

VOLUME 3
RESULTS OF ENVIRONMENTAL INVESTIGATIONS
APPENDIX 4, PART 5 OF 5

Of The

COMM 100 ASSOCIATES FACILITY
100 COMMERCIAL STREET
PLAINVIEW, NASSAU COUNTY, NEW YORK
SITE NO. 1-30-075

For

ROBIN S. WEINSTEIN, ESQ.
KENSINGTON & RESSLER, P.C.
400 MADISON AVENUE
NEW YORK, NEW YORK 10017-1910

By

EIKON PLANNING AND DESIGN CORP.
P.O. BOX 469 - 221 HIGH STREET
HACKETTSTOWN, NEW JERSEY 07840

February 1, 1995

Concentration (ug/L): -0.44

Corrected Conc (ug/L): -0.44

L dispensed: 5 from 40, 20 from 22

Replicate 2

Peak Area (A-s): 0.001

Background Pk Area (A-s): 0.097

Blank Corrected Pk Area (A-s): 0.000

Concentration (ug/L): 0.07

Time: 14:11

Peak Height (A): 0.007

Background Pk Height (A): 0.033

Corrected Conc (ug/L): 0.07

Mean Conc (ug/L): -0.18

SD: 0.361

RSD(%): 197.71

Corrected Conc (ug/L): -0.18

FU3

STANDARD PREPARATION LOG
-FURNACE-

METALS DEPT.

STD LOT NO.: FU-A-0138-01 STD NAME: FURNACE HIGH STD DATE PREP: 08/13/94 ANALYST INIT: <u>Am</u> 9Am FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML 1.0	STOCK CONC, ppb 10,000	STOCK INTECH NO. FU-A-0111-03
TV, ppb: As, Cd, Pb, Sb, Se, Tl 100 ppb. Prep fresh for each run.				
STD LOT NO.: FU-A-0138-02 STD NAME: FURNACE HIGH STD DATE PREP: 08/15/94 ANALYST INIT: <u>Am</u> 9Am FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML 1.0	STOCK CONC, ppb 10,000	STOCK INTECH NO. FU-A-0111-03
TV, ppb: As, Cd, Pb, Sb, Se, Tl 100 ppb. Prep fresh for each run.				
STD LOT NO.: FU-A-0138-03 STD NAME: FURNACE HIGH STD DATE PREP: 08-16-94 ANALYST INIT: <u>Am</u> 9Am FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML 1.0	STOCK CONC, ppb 10,000	STOCK INTECH NO. FU-A-0111-03
TV, ppb: As, Cd, Pb, Sb, Se, Tl 100 ppb. Prep fresh for each run.				
STD LOT NO.: FU-A-0138-04 STD NAME: FURNACE HIGH STD DATE PREP: 08/17/94 ANALYST INIT: <u>Am</u> 9Am FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML 1.0	STOCK CONC, ppb 10,000	STOCK INTECH NO. FU-A-0111-03
TV, ppb: As, Cd, Pb, Sb, Se, Tl 100 ppb. Prep fresh for each run.				
STD LOT NO.: FU-A- STD NAME: FURNACE HIGH STD DATE PREP: ANALYST INIT: FINAL VOL(ML): 100.0 PRESERVATIVES: ML CONC HNO3 ML H2O2	STOCK STD NAME	ML 1.0	STOCK CONC, ppb 10,000	STOCK INTECH NO. FU-A-
TV, ppb: As, Cd, Pb, Sb, Se, Tl 100 ppb. Prep fresh for each run.				

0138

STANDARD PREPARATION LOG
-FURNACE-

METALS DEPT.

STD LOT NO.: FU-A-0028-01 STD NAME: ICV/CCV DATE PREP: 08/13/94 ANALYST INIT: Arr 9A FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	0.40	10,000 MULTI	FU-A-001-03
TV, ppb: Cd, As, Se, Sb, Pb, TL _____ 40; Prep fresh for each run.				
STD LOT NO.: FU-A-0028-02 STD NAME: ICV/CCV DATE PREP: 08/15/94 ANALYST INIT: A 9A FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	0.40	10,000 MULTI	FU-A-001-03
TV, ppb: Cd, As, Se, Sb, Pb, TL _____ 40; Prep fresh for each run.				
STD LOT NO.: FU-A-0028-03 STD NAME: ICV/CCV DATE PREP: 08-16-94 9 AM ANALYST INIT: RS FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	0.40	10,000 MULTI	FU-A-001-03
TV, ppb: Cd, As, Se, Sb, Pb, TL _____ 40; Prep fresh for each run.				
STD LOT NO.: FU-A-0028-04 STD NAME: ICV/CCV DATE PREP: 08/17/94 ANALYST INIT: A 9A FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ML H2O2	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	0.40	10,000 MULTI	FU-A-001-03
TV, ppb: Cd, As, Se, Sb, Pb, TL _____ 40; Prep fresh for each run.				
STD LOT NO.: FU-A- STD NAME: ICV/CCV DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	0.40	10,000 MULTI	FU-A-
TV, ppb: Cd, As, Se, Sb, Pb, TL _____ 40; Prep fresh for each run.				

0028

FU1

STANDARD PREPARATION LOG
-FURNACE-

METALS DEPT.

STD LOT NO.: FU-A-0227-01 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>08/15/94</u> ANALYST INIT: <u>Am</u> 9A FINAL VOL(ML): 100.0 PRESERVATIVES: <u>2.0</u> ML CONC HNO3 <u>0.5</u> ML H2O2	STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2
STD LOT NO.: FU-A-0227-02 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>08-16-94</u> 9A ANALYST INIT: <u>RS</u> FINAL VOL(ML): 100.0 PRESERVATIVES: <u>2.0</u> ML CONC HNO3 <u>0.5</u> ML H2O2	STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2
STD LOT NO.: FU-A-0227-03 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>08/17/94</u> 9A ANALYST INIT: <u>Am</u> FINAL VOL(ML): 100.0 PRESERVATIVES: <u>2.0</u> ML CONC HNO3 <u>0.5</u> ML H2O2	STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2
STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2	STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2
STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2	STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2
STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2	STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2
STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2	STD LOT NO.: FU-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: _____ ML CONC HNO3 _____ ML H2O2

FU2

STANDARD PREPARATION LOG
-FURNACE-

METALS DEPT.

STD LOT NO.: FU-A-0415-01 STD NAME: <u>CR4 STD ①</u> DATE PREP: <u>08/17/94</u> ANALYST INIT: <u>Am</u> 9A FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ml H2O2	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO
Notes: <u>As, Se, Pb</u> <u>TL, Sb</u> { 3, 5, 10 ppb	High std	3.0	100 ppb	FU-A-0138-04
	↓	5.0	↓	FU-A-↓
	↓	10.0	↓	FU-A-↓
				FU-A-
				FU-A-
				FU-A-
STD LOT NO.: FU-A-0415-02 STD NAME: <u>STD ②, ③, ④</u> DATE PREP: <u>08/17/94</u> ANALYST INIT: <u>Am</u> FINAL VOL(ML): <u>100.0</u> PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ml H2O2	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO
Notes: <u>As, Se, Pb</u> <u>TL, Sb</u> { 25, 50, 75 ppb	High std	2.5	100 ppb	FU-A-0138-04
	CalBik	7.5	0 "	FU-A-0227-03
	High std	5.0	100 "	FU-A-0138-04
	CalBik	5.0	0 "	FU-A-0227-03
	High std	7.5	100 "	FU-A-0138-04
	CalBik	2.5	0 "	FU-A-0227-03
STD LOT NO.: FU-A-0415-03 STD NAME: <u>spiking soln</u> DATE PREP: <u>08/17/94</u> ANALYST INIT: <u>Am</u> FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 0.5 ml H2O2	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO
Notes: _____	As	0.20	1,000	FU-A-52-16
	Se	0.10	↓	FU-A-53-04
	Pb	0.060	↓	FU-A-53-13
	TL	0.20	↓	FU-A-52-06
				FU-A-
				FU-A-

0415

STANDARD PREPARATION LOG
-FURNACE-

METALS DEPT.

FU2

STD LOT NO.: FU-A-8416-01 STD NAME: <i>spiking furnSA</i> DATE PREP: <i>05/17/94</i> ANALYST INIT: <i>Am</i> FINAL VOL(ML): 100.0 PRESERVATIVES: 2.0 ML CONC HNO3 <i>0.5M H2O2</i> Notes: _____ _____ _____	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppm</th> <th>STOCK INTECH NO</th> </tr> </thead> <tbody> <tr> <td><i>Pb</i></td> <td><i>0.15</i></td> <td><i>1,000</i></td> <td><i>FU-A-53-13</i></td> </tr> <tr> <td><i> </i></td> <td><i>0.30</i></td> <td><i> </i></td> <td><i>FU-A-</i></td> </tr> <tr> <td><i> </i></td> <td><i>0.45</i></td> <td><i> </i></td> <td><i>FU-A-</i></td> </tr> <tr> <td><i> </i></td> <td><i>0.10</i></td> <td><i> </i></td> <td><i>FU-A-</i></td> </tr> <tr> <td><i>↓</i></td> <td><i>0.20</i></td> <td><i>↓</i></td> <td><i>FU-A- ↓</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO	<i>Pb</i>	<i>0.15</i>	<i>1,000</i>	<i>FU-A-53-13</i>	<i> </i>	<i>0.30</i>	<i> </i>	<i>FU-A-</i>	<i> </i>	<i>0.45</i>	<i> </i>	<i>FU-A-</i>	<i> </i>	<i>0.10</i>	<i> </i>	<i>FU-A-</i>	<i>↓</i>	<i>0.20</i>	<i>↓</i>	<i>FU-A- ↓</i>				<i>FU-A-</i>
STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO																										
<i>Pb</i>	<i>0.15</i>	<i>1,000</i>	<i>FU-A-53-13</i>																										
<i> </i>	<i>0.30</i>	<i> </i>	<i>FU-A-</i>																										
<i> </i>	<i>0.45</i>	<i> </i>	<i>FU-A-</i>																										
<i> </i>	<i>0.10</i>	<i> </i>	<i>FU-A-</i>																										
<i>↓</i>	<i>0.20</i>	<i>↓</i>	<i>FU-A- ↓</i>																										
			<i>FU-A-</i>																										
STD LOT NO.: FU-A- STD NAME: DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3 Notes: _____ _____ _____	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppm</th> <th>STOCK INTECH NO</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>
STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
STD LOT NO.: FU-A- STD NAME: DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3 Notes: _____ _____ _____	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppm</th> <th>STOCK INTECH NO</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td><i>FU-A-</i></td> </tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>				<i>FU-A-</i>
STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										
			<i>FU-A-</i>																										

0416

STANDARD PREPARATION LOG
-FURNACE-

METALS DEPT.

FU2

STD LOT NO.: FU-A-0111-01	STOCK	ML	STOCK	STOCK INTECH
STD NAME: FURNACE STOCK STD	STD NAME		CONC, ppm	NO
DATE PREP: 04-21-94				
ANALYST INIT: Am	As	1.0	1,000	A- 50-16
FINAL VOL(ML): 100.0	Cd	1.0	1,000	A- 49-02
PRESERVATIVES: 1.0 ML CONC HNO3	Pb	1.0	1,000	A- 49-08
TV, ppb:	Sb	1.0	1,000	A- 49-09
As, Cd, Pb, Sb, Se, Tl 10,000ppb.	Se	1.0	1,000	A- 51-07
Use INORGANIC VENTURES stds.	Tl	1.0	1,000	A- 48-14
Prep fresh weekly.				
STD LOT NO.: FU-A-0111-02	STOCK	ML	STOCK	STOCK INTECH
STD NAME: FURNACE STOCK STD	STD NAME		CONC, ppm	NO
DATE PREP: 07-05-94				
ANALYST INIT: Am	As (Ag)	1.0	1,000	A- 50-14
FINAL VOL(ML): 100.0	Cd	1.0	1,000	A- 49-02
PRESERVATIVES: 1.0 ML CONC HNO3	Ba	1.0	1,000	A- 49-13
TV, ppb:	Be	1.0	1,000	A- 51-02
As, Cd, Pb, Sb, Se, Tl 10,000ppb.	Cr	1.0	1,000	A- 51-04
Use INORGANIC VENTURES stds.	Tl	1.0	1,000	A-
Prep fresh weekly.				
STD LOT NO.: FU-A-0111-03	STOCK	ML	STOCK	STOCK INTECH
STD NAME: FURNACE STOCK STD	STD NAME		CONC, ppm	NO
DATE PREP: 07-19-94				
ANALYST INIT: Am	As	1.0	1,000	A- 52-16
FINAL VOL(ML): 100.0	Cd	1.0	1,000	A-
PRESERVATIVES: 1.0 ML CONC HNO3	Pb	1.0	1,000	A- 53-13
TV, ppb:	Sb	1.0	1,000	A- 53-04
As, Cd, Pb, Sb, Se, Tl 10,000ppb.	Se	1.0	1,000	A- 53-04
Use INORGANIC VENTURES stds.	Tl	1.0	1,000	A- 52-06
Prep fresh weekly.				

0111

STANDARD PREPARATION LOG

METALS DEPT.

A1

-FURNACE-

STD LOT NO.: FU-A-001-01	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.
STD NAME: ICV/CCV INTERM,				
DATE PREP: 03/07/94 9 AM	As	1.0	1,000	A- 49-16
ANALYST INIT: <u>Am</u>	Cd	1.0	1,000	A- 51-17
FINAL VOL(ML): 100.0	Pb	1.0	1,000	A- 48-04
PRESERVATIVES: 1.0 ML CONC HNO3	Sb	1.0	1,000	A- 52-04
TV, ppb:	Se	1.0	1,000	A- 50-05
As, Cd, Pb, Sb, Se, Tl 10,000;	Tl	1.0	1,000	A- 48-03
Use SPEX standards;				
Prep fresh weekly;				
STD LOT NO.: FU-A-001-02	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.
STD NAME: ICV/CCV INTERM				
DATE PREP: 07/05/94 2 PM	As Ag	1.0 0.10	1,000	A- 51-15
ANALYST INIT: <u>Am</u>	Cd	1.0 0.10	1,000	A- 51-17
FINAL VOL(ML): 100.0	Pb Ba	1.0	1,000	A- 49-17
PRESERVATIVES: 1.0 ML CONC HNO3	Sb Be	1.0 0.10	1,000	A- 48-10
TV, ppb:	Se Cr	1.0 0.10	1,000	A- 47-16
As, Cd, Pb, Sb, Se, Tl 10,000;	Tl	1.0	1,000	A-
Use SPEX standards;				
Prep fresh weekly;				
STD LOT NO.: FU-A-001-03	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.
STD NAME: ICV/CCV INTERM				
DATE PREP: 07/19/94 2 PM	As	1.0	1,000	A- 50-16
ANALYST INIT: <u>Am</u>	Cd	1.0	1,000	A-
FINAL VOL(ML): 100.0	Pb	1.0	1,000	A- 49-08
PRESERVATIVES: 1.0 ML CONC HNO3	Sb	1.0	1,000	A- 49-09
TV, ppb:	Se	1.0	1,000	A- 51-07
As, Cd, Pb, Sb, Se, Tl 10,000;	Tl	1.0	1,000	A- 48-14
Use SPEX standards;				
Prep fresh weekly;				

T 1001

Lot #	Std	Manufacturer	Lot No.	Conc ppm	Date Recd	Date Open	Date Exp
A-48-01	Ca	Spex 35-228	G-228CA	10,000	7/8/93	7/15/93	7/15/94
A-48-02	Mg	Spex	G-215MG	10,000	7/8/93	7/15/93	7/15/94
A-48-03	Ti	Spex	3-2-TI	1,000	7/8/93	7/8/93	7/15/94
A-48-04	Pb	Spex	3-40PB	1,000	7/8/93	7/15/93	7/15/94
A-48-05	V	Spex	2-233V	1,000	7/8/93	7/12/93	7/15/94
A-48-06	Zn	Spex	3-50ZN	1,000	7/8/93	7/13/93	7/15/94
A-48-07	Al	Spex	2-266AL	1,000	7/8/93	7/18/93	7/15/94
A-48-08	Fe	Spex	3-18FE	1,000	7/8/93	7/22/93	7/15/94
A-48-09	Al	Spex	3-58AL	1,000	7/8/93	7/22/93	7/15/94
A-48-10	Bz	Spex	3-56Bz	1,000	7/8/93	7/9/93	7/15/94
A-48-11	Sn	IV	11-SN0126	1,000	7/8/93	8/1/93	8/1/94
A-48-12	Zn	IV	11-ZN0051	1,000	7/8/93	8/2/93	8/1/94
A-48-13	Na	IV	11-NA0100A	993	7/8/93	7/3/93	8/1/94
A-48-14	Ti	IV	11-TI0132	991	7/8/93	7/9/93	8/1/94
A-48-15	V	IV	11-VO1114	1001	7/8/93	8/11/93	8/1/94
A-48-16	Mo	IV	11-MO0137	1,000	7/8/93	8/11/93	8/1/94
A-48-17	Cl	IV	11-CL01058	999	7/8/93	8/2/93	8/1/94

SIGNATURE

DATE

10/19/94

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

Lot No. LRI	STD	Manufacturer	Lot No.	Conc. ppm	Disc. Rec'd	Disk open	Exo. Disk	No
A-49-01	IV	IV	H-FI0110	997	7/8/93	8/2/93	8/1/94	
A-49-02	Ca	IV	I-CO-0143	996	7/8/93	7/27/93	8/1/94	
A-49-03	Fe	IV	I-FE0184	994	7/8/93	7/27/93	8/1/94	
A-49-04	Mn	IV	I-MN0159	1003	7/8/93	8/1/93	8/1/94	
A-49-05	Na	IV	I-NAG150	1001	7/8/93	8/2/93	8/1/94	
A-49-06	B	IV	H-BO133	998	7/8/93	8/4/93	8/1/94	
A-49-07	Fe	IV	I-FE0153	1003	7/8/93	8/1/93	8/1/94	
A-49-08	Pb	IV	I-Pb0101C	1005	7/8/93	7/8/93	8/1/94	
A-49-09	Sb	IV	I-SB0172	997	7/8/93	7/8/93	8/1/94	
A-49-10	Ca	IV	I-CA0117	1002	7/8/93	7/11/93	8/1/94	
A-49-11	Mg	IV	I-MG0174	1002	7/8/93	10/11/93	8/1/94	
A-49-12	Co	IV	H-CO0135	997	7/8/93	8/2/93	8/1/94	
A-49-13	Ba	IV	I-BA0152	1004	7/8/93	8/2/93	8/1/94	
A-49-14	Blank cnd	ERA	5800-1		7/16/93	7/31/93		2-35
A-49-15	Hg	IV	H-HG0135	1000	8/20/93	8/20/93	9/1/94	
A-49-16	As	DOES	2-217A	1000	8/2/93	8/4/93	8/3/94	
A-49-17	Se	DOES	2-235A	1000	8/2/93	8/4/93	8/3/94	

SIGNATURE

DATE

10/13/93

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

Lot No.	Spec.	Material	Lot #	Conc	Date	Date	Expt	Notes
L.R. II	Spec	Material	Lot #	Ppm	Received	Original	Date	
A-50-4	B	Speck	2-201	1,000	9/20/93	10/1/93	9/20/93	
A-50-5	M	Speck	2-202	1,000	9/20/93		9/20/93	
A-50-6	M	Speck	2-203	1,000	9/20/93	9/20/93	9/20/93	
A-50-7	M	Speck	2-204	1,000	9/20/93	9/20/93	9/20/93	
A-50-8	S	Speck	3-205	1,000	9/20/93	10/1/93	9/20/93	
A-50-9	T	Speck	3-206	1,000	9/20/93	10/1/93	9/20/93	
A-50-10	N	Speck	3-207	1,000	9/20/93		9/20/93	
A-50-11	A	Speck	E-208	10,000	9/20/93	10/1/93	9/20/93	
A-50-12	K	Speck	F-209	10,000	9/20/93	10/1/93	9/20/93	
A-50-13	N	Speck	3-210	1,000	9/20/93	10/1/93	9/20/93	
A-50-14	N	Speck	F-211	10,000	9/20/93	10/1/93	9/20/93	
A-50-15	S	Speck	3-212	1,000	9/20/93	10/1/93	9/20/93	Standard Concentration
A-50-16	S	Speck	D-213	10,000	9/20/93	10/1/93	9/20/93	
A-50-17	A	I.V.	I-214	1,000	9/20/93	10/1/93	10/1/93	
A-50-18	A	I.V.	I-215	1,000	9/20/93	10/1/93	10/1/93	
A-50-19	A	I.V.	I-216	1,000	9/20/93	10/1/93	10/1/93	
A-50-20	B	I.V.	I-217	1,000	9/20/93	10/1/93	10/1/93	

SIGNATURE

C. R. P. H.

DATE

10/19/93

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

Lot # LRI	STD	Manu Factor	Lot No.	Conc PPM	Date Rec'd	Date Opened	Exp Date	Notes
A-52-01	Co	Spex	3-100Co	1000	2/28/94	2/28/94	2/28/95	
A-52-02	Ti	Spex	3-38Ti	1000	2/28/94	2/28/94	2/28/95	
A-52-03	Cu	Spex	3-78Cu	1000	2/28/94	2/28/94	2/28/95	
A-52-04	Sb	Spex	3-86Sb	1000	2/28/94	2/28/94	2/28/95	
A-52-05	Mn	Spex	3-112Mn	1000	2/28/94	2/28/94	2/28/95	
A-52-05	Blank sand	ERA	58001	—	1/21/94	3/2/94	N/A	
A-52-06	Tl	Spex	4-3Tl	1,000	3/22/94	3/22/94	3/31/95	
A-52-07	AL	I.V.	I-AL0000	10,047	4/28/94	6/20/94	5/1/95	
A-52-08	Ca	I.V.	I-CA00114	10,002	4/28/94	6/23/94	5/1/95	
A-52-09	Mg	I.V.	I-MG00114	10,055	4/28/94	6/13/94	5/1/95	
A-52-10	Si	Spex	4-37Si	10,000	5/6/94		4/30/95	
A-52-11	Ca	Spex	H-12CA	10,000	5/6/94	6/1/94	4/30/95	
A-52-12	Mg	Spex	H-51Mg	10,000	5/6/94		4/30/95	
A-52-13	BLANK SAND	ERA	58001	—	4/94	6/9/94		
A-52-14	K	Spex	T-26K	10,000	6/23/94	6/23/94	6/30/95	
A-52-15	AL	Spex	3-77AL	1,000	6/23/94		6/30/95	
A-52-16	RS	Spex	4-52RS	1,000	6/23/94		6/30/95	

SCIENTIFIC ANALYTICAL PRODUCTIONS CHICAGO 60605

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

TITLE

PROJECT NO.

53

BOOK NO.

Lot# LRI	STD	Mag. Factor	Lot No.	Conc. PPM	Date Rec'd	Date Open	Exp. Date	Notes
A-53-01	Zn	Spey	4-34ZN	1,000	6/23/94	7/14/94	6/30/95	
A-53-02	Mg	Spey	3-170MG	1,000	6/23/94		6/30/95	
A-53-03	V	Spey	4-10V	1,000	6/23/94	7/14/94	6/30/95	
A-53-04	Se	Spey	4-43SE	1,000	6/23/94	7/14/94	6/30/95	
A-53-05	Fe	Spey	4-23FE	1,000	6/23/94	7/14/94	6/30/95	
A-53-06	Sn	Spey	3-92SN	1,000	6/23/94	7/14/94	6/30/95	
A-53-07	Cr	Spey	3-124CR	1,000	6/23/94	7/14/94	6/30/95	
A-53-08	Bc	Spey	4-48BC	1,000	6/23/94	7/14/94	6/30/95	
A-53-09	Ti	Spey	4-16TI	1,000	6/23/94	7/14/94	6/30/95	
A-53-10	B	Spey	3-139B	1,000	6/23/94	7/14/94	6/30/95	
A-53-11	Mo	Spey	3-111MO	1,000	6/23/94	7/14/94	6/30/95	
A-53-12	Ni	Spey	4-26NI	1,000	6/23/94	7/14/94	6/30/95	
A-53-13	Pb	Spey	4-9PB	1,000	6/23/94	7/14/94	6/30/95	
A-53-14	Ba	Spey	3-107BA	1,000	6/23/94	7/17/94	6/30/95	
A-53-15	Blank Sand	ERA	58001	—	5/94	6/28/94		
A-53-16	Ca	Spey	I-91CA	10,000	6/26/94	7/14/94	6/30/95	

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 6060

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE 263

DATE: 8/14/94
 SHIFT: DAY
 INSTR. NO.: TS1000
 BATCH NO.: 890895-896898
 RAW DATA W/: 898
 ANALYST INIT: BD
 SUPERVISOR: [Signature]

STANDARD	CONC. ppb	LOT NO.	CALIBRATION			
			STDS. ppb	REPS	ABS.	PEAK HT. mm
BLANK	0	HG-A-0306				
STD 0.2	0.2	HG-A-4501				
STD 0.5	0.5	HG-A-881				
STD 1.0	1.0	HG-A-				
STD 2.0	2.0	HG-A-883				
STD 5.0	5.0	HG-A-881				
STD 10.0	10.0	HG-A-885				
ICV	4.0	HG-A-1083				
CCV	4.0	HG-A-1083				
CRA	0.2	HG-A-1205				
SPK SOLN		1073				

SAMPLE NO	BATCH NO	MATRIX	DILUTION FACTORS			REPS	ABS	PEAK HT mm	NOTES
			PREP	INSTR	FINAL				
ICV-1									3.69
ICB-1									✓
CCV-1-1									3.54
CCB-1-1									✓
CRA									0.15
PBW									✓
LCBW									1.09
0806907	890	L	1D						✓
08	↓	L	↓						✓
0810307	895	L	↓						✓
CEW2									4.11
CBZ									✓

Lot No. LRI	STD.	Manufacturer	Lot No.	Conc PPM	Date Received	Date Opened	Expt Date	Notes
A-50-01	B	SpeX	2-2625	1,000	8/23/93	10/2/93	8/31/94	
A-50-02	Mg	SpeX	2-2731	1,000	8/23/93		8/31/94	
A-50-03	Hg	SpeX	2-20146	1,000	8/23/93	8/23/93	8/31/94	
A-50-04	Mo	SpeX	2-261-MO	1,000	8/23/93	10/13/93	8/31/94	
A-50-05	Se	SpeX	3-70-se	1,000	8/23/93	10/11/93	8/31/94	
A-50-06	Ti	SpeX	3-3811	1,000	8/23/93	10/13/93	8/31/94	
A-50-07	Y	SpeX	3-0914	1,000	8/23/93		8/31/94	
A-50-08	AL	SpeX	E-185AL	10,000	9/23/93	10/29/93	9/30/94	
A-50-09	Fe	SpeX	F-244FE	10,000	9/23/93	11/6/94	9/30/94	
A-50-10	Na	SpeX	3-60NA	1,000	9/23/93	10/20/93	9/30/94	
A-50-11	Na	SpeX	F-215NA	10,000	9/23/93	10/20/93	9/30/94	
A-50-12	Si	SpeX	3-5751	1,000	9/23/93	10/20/93	9/30/94	Standard Container not used
A-50-13	Sn	SpeX	D-119SN	10,000	9/23/93	10/12/93	9/30/94	
A-50-14	Ag	I.V.	I-A60058	1,000	9/23/93	10/14/93	10/1/94	
A-50-15	Al	I.V.	I-A60066	10,000	9/23/93	10/11/93	10/1/94	
A-50-16	As	I.V.	I-A50147	999	9/23/93	10/NA	10/1/94	
A-50-17	B	I.V.	I-B01057	1,000	9/23/93		10/1/94	

SIGNATURE

DATE

10/19/93

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

285

Lot#	STD	Main	Lot#	Core	Date	Date	Exp.	Notes
Lot#	STD	Main	Lot#	Core	Recd	Appt	Date	Lot#
A-54-01	Hg	I.V.	J-HG01070	1003	8-5-94	8-8-94	9-01-95	
A-54-02	Mn	I.V.	J-MN01093	997	8-5-94	8-8-94	9-01-95	
A-54-03	Mo	I.V.	J-MO01072	997	8-5-94	8-8-94	9-01-95	
A-54-04	Na	I.V.	J-NA01084	1,005	8-5-94	8-8-94	9-01-95	
A-54-05	Na	I.V.	J-NA01085	1,004	8-5-94	8-8-94	9-01-95	
A-54-06	Sb	I.V.	J-SB01116	998	8-5-94	8-8-94	9-01-95	
A-54-07	Sn	I.V.	J-SN01018	1,001	8-5-94	8-8-94	9-01-95	
A-54-08	Ti	I.V.	J-TI01061	1,000	8-5-94	8-8-94	9-01-95	
A-54-09	V	I.V.	J-V01094	1,004	8-5-94	8-8-94	9-01-95	
A-54-10	Zn	I.V.	J-ZN01080	1,005	8-5-94	8-8-94	9-01-95	
A-54-11	Cd	I.V.	J-CD01057	1,002	8-9-94	8-9-94	9-01-95	
A-54-12	Co	I.V.	J-CO01067	1,000	8-9-94	8-9-94	9-01-95	
A-54-13	Fe	I.V.	J-FE02013	1,004	8-9-94	8-9-94	9-01-95	
A-54-14	Pb	I.V.	J-PB02013	1,004	8-9-94	8-9-94	9-01-95	
A-54-15	S	I.V.	J-SI01087	999	8-9-94	8-9-94	9-01-95	
A-54-16	Tl	I.V.	J-TL01047	1,002	8-9-94	8-9-94	9-01-95	

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

266

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

HGBLANK

003

STD LOT NO.: HG-A- 0301 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/10/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0302 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/11/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0303 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/13/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0304 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/16/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0305 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/17/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0306 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/19/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0307 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/21/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3

HGSTDINT

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

017

STD LOT NO.: HG-A- 17-1 STD NAME: STD INTERMEDIATE DATE PREP: 8/17/94 ANALYST INIT: [signature] FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC ppm 1,000	STOCK INTECH NO. A- 54-01
- USE INORGANIC VENTURES STDS; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- 17-2 STD NAME: STD INTERMEDIATE DATE PREP: 8/19/94 ANALYST INIT: [signature] FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC ppm 1,000	STOCK INTECH NO. A- 54-01
- USE INORGANIC VENTURES STDS; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- 17-3 STD NAME: STD INTERMEDIATE DATE PREP: 8/21/94 ANALYST INIT: [signature] FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC ppm 1,000	STOCK INTECH NO. A- 54-01
- USE INORGANIC VENTURES STDS; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- STD NAME: STD INTERMEDIATE DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC ppm 1,000	STOCK INTECH NO. A-
- USE INORGANIC VENTURES STDS; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- STD NAME: STD INTERMEDIATE DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC ppm 1,000	STOCK INTECH NO. A-
- USE INORGANIC VENTURES STDS; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- STD NAME: STD INTERMEDIATE DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC ppm 1,000	STOCK INTECH NO. A-
- USE INORGANIC VENTURES STDS; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				

STDPREPL

STANDARD PREPARATION LOG
MERCURY

032

STD LOT NO.: HG-A- 32-01 STD NAME: WORKING INTERMEDIATE DATE PREP: 8/17/94 ANALYST INIT: 30 INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A- 17 -1
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- 3202 STD NAME: WORKING INTERMEDIATE DATE PREP: 8/19/94 ANALYST INIT: 30 INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A- 17 -2
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- 32-03 STD NAME: WORKING INTERMEDIATE DATE PREP: 8/21/94 ANALYST INIT: 30 INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A- 17 -3
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- STD NAME: WORKING INTERMEDIATE DATE PREP: ANALYST INIT: INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A-
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- STD NAME: WORKING INTERMEDIATE DATE PREP: ANALYST INIT: INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A-
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- STD NAME: WORKING INTERMEDIATE DATE PREP: ANALYST INIT: INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A-
TV = 100 ppb PREP FRESH FOR EACH RUN				

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

HG02

045

STD LOT NO: HG-A- <u>8/10/94</u> STD NAME: STD 0.2 DATE PREP: <u>45-01</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-3</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/11/94</u> STD NAME: STD 0.2 DATE PREP: <u>4502</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-4</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/13/94</u> STD NAME: STD 0.2 DATE PREP: <u>45-03</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-5</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/16/94</u> STD NAME: STD 0.2 DATE PREP: <u>45-04</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-6</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/19/94</u> STD NAME: STD 0.2 DATE PREP: <u>BD</u> ANALYST INIT: <u>4505</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>3202</u>
TV=0.2ppb Prep fresh for each run				

HGSTDS

STANDARD PREPARATION LOG
-MERCURY-

088 METALS DEPT.

STD LOT NO: HG-A- 88-1 STD NAME: STD 0.5 DATE PREP: 8/18/94 5/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC PPB	STOCK INTECH NO.
	WORKING INTERM.	0.5	100.0	HG-A- 32 -2
TV=0.5P ppb Prep fresh for each run.				
STD LOT NO: HG-A- STD NAME: STD 1.0 DATE PREP: ANALYST INIT: FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC PPB	STOCK INTECH NO.
	WORKING INTERM.	1.0	100.0	HG-A-
TV=1.0 ppb Prep fresh for each run.				
STD LOT NO: HG-A- 88-3 STD NAME: STD 2.0 DATE PREP: 8/18/94 8/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC PPB	STOCK INTECH NO.
	WORKING INTERM.	2.0	100.0	HG-A- 32 -2
TV=2.0 ppb Prep fresh for each run.				
STD LOT NO: HG-A- 88-4 STD NAME: STD 5.0 DATE PREP: 8/18/94 8/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC PPB	STOCK INTECH NO.
	WORKING INTERM.	5.0	100.0	HG-A- 32 -2
TV=5.0 ppb Prep fresh for each run.				
STD LOT NO: HG-A- 88-5 STD NAME: STD 10.0 DATE PREP: 8/18/94 8/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC PPB	STOCK INTECH NO.
	WORKING INTERM.	10.0	100.0	HG-A- 32 -2
TV=10.0 ppb Prep fresh for each run.				

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

108

HG1

STD LOT NO: HG-A- <u>108 01</u> STD NAME: ICV/CCV DATE PREP: <u>8/16/94</u> ANALYST INIT: <u>30</u> FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO. HG-A- <u>153</u> <u>01</u>
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>108 02</u> STD NAME: ICV/CCV DATE PREP: <u>8/17/94</u> ANALYST INIT: <u>29</u> FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO. HG-A- <u>153</u> <u>02</u>
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>108 03</u> STD NAME: ICV/CCV DATE PREP: <u>8/19/94</u> ANALYST INIT: <u>30</u> FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO. HG-A- <u>153</u> <u>-03</u>
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>108-4</u> STD NAME: ICV/CCV DATE PREP: <u>8/21/94</u> ANALYST INIT: <u>99</u> FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO. HG-A- <u>153</u> <u>4</u>
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- STD NAME: ICV/CCV DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO. HG-A-
TV=4.0 ppb Prep fresh for each run				

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

HGCRA

STD LOT NO: HG-A- 120 01 STD NAME: CRA DATE PREP: 8/10/94 ANALYST INIT: AT FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 123
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 02 STD NAME: CRA DATE PREP: 8/11/94 ANALYST INIT: BO FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 1524
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 03 STD NAME: CRA DATE PREP: 8/13/94 ANALYST INIT: BO FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 1525
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 04 STD NAME: CRA DATE PREP: 8/16/94 ANALYST INIT: BE FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 15301
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 05 STD NAME: CRA DATE PREP: 8/19/94 ANALYST INIT: BO FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 15303
TV=0.2ppb Prep fresh for each run				

STD LOT NO: HG-A- 133-01 STD NAME: ICV/CCV/SSHg INTERMEDIATE DATE PREP: 8/16/94 ANALYST INIT: BO FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC. PPM 1000	STOCK INTECH NO. A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- 133-02 STD NAME: ICV/CCV/SSHg INTERMEDIATE DATE PREP: 8/17/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC. PPM 1000	STOCK INTECH NO. A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- 133-03 STD NAME: ICV/CCV/SSHg INTERMEDIATE DATE PREP: 8/19/94 ANALYST INIT: BO FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC. PPM 1000	STOCK INTECH NO. A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- 133-04 STD NAME: ICV/CCV/SSHg INTERMEDIATE DATE PREP: 8/21/94 ANALYST INIT: BO FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC. PPM 1000	STOCK INTECH NO. A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- STD NAME: ICV/CCV/SSHg INTERMEDIATE DATE PREP: ANALYST INIT: FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME HG	ML 1.0	STOCK CONC. PPM 1000	STOCK INTECH NO. A-
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				

STANDARD PREPARATION LOG
HGICVWOR, CCVWOR, SSHg -MERCURY-

METALS DEPT.

1

STD LOT NO; HG-A- 15301 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/16/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME ICV/CCV/SSHg INTERM.	ML 1.0	STOCK CONC. ppm 10.0	STOCK INTECH NO. HG-A- 133 01
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- 15302 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/17/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME ICV/CCV/SSHg INTERM.	ML 1.0	STOCK CONC. ppm 10.0	STOCK INTECH NO. HG-A- 133 02
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- 15303 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/19/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME ICV/CCV/SSHg INTERM.	ML 1.0	STOCK CONC. ppm 10.0	STOCK INTECH NO. HG-A- 133 03
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- 15304 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/21/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME ICV/CCV/SSHg INTERM.	ML 1.0	STOCK CONC. ppm 10.0	STOCK INTECH NO. HG-A- 133 01
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: ANALYST INIT: FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME ICV/CCV/SSHg INTERM.	ML 1.0	STOCK CONC. ppm 10.0	STOCK INTECH NO. HG-A-
TV=100 ppb Prep fresh for each run.				

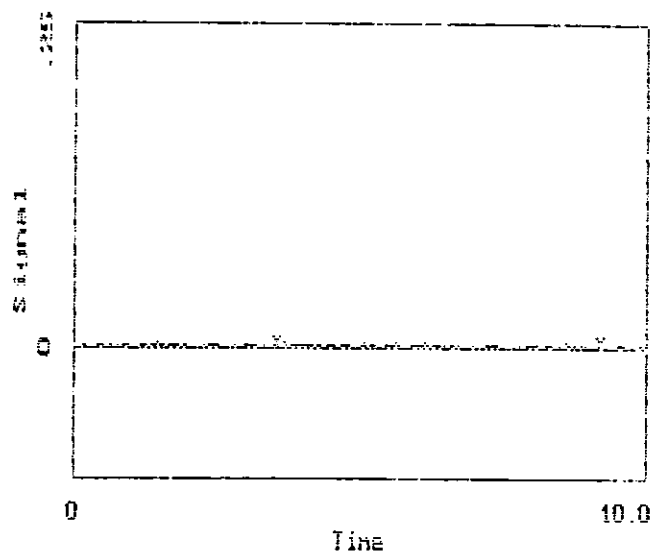
Method: HG

Standard: BlankSTD

08/19/94 12:43

xHG

#1 .9878



ANALYST SIGNATURE: _____

SUPERVISOR SIGNATURE: _____

Standardization Rpt.

Fri 08-19-94 12:44:34 PM

Page 1

Method: HG

Standard: Blank-GTN

Date: 08/19/94 12:43

Elem

HG

Avg

0.0078

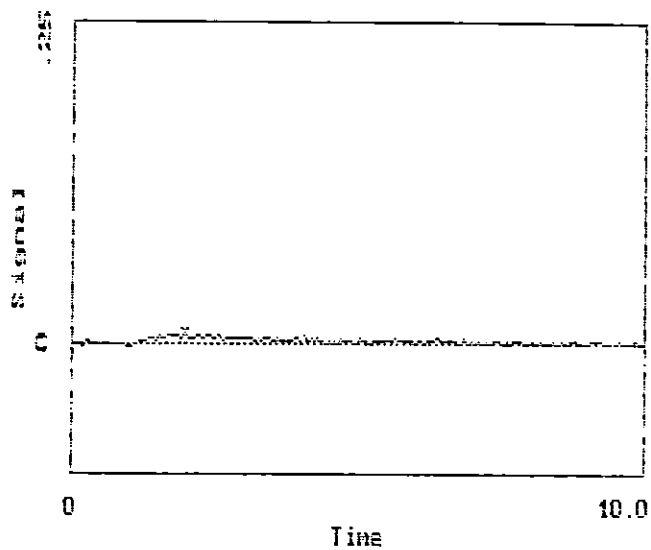
Method: HG

Standard: STD1

08/19/94 12:45

xHG

#1 .0152



Standardization Rpt.

Fri 08-19-94 12:46:35 PM

page 1

Method: HG

Standard: STD1

Date: 08/19/94 12:45

Elem	HG
Avg	.0152

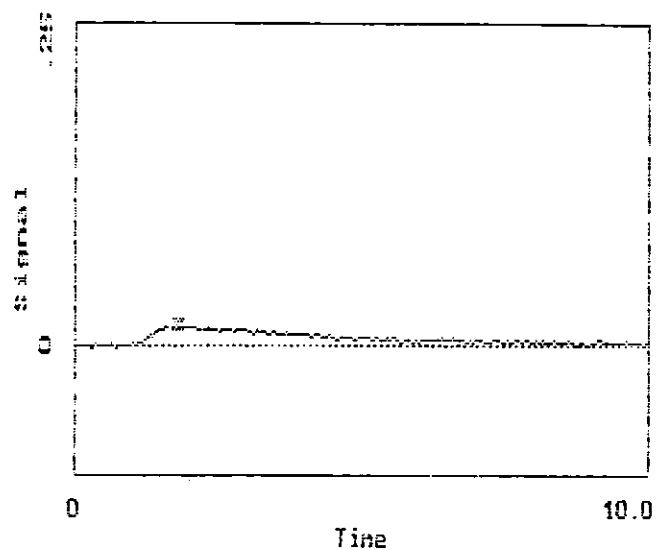
Method: HG

Standard: STD2

08/19/94 12:47

xHG

#1 .8487



Corrected ———
Uncorrected - - - -

Standardization Rpt.

Fri 08-19-94 12:49:10 PM

page 1

Method: HG

Standard: STD2

Date: 08/19/94 12:47

Elem HG
Avge .0487

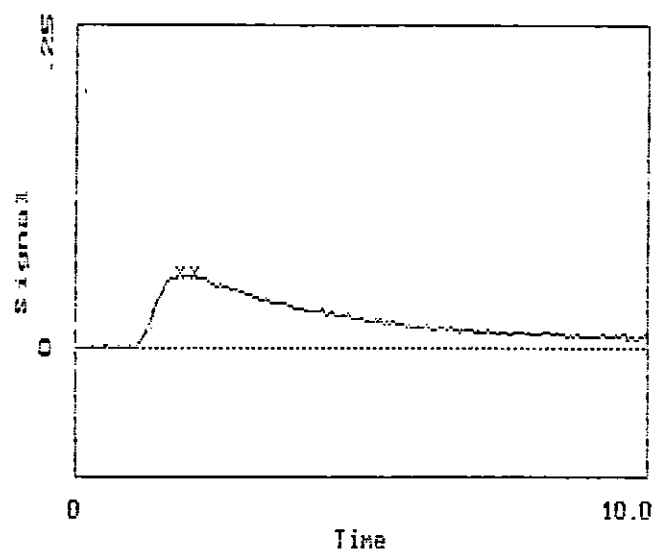
Method: HG

Standard: STD3

08/19/94 12:49

xHG

#1 .2054



Standardization Rpt.

Fri 08-19-94 12:51:19 PM

page 1

Method: HG

Standard: STD3

Date: 08/19/94 12:49

Elem HG
Avge .2064

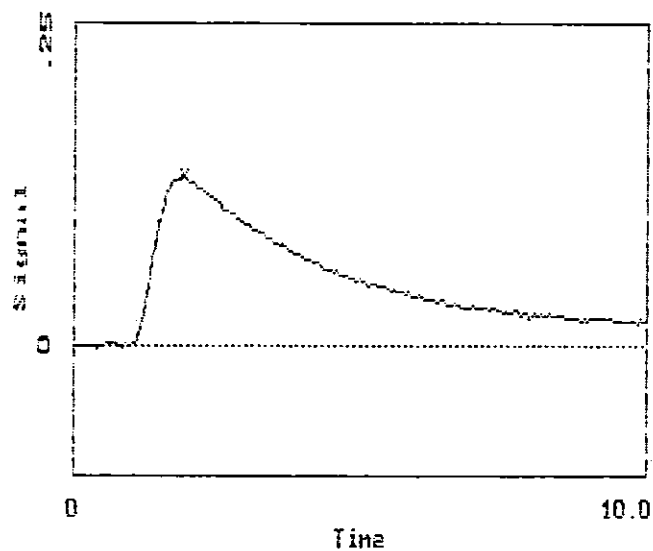
Method: HG

Standard: STD4

08/19/94 12:51

xHG

#1 .4653



Standardization Rpt.

Fri 08-19-94 12:53:22 PM

page 1

Method: HG

Standard: STD4

Date: 08/19/94 12:51

Elem HG

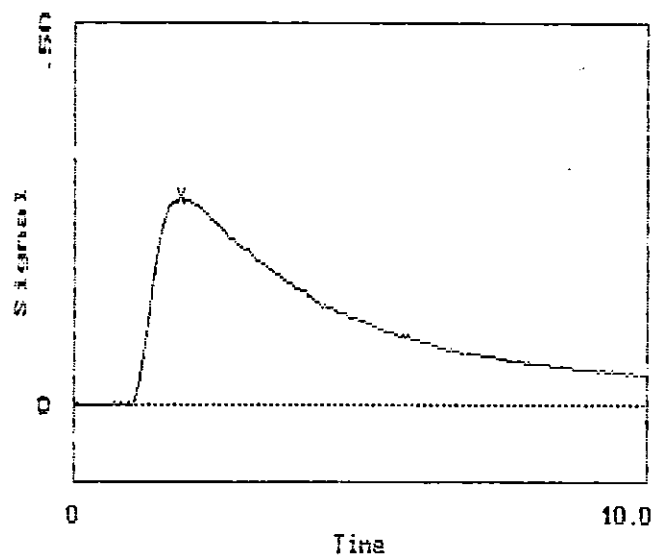
Avgc .4653

Method: HG

Standard: STD5

08/19/94 12:54

xHG
#1 1.027



Standardization Rpt.

Fri 08-19-94 12:55:41 PM

page 1

Method: HG

Standard: STD5

Date: 08/19/94 12:54

Elem	HG
Avge	1.027

Method: HG

Element: HG

Wavelength: 253.70

Element 1 of 1

Correlation Coefficient: .999751

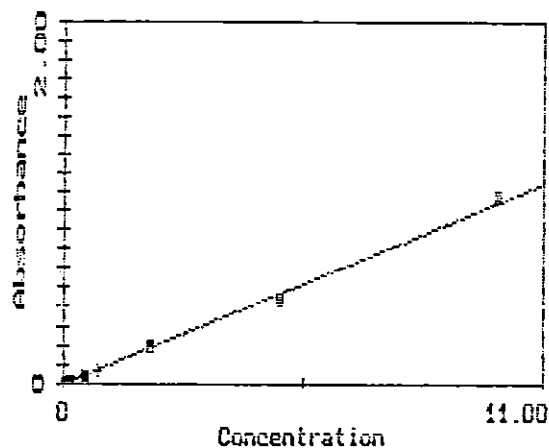
Conc. Correlation: .998891

Coefficients

a1 = .099579 Abs : .079954

a2 = 0 Conc : .00292

a3 = 0



Fit Straight Line

Date: 19 Aug 94 12:54

Slope corr.: 1

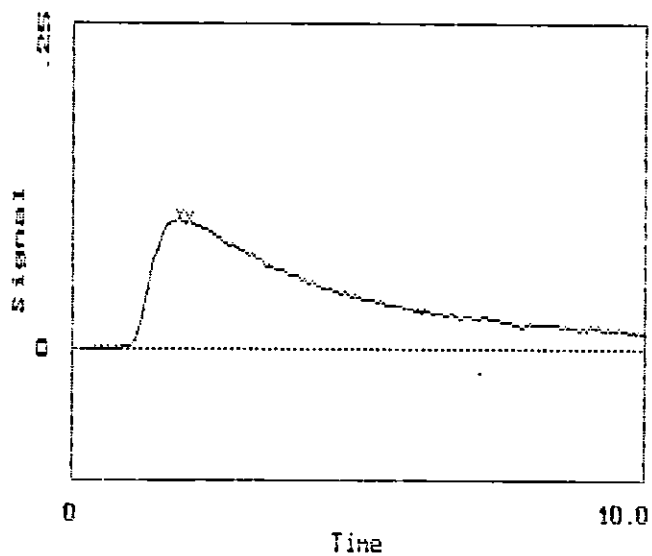
Standard: Blank	STD1	STD2	STD3	STD4	STD5
Absorbance: 0.0000	.015177	.048719	.206395	.465273	1.02689
Known conc.: 0	.2	.5	2	5	10
Calc. conc.: 0.0000	.152408	.489245	2.07268	4.67241	10.3123
Residual: 0.0000	-.047592	-.010755	.072676	-.327592	.312311

Fri 08-19-94 12:57:21 PM

page 1

HG Unk Conc F:1 SN:ICV 08/19/94 12:57:21

xHG
#1 3.685



Corrected ———
Uncorrected - - - - -

Analysis Report

Fri 08-19-94 12:58:50 PM

page 1

Method: HG Sample Name: ICV

Operator:

Run Time: 08/19/94 12:57:21

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPS

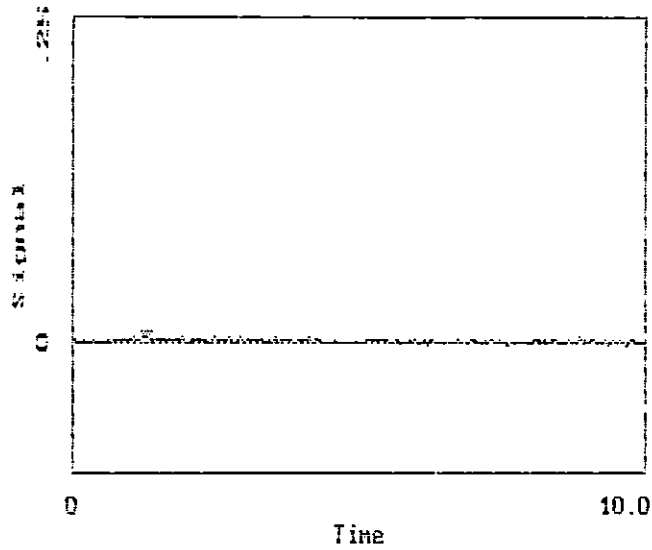
Avge 3.685

Fri 08-19-94 12:59:13 PM

page 1

HG Unk Conc F:1 SN:ICB 08/19/94 12:59:13

xHG
#1 .0683



Analysis Report

Fri 08-19-94 01:00:43 PM

page 1

Method: HG Sample Name: ICB

Operator:

Run Time: 08/19/94 12:59:13

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avge .0683

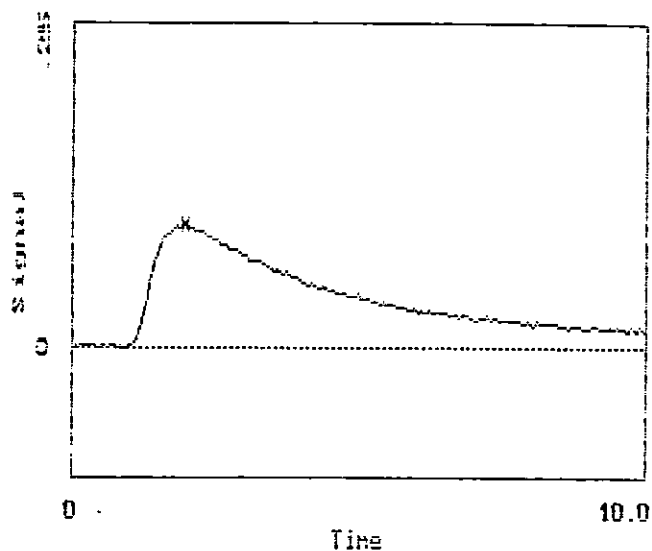
Fri 08-19-94 01:02:08 PM

page 1

HG Unk Conc F:1 SN:CCU 88/19/94 13:82:88

x100

#1 3.536



Analysis Report

Fri 08-19-94 01:03:39 PM

page 1

Method: HG Sample Name: CCV

Operator:

Run Time: 08/19/94 13:02:08

Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPB
Avge	3.536

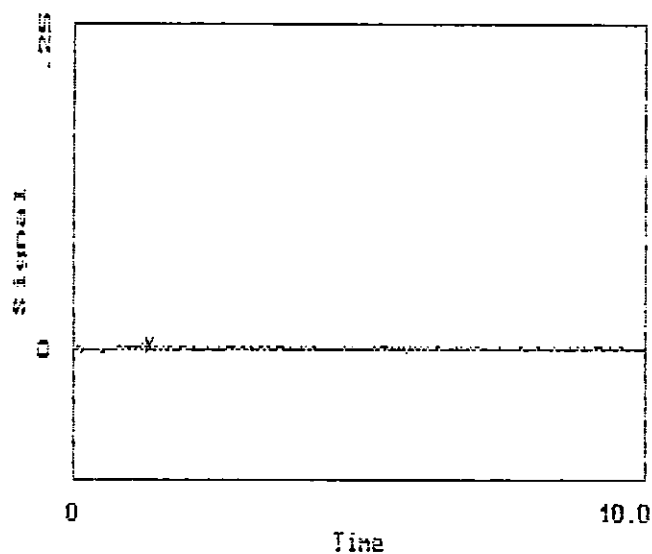
Fri 08-19-94 01:04:08 PM

page 1

HG Unk Conc F:1 SN:CCB 08/19/94 13:04:07

xiG

#1 .0356



Analysis Report

Fri 08-19-94 01:05:37 PM

page 1

Method: HG Sample Name: CCB
Run Time: 08/19/94 13:04:07
Comment:
Mode: Conc Corr. Factor: 1

Operator:

Elem HG
Units ppb
Avg .0356

Analysis Report

Fri 08-19-94 01:11:14 PM

Page 1

Method: HG Sample Name: PBW

Operator:

Run Time: 08/19/94 13:07:45

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avgc .0413

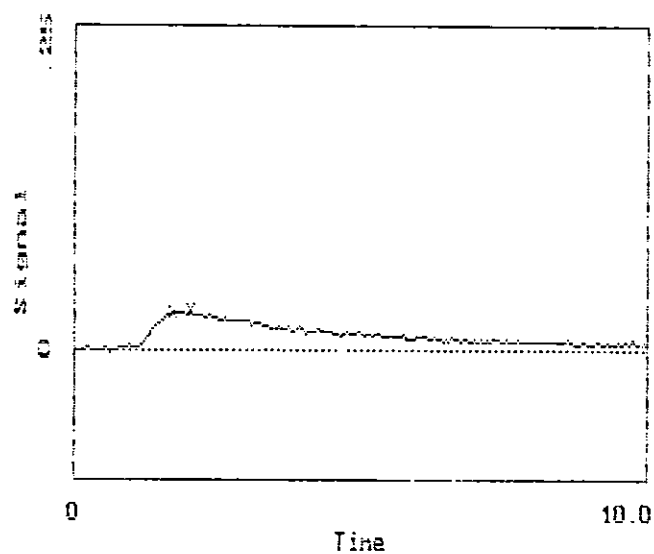
Fri 08-19-94 01:12:15 PM

page 1

HG Unk Conc F:1 SN:LCSH 08/19/94 13:12:15

xr15

#1 1.00E



Analysis Report

Fri 08-19-94 01:13:44 PM

page 1

Method: HG Sample Name: LCSW

Operator:

Run Time: 08/19/94 13:12:15

Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPB
Avg	1.086

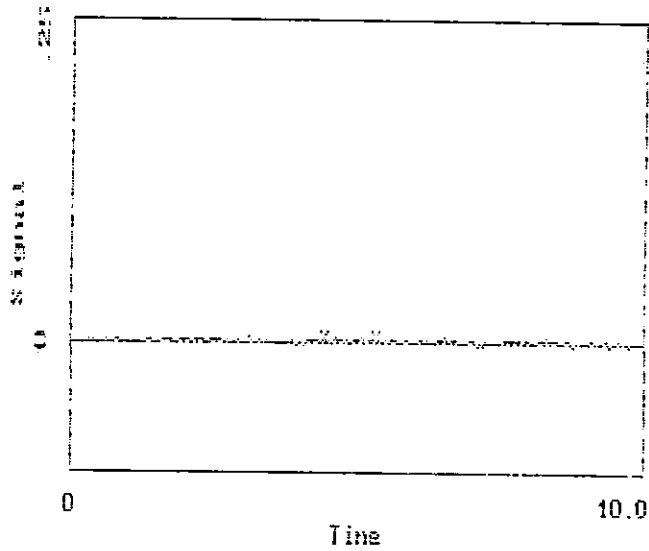
Fri 08-19-94 01:14:29 PM

page 1

HG Unk Conc F:1 SN:8886387 88/19/94 13:14:37

xHG

#1 .9595



Analysis Report

Fri 08-19-94 01:16:07 PM

page 1

Method: HG Sample Name: 0906907

Operator:

Run Time: 08/19/94 13:14:37

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avgc .0505

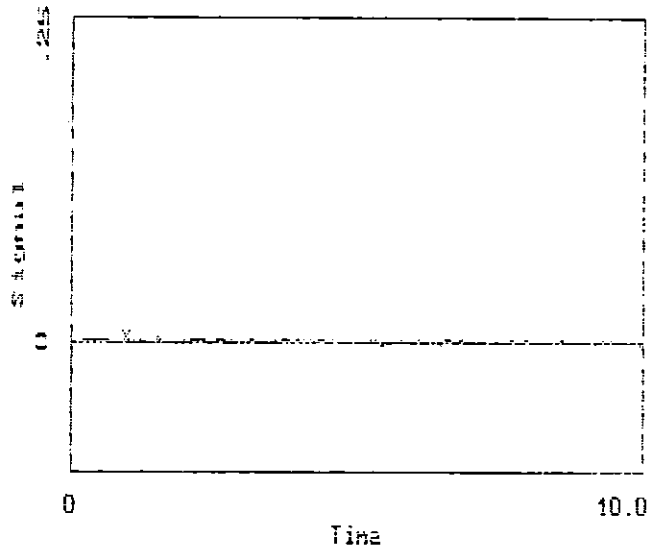
Fri 08-19-94 01:17:19 PM

page 1

HE Unk Conc F:1 SN:0006900 88/19/94 13:17:19

xHG

#1 .9222



Analysis Report

Fri 08-19-94 01:18:48 PM

page 1

Method: HS Sample Name: 0806908

Operator:

Run Time: 08/19/94 13:17:19

Comment:

Mode: Conc Corr. Factor: 1

Elev 46

Units PPS

Avgc .0222

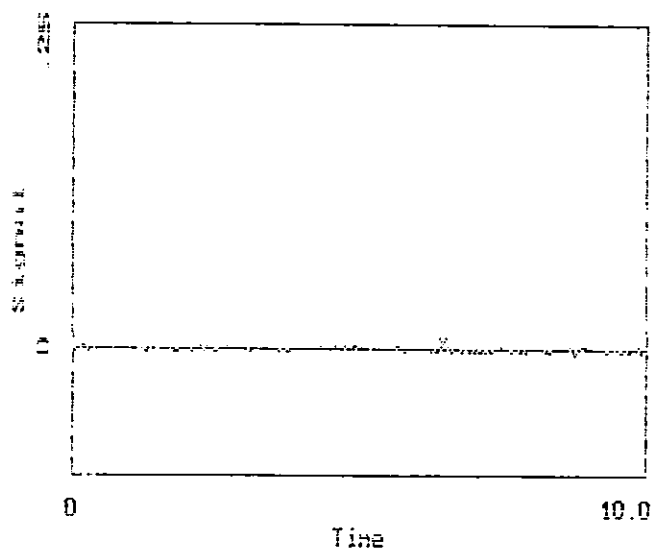
Fri 08-19-94 01:20:05 PM

page 1

HG Unk Conc F:1 SN:8016387 08/19/94 13:28:05

xHG

#1 -.0483



Analysis Report

Fri 08-19-94 01:21:34 PM

page 1

Method: HG Sample Name: 0810307

Operator:

Run Time: 08/19/94 13:20:05

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

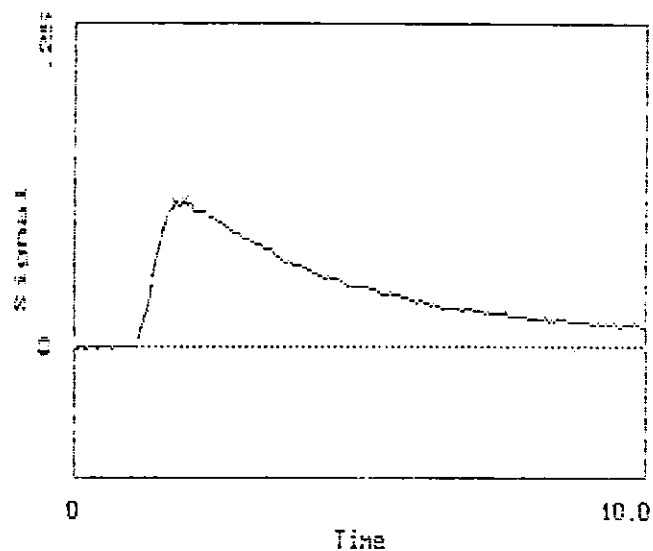
Units PPB

Avge <.0000

HG Unk Conc F:1 SN:CCV2 08/19/94 13:22:31

xHG

#1 4.106



Corrected ———
Uncorrected - - - -

Elow
Units
PPB
Avg 4.106

Method: HB
Sample Name: CCV2
Run Time: 08/19/94 13:22:31
Comment:
Model Conc Dely. Factor: 1

Operator:

Analytic Report

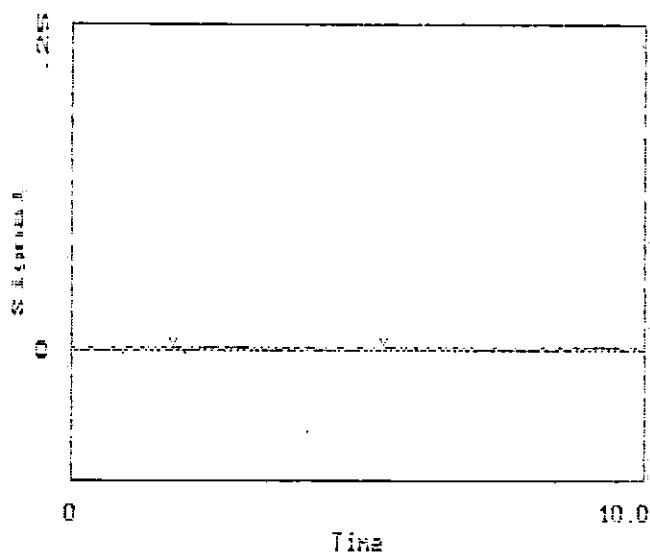
Fri 08-19-94 01:24:01 PM

Page 1

HG Unk Conc F:1 SN:CCB2 08/19/94 13:24:38

xHG

#1 .8547



Corrected ———
Uncorrected - - - -

Analysis Report

Fri 08-19-94 01:26:00 PM

page 1

Method: HG Sample Name: CCB2

Operator:

Run Time: 08/19/94 13:24:30

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPE

Avgc .0547

T00

DATE: 8/19/24
 SHIFT: DAY
 INSTR. NO.: 13A1000
 BATCH NO.: 890 895 907
 RAW DATA W/: 907
 ANALYST INIT: JBO
 SUPERVISOR: [Signature]

STANDARD	CONC. ppb	LOT NO.	CALIBRATION			
			STDS. ppb	REPS	ABS.	PEAK HT. mm
BLANK	0	HG-A-03-06				
STD 0.2	0.2	HG-A-45-05				
STD 0.5	0.5	HG-A-88-1	BLANK			
STD 1.0	1.0	HG-A-	0.2			
STD 2.0	2.0	HG-A-88-3	0.5			
STD 5.0	5.0	HG-A-88-4	1.0			
STD 10.0	10.0	HG-A-88-5	2.0			
ICV	4.0	HG-A-125-3	5.0			
CCV	4.0	HG-A-108-3	10.0			
CRA	0.2	HG-A-120-05				
SPK SOLN		123-3				

SAMPLE NO	BATCH NO	MATRIX	DILUTION FACTORS			REPS	ABS	PEAK HT mm	NOTES
			PREP	INSTR	FINAL				
ICV-1									3.69
ICB-1									U
CCV-1-1									3.97
CCB-1-1									U
CRA									0.38
PBS		sol		1000					U
LCSS									1.12
08 069 01	890								U
02									U
03									U
04								1.01	1.02
04D									0.66
04S									1.90

313

METALS DEPT.
PAGE 2

DATE: _____
ANALYST INIT: _____
BATCH NO: _____

002

[illegible]

50

TITLE

PROJECT NO.

BOOK NO.

Lot No. LRI	STD.	Manufacturer	Lot No.	Conc PPM	Date Received	Date Opened	Exp Date	Notes
A-50-01	B	Spex	2-2025	1,000	8/23/93	10/21	8/31/94	
A-50-02	Mg	Spex	2-2734	1,000	8/23/93		8/31/94	
A-50-03	Hg	Spex	2-20146	1,000	8/23/93	8/23/93	8/31/94	
A-50-04	Mo	Spex	2-20140	1,000	8/23/93	10/13/93	8/31/94	
A-50-05	Se	Spex	3-7052	1,000	8/23/93	10/11/93	8/31/94	
A-50-06	Ti	Spex	3-3811	1,000	8/23/93	10/13/93	8/31/94	
A-50-07	N	Spex	3-8914	1,000	8/23/93		8/31/94	
A-50-08	AL	Spex	E-185AL	10,000	9/23/93	10/29/93	9/30/94	
A-50-09	Fe	Spex	F-244FE	10,000	9/23/93	11/6/94	9/30/94	
A-50-10	Na	Spex	3-60NA	1,000	9/23/93	10/20/93	9/30/94	
A-50-11	Na	Spex	F-215NA	10,000	9/23/93	10/24/93	9/30/94	
A-50-12	Si	Spex	3-5751	1,000	9/23/93	10/20/93	9/30/94	Standard Container of use
A-50-13	Sn	Spex	D-119SN	10,000	9/23/93	10/13/93	9/30/94	
A-50-14	Ag	I.V.	I-AL0058	1,000	9/23/93	10/14/93	10/1/94	
A-50-15	Al	I.V.	I-AL0056	10,000	9/23/93	10/11/93	10/1/94	
A-50-16	As	I.V.	I-AS0147	999	9/23/93	10/14/93	10/1/94	
A-50-17	B	I.V.	I-B01057	1,000	9/23/93		10/1/94	

SCIENTIFIC BIRDY PRODUCTIONS CHICAGO 60605

SIGNATURE *CHOPH* DATE 10/19/93

DISCLOSED TO AND UNDERSTOOD BY DATE WITNESS DATE 315

Lot# LRI	STD	Mat. Fact.	Lot# LRI	Conc. PPM	Date Recd	Date Appld	Exp. Date	Note
A-54-01	Hg	I.V.	J-HG01070	1009	8-5-94	8-8-94	9-01-95	
A-54-02	Mn	I.V.	J-MN01093	997	8-5-94	8-8-94	9-01-95	
A-54-03	Mo	I.V.	J-MO01072	997	8-5-94	8-8-94	9-01-95	
A-54-04	Na	I.V.	J-NA01089	1005	8-5-94	8-8-94	9-01-95	
A-54-05	Na	I.V.	J-NA01105	1004	8-5-94	8-8-94	9-01-95	
A-54-06	Sb	I.V.	J-SB0116	998	8-5-94	8-8-94	9-01-95	
A-54-07	Sn	I.V.	J-SN01018	1001	8-5-94	8-8-94	9-01-95	
A-54-08	Ti	I.V.	J-TI01061	1000	8-5-94	8-8-94	9-01-95	
A-54-09	V	I.V.	J-VO01094	1004	8-5-94	8-8-94	9-01-95	
A-54-10	Zn	I.V.	J-ZN01080	1005	8-5-94	8-8-94	9-01-95	
A-54-11	Cd	I.V.	J-CD01057	1008	8-9-94	8-9-94	9-01-95	
A-54-12	Co	I.V.	J-CO01067	1000	8-9-94	8-9-94	9-01-95	
A-54-13	Fe	I.V.	J-FE02013	1004	8-9-94	8-9-94	9-01-95	
A-54-14	Pb	I.V.	J-PB02013	1004	8-9-94	8-9-94	9-01-95	
A-54-15	S.	I.V.	J-SI01087	999	8-9-94	8-9-94	9-01-95	
A-54-16	Tl	I.V.	J-TL01047	1002	8-9-94	8-9-94	9-01-95	

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 6060

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

316

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

003

HGBLANK

STD LOT NO.: HG-A- 0301 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/10/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0302 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/11/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0303 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/13/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0304 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/16/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0305 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/17/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0306 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/19/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- 0307 STD NAME: ICB/CCB/CAL BLK DATE PREP: <u>8/21/94</u> ANALYST INIT: <u>AN</u> FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3
STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3	STD LOT NO.: HG-A- STD NAME: ICB/CCB/CAL BLK DATE PREP: _____ ANALYST INIT: _____ FINAL VOL: <u>100 ML</u> PRESERVATIVES: 1ML CONC HNO3

317

HGSTDINT

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

017

STD LOT NO.: HG-A- 17-1 STD NAME: STD INTERMEDIATE DATE PREP: 8/12/94 ANALYST INIT: 32 FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	HG	1.0	1,000	A- 54-01
- USE INORGANIC VENTURES STDs; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- 17-2 STD NAME: STD INTERMEDIATE DATE PREP: 8/14/94 ANALYST INIT: 30 FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	HG	1.0	1,000	A- 54-01
- USE INORGANIC VENTURES STDs; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- 17-3 STD NAME: STD INTERMEDIATE DATE PREP: 8/21/94 ANALYST INIT: 30 FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	HG	1.0	1,000	A- 54-01
- USE INORGANIC VENTURES STDs; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- STD NAME: STD INTERMEDIATE DATE PREP: ANALYST INIT: FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	HG	1.0	1,000	A-
- USE INORGANIC VENTURES STDs; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- STD NAME: STD INTERMEDIATE DATE PREP: ANALYST INIT: FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	HG	1.0	1,000	A-
- USE INORGANIC VENTURES STDs; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				
STD LOT NO.: HG-A- STD NAME: STD INTERMEDIATE DATE PREP: ANALYST INIT: FINAL VOL: 100 ML PRESERVATIVES: 1ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	HG	1.0	1,000	A-
- USE INORGANIC VENTURES STDs; - PREPARE FRESH FOR EACH RUN; - TV = 10,000 ppb				

STANDARD PREPARATION LOG
MERCURY

STDPREPL

032

STD LOT NO.: HG-A- 32-01 STD NAME: WORKING INTERMEDIATE DATE PREP: 8/17/94 ANALYST INIT: 30 INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A- 17 -1
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- 3202 STD NAME: WORKING INTERMEDIATE DATE PREP: 8/19/94 ANALYST INIT: 30 INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A- 17 -2
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- 32-03 STD NAME: WORKING INTERMEDIATE DATE PREP: 8/21/94 ANALYST INIT: 30 INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A- 17 -3
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- STD NAME: WORKING INTERMEDIATE DATE PREP: ANALYST INIT: INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A-
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- STD NAME: WORKING INTERMEDIATE DATE PREP: ANALYST INIT: INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A-
TV = 100 ppb PREP FRESH FOR EACH RUN				
STD LOT NO.: HG-A- STD NAME: WORKING INTERMEDIATE DATE PREP: ANALYST INIT: INIT VOL (ML): 100 PRESERVATIVES: 1.0ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
	STD INTERMED	1.0	10	HG-A-
TV = 100 ppb PREP FRESH FOR EACH RUN				

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

HG02

045

STD LOT NO: HG-A- <u>8/10/84</u> STD NAME: STD 0.2 DATE PREP: <u>45-01</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-3</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/11/84</u> STD NAME: STD 0.2 DATE PREP: <u>45-02</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-4</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/13/84</u> STD NAME: STD 0.2 DATE PREP: <u>45-03</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-5</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/16/84</u> STD NAME: STD 0.2 DATE PREP: <u>45-04</u> ANALYST INIT: <u>BD</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>31-6</u>
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- <u>8/19/84</u> STD NAME: STD 0.2 DATE PREP: <u>BD</u> ANALYST INIT: <u>45-05</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- <u>3202</u>
TV=0.2ppb Prep fresh for each run				

HGSTDS

STANDARD PREPARATION LOG
-MERCURY-

088

METALS DEPT.

STD LOT NO: HG-A- 88-1 STD NAME: STD 0.5 DATE PREP: 8/18/94 5/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME WORKING INTERM.	ML 0.5	STOCK CONC PPB 100.0	STOCK INTECH NO. HG-A- 32 -2 TV=0.5P ppb Prep fresh for each run.
STD LOT NO: HG-A- STD NAME: STD 1.0 DATE PREP: ANALYST INIT: FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME WORKING INTERM.	ML 1.0	STOCK CONC PPB 100.0	STOCK INTECH NO. HG-A- TV=1.0 ppb Prep fresh for each run.
STD LOT NO: HG-A- 88-3 STD NAME: STD 2.0 DATE PREP: 8/18/94 5/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME WORKING INTERM.	ML 2.0	STOCK CONC PPB 100.0	STOCK INTECH NO. HG-A- 32 -2 TV=2.0 ppb Prep fresh for each run.
STD LOT NO: HG-A- 88-4 STD NAME: STD 5.0 DATE PREP: 8/18/94 5/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME WORKING INTERM.	ML 5.0	STOCK CONC PPB 100.0	STOCK INTECH NO. HG-A- 32 -2 TV=5.0 ppb Prep fresh for each run.
STD LOT NO: HG-A- 88-5 STD NAME: STD 10.0 DATE PREP: 8/18/94 5/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME WORKING INTERM.	ML 10.0	STOCK CONC PPB 100.0	STOCK INTECH NO. HG-A- 32 -2 TV=10.0 ppb Prep fresh for each run.

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

108

HG1

STD LOT NO: HG-A- 108 01 STD NAME: ICV/CCV DATE PREP: 8/16/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	4.0	100	HG-A- 153 01
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- 108 02 STD NAME: ICV/CCV DATE PREP: 8/12/94 ANALYST INIT: 34 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	4.0	100	HG-A- 153 02
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- 108 03 STD NAME: ICV/CCV DATE PREP: 8/19/94 ANALYST INIT: 30 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	4.0	100	HG-A- 153 -03
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- 108-4 STD NAME: ICV/CCV DATE PREP: 8/21/94 ANALYST INIT: 34 FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	4.0	100	HG-A- 153 4
TV=4.0 ppb Prep fresh for each run				
STD LOT NO: HG-A- STD NAME: ICV/CCV DATE PREP: ANALYST INIT: FINAL VOL(ML): 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppb	STOCK INTECH NO.
	ICV/CCV INTERM.	4.0	100	HG-A-
TV=4.0 ppb Prep fresh for each run				

STANDARD PREPARATION LOG
-MERCURY-

METALS DEPT.

HGCRA

STD LOT NO: HG-A- 120 01 STD NAME: CRA DATE PREP: 8/10/94 ANALYST INIT: <u>AB</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 123
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 02 STD NAME: CRA DATE PREP: 8/11/94 ANALYST INIT: <u>BO</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 1524
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 03 STD NAME: CRA DATE PREP: 8/13/94 ANALYST INIT: <u>BO</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 1525
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 04 STD NAME: CRA DATE PREP: 8/16/94 ANALYST INIT: <u>BO</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 15301
TV=0.2ppb Prep fresh for each run				
STD LOT NO: HG-A- 120 05 STD NAME: CRA DATE PREP: 8/19/94 ANALYST INIT: <u>BO</u> FINAL VOL(ML) : 100.0 PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPB	STOCK INTECH NO.
	WORKING INTERM.	0.2	100	HG-A- 15303
TV=0.2ppb Prep fresh for each run				

STD LOT NO: HG-A- 133-01 STD NAME: <u>ICV/ccv/SSHg</u> INTERMEDIATE DATE PREP: <u>8/16/94</u> ANALYST INIT: <u>BO</u> FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPM	STOCK INTECH NO.
	HG	1.0	1000	A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- 133-02 STD NAME: <u>ICV/ccv/SSHg</u> INTERMEDIATE DATE PREP: <u>8/17/94</u> ANALYST INIT: <u>BO</u> FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPM	STOCK INTECH NO.
	HG	1.0	1000	A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- 133-03 STD NAME: <u>ICV/ccv/SSHg</u> INTERMEDIATE DATE PREP: <u>8/19/94</u> ANALYST INIT: <u>BO</u> FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPM	STOCK INTECH NO.
	HG	1.0	1000	A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- 133-04 STD NAME: <u>ICV/ccv/SSHg</u> INTERMEDIATE DATE PREP: <u>8/21/94</u> ANALYST INIT: <u>BO</u> FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPM	STOCK INTECH NO.
	HG	1.0	1000	A- 50-03
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				
STD LOT NO: HG-A- STD NAME: <u>ICV/ccv/SSHg</u> INTERMEDIATE DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. PPM	STOCK INTECH NO.
	HG	1.0	1000	A-
TV=10,000ppb Use SPEX standard; Prep fresh for each run.				

STANDARD PREPARATION LOG
HGICVWOR, CCVWOR, SSHg -MERCURY-

METALS DEPT.

1

STD LOT NO; HG-A- 15301 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/16/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppm	STOCK INTECH NO.
	ICV/CCV/SSHg	1.0	10.0	HG-A- 133 01
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- 15302 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/17/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppm	STOCK INTECH NO.
	ICV/CCV/SSHg	1.0	10.0	HG-A- 133 02
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- 15303 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/19/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppm	STOCK INTECH NO.
	ICV/CCV/SSHg	1.0	10.0	HG-A- 133 03
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- 15304 STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: 8/21/94 ANALYST INIT: AD FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppm	STOCK INTECH NO.
	ICV/CCV/SSHg	1.0	10.0	HG-A- 133 01
TV=100 ppb Prep fresh for each run.				
STD LOT NO; HG-A- STD NAME: ICV/CCV/SSHg WORKING INTERMEDIATE DATE PREP: ANALYST INIT: FINAL VOL(ML): 100.0 ML PRESERVATIVES: 1.0 ML CONC HNO3	STOCK STD NAME	ML	STOCK CONC. ppm	STOCK INTECH NO.
	ICV/CCV/SSHg	1.0	10.0	HG-A-
TV=100 ppb Prep fresh for each run.				

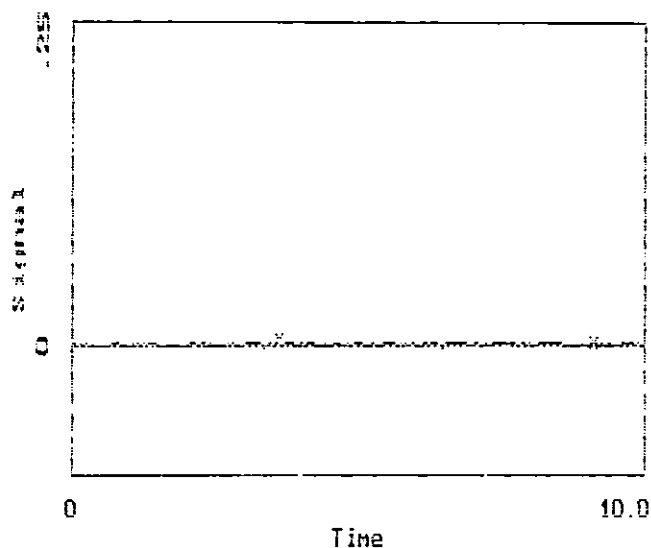
Method: HG

Standard: BlankSTD

08/19/94 09:42

xHG

#1 .0053



ANALYST SIGNATURE:

SUPERVISOR SIGNATURE:

Standardization Rpt.

Fri 08-19-94 09:44:27 AM

page 1

Method: HG

Standard: BlankSTD

Date: 08/19/94 09:42

Elem HG

Avgc .0053

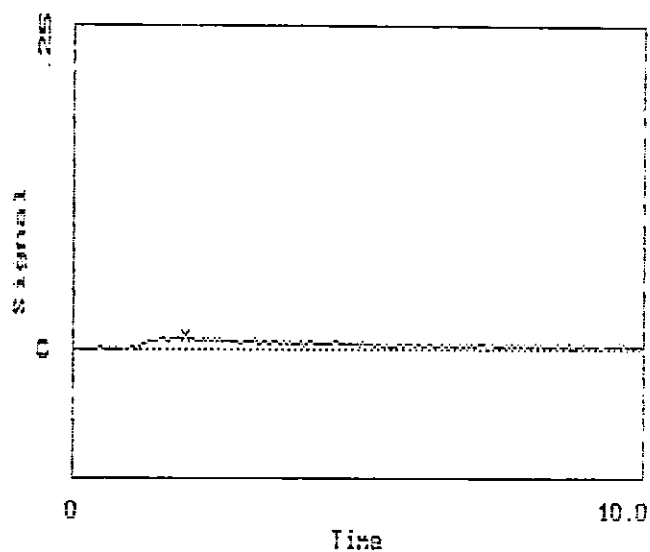
Method: HG

Standard: STD1

08/19/94 03:45

xH3

#1 .6311



Standardization Rpt.

Fri 08-19-94 09:46:31 AM

page 1

Method: HG

Standard: STD1

Date: 08/19/94 09:45

Elem HG

Avge .0311

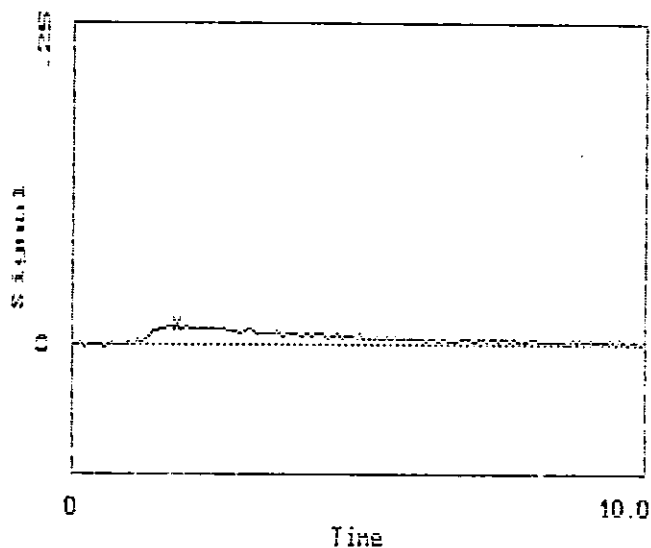
Method: HG Standard: STD2

08/19/94 09:47

xHG

#1 .0453

Corrected ———
Uncorrected - - - -



Standardization Rpt.

Fri 08-19-94 09:48:46 AM

page 1

Method: HG

Standard: STD2

Date: 08/19/94 09:47

Elem HG

Avge .0463

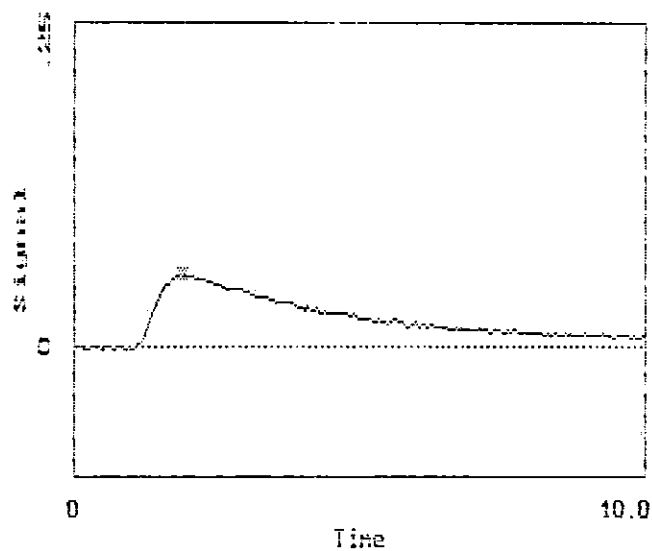
Method: HG

Standard: STD3

08/19/94 08:58

xHG

#1 .1956



Corrected ———
Uncorrected - - - -

Standardization Rpt.

Fri 08-19-94 09:51:50 AM

page 1

Method: HG

Standard: STDS

Date: 08/19/94 09:50

Elem HS

Avg# .1955

7-1 03-19-94 09:52:01 AM

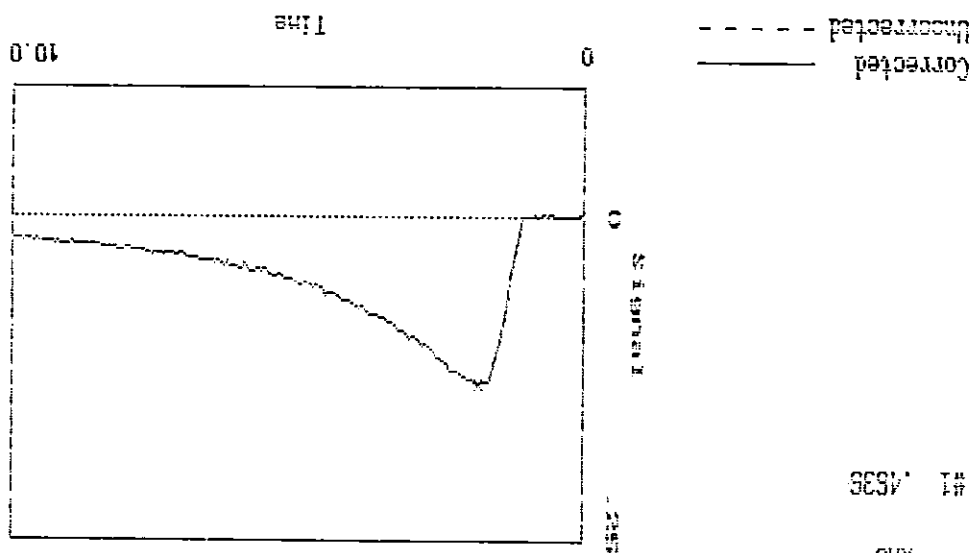
08/19/94 09:52

Standard: STD4

Method: HG

XHG

#1 .4535



Standardization Rpt.

Fri 09-19-94 09:53:50 AM

page 1

Method: HG

Standard: STD4

Date: 08/19/94 09:52

Elem H3

Avge .4636

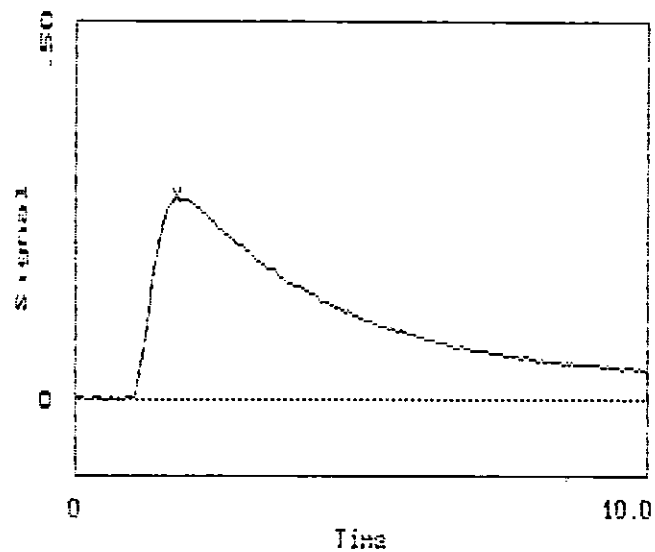
Method: HG

Standard: STD5

08/19/94 09:54

xHG

#1 1.004



Standardization Rpt.

Fri 08-19-94 09:55:43 AM

page 1

Method: HG

Standard: STD5

Date: 08/19/94 09:54

Elem HG

Avge 1.004

Method: HG Element: HG Wavelength: 253.70 Element 1 of 1

Correlation Coefficient: .997785
Conc. Correlation: .999144

Coefficients

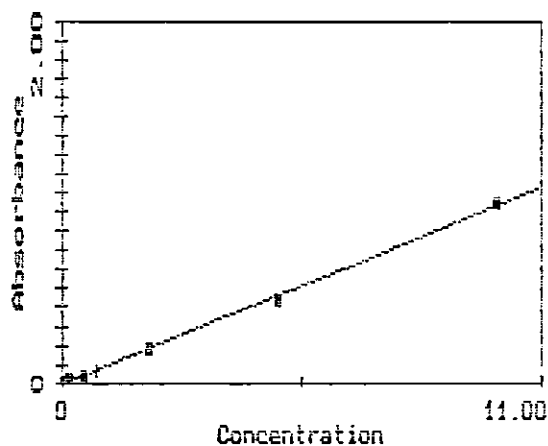
a1 = .090333 Abs : .070954
a2 = 0 Conc : .00292
a3 = 0

Fit Straight Line

Date: 19 Aug 94 09:54

Slope corr.: 1

Standard: Blank	STD1	STD2	STD3	STD4	STD5
Absorbance: 0.0000	.031054	.04631	.195639	.463633	1.00409
Known conc.: 0	.2	.5	2	5	10
Calc. conc.: 0.0000	.315801	.470949	1.90955	4.71492	10.2111
Residual: 0.0000	.115801	-.029052	-.010452	-.285063	.211102



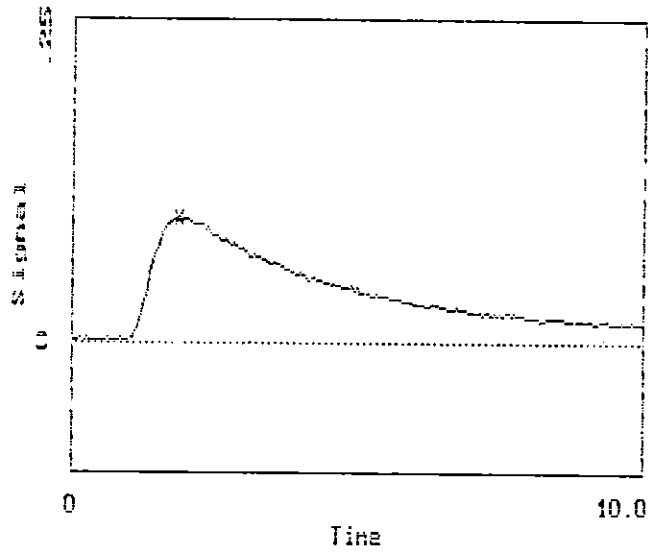
Fri 08-19-94 09:56:42 AM

Page 1

HG Unk Conc F:1 SN:ICV 08/19/94 09:56:41

xHG

#1 3.639



Analysis Report

Fri 08-19-94 09:58:11 AM

page 1

Method: HG Sample Name: ICV

Operator:

Run Time: 08/19/94 09:56:41

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avg 3.689

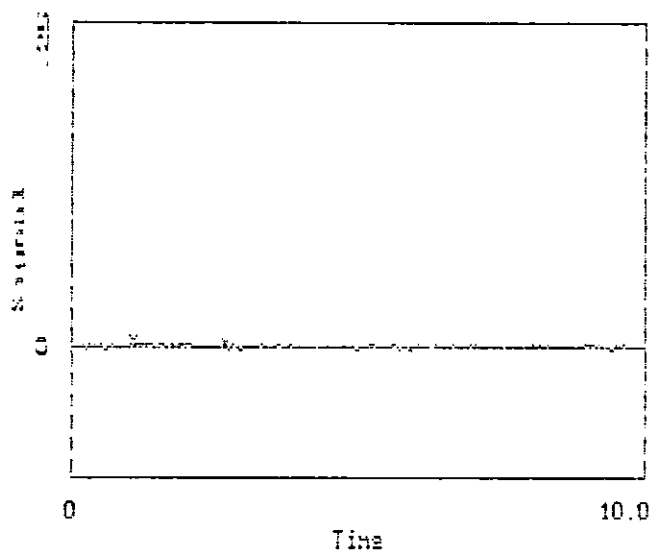
Fri 08-19 09:58:41 AM

page 1

HG Unk Conc F:1 SN:ICB 08/19/94 09:58:40

xHG

#1 .0917



Analysis Report

Fri 08-19-94 10:00:10 AM

page 1

Method: HG Sample Name: ICB

Operator:

Run Time: 08/19/94 09:58:40

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avge .0017

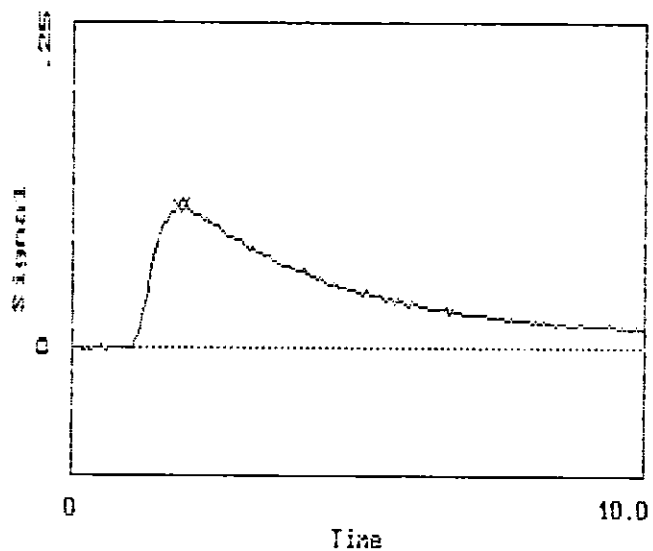
Fri 08-19-94 10:00:59 AM

page 1

HG Unk Conc F:1 SN:CCV 08/19/94 10:00:59

xHG

#1 3.974



Corrected ———
Uncorrected - - - -

Analysis Report

Fri 08-19-94 10:02:29 AM

page 1

Method: HG Sample Name: CCV

Operator:

Run Time: 08/19/94 10:00:59

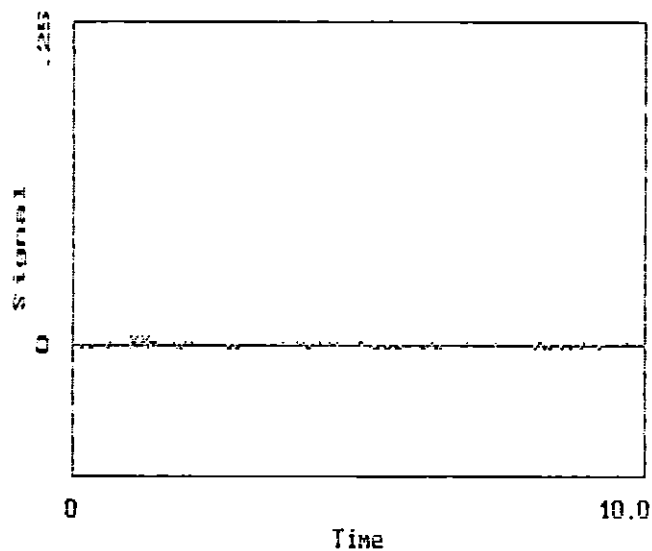
Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPB
Avge	3.974

HG Unk Conc F:1 SN:CCB 08/19/94 10:02:52

xHG
#1 -.0624



* Analysis Report

Fri 08-19-94 10:04:22 AM

page 1

Method: HG Sample Name: CCB

Operator:

Run Time: 08/19/94 10:02:52

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

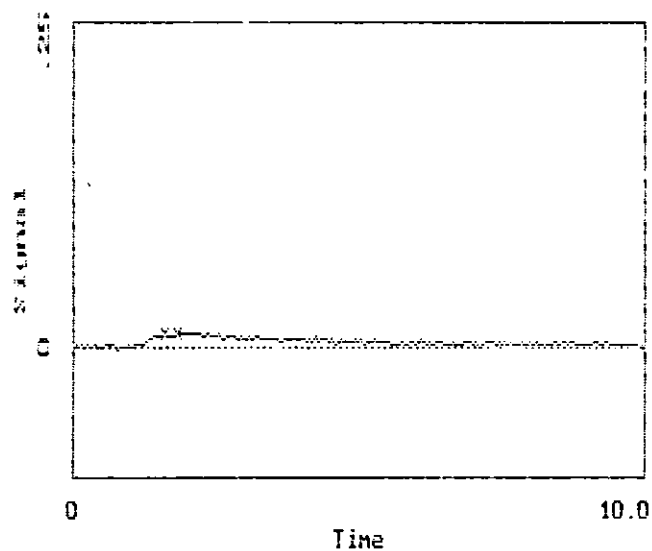
Units PPB

Avge <.0000

HG Unk Conc F:1 SN:CRA 08/19/94 10:04:45

xHG

#1 .3755



Analysis Report

Fri 08-19-94 10:06:19 AM

Page 1

Method: HG Sample Name: CRA

Operator:

Run Time: 08/19/94 10:04:49

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avg: .3755

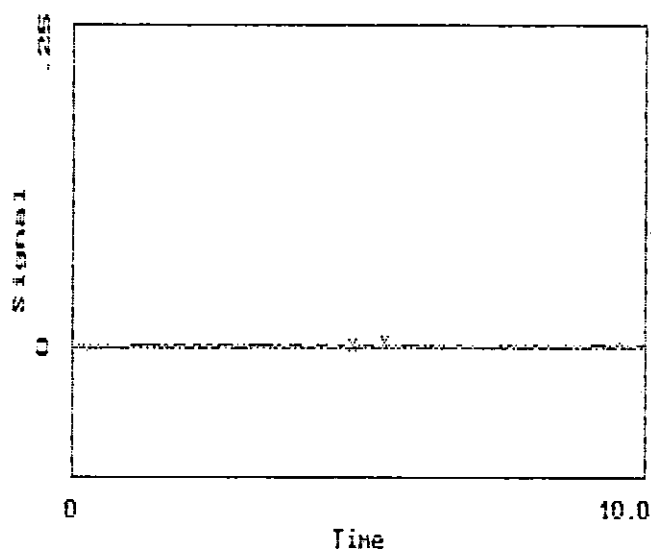
Fri 08-19-94 10:06:44 AM

page 1

HG Unk Conc F:1 SN:PBS 08/19/94 10:06:43

xHG

#1 .0500



Analysis Report

Fri 08-19-94 10:08:12 AM

page 1

Method: HG Sample Name: PPS

Operator:

Run Time: 08/19/94 10:06:43

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

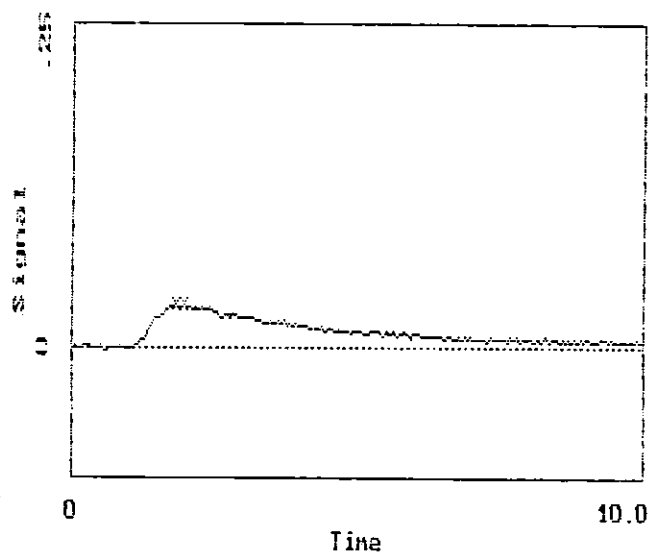
Avgc .0500

HG Unk Conc F:1 SN:LCSS

08/19/94 10:08:57

xHG

#1 1.121



Corrected ———
Uncorrected - - - -

Analysis Report

Fri 08-19-94 10:10:26 AM

page 1

Method: HG Sample Name: LCSS

Operator:

Run Time: 08/19/94 10:08:57

Comment:

Mode: Conc Corr. Factor: 1

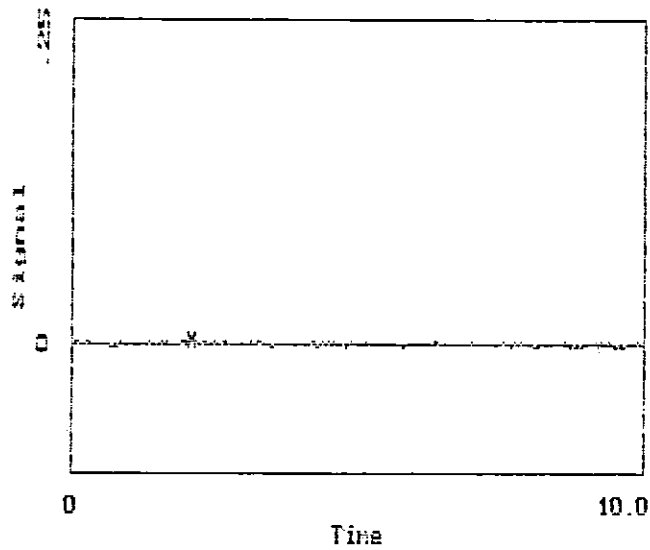
Elem	HG
Units	PPB
Avge	1.121

Fri 08-19-94 10:12:17 AM

page 1

HG Unk Conc F:1 SN:0006901 08/19/94 10:12:17

xHG
#1 -.0319



Corrected _____
Uncorrected - - - - -

Analysis Report

Fri 08-19-94 10:13:46 AM

page 1

Method: HG Sample Name: 0806901

Operator:

Run Time: 08/19/94 10:12:17

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

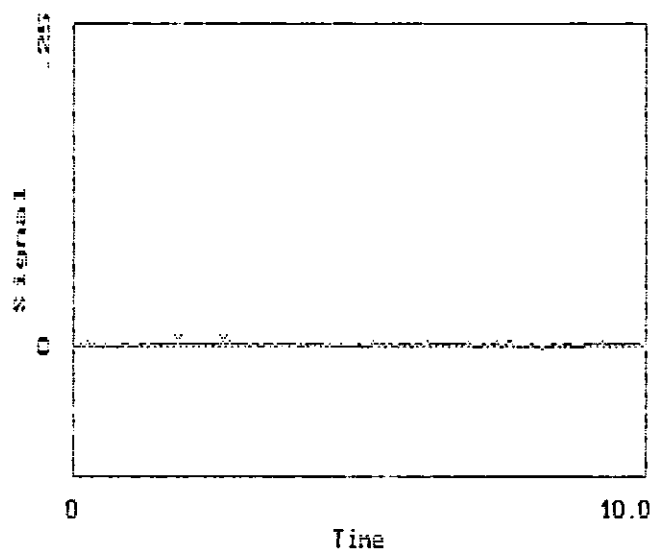
Units PPB

Avge <.0000

HG Unk Conc F:1 SW:0006902 08/19/94 10:14:53

xHG

#1 .1001



Corrected ———
Uncorrected - - - - -

Analysis Report

Fri 08-19-94 10:16:22 AM

page 1

Method: HG Sample Name: 0806902

Operator:

Run Time: 08/19/94 10:14:53

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avge .1001

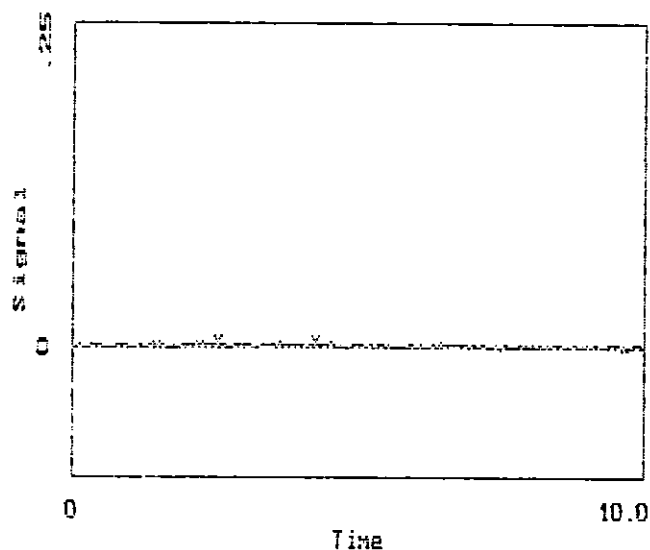
Fri 08-19-94 10:16:44 AM

page 1

HG Unk Conc F:1 SN:0006303 08/19/94 10:16:44

xHG

#1 .0005



Elem Hg
Units PPB
Avg .0885

Method: H5
Run Time: 08/19/94 10:16:44
Sample Name: 0906902
Comment:
Mode: Conc Corr. Factor: 1

Operator:

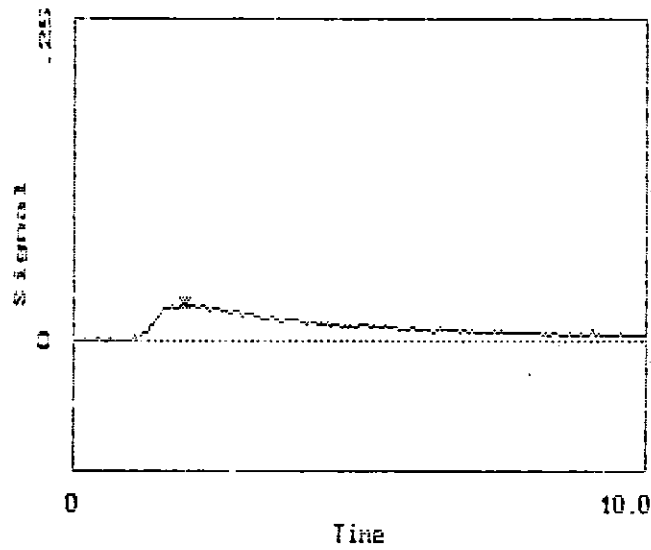
Analysis Report

Fri 08-19-94 10:18:13 AM

HG Unk Conc F:1 SN:0006904 08/19/94 10:18:45

xHG

#1 1.012



Corrected ———
Uncorrected - - - -

Analysis Report

Fri 08-19-94 10:20:15 AM

page 1

Method: HG Sample Name: 0806904

Operator:

Run Time: 08/19/94 10:18:45

Comment:

Mode: Conc Corr. Factor: 1

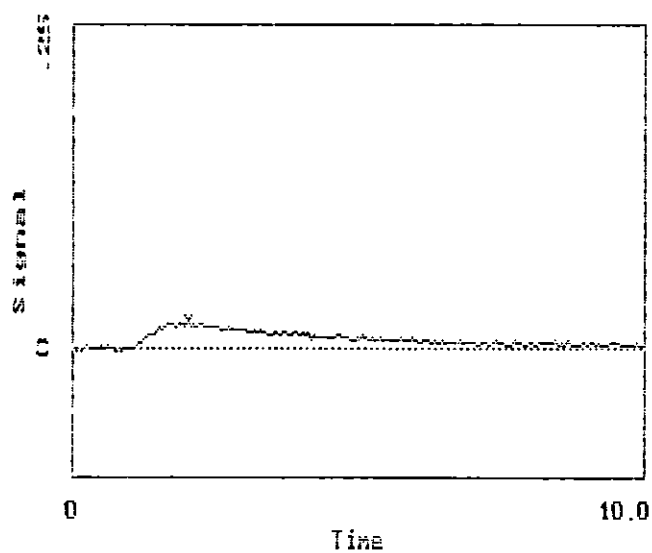
Elem HG

Units PPB

Avg 1.012

HC Unk Conc F:1 SN:0006924D 08/19/94 10:28:51

xH0
#1 .6612



Corrected ———
Uncorrected - - - - -

Analysis Report

Fri 08-19-94 10:22:20 AM

page 1

Method: HG Sample Name: 0806904D

Operator:

Run Time: 08/19/94 10:20:51

Comment:

Mode: Conc Corr. Factor: 1

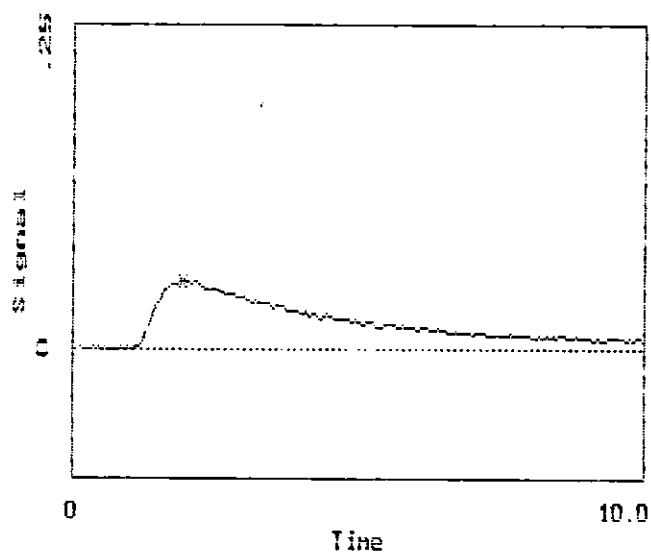
Elem HG

Units PPB

Avge .6612

HG . Unk Conc F:1 SN:0006904S 08/19/94 10:22:50

xHG
#1 1.904



Analysis Report

Fri 08-19-94 10:24:20 AM

page 1

Method: HG Sample Name: 08069048

Operator:

Run Time: 08/19/94 10:22:50

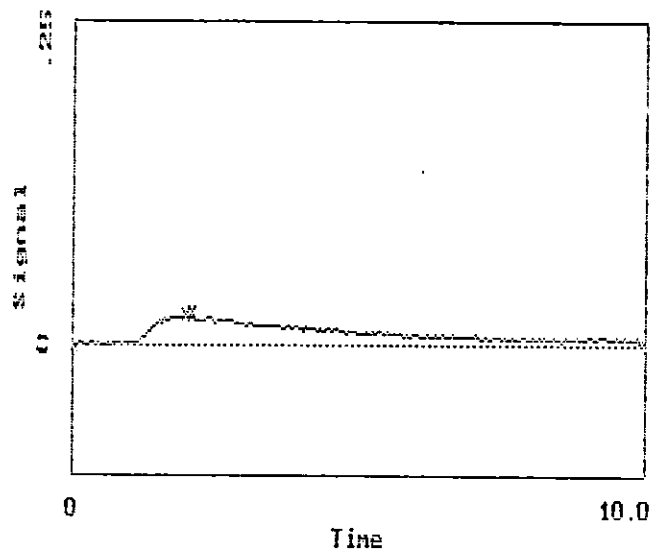
Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPB
Avg	1.904

HG Unk Conc F:1 SN:0006905 08/19/94 10:26:05

xHG
#1 .8514



Analysis Report

Fri 08-19-94 10:27:34 AM

page 1

Method: HG Sample Name: 0806905

Operator:

Run Time: 08/19/94 10:26:05

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avge .8514

Fri 08-19-94 10:29:55 AM

page 1

HG

Unk

Conc

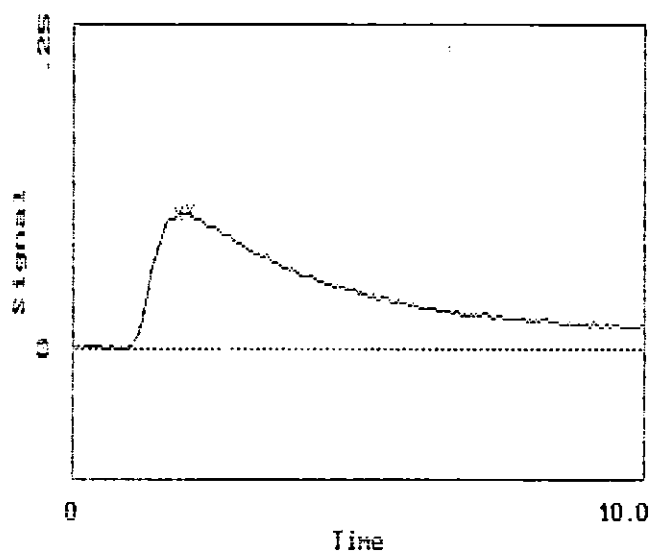
F:1

SN:CCV2

08/19/94 10:29:55

xHG

#1 4.043



Analysis Report

Fri 08-19-94 10:31:24 AM

page 1

Method: HG Sample Name: CCV2

Run Time: 08/19/94 10:29:55

Operator:

Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPB
Avg	4.043

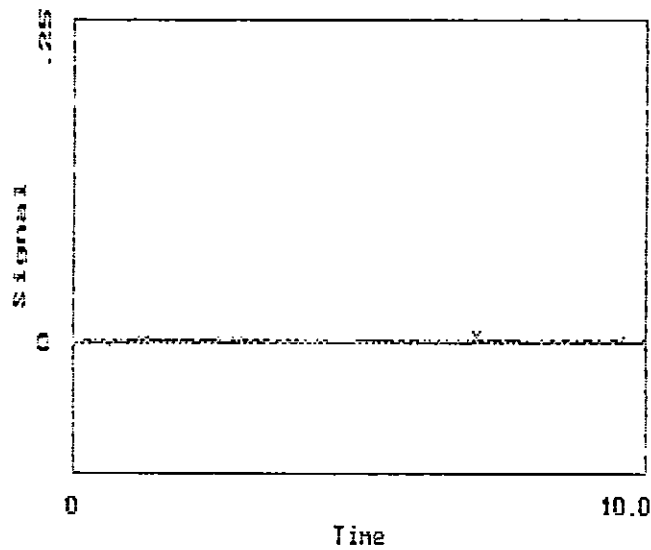
Fri 08-19-94 10:32:11 AM

page 1

HG Unk Conc F:1 SN:CCB2 08/19/94 10:32:10

xHG

#1 .8753



Analysis Report

Fri 08-19-94 10:33:40 AM

page 1

Method: HG Sample Name: CCB2

Operator:

Run Time: 08/19/94 10:32:10

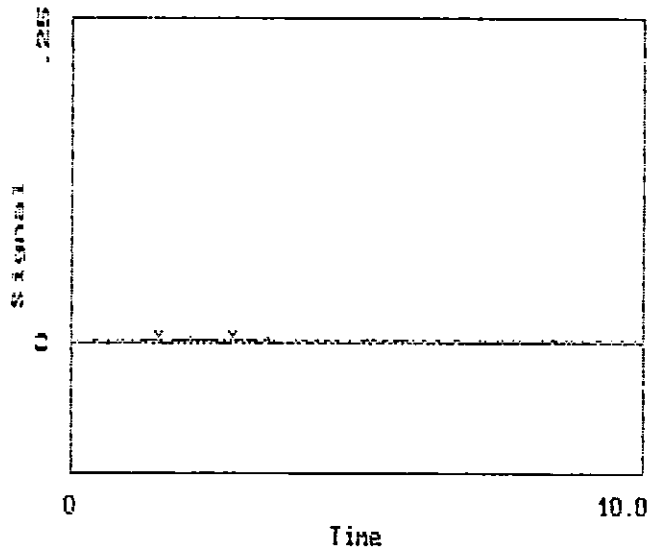
Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPB
Avge	.0753

HG Unk Conc F:1 SN:0806306 08/19/94 10:34:10

xH5
#1 .0468



Analysis Report

Fri 08-19-94 10:35:38 AM

Page 1

Method: HG Sample Name: 0806906

Operator:

Run Time: 08/19/94 10:34:10

Comment:

Mode: Conc Corr. Factor: 1

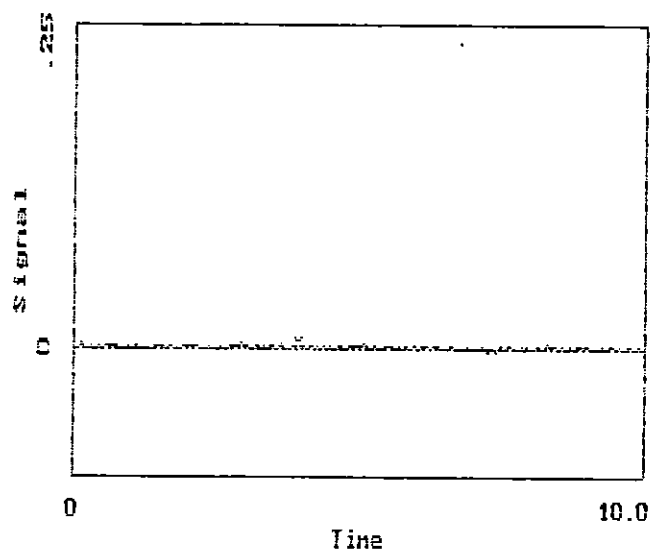
Elem HG

Units PPB

Avg: .0469

HG Unk Conc F:1 SN:0810301 08/19/94 10:36:04

xtHG
#1 .0577



Analysis Report

Fri 08-19-94 10:37:34 AM

Page 1

Method: HB Sample Name: 0810301

Operator:

Run Time: 08/19/94 10:36:04

Comment:

Mode: Conc Corr. Factor: 1

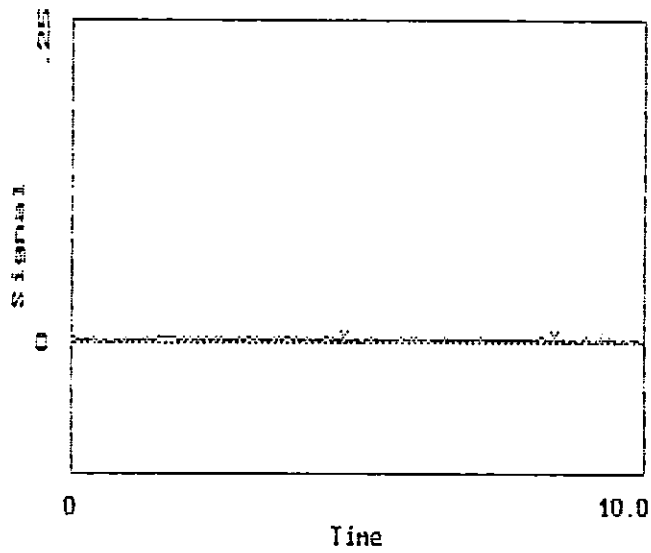
Elem HG

Units PPB

Avgc .0577

HG Unk Conc F:1 SN:00103010 08/19/94 10:37:58

xHG
#1 .1879



Analysis Report

Fri 08-19-94 10:39:30 AM

page 1

Method: HG Sample Name: 0810301D

Operator:

Run Time: 08/19/94 10:37:58

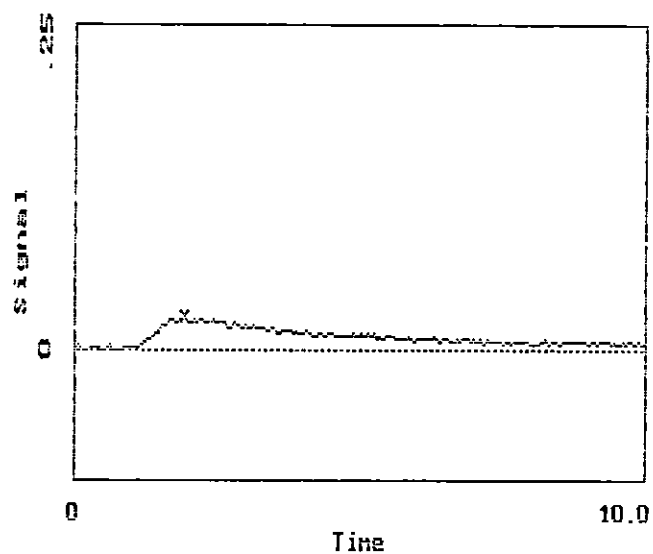
Comment:

Mode: Conc Corr. Factor: 1

Elem HG
Units PPB
Avge .1879

HG Unk Conc F:1 SN:0010301S 08/19/94 10:39:59

xHG
#1 .9276



Analyte Report

FY1 08-19-94 10:41:29 AM

Page 1

Method: HG

Sample Name: 08103015

Operator:

Run Time: 08/19/94 10:39:59

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPM

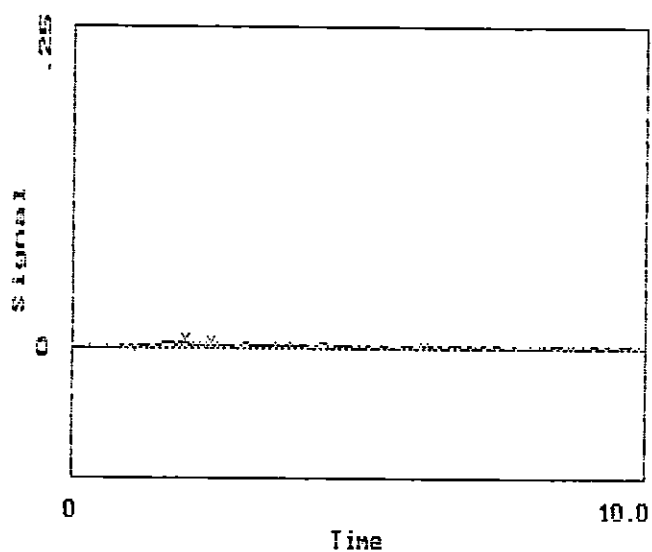
Avg .9276

Fri 08-19-94 10:41:58 AM

page 1

HG Unk Conc F:1 SN:0010302 08/19/94 10:41:58

xHG
#1 .1812



Corrected ———
Uncorrected - - - -

Analysis Report

Fri 08-19-94 10:43:27 AM

page 1

Method: HG Sample Name: 0810302

Operator:

Run Time: 08/19/94 10:41:58

Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPB
Avg	.1012

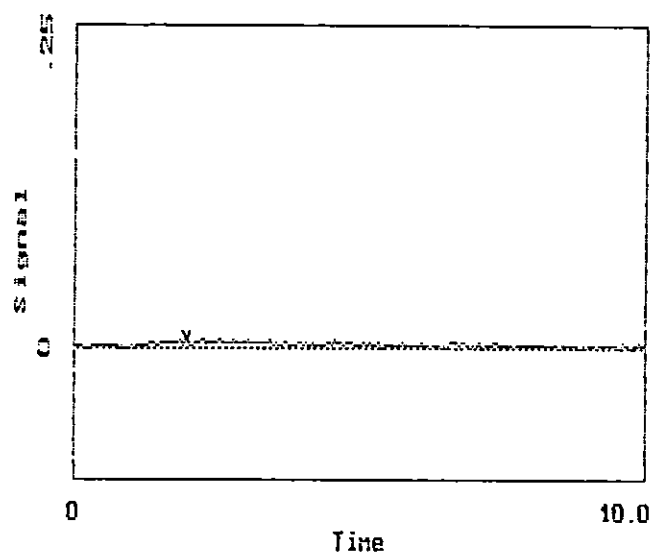
Fri 08-19-94 10:44:19 AM

page 1

HG Unk Conc F:1 SN:0810303 08/19/94 10:44:18

xHG

#1 .2112



Corrected —————
Uncorrected - - - - -

Analysis Report

Fri 08-19-94 10:45:48 AM

page 1

Method: HG Sample Name: 0810303

Operator:

Run Time: 08/19/94 10:44:18

Comment:

Mode: Conc Corr. Factor: 1

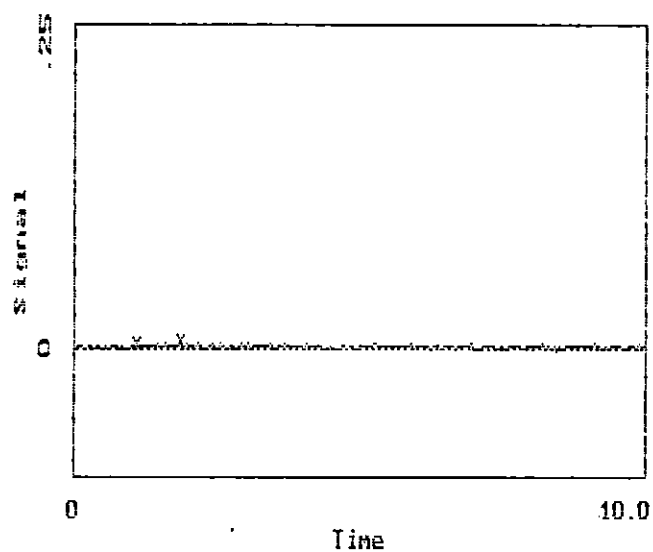
Elem	HG
Units	PPB
Avge	.2112

Fri 08-19-94 10:46:27 AM

page 1

HG Unk Conc F:1 SN:0010304 08/19/94 10:46:26

xHG
#1 .1214



Corrected ———
Uncorrected - - - -

Analysis Report

Fri 08-19-94 10:47:56 AM

page 1

Method: HG Sample Name: 0810304

Run Time: 08/19/94 10:46:26

Operator:

Comment:

Mode: Conc Corr. Factor: 1

Elem HG
Units PPB
Avge .1214

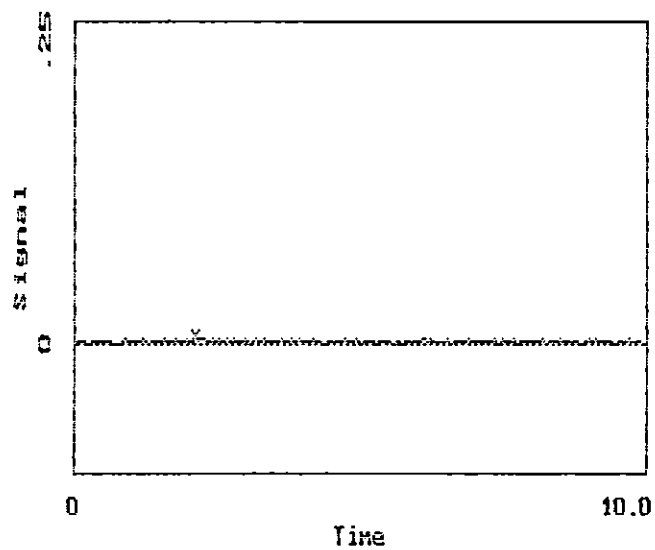
Fri 08-19-94 10:48:33 AM

page 1

HG Unk Conc F:1 SN:0810305 08/19/94 10:48:33

xHG

#1 .1500



Analysis Report

Fri 08-19-94 10:50:02 AM

page 1

Method: HG Sample Name: 0810305

Operator:

Run Time: 08/19/94 10:48:33

Comment:

Mode: Conc Corr. Factor: 1

Elem HG

Units PPB

Avge .1680

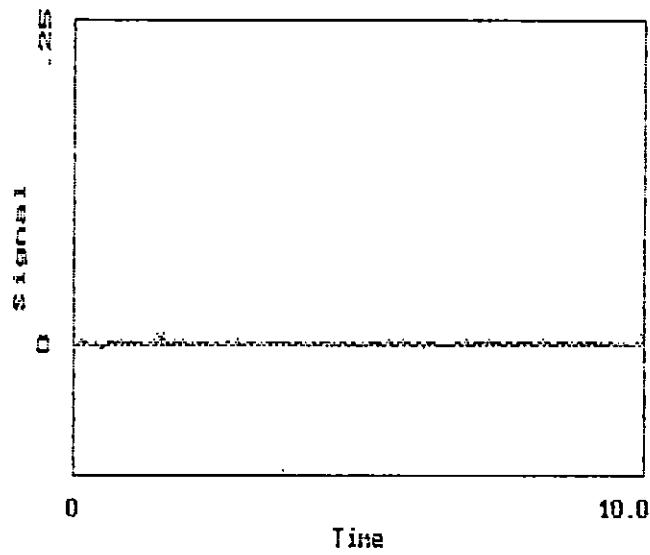
Fri 08-19-94 10:50:39 AM

page 1

HG Unk Conc F:1 SN:0810306 08/19/94 10:50:38

xHG

#1 .1029



Analysis Report

Fri 08-19-94 10:52:08 AM

page 1

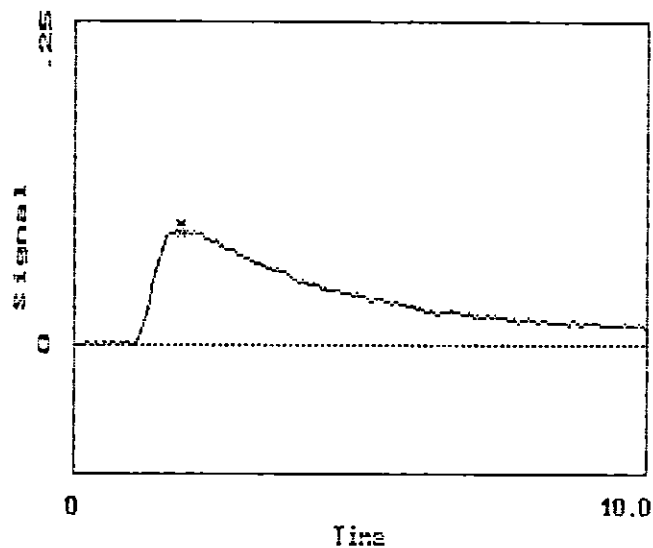
Method: HG Sample Name: 0810306
Run Time: 08/19/94 10:50:38
Comment:
Mode: Conc Corr. Factor: 1

Operator:

Elem HG
Units PPB
Avge .1029

HG Unk Conc F:1 SN:CCV3 08/19/94 10:59:03

xHG
#1 3.398



Corrected ———
Uncorrected - - - - -

Analysis Report

Fri 08-19-94 11:00:32 AM

page 1

Method: HG Sample Name: CCV3

Operator:

Run Time: 08/19/94 10:59:03

Comment:

Mode: Conc Corr. Factor: 1

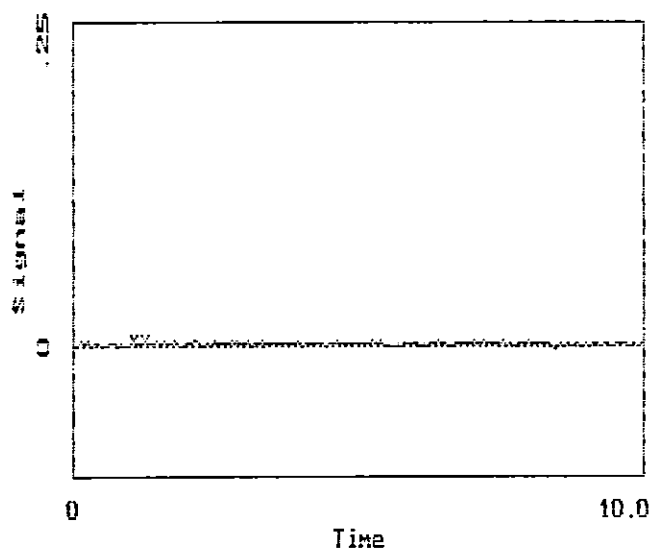
Elem	HG
Units	PPB
Avge	3.398

Fri 08-19-94 11:01:09 AM

page 1

HG Unk Conc F:1 SN:CCB3 08/19/94 11:01:08

xHG
#1 .1488



Corrected ———
Uncorrected - - - - -

Analysis Report

Fri 08-19-94 11:02:38 AM

page 1

Method: HG Sample Name: CCB3

Operator:

Run Time: 08/19/94 11:01:08

Comment:

Mode: Conc Corr. Factor: 1

Elem	HG
Units	PPE
Avgc	.1408

DISTILLATION LOG CYANIDE

DEPT: WET CHEM

DATE : 8/19/1994
TIME START : 2:30
TIME END : 5:00
ANALYST : OK

SAMPLE NO.	MATRIX	BATCH NO	SAMPLE AMOUNT		WATER ML	SCRUBER ML	FINAL VOL. ML
			ML (B)	G, WET (G)			
PBS	Soil	1N. Blk. Sand BMS-58 LOT 58001		5.0	500	50	250
LCSS	Soil	PPS-46 LOT# 214		1.1	500		
PBW.	liquid				500		
Std.	liquid				500		
ICV.	liquid				500		
8-103 -1	Soil			5.0	500		
(dup) -1							
(MS) -1							
-2							
-3							
-4							
-5							
-6							
-7	liquid		500				
							
							
							
							

DATE : 8/22/94
ANALYST: DB

1. STANDARDIZATION OF THE SILVER NITRATE SOLUTION

AGNO₃ = 50 ML FOR TITRATION

FINAL VOL = 50 ML

pH = 8.0 su

NACL SOLN = 68 ML TITRANT

Normality AGNO₃ = 0.0192

2. STANDARDIZATION OF THE STOCK SOLUTIONS

2.1 BLANK

BLANK = 250 ML FOR TITRATION

AGNO₃ = 0 ML TITRANT

2.2 STOCK CN (FOR STDS)

STOCK CN = 25 ML FOR TITRATION

FINAL VOL = 250 ML

AGNO₃ = 249 ML TITRANT

Normality stock CN = 996

2.3 STOCK CHECK (FOR CHECKS)

STOCK CHECK = 25 ML FOR TITRATION

FINAL VOL = 250 ML

AGNO₃ = 25 ML TITRANT

Normality stock check = 1000

ANALYSIS RUN LOG
CYANIDE

DEPT:WET CHEM
PAGE 1

DATE : 8/22/94
TIME(START) : 9:30
TIME(END) : 11:30
BATCH NO :
METHOD NO : CLP
ANALYST : OS
SUPERVISOR : OS

1. f = 0.0192

AGNO3

2. True = Theor. x f
CN

3. Corr. coef = 0.998

4. CN(ug/l) = $\frac{A \times 1000}{B} \times \frac{50}{C}$

5. CN(mg/kg wet) = $\frac{A \times 50/C}{G}$

STD NAME	CONC, UG TOTAL IN 250 ML		ABS	LOT NO
	THEOR.	TRUE		
STD1=BLK	0		0.000	WET-A-34-1
STD2	5		0.069	WET-A-34-2
STD3	10		0.145	WET-A-34-3
STD4	25		0.366	WET-A-34-4
STD5	50		0.73	WET-A-34-5
STD6	75		1.115	WET-A-34-6
STD7	100		1.404	WET-A-34-7
STD8	200		2.571	WET-A-34-8

SAMPLE NO	MATRIX	BATCH	COLORIMETRIC ANALYSIS		ABS	CONC, UG FROM CURVE (A)	FINAL CONC	
			INITIAL ML (C)	FINAL ML			UG/L	MG/KG WET
DISTILLED STANDARD TV = 200ppb			50	100		0.390	195	Rec = 98%
ICV-1 TV = 80ppb						0.138	69	Rec = 86%
ICB-1						0.000	<10.0	
CCV-1-1 TV = 200ppb						0.401	200	Rec = 100%
CCB-1-1						0.000	<10	
PBW						0.000	<10	
PBS						0.001		<1.0
DCSW								
3 ICSS TV = 117 ug/kg			50	100		0.511	255	Rec = 99% 116

PAGE 2

[illegible]

**STANDARDS PREPARATION LOG
CYANIDE**

DEPT:WET CHEM

STD LOT NO : WET-A-1-1	STD NAME	AMOUNT,G	ORIGINAL LOT NO.
STD NAME : STOCK CN	KCN	2.51	Fisher Scientific # 855146A
DATE/TIME PREP : 2/11/93	KOH	2.0	EM Science # 293.42023
ANALYST : <u>W</u>	Theoretical Value : 1000 mg/l		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-2	STD NAME	AMOUNT,G	ORIGINAL LOT NO.
STD NAME : STOCK CN	KCN	2.51	J.T. Baker Inc LOT # 3080-01
DATE/TIME PREP : 7/19/93	KOH	2.0	Mallinckrodt LOT # 6984
ANALYST : <u>OS</u>	Theoretical Value : 1000 mg/l		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-3	STD NAME	AMOUNT,G	ORIGINAL LOT NO.
STD NAME : STOCK CN	KCN	2.51	J.T. Baker LOT # 3080-01
DATE/TIME PREP : 1/10/94	KOH	2.0	Mallinckrodt LOT # 6984
ANALYST : <u>OS</u>	Theoretical Value : 1000 mg/l		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-4	STD NAME	AMOUNT,G	ORIGINAL LOT NO.
STD NAME : STOCK CN	KCN	2.51	J.T. Baker LOT # 3080-01
DATE/TIME PREP : 6/21/94	KOH	2.0	Mallinckrodt LOT # 6984
ANALYST : <u>OS</u>	Theoretical Value : 1000 mg/l		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-5	STD NAME	AMOUNT,G	ORIGINAL LOT NO.
STD NAME : STOCK CN	KCN	2.51	
DATE/TIME PREP : _____	KOH	2.0	
ANALYST : _____	Theoretical Value : 1000 mg/l		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-6	STD NAME	AMOUNT,G	ORIGINAL LOT NO.
STD NAME : STOCK CN	KCN	2.51	
DATE/TIME PREP : _____	KOH	2.0	
ANALYST : _____	Theoretical Value : 1000 mg/l		
FINAL VOLUME : 1000.0 ML			

STANDARDS PREPARATION LOG
CYANIDE

DEPT:WET CHEM

STD LOT NO : WET-A-6-1	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CN	STOCK CN	5.0	WET-A-1-4
DATE/TIME PREP : 7/25/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-2	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CN	STOCK CN	5.0	WET-A-1-4
DATE/TIME PREP : 7/27/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-3	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CN	STOCK CN	5.0	WET-A-1-4
DATE/TIME PREP : 7/29/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-4	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CN	STOCK CN	5.0	WET-A-1-4
DATE/TIME PREP : 8/17/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-5	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CN	STOCK CN	5.0	WET-A-1-4
DATE/TIME PREP : 8/22/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-6	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CN	STOCK CN	5.0	WET-A-1-4
DATE/TIME PREP :			
ANALYST :			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		

STANDARDS PREPARATION LOG
CYANIDE

DEPT:WET CHEM

STD LOT NO : WET-A-6-1	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CN	INTERM CN	10.0	WET-A-6-1
DATE/TIME PREP : 7/25/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A-6-2	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CN	INTERM CN	10.0	WET-A-6-2
DATE/TIME PREP : 7/27/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A-6-3	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CN	INTERM CN	10.0	WET-A-6-3
DATE/TIME PREP : 7/29/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A-6-4	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CN	INTERM CN	10.0	WET-A-6-4
DATE/TIME PREP : 8/17/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A-6-5	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CN	INTERM CN	10.0	WET-A-6-5
DATE/TIME PREP : 8/22/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A-6-6	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CN	INTERM CN	10.0	WET-A-6-6
DATE/TIME PREP :			
ANALYST :			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		

**STANDARDS PREPARATION LOG
CYANIDE**

DEPT:WET CHEM

STD LOT NO : WET-A-1-1	STD NAME	G	FROM LOT NO.
STD NAME : STOCK CHECK	KCN	2.51	CHEMPUR # RC-235
DATE/TIME PREP : 2/5/93	KOH	2.0	EM Soluce # 293+2025
ANALYST : <u>HR</u>	Theoretical Value : 1000MG/L		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-2	STD NAME	G	FROM LOT NO.
STD NAME : STOCK CHECK	KCN	2.51	Mallinckrodt LOT # 6881
DATE/TIME PREP : 6/22/93	KOH	2.0	Mallinckrodt LOT # 6984
ANALYST : <u>OS</u>	Theoretical Value : 1000MG/L		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-3	STD NAME	G	FROM LOT NO.
STD NAME : STOCK CHECK	KCN	2.51	Mallinckrodt LOT # 6881
DATE/TIME PREP : 12/21/93	KOH	2.0	Mallinckrodt LOT # 6984
ANALYST : <u>OS</u>	Theoretical Value : 1000MG/L		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-4	STD NAME	G	FROM LOT NO.
STD NAME : STOCK CHECK	KCN	2.51	Mallinckrodt LOT # 6881
DATE/TIME PREP : 6/21/94	KOH	2.0	Mallinckrodt LOT # 6984
ANALYST : <u>OS</u>	Theoretical Value : 1000MG/L		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-5	STD NAME	G	FROM LOT NO.
STD NAME : STOCK CHECK	KCN	2.51	
DATE/TIME PREP : _____	KOH	2.0	
ANALYST : _____	Theoretical Value : 1000MG/L		
FINAL VOLUME : 1000.0 ML			
STD LOT NO : WET-A-1-6	STD NAME	G	FROM LOT NO.
STD NAME : STOCK CHECK	KCN	2.51	
DATE/TIME PREP : _____	KOH	2.0	
ANALYST : _____	Theoretical Value : 1000MG/L		
FINAL VOLUME : 1000.0 ML			

400

STANDARDS PREPARATION LOG
CYANIDE

DEPT:WET CHEM

STD LOT NO : WET-A-6-1	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CHECK			
DATE/TIME PREP : 7/25/94	STOCK CHECK	5.0	WET-A-1-4
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-2	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CHECK			
DATE/TIME PREP : 7/27/94	STOCK CHECK	5.0	WET-A-1-4
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-3	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CHECK			
DATE/TIME PREP : 7/29/94	STOCK CHECK	5.0	WET-A-1-4
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-4	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CHECK			
DATE/TIME PREP : 8/17/94	STOCK CHECK	5.0	WET-A-1-4
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-5	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CHECK			
DATE/TIME PREP : 8/22/94	STOCK CHECK	5.0	WET-A-1-4
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 50MG/L(1ml=50ug)		
STD LOT NO : WET-A-6-6	STD NAME	ML	FROM LOT NO.
STD NAME : INTERM CHECK			
DATE/TIME PREP :	STOCK CHECK	5.0	WET-A-1-4
ANALYST :			
FINAL VOLUME : 100.0 ML	401 Theoretical Value : 50MG/L(1ml=50ug)		

STANDARDS PREPARATION LOG
CYANIDE

DEPT:WET CHEM

STD LOT NO : WET-A- 6-1	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CHECK	INTERM CHECK	10.0	WET-A- 6-1
DATE/TIME PREP : 7/25/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A- 6-2	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CHECK	INTERM CHECK	10.0	WET-A- 6-2
DATE/TIME PREP : 7/27/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A- 6-3	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CHECK	INTERM CHECK	10.0	WET-A- 6-3
DATE/TIME PREP : 7/29/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A- 6-4	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CHECK	INTERM CHECK	10.0	WET-A- 6-4
DATE/TIME PREP : 8/17/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A- 6-5	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CHECK	INTERM CHECK	10.0	WET-A- 6-5
DATE/TIME PREP : 8/22/94			
ANALYST : OS			
FINAL VOLUME : 100.0 ML	Theoretical Value : 5 MG/L(1ml=5 ug)		
STD LOT NO : WET-A- 6-6	STD NAME	ML	FROM LOT NO.
STD NAME : WORKING CHECK	INTERM CHECK	10.0	WET-A- 6-6
DATE/TIME PREP :			
ANALYST :			
FINAL VOLUME : 100.0 ML	402 Theoretical Value : 5 MG/L(1ml=5 ug)		

STANDARDS PREPARATION LOG
CYANIDE

DEPT:WET CHEM

STD LOT NO : WET-A- 6-1	STD NAME	ML	FROM LOT NO.
STD NAME : ICV			
DATE/TIME PREP : 7/25/94	WORKING CHECK	8.0	WET-A- 6-1
ANALYST : OS			
PIPET TO BOILING FLASK			
	Theoretical Value :40 UG/250ML		
STD LOT NO : WET-A- 6-2	STD NAME	ML	FROM LOT NO.
STD NAME : ICV			
DATE/TIME PREP : 7/27/94	WORKING CHECK	8.0	WET-A- 6-2
ANALYST : OS			
PIPET TO BOILING FLASK			
	Theoretical Value :40 UG/250ML		
STD LOT NO : WET-A- 6-3	STD NAME	ML	FROM LOT NO.
STD NAME : ICV			
DATE/TIME PREP : 7/29/94	WORKING CHECK	8.0	WET-A- 6-3
ANALYST : OS			
PIPET TO BOILING FLASK			
	Theoretical Value :40 UG/250ML		
STD LOT NO : WET-A- 6-4	STD NAME	ML	FROM LOT NO.
STD NAME : ICV			
DATE/TIME PREP : 8/17/94	WORKING CHECK	8.0	WET-A- 6-4
ANALYST : OS			
PIPET TO BOILING FLASK			
	Theoretical Value :40 UG/250ML		
STD LOT NO : WET-A- 6-5	STD NAME	ML	FROM LOT NO.
STD NAME : ICV			
DATE/TIME PREP : 8/22/94	WORKING CHECK	8.0	WET-A- 6-5
ANALYST : OS			
PIPET TO BOILING FLASK			
	Theoretical Value :40 UG/250ML		
STD LOT NO : WET-A- 6-6	STD NAME	ML	FROM LOT NO.
STD NAME : ICV			
DATE/TIME PREP :	WORKING CHECK	8.0	WET-A- 6-6
ANALYST :			
PIPET TO BOILING FLASK			
	403		
	Theoretical Value :40 UG/250ML		

STANDARDS PREPARATION LOG
CYANIDE

DEPT:WET CHEM

STD LOT NO : WET-A- 6-1	STD NAME	ML	FROM LOT NO.
STD NAME : CCV	WORKING CN	20.0	WET-A- 6-1
DATE/TIME PREP : 7/25/94			
ANALYST : OS			
FINAL VOLUME : 250.0ML	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-2	STD NAME	ML	FROM LOT NO.
STD NAME : CCV	WORKING CN	20.0	WET-A- 6-2
DATE/TIME PREP : 7/27/94			
ANALYST : OS			
FINAL VOLUME : 250.0ML	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-3	STD NAME	ML	FROM LOT NO.
STD NAME : CCV	WORKING CN	20.0	WET-A- 6-3
DATE/TIME PREP : 7/29/94			
ANALYST : OS			
FINAL VOLUME : 250.0ML	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-4	STD NAME	ML	FROM LOT NO.
STD NAME : CCV	WORKING CN	20.0	WET-A- 6-4
DATE/TIME PREP : 8/17/94			
ANALYST : OS			
FINAL VOLUME : 250.0ML	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-5	STD NAME	ML	FROM LOT NO.
STD NAME : CCV	WORKING CN	20.0	WET-A- 6-5
DATE/TIME PREP : 8/22/94			
ANALYST : OS			
FINAL VOLUME : 250.0ML	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-6	STD NAME	ML	FROM LOT NO.
STD NAME : CCV	WORKING CN	20.0	WET-A- 6-6
DATE/TIME PREP :			
ANALYST :			
FINAL VOLUME : 250.0ML	404 Theoretical Value :100UG/250ML		

STANDARDS PREPARATION LOG
CYANIDE

DEPT:WET CHEM

STD LOT NO : WET-A- 6-1	STD NAME	ML	FROM LOT NO.
STD NAME : DISTILLED STD	WORKING CN	20.0	WET-A- 6-1
DATE/TIME PREP : 7/25/94			
ANALYST : OS			
PIPET TO BOILING FLASK	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-2	STD NAME	ML	FROM LOT NO.
STD NAME : DISTILLED STD	WORKING CN	20.0	WET-A- 6-2
DATE/TIME PREP : 7/27/94			
ANALYST : OS			
PIPET TO BOILING FLASK	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-3	STD NAME	ML	FROM LOT NO.
STD NAME : DISTILLED STD	WORKING CN	20.0	WET-A- 6-3
DATE/TIME PREP : 7/29/94			
ANALYST : OS			
PIPET TO BOILING FLASK	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-4	STD NAME	ML	FROM LOT NO.
STD NAME : DISTILLED STD	WORKING CN	20.0	WET-A- 6-4
DATE/TIME PREP : 8/17/94			
ANALYST : OS			
PIPET TO BOILING FLASK	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-5	STD NAME	ML	FROM LOT NO.
STD NAME : DISTILLED STD	WORKING CN	20.0	WET-A- 6-5
DATE/TIME PREP : 8/22/94			
ANALYST : OS			
PIPET TO BOILING FLASK	Theoretical Value :100UG/250ML		
STD LOT NO : WET-A- 6-6	STD NAME	ML	FROM LOT NO.
STD NAME : DISTILLED STD	WORKING CN	20.0	WET-A- 6-6
DATE/TIME PREP :			
ANALYST :			
PIPET TO BOILING FLASK	405		
	Theoretical Value :100UG/250ML		

STD LOT NO : WET-A- 34-1	FROM STD	ML	FROM LOT NO
STD NAME : STD1 = BLANK	-	-	-
DATE/TIME PREP : 8/22/99	Theoretical Value : 0 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			
STD LOT NO : WET-A- 34-2	FROM STD	ML	FROM LOT NO
STD NAME : STD2	WORKING CN	1.0	WET-A- 6-5
DATE/TIME PREP : 8/22/99	Theoretical Value : 5 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			
STD LOT NO : WET-A- 34-3	FROM STD	ML	FROM LOT NO
STD NAME : STD3	WORKING CN	2.0	WET-A- 6-5
DATE/TIME PREP : 8/22/99	Theoretical Value : 10 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			
STD LOT NO : WET-A- 34-4	FROM STD	ML	FROM LOT NO
STD NAME : STD4	WORKING CN	5.0	WET-A- 6-5
DATE/TIME PREP : 8/22/99	Theoretical Value : 25 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			
STD LOT NO : WET-A- 34-5	FROM STD	ML	FROM LOT NO
STD NAME : STD5	WORKING CN	10.0	WET-A- 6-5
DATE/TIME PREP : 8/22/99	Theoretical Value : 50 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			
STD LOT NO : WET-A- 34-6	FROM STD	ML	FROM LOT NO
STD NAME : STD6	WORKING CN	15.0	WET-A- 6-5
DATE/TIME PREP : 8/22/99	Theoretical Value : 75 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			
STD LOT NO : WET-A- 34-7	FROM STD	ML	FROM LOT NO
STD NAME : STD7	WORKING CN	20.0	WET-A- 6-5
DATE/TIME PREP : 8/22/99	Theoretical Value : 100 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			
STD LOT : WET-A- 34-8	FROM STD	ML	FROM LOT NO
STD NAME : STD8	WORKING CN	40.0	WET-A- 6-5
DATE/TIME PREP : 8/22/99	Theoretical Value : 200 ug/250ml		
ANALYST : 03			
FINAL VOLUME : 250.0 ML			

BATCH NO.

[illegible]

Analyst/Date 8/19/94 BZ

Sample Spiked _____

Apple Duped

Mike Added

00030

SAMPLE PREPARATION LOG

BATCH NO.

Sample No.	ICP			Furnace			Mercury			pH S.U.	Comments
	Initial Vol/wt	Final Vol/wt	Factor	Initial Vol/wt	Final Vol/wt	Factor	Initial Vol/wt	Final Vol/wt	Factor		
BUL							100	100			
0.2							100	100			
0.5							100	100			
1.0							100	100			
5.0							100	100			
11.0							100	100			
FW							100	100			4.05 gm
LCB							100	100			
CU							100	100			4.05 gm
CUB							100	100			
CRA							100	100			0.25 gm
PGS							0.20	100			
LCSS							0.20	100			1.05 gm
03069	03069	04					0.20	100			
040		040					0.20	100			
045		045					0.20	100			1.05 gm
02							0.20	100			
03							0.20	100			
01030	01030	01					0.20	100			
05							0.20	100			
CU2							100	100			4.05 gm
CCB2							100	100			
06							0.20	100			
031030							0.20	100			
010							0.20	100			
011							0.20	100			1.05 gm
02							0.20	100			
03							0.20	100			
04							0.20	100			
05							0.20	100			
06							0.20	100			

Analyst/Date

8/19/94

Sample Spiked

0306904

0310301

Sample Duped

04

01

Spike Added

409

Laboratory
Resources

SAMPLE PREPARATION LOG

BATCH NO. _____

analyst/Date

Sample Spiked

Simple Duped

Size Added

8/25/44 M

STD LOT NO.: SP-CLP-A 12
 STD NAME: SSICAP1
 DATE PREP: 9/10/94
 ANALYST INIT: JB
 FINAL VOL(ML): 100.0
 PRESERVATIVES: 1.0 ML CONC HNO3

TV, ppb:

Ag, Cd, Be: ----- 5,000 ppb;
 As, Ba, Tl, Si ----- 200,000 ppb;
 Co, Mn, Ni, Pb, Sb, Zn 50,000 ppb;
 Cr ----- 20,000 ppb;
 Cu ----- 25,000 ppb;

Use SPEX standards

200 ml prepped

STOCK STD NAME	ML	STOCK CONC ppm	STOCK INTECH NO.
Ag ✓	1.0 0.5	1,000	A-51-15
As ✓	20.0 40.0	1,000	A-49-16
Ba ✓	20.0 40.0	1,000	A-49-17
Be ✓	0.5 1.0	1,000	A-48-10
Cd ✓	0.5 1.0	1,000	A-51-17
Co ✓	5.0 10.0	1,000	A-52-01
Cr ✓	2.0 4.0	1,000	A-47-16
Cu ✓	2.5 5.0	1,000	A-52-03
Mn ✓	5.0 10.0	1,000	A-52-05
Ni ✓	5.0 10.0	1,000	A-48-07
Pb ✓	5.0 10.0	1,000	A-48-04
Sb ✓	5.0 10.0	1,000	A-52-04
Tl ✓	20.0 40.0	1,000	A-52-06
Zn ✓	5.0 10.0	1,000	A-48-06
Si ✓	20.0	1,000	A

SPIKE SOLUTIONS LOG
ICAP

METALS DEPT.

STD LOT NO.: SP-CLP-A- 66-01 STD NAME: SSICAP2 DATE PREP: <u>12/17/93</u> ANALYST INIT: <u>MP</u> FINAL VOL(ML): <u>100.0</u> <u>200.0</u> PRESERVATIVES: <u>1.0</u> ML CONC HNO3 <u>2.0</u> TV, ppb: Ca, Mg, Na-----1,000,000 ppb; Al-----200,000 ppb; Fe-----100,000 ppb; K-----2,000,000 ppb; Use SPEX standards.	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppb</th> <th>STOCK INTECH NO.</th> </tr> </thead> <tbody> <tr> <td>Al</td> <td>2.0</td> <td>10,000</td> <td>A- 50-02</td> </tr> <tr> <td>Ca</td> <td>10.0</td> <td>10,000</td> <td>A- 48-01</td> </tr> <tr> <td>Fe</td> <td>10.0</td> <td>1,000</td> <td>A- 48-02</td> </tr> <tr> <td>Mg</td> <td>10.0</td> <td>10,000</td> <td>A- 48-02</td> </tr> <tr> <td>K</td> <td>20.0</td> <td>10,000</td> <td>A- 47-17</td> </tr> <tr> <td>Na</td> <td>10.0</td> <td>10,000</td> <td>A- 50-11</td> </tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.	Al	2.0	10,000	A- 50-02	Ca	10.0	10,000	A- 48-01	Fe	10.0	1,000	A- 48-02	Mg	10.0	10,000	A- 48-02	K	20.0	10,000	A- 47-17	Na	10.0	10,000	A- 50-11
STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.																										
Al	2.0	10,000	A- 50-02																										
Ca	10.0	10,000	A- 48-01																										
Fe	10.0	1,000	A- 48-02																										
Mg	10.0	10,000	A- 48-02																										
K	20.0	10,000	A- 47-17																										
Na	10.0	10,000	A- 50-11																										
STD LOT NO.: SP-CLP-A- 66-02 STD NAME: SSICAP2 DATE PREP: <u>7-21-94</u> ANALYST INIT: <u>AB</u> FINAL VOL(ML): <u>100.0</u> PRESERVATIVES: <u>1.0</u> ML CONC HNO3 TV, ppb: Ca, Mg, Na-----1,000,000 ppb; Al-----200,000 ppb; Fe-----100,000 ppb; K-----2,000,000 ppb; Use SPEX standards. <u>200 ml prepped</u>	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppb</th> <th>STOCK INTECH NO.</th> </tr> </thead> <tbody> <tr> <td>Al ✓</td> <td>2.0 <u>4.0</u></td> <td>10,000</td> <td>A- 50-08</td> </tr> <tr> <td>Ca ✓</td> <td>10.0 <u>20.0</u></td> <td>10,000</td> <td>A- 53-16</td> </tr> <tr> <td>Fe ✓</td> <td>10.0 <u>20.0</u></td> <td>1,000</td> <td>A- 53-05</td> </tr> <tr> <td>Mg ✓</td> <td>10.0 <u>20.0</u></td> <td>10,000</td> <td>A- 52-12</td> </tr> <tr> <td>K ✓</td> <td>20.0 <u>40.0</u></td> <td>10,000</td> <td>A- 52-14</td> </tr> <tr> <td>Na ✓</td> <td>10.0 <u>20.0</u></td> <td>10,000</td> <td>A- 50-11</td> </tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.	Al ✓	2.0 <u>4.0</u>	10,000	A- 50-08	Ca ✓	10.0 <u>20.0</u>	10,000	A- 53-16	Fe ✓	10.0 <u>20.0</u>	1,000	A- 53-05	Mg ✓	10.0 <u>20.0</u>	10,000	A- 52-12	K ✓	20.0 <u>40.0</u>	10,000	A- 52-14	Na ✓	10.0 <u>20.0</u>	10,000	A- 50-11
STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.																										
Al ✓	2.0 <u>4.0</u>	10,000	A- 50-08																										
Ca ✓	10.0 <u>20.0</u>	10,000	A- 53-16																										
Fe ✓	10.0 <u>20.0</u>	1,000	A- 53-05																										
Mg ✓	10.0 <u>20.0</u>	10,000	A- 52-12																										
K ✓	20.0 <u>40.0</u>	10,000	A- 52-14																										
Na ✓	10.0 <u>20.0</u>	10,000	A- 50-11																										
STD LOT NO.: SP-CLP-A- STD NAME: SSICAP2 DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML): <u>100.0</u> PRESERVATIVES: <u>1.0</u> ML CONC HNO3 TV, ppb: Ca, Mg, Na-----1,000,000 ppb; Al-----200,000 ppb; Fe-----100,000 ppb; K-----2,000,000 ppb; Use SPEX standards.	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppb</th> <th>STOCK INTECH NO.</th> </tr> </thead> <tbody> <tr> <td>Al</td> <td>2.0</td> <td>10,000</td> <td>A-</td> </tr> <tr> <td>Ca</td> <td>10.0</td> <td>10,000</td> <td>A-</td> </tr> <tr> <td>Fe</td> <td>10.0</td> <td>1,000</td> <td>A-</td> </tr> <tr> <td>Mg</td> <td>10.0</td> <td>10,000</td> <td>A-</td> </tr> <tr> <td>K</td> <td>20.0</td> <td>10,000</td> <td>A-</td> </tr> <tr> <td>Na</td> <td>10.0</td> <td>10,000</td> <td>A-</td> </tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.	Al	2.0	10,000	A-	Ca	10.0	10,000	A-	Fe	10.0	1,000	A-	Mg	10.0	10,000	A-	K	20.0	10,000	A-	Na	10.0	10,000	A-
STOCK STD NAME	ML	STOCK CONC, ppb	STOCK INTECH NO.																										
Al	2.0	10,000	A-																										
Ca	10.0	10,000	A-																										
Fe	10.0	1,000	A-																										
Mg	10.0	10,000	A-																										
K	20.0	10,000	A-																										
Na	10.0	10,000	A-																										

SPIKE SOLUTIONS LOG
ICAP

METALS DEPT.

STD LOT NO.: SP-CLP-A-127-01 STD NAME: SSICAP3 DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML) 100.0 PRESERVATIVES: 1.0 ML CONC HNO3 TV, ppb: V-----50,000 ppb; B,Mo,Se,Ti---200,000 ppb; Use SPEX standards	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppm</th> <th>STOCK INTECH NO.</th> </tr> </thead> <tbody> <tr><td>B</td><td>20.0</td><td>1,000</td><td>A-56-01</td></tr> <tr><td>Mo</td><td>20.0</td><td>1,000</td><td>A-56-04</td></tr> <tr><td>Se</td><td>20.0</td><td>1,000</td><td>A-50-05</td></tr> <tr><td>Ti</td><td>20.0</td><td>1,000</td><td>A-47-06</td></tr> <tr><td>V</td><td>5.0</td><td>1,000</td><td>A-48-05</td></tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.	B	20.0	1,000	A-56-01	Mo	20.0	1,000	A-56-04	Se	20.0	1,000	A-50-05	Ti	20.0	1,000	A-47-06	V	5.0	1,000	A-48-05
STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.																						
B	20.0	1,000	A-56-01																						
Mo	20.0	1,000	A-56-04																						
Se	20.0	1,000	A-50-05																						
Ti	20.0	1,000	A-47-06																						
V	5.0	1,000	A-48-05																						
STD LOT NO.: SP-CLP-A-127-02 STD NAME: SSICAP3 DATE PREP: 7-21-94 ANALYST INIT: AB FINAL VOL(ML) 100.0 PRESERVATIVES: 1.0 ML CONC HNO3 TV, ppb: V-----50,000 ppb; B,Mo,Se,Ti---200,000 ppb; Use SPEX standards 200 ml prepped	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppm</th> <th>STOCK INTECH NO.</th> </tr> </thead> <tbody> <tr><td>B ✓</td><td>20.0 40.0</td><td>1,000</td><td>A-53-10</td></tr> <tr><td>Mo ✓</td><td>20.0 40.0</td><td>1,000</td><td>A-53-11</td></tr> <tr><td>Se ✓</td><td>20.0 40.0</td><td>1,000</td><td>A-53-04</td></tr> <tr><td>Ti ✓</td><td>20.0 40.0</td><td>1,000</td><td>A-53-09</td></tr> <tr><td>V</td><td>5.0 10.0</td><td>1,000</td><td>A-53-03</td></tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.	B ✓	20.0 40.0	1,000	A-53-10	Mo ✓	20.0 40.0	1,000	A-53-11	Se ✓	20.0 40.0	1,000	A-53-04	Ti ✓	20.0 40.0	1,000	A-53-09	V	5.0 10.0	1,000	A-53-03
STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.																						
B ✓	20.0 40.0	1,000	A-53-10																						
Mo ✓	20.0 40.0	1,000	A-53-11																						
Se ✓	20.0 40.0	1,000	A-53-04																						
Ti ✓	20.0 40.0	1,000	A-53-09																						
V	5.0 10.0	1,000	A-53-03																						
STD LOT NO.: SP-CLP-A- STD NAME: SSICAP3 DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML) 100.0 PRESERVATIVES: 1.0 ML CONC HNO3 TV, ppb: V-----50,000 ppb; B,Mo,Se,Ti---200,000 ppb; Use SPEX standards	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppm</th> <th>STOCK INTECH NO.</th> </tr> </thead> <tbody> <tr><td>B</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>Mo</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>Se</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>Ti</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>V</td><td>5.0</td><td>1,000</td><td>A-</td></tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.	B	20.0	1,000	A-	Mo	20.0	1,000	A-	Se	20.0	1,000	A-	Ti	20.0	1,000	A-	V	5.0	1,000	A-
STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.																						
B	20.0	1,000	A-																						
Mo	20.0	1,000	A-																						
Se	20.0	1,000	A-																						
Ti	20.0	1,000	A-																						
V	5.0	1,000	A-																						
STD LOT NO.: SP-CLP-A- STD NAME: SSICAP3 DATE PREP: _____ ANALYST INIT: _____ FINAL VOL(ML) 100.0 PRESERVATIVES: 1.0 ML CONC HNO3 TV, ppb: V-----50,000 ppb; B,Mo,Se,Ti---200,000 ppb; Use SPEX standards	<table border="1"> <thead> <tr> <th>STOCK STD NAME</th> <th>ML</th> <th>STOCK CONC, ppm</th> <th>STOCK INTECH NO.</th> </tr> </thead> <tbody> <tr><td>B</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>Mo</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>Se</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>Ti</td><td>20.0</td><td>1,000</td><td>A-</td></tr> <tr><td>V</td><td>5.0</td><td>1,000</td><td>A-</td></tr> </tbody> </table>	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.	B	20.0	1,000	A-	Mo	20.0	1,000	A-	Se	20.0	1,000	A-	Ti	20.0	1,000	A-	V	5.0	1,000	A-
STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.																						
B	20.0	1,000	A-																						
Mo	20.0	1,000	A-																						
Se	20.0	1,000	A-																						
Ti	20.0	1,000	A-																						
V	5.0	1,000	A-																						

SPCLP

SPIKE SOLUTION LOG
-FURNACE-

METALS DEPT.

STD LOT NO.: SP-CLP-A-189-01	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.
STD NAME: SSFU	As	0.4 0.8	1,000	A-49-16
DATE PREP: 6/29/94	Cd	0.05 0.1	1,000	A-51-17
ANALYST INIT: JB	Pb	0.2 0.4	1,000	A-48-04
FINAL VOL(ML): 100.0	Se	0.1 0.2	1,000	A-50-01
PRESERVATIVES: 2.0 HNO ₃	Tl	0.5 1.0	1,000	A-52-06
	Sb	1.0 2.0	1,000	A-52-04
	Sn	0.4	1,000	A-47-15
TV, ppb: 200 ml prepped				
As 4,000;				
Cd 500;				
Pb 2,000;				
Se 1,000;				
Tl 5,000;				
Sb 10,000;				
Sn				
Use SPEX standards.				

STD LOT NO.: SP-CLP-A-	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.
STD NAME: SSFU	As	0.4	1,000	A-
DATE PREP:	Cd	0.05	1,000	A-
ANALYST INIT:	Pb	0.2	1,000	A-
FINAL VOL(ML): 100.0	Se	0.1	1,000	A-
PRESERVATIVES:	Tl	0.5	1,000	A-
	Sb	1.0	1,000	A-
	Sn		1,000	A-
TV, ppb:				
As 4,000;				
Cd 500;				
Pb 2,000;				
Se 1,000;				
Tl 5,000;				
Sb 10,000;				
Sn				
Use SPEX standards.				

STD LOT NO.: SP-CLP-A-	STOCK STD NAME	ML	STOCK CONC, ppm	STOCK INTECH NO.
STD NAME: SSFU	As	0.4	1,000	A-
DATE PREP:	Cd	0.05	1,000	A-
ANALYST INIT:	Pb	0.2	1,000	A-
FINAL VOL(ML): 100.0	Se	0.1	1,000	A-
PRESERVATIVES:	Tl	0.5	1,000	A-
	Sb	1.0	1,000	A-
	Sn		1,000	A-
TV, ppb:				
As 4,000;				
Cd 500;				
Pb 2,000;				
Se 1,000;				
Tl 5,000;				
Sb 10,000;				
Sn				
Use SPEX standards.				

48

TITLE

PROJECT NO.

BOOK NO.

Lot # LRI	STD	Manufacturer	Lot No.	Conc. Ppm	Date Rec.	Date Open	Exp Date	A
A-48-01	Ca	Spex G-228Ca JB 7/1/93	G-228Ca	10,000	7/8/93	7/15/93	7/15/94	
A-48-02	Mg	Spex	G-245Mg	10,000	7/8/93	7/15/93	7/15/94	
A-48-03	Tl	Spex	3-2TL	1,000	7/8/93	7/8/93	7/15/94	
A-48-04	Pb	Spex	3-40Pb	1,000	7/8/93	7/8/93	7/15/94	
A-48-05	V	Spex	2-233V	1,000	7/8/93	7/22/93	7/15/94	
A-48-06	Zn	Spex	3-50ZN	1,000	7/8/93	7/8/93	7/15/94	
A-48-07	Ni	Spex	2-266Ni	1,000	7/8/93	7/8/93	7/15/94	
A-48-08	Fe	Spex	3-18FE	1,000	7/8/93	7/22/93	7/15/94	
A-48-09	Al	Spex	3-58AL	1,000	7/8/93	7/22/93	7/15/94	
A-48-10	Be	Spex	3-56Be	1,000	7/8/93	7/8/93	7/15/94	
A-48-11	Sn	IV	A-Sn0128	1,002	7/8/93	10/8/93	8/1/94	
A-48-12	Zn	IV	1-ZN0151	1,001	7/8/93	8/2/93	8/1/94	
A-48-13	Na	IV	1-NA01060	993	7/8/93	7/9/93	8/1/94	
A-48-14	Tl	IV	11-TL0132	1001	7/8/93	7/8/93	8/1/94	
A-48-15	V	IV	1-V0144	1001	7/8/93	9/1/93	8/1/94	
A-48-16	Mo	IV	1-M00139	1002	7/8/93	8/4/93	8/1/94	
A-48-17	Si	IV	11-SI01058	999	7/8/93	8/2/93	8/1/94	

SIGNATURE

SCIENTIFIC WENDY PRODUCTIONS CHICAGO

DATE

10/19/93

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

Lot No. LRI	STD	Manufacturer	Lot No.	Conc. ppm	Date Recd	Date open	Exp. Date	Notes
49-01	Pi	IV	H-T10140	997	7/8/93	8/2/93	8/1/94	
49-02	Cd	IV	1-CD-0143	996	7/8/93	7/2/93	8/1/94	
49-03	Fe	IV	1-FE0184	9944	7/8/93	7/29/93	8/1/94	
49-04	Mn	IV	1-MN01059	1003	7/8/93	8/4/93	8/1/94	
49-05	Na	IV	1-NA0150	10011	7/8/93	8/2/93	8/1/94	
49-06	B	IV	H-B0133	998	7/8/93	8/4/93	8/1/94	
49-07	Fe	IV	1-FE0183	1003	7/8/93	8/1/93	8/1/94	
49-08	Pb	IV	1-Pb01060	1005	7/8/93	7/8/93	8/1/94	
49-09	Sb	IV	1-SB0172	997	7/8/93	7/8/93	8/1/94	
49-10	Ca	IV	1-CA0167	10,024	7/8/93	7/21/93	8/1/94	
49-11	Mg	IV	1-MG0174	10,020	7/8/93	10/11/93	8/1/94	
49-12	Co	IV	H-CO0135	997	7/8/93	8/2/93	8/1/94	
49-13	Ba	IV	1-BA0152	1004	7/8/93	8/2/93	8/1/94	
49-14	Black sand	ERA	58001		6/16/93	7/31/93		Dr. 38
49-15	Hg	IV	H-Hg0135	1000	8/20/93	8/20/93	9/1/94	
49-16	As	Spec	2-217AS	1,000	8/23/93	8/14/93	8/31/94	
49-17	Bg	Spec	2-235BA	1,000	8/23/93	8/14/93	8/31/94	

SIGNATURE

DATE

10/19/93

CLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

416

50

TITLE

PROJECT NO.

BOOK NO.

Lot No. LRI	STD.	Manufacturer	Lot No.	Conc PPM	Date Received	Date Opened	Expt Date	Notes
A-50-01	B	SPeX	2-2625	1,000	8/23/93	10/2/93	8/31/94	
A-50-02	Mg	SPeX	2-2731	1,000	8/23/93		8/31/94	
A-50-03	Hg	SPeX	2-25116	1,000	8/23/93	8/23/93	8/31/94	
A-50-04	Mo	SPeX	2-26116	1,000	8/23/93	10/13/93	8/31/94	
A-50-05	Se	SPeX	3-70-se	1,000	8/23/93	10/11/93	8/31/94	
A-50-06	Ti	SPeX	3-3011	1,000	8/23/93	10/13/93	8/31/94	
A-50-07	N	SPeX	3-0917	1,000	8/23/93		8/31/94	
A-50-08	AL	SPeX	E-185AL	10,000	9/23/93	10/29/93	9/30/94	
A-50-09	Fe	SPeX	F-241FE	10,000	9/23/93	11/6/94	9/30/94	
A-50-10	Na	SPeX	3-60NA	1,000	9/23/93	10/20/93	9/30/94	
A-50-11	Na	SPeX	F-215NA	10,000	9/23/93	10/29/93	9/30/94	
A-50-12	Si	SPeX	3-57Si	1,000	9/23/93	10/20/93	9/30/94	Standard Concentration
A-50-13	Sn	SPeX	D-119SN	10,000	9/23/93	10/12/93	9/30/94	
A-50-14	Ag	I.V.	I-AL0058	1,000	9/23/93	10/14/93	10/1/94	
A-50-15	Al	I.V.	I-AL0066	10,000	9/23/93	10/11/93	10/1/94	
A-50-16	As	I.V.	I-AS0147	999	9/23/93	10/14/93	10/1/94	
A-50-17	B	I.V.	I-B01057	1,000	9/23/93		10/1/94	

SIGNATURE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

DATE

SCIENTIFIC BINDER PRODUCTIONS CHICAGO

10/19/93

TITLE

PROJECT NO.

BOOK NO.

51

LOT #	STD	MANUFACTURER	LOT NO.	CONC	DATE Recd	DATE Recd	EXPIR	Notes
LRI				PPM			Date	
A-51-01	Bg	IV	I-BA0152	1,004	9/23/93		10/1/94	
A-51-02	Be	IV	I-BE0133	1,002	9/23/93	11/11/93	10/1/94	
A-51-03	Ca	IV	I-CA0103	999	9/23/93	10/1/93	10/1/94	
A-51-04	Cr	IV	I-CR0103	1,000	9/23/93	10/1/93	10/1/94	
A-51-05	K	IV	I-K01093	9,959	9/23/93	11/10/93	10/1/94	
A-51-06	Mg	IV	I-MG0173	1,002	9/23/93	10/1/93	10/1/94	
A-51-07	Se	IV	I-SE01029	1,000	9/23/93	10/1/93	10/1/94	10
A-51-08	Si	Spex	3-11-Si	1000	10/28/93	11/16/93	11/15/93	replaced A-50-12
A-51-09	Blank Sand	ERA	58001	—	6/16/93	1/6/94		
A-51-10	Blank Sand	ERA	58001	—	1/21/94			
A-51-11	Blank Sand	ERA	58001	—	1/21/94			
A-51-12	Al	IV	I-AL0009	1,000	2/22/94	3-1-94	3/1/95	
A-51-13	Cu	IV	I-CU01001	999	2/22/94	3-1-94	3/1/95	
A-51-14	Ni	IV	I-NI01002	1004	2/22/94	3-1-94	3/1/95	
A-51-15	Ag	Spex	3-111-Ag	1,000	2/28/94	2/28/94	2/28/95	
A-51-16	Ca	Spex	3-150-Ca	1000	2/28/94		2/28/95	
A-51-17	Cd	Spex	3-131-Cd	1000	2/28/94	2/28/94	2/28/95	

SIGNATURE 

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

418

SCIENTIFIC BATTERY PRODUCTIONS CHICAGO 60605

52

TITLE

PROJECT NO.

BOOK NO.

Lot # LRI	STD	Manu Factory	Lot No.	Conc PPM	Date Rec'd	Date Opened	Exp Date	No
A-52-01	Co	Spex	3-100Co	1000	2/28/94	2/28/94	2/28/95	
A-52-02	Ti	Spex	3-38Ti	1000	2/28/94	2/28/94	2/28/95	
A-52-03	Cu	Spex	3-78Cu	1000	2/28/94	2/28/94	2/28/95	
A-52-04	Sb	Spex	3-86Sb	1000	2/28/94	2/28/94	2/28/95	
A-52-05	Mn	Spex	3-112Mn	1000	2/28/94	2/28/94	2/28/95	
A-52-05	Blank sand	ERA	58001	—	1/21/94	3/2/94	NA	
A-52-06	Tl	Spex	4-3Tl	1,000	3/22/94	3/22/94	3/31/95	
A-52-07	AL	I.V.	I-AL0204	10,047	4/28/94	6/20/94	5/1/95	
A-52-08	Ca	I.V.	J-CA0114	10,002	4/28/94	6/13/94	5/1/95	
A-52-09	Mg	I.V.	J-MG0114	10,055	4/28/94	6/13/94	5/1/95	
A-52-10	Si	Spex	4-37Si	10,000	5/6/94		4/30/95	
A-52-11	Cz	Spex	H-12Cz	10,000	5/6/94	6/1/94	4/30/95	
A-52-12	Mg	Spex	H-51Mg	10,000	5/6/94		4/30/95	
A-52-13	BLANK SAND	ERA	58001	—	4/94	6/9/94	—	
A-52-14	K	Spex	J-20K	10,000	6/23/94	6/23/94	6/30/95	
A-52-15	AL	Spex	3-77AL	1,000	6/23/94		6/30/95	
A-52-16	As	Spex	4-52As	1,000	6/23/94		6/30/95	

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

419

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO

Lot # LRI	SFO	Min Sample	Lot # IND	Spec MFM	Date Rec'd	Date Open	Exp. Date	Notes
A-53-01	Zn	Spex	4-34ZN	1,000	6/23/94	7/14/94	6/30/95	
A-53-02	Mg	Spex	3-170MG	1,000	6/23/94		6/30/95	
A-53-03	V	Spex	4-10V	1,000	6/23/94	7/14/94	6/30/95	
A-53-04	Se	Spex	4-43SE	1,000	6/23/94	7/12/94	6/30/95	
A-53-05	Fe	Spex	4-23FE	1,000	6/23/94	7/14/94	6/30/95	
A-53-06	Sn	Spex	3-92SN	1,000	6/23/94	7/14/94	6/30/95	
A-53-07	Cr	Spex	3-124CR	1,000	6/23/94	7/14/94	6/30/95	
A-53-08	Be	Spex	4-45BE	1,000	6/23/94	7/14/94	6/30/95	
A-53-09	Ti	Spex	4-16TI	1,000	6/23/94	7/14/94	6/30/95	
A-53-10	B	Spex	3-139B	1,000	6/23/94	7/14/94	6/30/95	
A-53-11	Mo	Spex	3-171MO	1,000	6/23/94	7/14/94	6/30/95	
A-53-12	Ni	Spex	4-26NI	1,000	6/23/94	7/14/94	6/30/95	
A-53-13	Pb	Spex	4-9PB	1,000	6/23/94	7/14/94	6/30/95	
A-53-14	Ba	Spex	3-107BA	1,000	6/23/94	7/17/94	6/30/95	
A-53-15	Blank Sand	ERA	58001	—	5/94	6/28/94		
A-53-16	Cu	Spex	I-94CA	10,000	6/26/94	7/14/94	6/30/95	
A-53-17	Fe	I.V.	I-94FO #126	10,000	8/5/94		9-1-95	

SIGNATURE

DATE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

420

DESCRIPTION

-CLP-

8895

[illegible]

LP DESCRIPTIVE TERMS

.COLOR: Red, BLUE, YELLOW, Green, Orange, Violet, White, Colorless, Brown, Gray, Black;

.CLARITY: Clear, Cloudy, Opaque;

.TEXTURE: Fine(powdery),Medium(sand),Coarse(large crystals or rocks);

If artifacts are present, enter YES in the artifacts field. Describe the artifacts in the comments field. Record any significant changes that occur during sample preparation in the comments field.

Date	Sample ID	Dish #	Dish W	D before 105°C	D after 105°C	% S	% M
2/10/94	1080953	17	1.501	4.545	4.461		
A.A.	4	124	1.486	3.5704	3.479		
2/10/94	BLK	BL	1.549	1.549	1.549		
A.A.	1	71	1.539	11.594	11.094	95.58	4.42
P	408103	1	1.530	11.643	11.193	95.54	4.46
dup	2	26c	1.514	11.640	10.828	10	1.0
	3	2c	1.526	11.629	10.015		
	4	2c	1.543	11.426	10.934		
	5	10	1.495	11.522	10.945		
	6	15	1.310	11.395	11.036		
4081131	8f		1.299	11.299	8.883	75.84	24.16
OUTR	1	6c	1.336	11.343	8.919	75.77	24.23
						RDD= 0	3.0
	2	5A	1.5421	11.571	9.523		
	3	1A	1.520	11.770	10.501		
	4	4A	1.485	11.5621	10.381		
	5	2A	1.556	11.564	10.653		
	6	15	1.317	11.465	10.435		
4081124	1	41	1.492	11.512	10.710		
	2	11f	1.427	11.745	10.477		
	4	10f	1.516	11.561	11.217		
	5	25	1.5224	11.531	11.1421		
	6	35	1.534	11.559	9.820		
	7	13c	1.535	11.431	10.950		
	8	16f	1.540	11.572	10.615		
	10	55	1.497	11.769	9.9621		
	11	25	1.525	11.561	10.970		
	12	1	1.511	11.673	10.830		
	13	110	1.527	11.554	10.433		
	14	9d	1.491	11.546	10.947		

Continued on Page

Continued on Page

Read and Understood By

dd-f

02/10/94

Signed

Date

Signed

422 Date



Laboratory Resources INC.

CHAIN OF CUSTODY

1408103

BILLING INFORMATION

REPORT INFORMATION

PROJECT INFORMATION

CUSTOMER: Eikon Planning & Design Corp.

SEND REPORT TO: Eikon Planning & Design Corp.

DELIVERABLES/REGULATION (PLEASE INDICATE):

ADDRESS: P.O. Box 469, 221 High St.

P.O. Box 469, 221 High St.

NYSDAP

TELEPHONE: 908-813-2323

Hackettstown, NJ 07840

TURNAROUND (INDICATE CALENDAR DAYS, CONFIRM)

PROJECT: Plainview

WITH LAB - NAME OF PERSON CONFIRMING (21-28)

PROJECT MANAGER: Andreas Eirenberger

IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:

PROJECT LOCATION: Plainview STATE: N.Y.

DATE REPORT REQUIRED: Standard 3-4 wks.

NAME: RICH WITZAK

PO NUMBER: PP80789

RUSH RESULTS: FAX: 908-813-8360

TELEPHONE: (908) 813-2323

ANALYTICAL REQUESTS

LAB ID CODE	SAMPLE IDENTIFICATION	NO. BOTTLES	COLLECTED		SAMPLE TYPE		SAMPLE MATRIX						ANALYSES														H ₂ SO ₄	NaOH	HCl	HNO ₃	OTHER
			DATE	TIME	COMPOSITE	GRAB	SOLID	LIQUID	PHASIC	SLUDGE	OTHER																				
01)	SD-1	3	8/5/94	10:00		X	X						Full TCL	(Target Compounds List) incl. Trace Metals																	
02)	SD-2	3	8/5/94	11:40		X	X						Full TCL																		
03)	SD-3	3	8/5/94	13:15		X	X						Full TCL																		
04)	SD-4	3	8/5/94	14:40		X	X						Full TCL																		
05)	SD-5	3	8/5/94	17:20		X	X						Full TCL																		
06)	SD-6	3	8/5/94	10:35		X	X						Full TCL																		
07)	FTD BLK, 8/5/94	9	8/5/94	9:00		X		X					Full TCL																		

CUSTODY

COMMENTS, REQUESTS OR REMARKS:

RELINQUISHED: Rick Witzak

DATE: 8/9/94

→ NO SUBCONTRACTORS w/out prior Eikon approval.

RECEIVED: B. Smith

LRI

TIME: 9:00

→ PLEASE FAX DATA TO OUR OFFICE AND IT IMMEDIATELY BECOMES AVAILABLE.

RELINQUISHED:

DATE: 8/9/94

RECEIVED:

TIME: 9:30 AM

RELINQUISHED:

DATE:

SAMPLE DISPOSAL: Return to Client ☒ Lab Disposal ☐ (additional Fee)

RECEIVED: 8

TIME:

CONCENTRATIONS EXPECTED High ☐ Medium ☐ Low ☒

RELINQUISHED:

DATE:

KNOWN HAZARD YES ☐ NO ☒

RECEIVED:

TIME:

DESCRIBE:

B 895

CLIENT: EIKON PLANNING & DESIGN CORP.

Updated on 8-10-94 at 11:00 pm

Project: PLAINVIEW

Date received : 08-09-94

Job # T408103

WATCH HOLDING TIMES (for VOA is 7 days from VTSR)

ORGANICS AND INORGANICS FOR NYASP DATA PACKAGE WITH DISKETTE

LAB ID #	Matrix	CLIENT ID #	SAMPLE ID to be used on forms
T408103-01	soil	SD-1	SD-1
T408103-02	soil	SD-2	SD-2
T408103-03	soil	SD-3	SD-3
T408103-04	soil	SD-4	SD-4
T408103-05	soil	SD-5	SD-5
T408103-06	soil	SD-6	SD-6
T408103-07	water	FLD BLK, 8/5/94	FLD BLK

CASE #: 08103 SDG #: 810301

PLEASE NOTE THAT, IT IS REQUIRED AS CLP NYASP DATA PACKAGE WITH BFB, DFTPP and OTHER CRITERIA DIFFERENT TO EPA CLP.

BLANK SPIKE FOR ORGANICS MUST BE ANALYZED FOR NYASP CLP.

PLEASE SUBMIT ALL RAW DATA AND ALSO ALL OTHER LAB PAPER WORK SUCH AS RUN LOG, INTERNAL C-O-C, EXTRACTION LOG, ETC.....

MS/MSD FOR ORGANICS AND MS/DUP FOR INORGANICS IN EVERY 20 SAMPLES OR WITHIN 7 DAYS FOR EACH SDG IS REQUIRED PER EACH MATRIX.

ALL SAMPLES FOR TCL-ORGANICS AND TAL-METALS WITH CYANIDE.

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample Laboratory: Laboratory Resources Location: Teterboro
 Name: Krishna Daggumati Title: Spl. Mgmt. Supervisor

Field Sample Seal No. Date Broken 8/9/94 Military Time Seal Broken 9:30
 Case No. Analytical Parameter/Fraction

SAMPLE NO.	ALIQUT/EXTRACT NO.	SAMPLE NO.	ALIQUT/EXTRACT NO.
<u>T408103-01</u>			
<u>-02</u>			
<u>-03</u>			
<u>-04</u>			
<u>-05</u>			
<u>-06</u>			
<u>-07</u>			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
<u>8/9</u>	<u>13:30</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	PRINTED NAME <u>E. SMITH</u> SIGNATURE <u>E. Smith</u>	<u>01-06 GC/MS VOA</u> <u>07 → depleted</u>
<u>8/9</u>	<u>14:30</u>	PRINTED NAME <u>E. SMITH</u> SIGNATURE <u>E. Smith</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	<u>1-6 ret.</u>
<u>8/10</u>	<u>8:30</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	PRINTED NAME <u>Greg Hesterson</u> SIGNATURE <u>Greg Hesterson</u>	<u>1-6 moisture</u>
<u>8/10</u>	<u>10</u>	PRINTED NAME <u>Greg Hesterson</u> SIGNATURE <u>Greg</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	<u>ret</u>
<u>8/11</u>	<u>9:00</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	PRINTED NAME <u>Vikas Parikh</u> SIGNATURE <u>Vikas Parikh</u>	<u>01, 02, 03, 04, 05, 06.</u> <u>BNA Soil</u>
<u>8/11</u>	<u>12:00</u>	PRINTED NAME <u>Vikas Parikh</u> SIGNATURE <u>Vikas Parikh</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	<u>Returned</u>
<u>8/11</u>	<u>9:00</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	PRINTED NAME <u>Vikas Parikh</u> SIGNATURE <u>Vikas Parikh</u>	<u>07 BNA lig.</u> <u>done by Tony</u>
<u>8/11</u>	<u>9:00</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>B. Modi</u>	PRINTED NAME <u>Vikas Parikh</u> SIGNATURE <u>Vikas Parikh</u>	<u>07 Post/Pre</u> <u>depleted</u>
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

INSTR. 1. 11. 11. 11.

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Location: Teterboro
Title: Spl. Mgmt. Supervisor

Military Time Seal Broken

Analytical Parameter/Fraction

SAMPLE NO.	ALQUOT/EXTRACT NO.	SAMPLE NO.	ALQUOT/EXTRACT NO.
TN08103-01			
-02			
-03			
-04			
-05			
-06			
-07			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
8/12	9:30	PRINTED NAME B. MODI SIGNATURE D. MODI	PRINTED NAME Vikas Parikh SIGNATURE Vikas Parikh	03 BNA soil extraction of not used
8/12	12:30	PRINTED NAME Vikas Parikh SIGNATURE Vikas Parikh	PRINTED NAME B. MODI SIGNATURE D. MODI	not v.p. not
8/12	9:30 u.p. 15	PRINTED NAME B. MODI SIGNATURE D. MODI	PRINTED NAME Vikas Parikh SIGNATURE Vikas Parikh	01 extraction Pest/PCB
8/12	10 AM u.p. 15	PRINTED NAME Vikas Parikh SIGNATURE Vikas Parikh	PRINTED NAME B. MODI SIGNATURE D. MODI	not
8/15	11:45	PRINTED NAME B. MODI SIGNATURE D. MODI	PRINTED NAME Eric Evans SIGNATURE Eric Evans	metals pce 0 -01 to 07
8/15	4 PM	PRINTED NAME Eric Evans SIGNATURE Eric Evans	PRINTED NAME B. MODI SIGNATURE D. MODI	Ret
8-15	14:30	PRINTED NAME E. Geller SIGNATURE E. Geller	PRINTED NAME R. TURLA SIGNATURE R. TURLA	1, 2, 3, 4, 5, 6 pH
8/15	14:30	PRINTED NAME R. TURLA SIGNATURE R. TURLA	PRINTED NAME B. MODI SIGNATURE D. MODI	not
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	427

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample Laboratory: Laboratory Resources Location: Teterboro
 Name: Krisna Daggumati Title: Spl. Mgmt. Supervisor

Field Sample Seal No. Date Broken 1/1 Military Time Seal Broken
 Case No. Analytical Parameter/Fraction

SAMPLE NO.	ALQUOT/EXTRACT NO.	SAMPLE NO.	ALQUOT/EXTRACT NO.
7408103-01			
-02			
-03			
-04			
-05			
-06			
-07			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUS
8/18	1 PM	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME <i>John D...</i> SIGNATURE <i>[Signature]</i>	1-6 SOIC #7 FB
8/18	5 PM	PRINTED NAME <i>John D...</i> SIGNATURE <i>[Signature]</i>	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	RET
8/19	10:00 AM	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME JOHN CALINDAS SIGNATURE <i>John Calindas</i>	#7 PHC-WX
8/19	5 PM	PRINTED NAME JOHN CALINDAS SIGNATURE <i>John Calindas</i>	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	
8/19	1 PM	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME O. SECEANU SIGNATURE <i>O. Seceanu</i>	CYANIDE
8/19	5 PM	PRINTED NAME O. SECEANU SIGNATURE <i>O. Seceanu</i>	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	RET
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

INTERNAL CHAIN OF CUSTODY

B 895

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: _____	Location: _____
	Name: _____	Title: _____
Field Sample Seal No. _____	Date Broken ____/____/____	Military Time Seal Broken _____
Case No. _____	Analytical Parameter/Fraction _____	

SAMPLE NO.	ALIQUT/EXTRACT NO.	SAMPLE NO.	ALIQUT/EXTRACT NO.
T408103-01	TCP Furnace Hg		
↓	↓ ↓ ↓		
-07			
+QC for Batch			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
8/15	10:00	PRINTED NAME Eric Evans SIGNATURE Eric Evans	PRINTED NAME Michael Polidori SIGNATURE Michael Polidori	TCP Analysis
8/15	10:00	PRINTED NAME Eric Evans SIGNATURE Eric Evans	PRINTED NAME Ravi Suresh SIGNATURE Ravi Suresh	Furnace Analysis
8/18	8:07	PRINTED NAME Robert Draney SIGNATURE Robert Draney	PRINTED NAME Robert Draney SIGNATURE Robert Draney	Hg
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

Batch Matrix: S

Metals Batch Sheet # 895

8/15/94

10:11:05 AM

Order	Client	Matrix	Rec.	Due	FAX	Option	Deliv.	ICP	Furnace	CV	QC
T408103-1	EIKON	S	8/9/94	08/27		ASP		Ag, Al, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Sb, V, Zn	As, Pb, Se, Hg		DUP MS
T408103-2	"	S	8/9/94	08/27		"	"		As, Pb, Se, Hg		
T408103-3	"	S	8/9/94	08/27		"	"		As, Pb, Se, Hg		
T408103-4	"	S	8/9/94	08/27		"	"		As, Pb, Se, Hg		
T408103-5	"	S	8/9/94	08/27		"	"		As, Pb, Se, Hg		
T408103-6	"	S	8/9/94	08/27		"	"		As, Pb, Se, Hg		
T408103-7	"	FB	8/9/94	08/27		"	"		As, Pb, Se, Hg		

ICP Batch: 7402

Furnace Batch: 7403

CV Batch: 7404

Prep Batch: 7405

Work List

Met Batch 895

												Due Dates				Comments				
(Opt)	(List)	Stat	Due	M	Ty	Pr	QC	Loc	Bat	Order #	Client	Descrip	Hold	Fax	Report	Rcd	Col.	O	S	A
Metals by Cold Vapor																				
Analysis - HGA_ASP1												ASP 12/91 Mercury								
0	(HG)	B	12	S	G	N	ASP	3	7404	T408103	1	EIKON	SD-1	09-04	08-27	08-09	08-05			
0	(HG)	B	12	S	G	N	ASP	3	7404	T408103	2	EIKON	SD-2	09-04	08-27	08-09	08-05			
0	(HG)	B	12	S	G	N	ASP	3	7404	T408103	3	EIKON	SD-3	09-04	08-27	08-09	08-05			
0	(HG)	B	12	S	G	N	ASP	3	7404	T408103	4	EIKON	SD-4	09-04	08-27	08-09	08-05			
0	(HG)	B	12	S	G	N	ASP	3	7404	T408103	5	EIKON	SD-5	09-04	08-27	08-09	08-05			
0	(HG)	B	12	S	G	N	ASP	3	7404	T408103	6	EIKON	SD-6	09-04	08-27	08-09	08-05			
0	(HG)	B	12	W	F	y	ASP	6	7404	T408103	7D	EIKON	FIELD BLANK 8/5	09-04	08-27	08-09	08-05			
Analysis - HGD_ASP1												ASP 12/91 Mercury Digestion								
0	()	B	12	S	G	N	ASP	3	7404	T408103	1	EIKON	SD-1	09-04	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7404	T408103	2	EIKON	SD-2	09-04	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7404	T408103	3	EIKON	SD-3	09-04	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7404	T408103	4	EIKON	SD-4	09-04	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7404	T408103	5	EIKON	SD-5	09-04	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7404	T408103	6	EIKON	SD-6	09-04	08-27	08-09	08-05			
0	()	B	12	W	F	y	ASP	6	7404	T408103	7D	EIKON	FIELD BLANK 8/5	09-04	08-27	08-09	08-05			
Total Entries :		14																		

Comments :

Printed by : Eric Evans

Work List Met Batch 895

Monday-Aug-15-1994 10:14
Page 1

(Opt) (List)	Stat	Due	M	Ty	Pr	QC	Loc	Bat	Order#	Client	Descrip	Due Dates			Rcd	Col	Comments		
												Hold	Fax	Report			O	S	A
Metals by ICP																			
Analysis - ICPAASP1										ASP 12/91 Metals by ICP									
0	(ASP1_ICP) B	12	S	G	N	ASP	3	7402 T408103	1	EIKON	SD-1	02-05		08-27	08-09	08-05			
0	(ASP1_ICP) B	12	S	G	N	ASP	3	7402 T408103	2	EIKON	SD-2	02-05		08-27	08-09	08-05			
0	(ASP1_ICP) B	12	S	G	N	ASP	3	7402 T408103	3	EIKON	SD-3	02-05		08-27	08-09	08-05			
0	(ASP1_ICP) B	12	S	G	N	ASP	3	7402 T408103	4	EIKON	SD-4	02-05		08-27	08-09	08-05			
0	(ASP1_ICP) B	12	S	G	N	ASP	3	7402 T408103	5	EIKON	SD-5	02-05		08-27	08-09	08-05			
0	(ASP1_ICP) B	12	S	G	N	ASP	3	7402 T408103	6	EIKON	SD-6	02-05		08-27	08-09	08-05			
0	(ASP1_ICP) B	12	W	F	y	ASP	6	7402 T408103	7D	EIKON	FIELD BLANK 8/5	02-05		08-27	08-09	08-05			
Total Entries :		7																	

Comments :

(Opt)	(List)	Stat	Due	M	Ty	Pr	QC	Loc	Bat	Order #	Client	Descrip	Due Dates		Report	Rcd	Col	Comments		
													Hold	Fax				O	S	A
Metals by Furnace AA																				
Analysis - AS ASP1		ASP 12/91 Arsenic by GFAA																		
0	(AS)	B	12	S	G	N	ASP	3	7403	T408103	1	EIKON	SD-1	02-05	08-27	08-09	08-05			
0	(AS)	B	12	S	G	N	ASP	3	7403	T408103	2	EIKON	SD-2	02-05	08-27	08-09	08-05			
0	(AS)	B	12	S	G	N	ASP	3	7403	T408103	3	EIKON	SD-3	02-05	08-27	08-09	08-05			
0	(AS)	B	12	S	G	N	ASP	3	7403	T408103	4	EIKON	SD-4	02-05	08-27	08-09	08-05			
0	(AS)	B	12	S	G	N	ASP	3	7403	T408103	5	EIKON	SD-5	02-05	08-27	08-09	08-05			
0	(AS)	B	12	S	G	N	ASP	3	7403	T408103	6	EIKON	SD-6	02-05	08-27	08-09	08-05			
0	(AS)	B	12	W	F	y	ASP	6	7403	T408103	7D	EIKON	FIELD BLANK 8/5	02-05	08-27	08-09	08-05			
Analysis - PB ASP1		ASP 12/91 Lead by GFAA																		
0	(PB)	B	12	S	G	N	ASP	3	7403	T408103	1	EIKON	SD-1	02-05	08-27	08-09	08-05			
0	(PB)	B	12	S	G	N	ASP	3	7403	T408103	2	EIKON	SD-2	02-05	08-27	08-09	08-05			
0	(PB)	B	12	S	G	N	ASP	3	7403	T408103	3	EIKON	SD-3	02-05	08-27	08-09	08-05			
0	(PB)	B	12	S	G	N	ASP	3	7403	T408103	4	EIKON	SD-4	02-05	08-27	08-09	08-05			
0	(PB)	B	12	S	G	N	ASP	3	7403	T408103	5	EIKON	SD-5	02-05	08-27	08-09	08-05			
0	(PB)	B	12	S	G	N	ASP	3	7403	T408103	6	EIKON	SD-6	02-05	08-27	08-09	08-05			
0	(PB)	B	12	W	F	y	ASP	6	7403	T408103	7D	EIKON	FIELD BLANK 8/5	02-05	08-27	08-09	08-05			
Analysis - SE ASP1		ASP 12/91 Selenium by GFAA																		
0	(SE)	B	12	S	G	N	ASP	3	7403	T408103	1	EIKON	SD-1	02-05	08-27	08-09	08-05			
0	(SE)	B	12	S	G	N	ASP	3	7403	T408103	2	EIKON	SD-2	02-05	08-27	08-09	08-05			
0	(SE)	B	12	S	G	N	ASP	3	7403	T408103	3	EIKON	SD-3	02-05	08-27	08-09	08-05			
0	(SE)	B	12	S	G	N	ASP	3	7403	T408103	4	EIKON	SD-4	02-05	08-27	08-09	08-05			
0	(SE)	B	12	S	G	N	ASP	3	7403	T408103	5	EIKON	SD-5	02-05	08-27	08-09	08-05			
0	(SE)	B	12	S	G	N	ASP	3	7403	T408103	6	EIKON	SD-6	02-05	08-27	08-09	08-05			
0	(SE)	B	12	W	F	y	ASP	6	7403	T408103	7D	EIKON	FIELD BLANK 8/5	02-05	08-27	08-09	08-05			
Analysis - TL ASP1		ASP 12/91 Thallium by GFAA																		
0	(TL)	B	12	S	G	N	ASP	3	7403	T408103	1	EIKON	SD-1	02-05	08-27	08-09	08-05			
0	(TL)	B	12	S	G	N	ASP	3	7403	T408103	2	EIKON	SD-2	02-05	08-27	08-09	08-05			
0	(TL)	B	12	S	G	N	ASP	3	7403	T408103	3	EIKON	SD-3	02-05	08-27	08-09	08-05			
0	(TL)	B	12	S	G	N	ASP	3	7403	T408103	4	EIKON	SD-4	02-05	08-27	08-09	08-05			
0	(TL)	B	12	S	G	N	ASP	3	7403	T408103	5	EIKON	SD-5	02-05	08-27	08-09	08-05			
0	(TL)	B	12	S	G	N	ASP	3	7403	T408103	6	EIKON	SD-6	02-05	08-27	08-09	08-05			
0	(TL)	B	12	W	F	y	ASP	6	7403	T408103	7D	EIKON	FIELD BLANK 8/5	02-05	08-27	08-09	08-05			
Total Entries :		28																		

Comments :

													Due Dates				Comments			
(Opt)	(List)	Stat	Due	M	Ty	Pr	QC	Loc	Bat	Order #	Client	Descrip	Hold	Fax	Report	Rcd	Col	O	S	A
Sample Prep Metals																				
Analysis - ICPDASP1						ASP 12/91 ICP Digestion														
0	()	B	12	S	G	N	ASP	3	7405	T408103	1	EIKON	SD-1	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	2	EIKON	SD-2	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	3	EIKON	SD-3	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	4	EIKON	SD-4	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	5	EIKON	SD-5	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	6	EIKON	SD-6	02-05	08-27	08-09	08-05			
0	()	B	12	W	F	y	ASP	6	7405	T408103	7D	EIKON	FIELD BLANK 8/5	02-05	08-27	08-09	08-05			
Analysis - IGFDASP1						ASP 12/91 Furnace Digestion														
0	()	B	12	S	G	N	ASP	3	7405	T408103	1	EIKON	SD-1	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	2	EIKON	SD-2	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	3	EIKON	SD-3	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	4	EIKON	SD-4	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	5	EIKON	SD-5	02-05	08-27	08-09	08-05			
0	()	B	12	S	G	N	ASP	3	7405	T408103	6	EIKON	SD-6	02-05	08-27	08-09	08-05			
0	()	B	12	W	F	y	ASP	6	7405	T408103	7D	EIKON	FIELD BLANK 8/5	02-05	08-27	08-09	08-05			
Total Entries :		14																		

Comments :

Laboratory Instrumentation Identification Form

	Instrument Identification	Method	IDL Date	IEC Date	Lin. Date
1	TJA61	P	10/01/91	10/01/91	10/01/91
2	PE5100#1	F	07/01/94		
3	PE5100#2	F	07/01/94		
4	ENVIROP	P	05/27/94	02/24/94	05/27/94
5	TJA1000	CV	08/02/94		
6	MR61	C	06/01/93		
7	PE5100#3	F	07/01/94		
8	PE5100#4	F	07/01/94		

Laboratory Instrumentation Elemental Information Form

Instrument Identification ENVIROP

Element	Instrument Symbol	Wavelength	Integration			Bkg
			Detection Limit	Time	Linearity	
Aluminum	Al	308.200	14.2	10.00	500000	
Antimony	Sb	206.800	14.2	10.00	200000	
Arsenic	As	193.600	19.8	10.00	200000	
Barium	Ba	493.400	0.5	10.00	200000	
Beryllium	Be	313.000	0.1	10.00	100000	
Cadmium	Cd	228.800	3.0	10.00	200000	
Calcium	Ca	317.900	14.9	10.00	500000	
Chromium	Cr	267.700	1.9	10.00	200000	
Cobalt	Co	228.600	2.3	10.00	200000	
Copper	Cu	324.700	3.8	10.00	200000	
Iron	Fe	259.900	4.8	10.00	400000	
Lead	Pb	220.300	15.7	10.00	200000	
Magnesium	Mg	279.000	21.9	10.00	500000	
Manganese	Mn	257.600	0.3	10.00	150000	
Mercury						
Nickel	Ni	231.600	7.7	10.00	200000	
Potassium	K	766.400	1201.9	10.00	1000000	
Selenium	Se	196.000	31.6	10.00	200000	
Silver	Ag	328.000	2.3	10.00	100000	
Sodium	Na	588.900	16.1	10.00	500000	
Thallium	Tl	190.800	31.7	10.00	200000	
Vanadium	V	292.400	2.5	10.00	100000	
Zinc	Zn	213.800	1.3	10.00	200000	
Cyanide						
Boron	B	249.600	5.5	10.00	200000	
Molybdenum	Mo	202.000	3.3	10.00	200000	
Silicon	Si	288.100	33.8	10.00	150000	
Titanium	Ti	334.900	0.8	10.00	200000	
Tin	Sn	189.900	12.0	10.00	200000	

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#1

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony	Sb	217.600			100	2
Arsenic	As	193.700	3.1		100	2
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.5		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	2.6		100	2
Silver						
Sodium						
Thallium	Tl	276.800	3.2		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#2

Element	Instrument Symbol	Wavelength	Detection Limit	Integration		Bkg
				Time	Linearity	
Aluminum						
Antimony	Sb	217.600	6.1		100	2
Arsenic	As	193.700	3.0		100	2
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	1.6		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	1.1		100	2
Silver						
Sodium						
Thallium	Tl	276.800	2.9		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#3

Element	Instrument		Detection Limit	Integration		Bkg
	Symbol	Wavelength		Time	Linearity	
Aluminum						
Antimony	Sb	217.600			100	2
Arsenic	As	193.700	3.2		100	2
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.4		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	1.6		100	2
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#4

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony	Sb	217.600			100	2
Arsenic	As	193.700	2.9		100	2
Barium						
Beryllium			0.1			
Cadmium			0.1			
Calcium						
Chromium			0.4			
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.8		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	0.9		100	2
Silver			0.1			
Sodium						
Thallium	Tl	276.800	0.5		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification TJA1000

Element	Instrument	Wavelength	Detection Limit	Integration		Bkg
	Symbol			Time	Linearity	
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Mercury	Hg	253.700	0.2		10	1
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
Zyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification MR61

Element	Instrument	Wavelength	Detection Limit	Integration		Bkg
	Symbol			Time	Linearity	
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
Cyanide	Cn					10.0
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						



Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700

LABORATORY ANALYSIS REPORT

Client: Eikon Planning & Design
221 High Street
Hackettstown, NJ 07840

Project Manager: Mr. Andreas Eisenberger

Project: Plainview

Laboratory Report #: T408103

<u>Lab ID No.:</u>	<u>Sample Reference</u>	<u>Matrix</u>	<u>Collection Date & Time</u>
T408103-01	SD-1	SOIL	08/05/94 10:00
T408103-02	SD-2	SOIL	08/05/94 11:40
T408103-03	SD-3	SOIL	08/05/94 13:15
T408103-04	SD-4	SOIL	08/05/94 14:40
T408103-05	SD-5	SOIL	08/05/94 19:20
T408103-06	SD-6	SOIL	08/05/94 10:35
T408103-07	FIELD BLANK	WATER	08/05/94 09:00

Date Received: August 09, 1994

Date of Report: August 30, 1994

N.J. Certification #02046
N.Y. Certification #11321
P.A. Certification #68-420


Moe R. Amirsoleymani
Quality Assurance Manager

TABLE OF CONTENTS

<u>ITEM</u>	<u>PAGE NO.</u>
Title Page	1
Table of Contents	2
Chain of Custody Forms	3
Methodology Review	10
Non-Conformance Summary	12
Holding Time Chronicle	13
Case Narrative	15
General Chemistry	
Quality Control Summary	16-20
Method Blank Results Form	
Matrix Spike/Duplicate Recovery Form	
Sample Data Package	21-27
Sample Results Summaries	
Raw Data	28-31
Instrument Printouts	
Copy of Digestion Log	
Copy of Instrument Log	
Table of Abbreviations	

1408103



Laboratory Resources INC.

CHAIN OF CUSTODY

BILLING INFORMATION

CUSTOMER: Eikon Planning & Design Corp.ADDRESS: P.O. Box 469, 221 High St.TELEPHONE: 908-813-2323PROJECT: PlainviewPROJECT MANAGER: Andrew FirenbergerPROJECT LOCATION: Plainview STATE: N.J.PO NUMBER: PA80789

REPORT INFORMATION

SEND REPORT TO: Eikon Planning & Design Corp.P.O. Box 469, 221 High St.
Hackettstown, NJ 07840DATE REPORT REQUIRED: Standard 3-4 wks.RUSH RESULTS: FAX 908-813-2360

PROJECT INFORMATION

DELIVERABLES/REGULATION (PLEASE INDICATE):

NYSDAP

TURNAROUND (INDICATE CALENDAR DAYS, CONFIRM)

WITH LAB - NAME OF PERSON CONFIRMING 21-28IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES
ARRIVE WE SHOULD CALL:NAME: RICH WITZAKTELEPHONE: (908) 813-2323

ANALYTICAL REQUESTS

ANALYTICAL REQUESTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
LAB ID CODE	SAMPLE IDENTIFICATION	NO. BOTTLES	COLLECTED		SAMPLE TYPE		SAMPLE MATRIX					ANALYSES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
			DATE	TIME	COMPOSITE	GRAB	SOLID	LIQUID	PHASIC	SLUDGE	OTHER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

CUSTODY

RELINQUISHED: Rich WitzakRECEIVED: Donna

LRI

RELINQUISHED:

RECEIVED:

RELINQUISHED:

RECEIVED:

RELINQUISHED:

RECEIVED:

RELINQUISHED:

DATE: 8/9/94TIME: 9:00DATE: 8/9/94TIME: 9:30 AM

DATE:

TIME:

DATE:

TIME:

COMMENTS, REQUESTS OR REMARKS:

→ NO SUBCONTRACTORS W/OUT PRIOR EIKON APPROVAL.

→ PLEASE FAX DATA TO OUR OFFICE AND IT IMMEDIATELY
BECOME AVAILABLE.SAMPLE DISPOSAL: Return to Client ☒ Lab Disposal ☐ (additional Fee)CONCENTRATIONS EXPECTED High ☐ Medium ☐ Low ☒KNOWN HAZARD YES ☐ NO ☒

DESCRIBE:

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Location: Teterboro
Title: Spl. Mgmt. Supervisor

9:30
Military Time Seal Broken

Analytical Parameter/Fraction

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
8/9	13:30	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME E. SMITH SIGNATURE <i>E. Smith</i>	01-06 GC/MS VOA 07 → depleted -
8/9	14:30	PRINTED NAME E. SMITH SIGNATURE <i>E. Smith</i>	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	1-6 ret.
8/10	8:30	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME J. J. HARTSON SIGNATURE <i>J. J. Hartson</i>	1-6 moisture
8/10	10	PRINTED NAME J. J. HARTSON SIGNATURE <i>J. J. Hartson</i>	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	ret
8/11	9:00	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME Vikas Parikh SIGNATURE <i>Vikas Parikh</i>	01, 02, 03, 04, 05, 06. BNA Soil
8/11	12:10	PRINTED NAME Vikas Parikh SIGNATURE <i>Vikas Parikh</i>	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	Returned.
8/11	9:00	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME Vikas Parikh SIGNATURE <i>Vikas Parikh</i>	07 BNA line done by Tony
8/11	9:00	PRINTED NAME B. MODI SIGNATURE <i>B. Modi</i>	PRINTED NAME Vikas Parikh SIGNATURE <i>Vikas Parikh</i>	07 Post/PCs depleted
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: <u>Laboratory Resources</u> Name: <u>Krishna Daggumati</u>	Location: <u>Teterboro</u> Title: <u>Spl. Mgmt. Supervisor</u>
Field Sample Seal No. _____	Date Broken <u> / / </u>	Military Time Seal Broken <u> / </u>
Case No. _____	Analytical Parameter/Fraction _____	

SAMPLE NO.	ALIUOT/EXTRACT NO.	SAMPLE NO.	ALIUOT/EXTRACT NO.
TN08103-01			
-02			
-03			
-04			
-05			
-06			
-07			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
8/12	9:30	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>Vikas Panik</u> SIGNATURE <u>[Signature]</u>	03 BNA soil extraction of Not Used
8/12	12:30	PRINTED NAME <u>Vikas Panik</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	Act v.p.
8/12	9:30	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>Vikas Panik</u> SIGNATURE <u>[Signature]</u>	01 extraction Pest/pcb
8/12	10 AM	PRINTED NAME <u>Vikas Panik</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	Act
8/15	11:45	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>Eric Evans</u> SIGNATURE <u>[Signature]</u>	metaspce 0 -01 to 07
8/15	14 PM	PRINTED NAME <u>Eric Evans</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	Ret
8/15	14:50	PRINTED NAME <u>[Signature]</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>R. FURLA</u> SIGNATURE <u>[Signature]</u>	1, 2, 3, 4, 5, 6 pH
8/15	15:30	PRINTED NAME <u>R. FURLA</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	Act
		PRINTED NAME _____ SIGNATURE _____	PRINTED NAME _____ SIGNATURE _____	05

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample Laboratory: Laboratory Resources Location: Teterboro
 Name: Krishna Daggumati Title: Spl. Mgmt. Supervisor

Field Sample Seal No. Date Broken / / Military Time Seal Broken
 Case No. Analytical Parameter/Fraction

SAMPLE NO.	ALIQUT/EXTRACT NO.	SAMPLE NO.	ALIQUT/EXTRACT NO.
<u>T408103-01</u>			
<u>-02</u>			
<u>-03</u>			
<u>-04</u>			
<u>-05</u>			
<u>-06</u>			
<u>-07</u>			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
<u>8/17</u>	<u>1PM</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>[Signature]</u> SIGNATURE <u>[Signature]</u>	<u>1-6 301C</u> <u># 7 FB</u>
<u>8/17</u>	<u>5PM</u>	PRINTED NAME <u>[Signature]</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	<u>RET</u>
<u>8/19</u>	<u>10:00 AM</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>JOHN CALINDAS</u> SIGNATURE <u>[Signature]</u>	<u># 7 PHC-WX</u>
<u>8/19</u>	<u>5PM</u>	PRINTED NAME <u>JOHN CALINDAS</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	
<u>8/19</u>	<u>1PM</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>O. JEEVANU</u> SIGNATURE <u>[Signature]</u>	<u>CYANIDE</u>
<u>8/19</u>	<u>5PM</u>	PRINTED NAME <u>O. JEEVANU</u> SIGNATURE <u>[Signature]</u>	PRINTED NAME <u>B. MODI</u> SIGNATURE <u>[Signature]</u>	<u>act</u>
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

07

CLIENT: EIKON PLANNING & DESIGN CORP.

Updated on 8-10-94 at 11:00 pm

Project: PLAINVIEW

Date received : 08-09-94

Job # T408103

WATCH HOLDING TIMES (for VOA is 7 days from VTSR)
ORGANICS AND INORGANICS FOR NYASP DATA PACKAGE WITH DISKETTE

LAB ID #	Matrix	CLIENT ID #	SAMPLE ID to be used on forms
T408103-01	soil	SD-1	SD-1
T408103-02	soil	SD-2	SD-2
T408103-03	soil	SD-3	SD-3
T408103-04	soil	SD-4	SD-4
T408103-05	soil	SD-5	SD-5
T408103-06	soil	SD-6	SD-6
T408103-07	water	FLD BLK, 8/5/94	FLD BLK

CASE #: 08103 SDG #: 810301

PLEASE NOTE THAT, IT IS REQUIRED AS CLP NYASP DATA PACKAGE WITH BFB, DFTPP and OTHER CRITERIA DIFFERENT TO EPA CLP.

BLANK SPIKE FOR ORGANICS MUST BE ANALYZED FOR NYASP CLP.

PLEASE SUBMIT ALL RAW DATA AND ALSO ALL OTHER LAB PAPER WORK SUCH AS RUN LOG, INTERNAL C-O-C, EXTRACTION LOG, ETC.....

MS/MSD FOR ORGANICS AND MS/DUP FOR INORGANICS IN EVERY 20 SAMPLES OR WITHIN 7 DAYS FOR EACH SDG IS REQUIRED PER EACH MATRIX.

ALL SAMPLES FOR TCL-ORGANICS AND TAL-METALS WITH CYANIDE.

SAMPLE LOG-IN SHEET				
LABORATORY RESOURCES INC		Page ____ of ____		
Received by (Print Name): <u>KRISHNA B DAGGUMATI</u>		Log-In Date: _____		
Received by (Signature): _____				
Case Number: _____ SDO Number: _____ SAS Number: _____	CORRESPONDING			
	MYSOEC SAMPLE	SAMPLE TAG	ASSIGNED LAB	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
REMARKS: 1. Custody Seal(s) Present/Absent Intact/Broken 2. Custody Seal Numbers: _____ 3. Chain-of-Custody Present/Absent Records 4. Contact LIO Present/Absent Sample Inform. Sheet (CLISIS) 5. Airbill Airbill/Socket Present/Absent 6. Airbill No.: _____ 7. Sample Tag Present/Absent Sample Tag Not. Used/Not Used on Chain-of-Custody 8. Sample Condition Intact/Broken/ Leaking 9. Does information on custody rec. CLISIS, & sample tags agree Yes/No 10. Date received at LIO: <u>8/9/94</u> 11. Time Received: _____	SD-1		T408103-41	Good
	SD-2		-02	
	SD-3		-03	
	SD-4		-04	
	SD-5		-05	
	SD-6		-06	
	FLD BLK 8/9/94		-07	
Sample Transfer				
Fraction: _____ Area #: _____ By: _____ On: _____				

* Contact BTRR and attach record of resolution

Reviewed By: _____

Date: _____

Logbook No.: _____

Logbook Page No.: _____

FORM DC-1

LABORATORY RESOURCES, INC. - TETERBORO 1993

GENERAL CHEMISTRY METHODOLOGY

SOIL MATRIX

PARAMETER	METHOD (1)
Acidity	305.1
Alkalinity	310.1
BOD, 5 day	507(4)
BOD, 20 day	507(4)
Chloride	9252
Chlorine, Residual	330.5
COO	HACH
Conductivity	9050
Cyanide, Total	9010
Cyanide, Amenable	9010
Ignitability	1010
MBAS, Surfactants	5128(4)
Nitrogen, NH3	350.1(2)
Nitrogen, NO3	9200
Nitrogen, NO2	354.1
Nitrogen, TKN	351.2(2)
Odor	140.1
Petroleum Hydro, Soil	418.1(5)
pH	9045
Phenolics, Total	9065
Phosphorous, Total	365.2(2)
Solids, Fixed	2090(4)
Solids, Total	CLP
Solids, Volatile	2090(4)
Sulfate	9038
Sulfide	9030
Sulfite	377.1(2)
TOC	415.1
Turbidity	180.1

(1) = Solid and hazardous waste methods approved by NJDEP ECRA and RCRA and listed in EPS SV 846 3rd Edition, 1986.

(2) = Water and wastewater methods approved in the Federal Register in section 40 CFR 136 and listed in EPA 600/4-79-020.

(4) = Methods cited in Standard Methods 16th Edition, 1986.

(5) = NJDEP modification of EPA Method 418.1.

CLP = Contract Laboratory Program procedure for total solids determination, SOU 7/83, Part F, page 0-83.

HACH = Method 8000, Hach Handbook of Water Analysis, 1979. Approved in the Federal Register, April 21, 1980, page 25811.

METHODOLOGY SUMMARY

GENERAL CHEMISTRY

Reference: EPA 600/4-79-020, 1983 revision.

Potable water, aqueous wastes and surface water are conducted in accordance with EPA methods 305.1 for Acidity, 310.1 for Alkalinity, 325.3 for Chloride, 330.5 for Residual Chlorine, 120.1 for Conductivity, 335.2 for Total Cyanide, 335.1 for Amenable Cyanide, 130.2 for Hardness, 350.1 for Ammonia-NH₃, 353.1 for Nitrate-NO₃, 354.1 for Nitrite-NO₂, 351.2 for Kjeldahl Nitrogen, 140.1 for Odor, 413.1 for Oil & Grease (Gr), 418.1 for Petroleum Hydrocarbons (IR), 150.1 for pH, 420.1 for Total Phenolics, 365.2 for Total Phosphorus, 160.1 for Dissolved Solids, 160.2 for Suspended Solids, 375.4 for Sulfate, 376.1 for Sulfide, 377.1 for Sulfite, 415.1 for Total Organic Carbon and 180.1 for Turbidity.

Reference: Hach Handbook of Water Analysis, 1979. Approved in the Federal Register, April 21, 1980; pg. 26811.

Potable water, aqueous wastes and surface water are conducted according to Hach method 8000.

Reference: Standard Methods, 16th Edition, 1986.

Potable water, aqueous wastes and surface water are conducted according to method 507 for Biochemical Oxygen Demand (5 and 20 Day), 512B for MBAS (Surfactants), 421B for Dissolved Oxygen and 209B for Volatile Solids.



Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700

INORGANIC NON-CONFORMANCE SUMMARY

GENERAL CHEMISTRY

1. Sample T408103-07 was analyzed outside of the required holding time for PHC analysis.

Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700 800-729-0852

TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES

Name	Container ¹	Preservation	Maximum holding time
Bacterial Tests:			
Coliform, fecal and total	P, G	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	6 hours
Fecal streptococci	P, G	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	6 hours
Inorganic Tests:			
Acidity	P, G	Cool, 4°C	14 days
Alkalinity	P, G	Cool, 4°C	14 days
Ammonia	P, G	Cool, 4°C, H ₂ SO ₄ to pH2	28 days
Biochemical oxygen demand	P, G	Cool, 4°C	48 hours
Bromide	P, G	None required	28 days
Biochemical oxygen demand, carbonaceous	P, G	Cool, 4°C	48 hours
Chemical oxygen demand	P, G	Cool, 4°C, H ₂ SO ₄ to pH2	28 days
Chloride	P, G	None required	28 days
Chlorine, total residual	P, G	None required	Analyze immediately
Color	P, G	Cool, 4°C	48 hours
Cyanide, total and amenable to chlorination	P, G	Cool, 4°C, NaOH to pH12, 0.6g ascorbic acid	14 days
Fluoride	P	None required	28 days
Hardness	P, G	HNO ₃ to pH2, H ₂ SO ₄ to pH2	6 months
Hydrogen ion (pH)	P, G	None required	Analyze immediately
Kjeldahl and organic nitrogen	P, G	Cool, 4°C, H ₂ SO ₄ to pH2	28 days
Metals:			
Chromium VI	P, G	Cool, 4°C	24 hours
Mercury	P, G	HNO ₃ to pH2	28 days
Metals, except chromium VI and mercury	P, G	HNO ₃ to pH2	6 months
Nitrate	P, G	Cool, 4°C	48 hours
Nitrate-nitrite	P, G	Cool, 4°C, H ₂ SO ₄ to pH2	28 days
Nitrite	P, G	Cool, 4°C	48 hours
Oil and grease	G	Cool, 4°C, H ₂ SO ₄ to pH2	28 days
Organic carbon	P, G	Cool, 4°C, HCl or H ₂ SO ₄ to pH2	28 days
Orthophosphate	P, G	Filter immediately, cool, 4°C	48 hours
Oxygen, Dissolved Probe	G Bottle and top	None required	Analyze immediately
Winkler	do	Fix on site and store in dark	8 hours
Phenols	G only	Cool, 4°C, H ₂ SO ₄ to pH2	28 days
Phosphorus (elemental)	G	Cool, 4°C	48 hours
Phosphorus, total	P, G	Cool, 4°C, H ₂ SO ₄ to pH2	28 days
Residue, total	P, G	Cool, 4°C	7 days
Residue, Filterable	P, G	Cool, 4°C	7 days
Residue, Nonfilterable (TSS)	P, G	Cool, 4°C	7 days
Residue, Settleable	P, G	Cool, 4°C	48 hours
Residue, volatile	P, G	Cool, 4°C	7 days
Silica	P	Cool, 4°C	28 days
Specific conductance	P, G	Cool, 4°C	28

TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES (CONTINUED)

Name	Container ¹	Preservation	Maximum holding time
Sulfate	P, G	Cool, 4°C	28 days
Sulfide	P, G	Cool, 4°C, add zinc acetate plus sodium hydroxide to pH 9	7 days
Sulfite	P, G	None required	Analyze immediately
Surfactants	P, G	Cool, 4°C	48 hours
Temperature	P, G	None required	Analyze
Turbidity	P, G	Cool, 4°C	48 hours
Organic Tests:			
Purgeable Halocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	14 days
Purgeable aromatic hydrocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ , HCl to pH 2	14 days
Acrolein and acrylonitrile	G, Teflon-lined septum	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ , Adjust pH to 4-5	14 days
Phenols	G, Teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	7 days until extraction, 40 days after extraction
Benzidines	G, Teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	7 days until extraction
Phthalate esters	G, Teflon-lined cap	Cool, 4°C	7 days until extraction 40 days after extraction
Nitrosamines	G, Teflon-lined cap	Cool, 4°C, store in dark, 0.008% Na ₂ S ₂ O ₃	40 days after extraction
PCBs, acrylonitrile	G, Teflon-lined cap	Cool, 4°C	40 days after extraction
Nitroaromatics and isophorone	G, Teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ store in dark	40 days after extraction
Polynuclear aromatic hydrocarbons	G, Teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ store in dark	40 days after extraction
Haloethers	G, Teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	40 days after extraction
Chlorinated hydrocarbons	G, Teflon-lined cap	Cool, 4°C	40 days after extraction
TCDD	G, Teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	40 days after extraction
Total organic halogens	G, Teflon-lined cap	Cool, 4°C; H ₂ SO ₄ to pH < 2	7 days
Pesticides Tests:			
Pesticides	G, Teflon-lined cap	Cool, 4°C, pH 5-9	40 days after extraction
Radiological Tests:			
Alpha, beta and radium	P, G	HNO ₃ to pH < 2	6 months

¹ Polyethylene (P) or Glass (G)

CASE NARRATIVE

Laboratory Resources, New Jersey Division, received six soil samples plus a field blank for Regulatory Deliverables Format on August 09, 1994. The samples were analyzed for the parameters outlined in the chain of custody.

The samples were analyzed within the required holding time. Any parameters which were outside of their respective quality control ranges are noted in the non-conformance summary.

Please contact us if there are any questions regarding the enclosed results.

PETROLEUM HYDROCARBONS CONFORMANCE/NONCONFORMANCE SUMMARY

WORK ORDER No. T408103

No Yes

1. Blank Contamination
If yes, list concentrations in each blank:

~~X~~ —

2. Matrix Spike Recoveries Meet Criteria
If not met, list those recoveries which fall outside the acceptable range:

— ~~X~~

3. Sample Duplicate Analyses Meet QC Criteria
If not met, list those criteria which fall outside the acceptable range:

— ~~X~~

4. GC Fingerprinting Chromatograms Submitted for All Standards, Blanks, and Samples (if applicable)

— —

5. Extraction Holding Time Met
If not met, list number of days exceeded for each sample:

— ~~X~~

6. Analysis Holding Time Met
If not met, list number of days exceeded for each sample:

— ~~X~~

NOTE: EPA method 418.1 permits the use of either a scanning or fixed wavelength infrared (IR) spectrophotometer for determining petroleum hydrocarbon concentrations. Laboratory Resources, Inc., uses fixed wavelength instruments; therefore, IR spectra are not included in this data package.

Laboratory Supervisor: Debra L. Linn

Date: 8/29/94

GENERAL CHEMISTRY CONFORMANCE/NONCONFORMANCE SUMMARY

WORK ORDER No. 7408103

No Yes

X

- Blank Contamination
If yes, list compounds and concentrations in each blank:

- Matrix Spike Recoveries Meet Criteria
If not met, list those compounds and their recoveries which fall outside the acceptable range:

NA

- Sample Duplicate Analyses Meet QC Criteria
If not met, list those compounds and their criteria which fall outside the acceptable range:

 X

- Analysis Holding Time Met
If not met, list analyses and number of days exceeded for each sample:

 X

NA not applicable

Laboratory Supervisor:

oega Sum

Date:

8/28/94

17

This blank was analyzed concurrent with the analysis of the workorder:

T408103

(*) Elevated MDLs due to dilution for range
(**) Elevated MDLs due to dilution for interferences
X = Undetected analyte of required analyses.

General Chemistry Method Blank Analysis

This blank was analyzed concurrent with the analysis of the workorder:

T408103

Element	Result mg/L	MDL mg/L	Dil.
Ammonia-NH3	U	0.50	1
BOD	U	NA	1
COD	U	10	1
Chloride, Total	U	2.0	1
Chromium Hexavalent	U	0.05	1
Cyanide, Total	U	0.01	1
MBAS	U	1.5	1
Nitrate	U	0.10	1
Nitrite	U	0.01	1
Oil & Grease	U	10	1
pH	U	NA	1
Pet. Hydrocarbons	U	X	1
Phenolics, Total	U	0.05	1
Phosphorus, Total	U	0.025	1
Sulfate	U	5.0	1
Sulfite	U	1.0	1
Sulfide	U	1.0	1
Dissolved Solids	U	10	1
Suspended Solids	U	5.0	1
Kjeldahl Nitrogen	U	0.50	1
TOC	U	10	1
Turbidity	U	0.20	1
Conductivity	U	1.0	1
Alkalinity	U	2.0	1
Color	U	5.0	1
Fluoride	U	0.20	1
Orthophosphate	U	0.01	1
Hardness	U	5.0	1

(*) Elevated MDLs due to dilution for range

(**) Elevated MDLs due to dilution for interferences

X = Undetected analyte of required analyses.

Workorder No.: T408103

Matrix: Non-Aqueous

Parameters	Blank Spike	Sample Result	Spike Added	Spiked Sample		Sample Result	Sample Dup.	% Rec.	RPD		Batch QC Sample ID
	% Rec	mg/Kg **	mg/Kg **	mg/Kg **		mg/Kg**	mg/Kg **	Limits	%RES	%Limit	
Ammonia								75-125		15	
Cr Hexavalent								85-115		10	
Cyanide								70-125		5	
Ignitability								---		3 °F	
Kjeldahl Nitrogen								65-135		20	
Nitrate								75-125		10	
Oil & Grease								70-135		50	
pH (Corrosivity)								---		0.2 pH	
Pet. Hydrocarbons	91	<49.0	485	369	76	<49.0	<49.0	50-140	ND	40	T408206-02
Phenolics								70-135		50	
% Moisture						21.1	21.0	---	1	20	T408066-03
Reactive Cyanide								80-120		10	
Reactive Sulfide								80-120		10	

Note: The QC is based on a batch system in which a sample is chosen at random for matrix spike and/or duplicate analyses for a given matrix and represents all of the samples included in that batch.

* = Duplicate analysis outside of required quality control limits.

** = Results expressed in mg/Kg wet weight.

N = Matrix Spike recovery outside of required quality control limits.

NA = Not applicable since the sample concentration is 4X the amount of spike added.

ND = Not Determinable

The RPD limits for pH is 0.2 pH units.

The RPD for Ignitability is 3 degrees Fahrenheit.

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.

Division: New Jersey

LRI Report No: T408103

LRI Sample No: 1

Customer: Eikon Planning & Design

Location: Plainview ,NJ

Project: Plainview

Sample Description: SD-1

Date Collected: 08/05/94

Date Received: 08/09/94

Matrix: Soil

Percent Moisture: 4.5%

Units in Dry Weight

Parameter	Result	QL	Units	Started Date	By	Completed Date	By	Dilution
<u>ASP 12/91 Cyanide</u>								
Cyanide	1.0 U	1.0	mg/kg	08/19/94	OD	08/19/94	OD	
<u>PHC (TPH) by 418.1</u>								
Petroleum Hydrocarbons, Total Recoverable	84	52	mg/kg	08/24/94	JC	08/24/94	JC	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.

Division: New Jersey

LRI Report No: T408103

LRI Sample No: 2

Customer: Eikon Planning & Design

Location: Plainview ,NJ

Project: Plainview

Sample Description: SD-2

Date Collected: 08/05/94

Date Received: 08/09/94

Matrix: Soil

Percent Moisture: 8.0%

Units in Dry Weight

Parameter	Result	QL	Units	Started Date	By	Completed Date	By	Dilution
<u>ASP 12/91 Cyanide</u>								
Cyanide	1.1 U	1.1	mg/kg	08/19/94	OD	08/19/94	OD	
<u>PHC (TPH) by 418.1</u>								
Petroleum	52 U	52	mg/kg	08/24/94	JC	08/24/94	JC	
Hydrocarbons, Total								
Recoverable								

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.

Division: New Jersey

LRI Report No: T408103

LRI Sample No: 3

Customer: Eikon Planning & Design

Location: Plainview ,NJ

Project: Plainview

Sample Description: SD-3

Date Collected: 08/05/94

Date Received: 08/09/94

Matrix: Soil

Percent Moisture: 15.7%

Units in Dry Weight

Parameter	Result	QL	Units	Started Date	By	Completed Date	By	Dilution
<u>ASP 12/91 Cyanide</u>								
Cyanide	1.2 U	1.2	mg/kg	08/19/94	OD	08/19/94	OD	
<u>PHC (TPH) by 418.1</u>								
Petroleum	330	56	mg/kg	08/24/94	JC	08/24/94	JC	
Hydrocarbons, Total								
Recoverable								

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.

Division: New Jersey

LRI Report No: T408103

LRI Sample No: 4

Customer: Eikon Planning & Design

Location: Plainview ,NJ

Project: Plainview

Sample Description: SD-4

Date Collected: 08/05/94

Date Received: 08/09/94

Matrix: Soil

Percent Moisture: 4.9% -

Units in Dry Weight

Parameter	Result	QL	Units	Started Date	By	Completed Date	By	Dilution
<u>ASP 12/91 Cyanide</u>								
Cyanide	1.1 U	1.1	mg/kg	08/19/94	OD	08/19/94	OD	
<u>PHC (TPH) by 418.1</u>								
Petroleum	83	52	mg/kg	08/24/94	JC	08/24/94	JC	
Hydrocarbons, Total								
Recoverable								

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T408103
LRI Sample No: 5

Customer: Eikon Planning & Design
Location: Plainview ,NJ
Project: Plainview
Sample Description: SD-5

Date Collected: 08/05/94
Date Received: 08/09/94

Matrix: Soil
Percent Moisture: 5.8%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	By	Completed Date	By	Dilution
<u>ASP 12/91 Cyanide</u>								
Cyanide	1.1 U	1.1	mg/kg	08/19/94	OD	08/19/94	OD	
<u>PHC (TPH) by 418.1</u>								
Petroleum Hydrocarbons, Total Recoverable	52 U	52	mg/kg	08/24/94	JC	08/24/94	JC	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T408103
LRI Sample No: 6

Customer: Eikon Planning & Design
Location: Plainview ,NJ
Project: Plainview
Sample Description: SD-6

Date Collected: 08/05/94
Date Received: 08/09/94

Matrix: Soil
Percent Moisture: 3.6%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	By	Completed Date	By	Dilution
<u>ASP 12/91 Cyanide</u>								
Cyanide	1.0 U	1.0	mg/kg	08/19/94	OD	08/19/94	OD	
<u>PHC (TPH) by 418.1</u>								
Petroleum Hydrocarbons, Total Recoverable	52 U	52	mg/kg	08/24/94	JC	08/24/94	JC	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.

Division: New Jersey

LRI Report No: T408103

LRI Sample No: 7

Customer: Eikon Planning & Design

Location: Plainview ,NJ

Project: Plainview

Sample Description: FIELD BLANK 8/5

Date Collected: 08/05/94

Date Received: 08/09/94

Matrix: Water

Percent Moisture: N/A

Units in Wet Weight

Parameter	Result	QL	Units	Started Date	By	Completed Date	By	Dilution
<u>ASP 12/91 Cyanide</u>								
Cyanide	0.010 U	0.010	mg/L	08/19/94	OD	08/19/94	OD	
<u>PHC (TPH) by 418.1</u>								
Petroleum	0.50 U	0.50	mg/L	08/19/94	JC	08/19/94	JC	
Hydrocarbons, Total								
Recoverable								

PROJECT IR - OIL CONTENT ANALYZER CALIBRATION

Continued From Page _____

07/20/94
JCCALIBRATION OF OIL CONTENT ANALYZER
(model OCM A - HORIBA 220)

40 PPM of Solvent used for spanning to 120 PPM per IR reading.

STD # CONC. IR READING

1	0	0
2	50	27
3	10	37
4	20	82
5	40	160
6	50	204

CORRELATION COEFFICIENT - 0.999

7	60	113 (2x)
8	70	145 (2x)
9	80	165 (2x)
10	100	204 (2x)

CORRELATION COEFFICIENT
AFTER 10 STANDARDS - - 0.999

Continued on Page

Read and Understood By

John J. Calender
Signed07/20/94
Date

Signed

Date

PROJECT PHC- SX

Notebook No. _____

Continued From Page _____

SAMPLE	ID	SP. WT. (g)	EXT	RANGE	DIL	IR READING	ALICUOT CNC.	RESULTS (mg/kg)	COMMENTS
8/22/94									
JC									
BLANK		-	100			G	45	98% REC	
ICV	30 ppm	-				118	29.5	REC	
REF ST. 20 (34.2)		1.32				120	30	88% REC	
SC 54	- 1	10.2				24	6.0		
	3	10.2				20	5.0		
	5	10.5				82	9.0		
	7	10.1				122	30.5		
811i	- 1	10.5		OVER	5x	151	37.8		
	2	10.2				30	7.5		
8134	- 1A	10.4				60	15.0		
8276	- 1	10.1		OVER	2x	192	48.0		
8236	- 1	10.4		OVER	20x	164	41.0		
8278	- 1	10.0				180	45.0		
CCV	30 ppm	-				113	28.3	94% REC	
CCB		-	Y			0	45		
8/24/94									
JC									
BLANK		-	100			10	45		
ICV	30 ppm	-				117	29.3	98% REC	
REF ST. 20 (25.40)		1.00				104	26.0	100% REC	
8103	- 1	10.0				JC 44 32	8.0		
(PUP)	1	10.0				38	9.5		
(MS)	1	10.0				189	47.3		
	2	10.5				19	4.8		
						17			
	3	10.6				17	29.3		
	4	10.1				32	8.0		
	5	10.3				19	4.8		
	6	10.8				16	4.0		
CCV	30 ppm	-				115	28.8	96% REC	
CCB	30 ppm	-	Y			0	45		

Continued on Page _____

Read and Understood By

John Galusinski

8/24/94

Signed

Signed

Date

PROJ

Base	Sample ID	Dish #	Dish W	D before 105°C	D after 105°C	% S	% M
08/09/							
A.A.	4080953	7	1501	4.545	4.461		
		12	1486	3.5204	3.479		
08/10/94							
A.A.	BLK	84	1549	1349	1549		
C.P.	1	71	1539	11.594	11.094	95.58	4.42
DUP	408103	1	1530	11.643	11.193	95.54	4.46
		2	1514	11.640	10.828	0	1.0
		3	1526	11.629	10.015		
		4	1543	11.426	10.937		
		5	1495	11.522	10.943		
		6	1310	11.595	11.036		
DUP	408113	8	1299	11.299	8.883	75.84	24.16
		1	1336	11.343	8.919	75.77	24.23
		2	1542	11.571	9.523	RM=0	3.0
		3	1520	11.770	10.501		
		4	1485	11.562	10.381		
		5	1556	11.64	10.653		
		6	1317	11.465	10.435		
	408114	1	1492	11.518	10.410		
		2	1427	11.745	10.477		
		4	1516	11.561	11.217		
		5	1522	11.531	11.142		
		6	1534	11.559	9.820		
		7	1535	11.431	10.950		
		8	163	11.572	10.613		
		10	1497	11.769	9.862		
		11	1525	11.561	10.990		
		12	1511	11.613	10.830		
		13	1527	11.554	10.453		
		14	1491	11.546	10.977		

Continued on Page _____

del f

Signed

08/10/94

Date

Read and Understood By

216

Signed

Date

TABLE OF ABBREVIATIONS

ORGANIC QUALIFIERS

B= Compound also detected in method blank
J= Below method detection limit
E= Exceeds calibration range
D= Dilution performed
U= Undetected
RE= Re-analysis performed

INORGANIC QUALIFIERS

EC= Estimated count
TNTC= Too numerous to count
QL= Quantitation limit
U= Undetected
S= Result quantitated by Method of Standard Additions
*= Duplicate analysis outside of required quality control
limits
N= Matrix spike recovery outside of required quality control
limits
ND= Not determinable
T= True Color
A= Apparent Color