FMO 0179ESO 10-115

ROUTING AND TRANSMITTAL SLIP

Date 8/4/86

TO (Name office symbol room number building Agency/Post)	Initials	Date
1 Paul Doherty CNSV/SIN		
2		
3		
4		
5 Thru Craig Smith		

	Action	✓	File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

Paul FYI attached is B&M report on lead at Elliott Shooting Park

Site Elliot Shooting Park
ID # MOD980968353
Break 12
Other Bunn & McDonnell
7-18-86

0758

DO NOT use this form as a RECORD of approvals concurrences disposals clearances and similar actions

FROM (Name org symbol Agency/Post)	Room No —Bldg
Dave Crawford	Phone No

5041 102 ☆ USGPO 1986 461 274/434

OPTIONAL FORM 41 (Rev 7 76)
Prescribed by GSA
FPMR (41 CFR) 101 11.206

40163452
SUPERFUND RECORDS

Burns & McDonnell
ENGINEERS - ARCHITECTS - CONSULTANTS

July 18, 1986

Mr David Crawford
U S Environmental Protection
Agency
726 Minnesota Avenue
Kansas City KS 66101

Elliott Shooting Park
Boatmen's First National Bank
Project No 85-170-4

Dear Mr Crawford

Please find enclosed Addendum No 2 to the "Work Plan for Initial Lead Removal and Sampling and Analysis at the Elliott Shooting Park " These addenda items address subjects discussed in our meeting of July 3, 1986

Also enclosed is a schedule for submittal of a plan for additional cleanup activities at the site Included with the schedule is a brief description of some of the actions being considered for this plan

Finally, results of recent sampling at the site (on July 7, 1986) are included

If you have questions concerning any of the above, please do not hesitate to call

Sincerely,

Tom Brown

H Tom Brown, P E

HTB/skb

Enclosure

xc Paul Doherty c vsu/sinv

4800 EAST 63rd STREET PO BOX 173 KANSAS CITY MISSOURI 64141 TEL 816-333-4375 TWX 910-771 3059

Addendum No 2 To
Work Plan For
Initial Lead Removal and
Sampling and Analysis
At The
Elliott Shooting Park
Raytown, Missouri

Date July 18, 1986

Owner Boatmen's First National Bank
Boatmen's Raytown Bank

Project No 85-170-4

This addendum forms a part of the document described above The original work plan remains in full force and effect except as modified by the following

1 Page II-1 Add a fourth paragraph under "A GENERAL to read as follows
The initial lead removal plan will be carried out on portions of the former Elliott Shooting Park property where lead shot has accumulated and on land outside the current property boundaries and located between portions of the north and east site boundaries and the building of precast concrete construction which lies generally east and north of the site Removal of lead shot from the roof of the precast concrete building will be the responsibility of the building's present owners

2 Page II-3 Change the first paragraph as follows

"stockpiled for lead removal The pit will be enclosed by a snow fence to prevent unauthorized access Signs indicating that no trespassing is allowed will be placed on the fence The fence and signs will be inspected each morning prior to initiating work on the site and any abnormalities will be corrected The soil and rock will settle in the pit and the water will be recycled to the separation system When rain is expected, drainageways to divert runoff water around the pit will be constructed in order to minimize pit discharges After the land removal is complete, the water in the pit will be "

Burns & McDonnell
Engineering Company
Kansas City, Missouri

* * * * *

3 Both the processed soil removed from the ditch carrying the process water and the sediment removed from the sedimentation pit have lead concentrations in excess of 500 ppm

4 Lead shot in the soil bank area next to the former International Fitness Building was encountered to a depth of 4 to 5 inches However, the soil immediately beneath this shot-contaminated soil contained lead concentrations (~900 ppm) relatively close to the residential development criteria

5 Additional clean-up actions currently being investigated include the following

   a On-site isolation with cover and deed/zoning restrictions

   b Off-site removal to a permitted sanitary landfill

   c Off-site removal to a RCRA conforming landfill

   d Additional lead removal using techniques other than the existing "mining" machine

   e Combinations of the above

SAMPLE DESCRIPTIONS

Sample No	Description
1	Background sample taken approx 50 ft south of 75th St and 100 ft SE of Club House, 0 to 3 inches depth
2	Stockpile sample taken from soil being processed on July 7
3	Processed soil sample taken from "old" (prior to July 7) processed soil storage area
4	Processed soil sample taken from "new" (processed soil removed July 7) process soil storage area
5	Sample from top of bank going down to the former International Fitness Building, 0-2 inch depth, shot was manually removed
6	Same location as 5, 2-5 inch depth, shot was manually removed
7	Same location as 5, 5-8 inch depth, no manual alteration of sample
8	Soil sample from swept area NW of stockpile
9	Sample of sediment removed from the sedimentation pit and placed in an on-site retaining basin on July 5

[illegible] ENVIRONMENTAL LABORATORY [illegible]
ENVIRONMENTAL MANAGEMENT OFFICE
[illegible] BOX 618 - ALEXANDRIA VA 22313
FTS 8-557-[illegible] FTS 8-557-[illegible]

RECEIVED JUL 14 1986 BURNS & McDONNELL K.C. OFFICE

DATE [illegible]

COVER PAGE

INORGANIC ANALYSIS DATA PACKAGE

[illegible] WILSON LABORATORIES CASE NO [illegible]
[illegible] SDG NO [illegible] P.O. REPORT NO [illegible]

SAMPLE NUMBERS

[illegible] NO	LAB ID NO		EPA NO	LAB ID NO
	[illegible]	I	2	[illegible]
	[illegible]	I		
[illegible]	[illegible]	I	4	[illegible]
		I		
[illegible]	[illegible]	I	6	[illegible]
		I		
[illegible]	[illegible]	I	[illegible]	[illegible]
		I		
[illegible]	[illegible]	I	8	[illegible]
		I		
	[illegible]	I		
		I		
		I		
		I		
		I		
		I		
		I		
		I		

COMMENTS

[illegible] INTERELEMENT AND BACKGROUND CORRECTIONS APPLIED [illegible] YES [illegible] NO
IF [illegible] CORRECTIONS APPLIED BEFORE [illegible] OR AFTER [illegible] GENERATION OF RAW [illegible]
DATA ITEMS

[illegible] - NOT REQUIRED BY CONTRACT AT THIS TIME

FOOTNOTE

VALUE - IF THE RESULT IS A VALUE GREATER THAN OR EQUAL TO THE INSTRUMENT DETECTION LIMIT BUT LESS THAN THE CONTRACT REQUIRED DETECTION LIMIT REPORT THE VALUE IN BRACKETS (I.E. [10]) INDICATE THE ANALYTICAL METHOD USED WITH F (FOR ICP AA) OR F (FOR FURNACE
U - INDICATES ELEMENT WAS ANALYZED FOR BUT NOT DETECTED REPORT WITH THE DETECTION LIMIT VALUE (E.G. 1 U
- INDICATES A VALUE ESTIMATED OR NOT REPORTED DUE TO THE PRESENCE OF INTERFERENCE (EXPLANATION NOTE INCLUDED ON COVER PAGE)
- INDICATES VALUE DETERMINED BY METHOD OF STANDARD ADDITION
- INDICATES SPIKE SAMPLE RECOVERY IS NOT WITHIN CONTROL LIMIT
- INDICATES DUPLICATE ANALYSIS IS NOT WITHIN CONTROL LIMIT
- INDICATES THE CORRELATION COEFFICIENT FOR METHOD OF STANDARD ADDITION IS LESS THAN [illegible]

EQBM_I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
FTS 557-2490 FTS 557-2490

EPA SAMPLE NO

DATE 8/7/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES CASE NO. BLANK
SDG NO. 764
LAB SAMPLE ID NO. EQ 7-1000 QC REPORT NO. BLANK

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION LOW MEDIUM
HIGH WATER SOIL SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1	ALUMINUM		13	MAGNESIUM	
2	ANTIMONY		14	MANGANESE	
3	ARSENIC		15	MERCURY	
4	BARIUM		16	NICKEL	
5	BERYLLIUM		17	POTASSIUM	
6	CADMIUM		18	SELENIUM	
7	CALCIUM		19	SILVER	
8	CHROMIUM		20	SODIUM	
9	COBALT		21	THALLIUM	
10	COPPER		22	TIN	
11	IRON		23	VANADIUM	
12	LEAD	147 F	24	ZINC	
25	CYANIDE			PERCENT SOLIDS	65

COMMENTS: FOR REPORTING RESULTS TO EPA STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES FOR DATA AND RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS MUST BE EXPLICIT AND CONTAINED ON COVER PAGE. HOWEVER,

LAB ID

LAB MANAGER Kathi A Mitchell

FORM I

U S EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P O BOX [illegible] - ALEXANDRIA VA 22313
[illegible] FTS 8-557-[illegible]

EPA SAMPLE NO 1
2

DATE [illegible]

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SDG NO [illegible]84
LAB SAMPLE ID NO 8[illegible]-1[illegible]1

CASE NO [illegible]
QC REPORT NO [illegible]

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION LOW X MEDIUM
MATRIX WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT CIRCLE ONE

1	ALUMINUM		13	MAGNESIUM	
2	ANTIMONY		14	MANGANESE	
3	ARSENIC		15	MERCURY	
4	BARIUM		16	NICKEL	
5	BERYLLIUM		17	POTASSIUM	
6	CADMIUM		18	SELENIUM	
7	CALCIUM		19	SILVER	
8	CHROMIUM		20	SODIUM	
9	COBALT		21	THALLIUM	
10	COPPER		22	TIN	
11	IRON		23	VANADIUM	
12	LEAD	240 F	24	ZINC	

CYANIDE PERCENT SOLIDS [illegible]1

FOOTNOTES USE REPORTING RESULTS TO EPA STANDARD RESULT QUALIFIERS [illegible]
USED AS DEFINED ON COVER PAGE ADDITIONAL FLAGS OR FOOTNOTES
EXPLAINING RESULTS ARE ENCOURAGED DEFINITION OF SUCH FLAGS MUST
BE EXPLICIT AND CONTAINED ON COVER PAGE HOWEVER

COMMENTS

LAB MANAGER Kathy A Mitchell

FORM I

U S EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P O BOX 818 - ALEXANDRIA VA 22313
703 557-2490 FTS 8-557-2490

EPA SAMPLE NO

DATE 86 07

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SDG NO
LAB SAMPLE ID NO 0007-1002

CASE NO

QC REPORT NO

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION LOW MEDIUM
MATRIX WATER SOIL SLUDGE OTHER

UNITS OF (MG KG DRY WEIGHT) CIRCLE ONE

1	ALUMINUM	13	MAGNESIUM
2	ANTIMONY	14	MANGANESE
3	ARSENIC	15	MERCURY
	BARIUM	16	NICKEL
5	BERYLLIUM	17	POTASSIUM
6	CADMIUM	18	SELENIUM
7	CALCIUM	19	SILVER
8	CHROMIUM	20	SODIUM
9	COBALT	21	THALLIUM
10	COPPER	22	TIN
11	IRON	23	VANADIUM
12	LEAD 0800	24	ZINC
CYANIDE		PERCENT SOLIDS	

FOOTNOTES FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS TO BE USED AS DEFINED ON COVER PAGE ADDITIONAL FLAGS OR FOOTNOTES BY LABORATORY RESULTS ARE ENCOURAGED DEFINITION OF SUCH FLAGS MUST BE EXPLICIT AND CONTAINED ON COVER PAGE HOWEVER

COMMENT

LAB MANAGER Kathi A Mitchell

FORM I

U S EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P O BOX 818 - ALEXANDRIA VA 22313
703 557-2490 FTS 8-557-2490

EPA SAMPLE NO

DATE 86/07/11

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SDG NO 784
LAB SAMPLE ID NO 8607-1000

CASE NO
QC REPORT NO

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION LOW > MEDIUM
MATRIX WATER SOIL < SLUDGE OTHER

UNIT OF MG/KG DRY WEIGHT / CIRCLE ONE

1	ALUMINUM		13	MAGNESIUM
2	ANTIMONY		14	MANGANESE
3	ARSENIC		15	MERCURY
	BARIUM		16	NICKEL
5	BERYLLIUM		17	POTASSIUM
6	CADMIUM		18	SELENIUM
7	CALCIUM		19	SILVER
8	CHROMIUM		20	SODIUM
9	COBALT		21	THALLIUM
10	COPPER		22	TIN
11	IRON		23	VANADIUM
12	LEAD	117 P	24	ZINC
CYANIDE			PERCENT SOLIDS	91

FOOTNOTES FOR REPORTING RESULTS TO EPA STANDARD RESULT QUALIFIERS MAY BE USED AS DEFINED ON COVER PAGE ADDITIONAL FLAGS OF ROUTINE OR EXPLAINING RESULTS ARE ENCOURAGED DEFINITION OF SUCH FLAGS MUST BE EXPLICIT AND CONTAINED ON COVER PAGE HOWEVER

COMMENTS

LAB MANAGER Kathy A Mitchell

FORM I

U S EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P O BOX 818 - ALEXANDRIA VA 22313
FTS 557-2190 ETS 8-557-2190

EPA SAMPLE NO
5

DATE 30 07 11

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SDW NO 784
LAB SAMPLE ID NO 8007-1004

CASE NO
QC REPORT NO

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION LOW MEDIUM
MATRIX WATER SOIL SLUDGE OTHER

UG L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1	ALUMINUM	13	MAGNESIUM
2	ANTIMONY	14	MANGANESE
3	ARSENIC	15	MERCURY
4	BARIUM	16	NICKEL
5	BERYLLIUM	17	POTASSIUM
6	CADMIUM	18	SELENIUM
7	CALCIUM	19	SILVER
8	CHROMIUM	20	SODIUM
9	COBALT	21	THALLIUM
10	COPPER	22	TIN
11	IRON	23	VANADIUM
12	LEAD 282 F	24	ZINC

CYANIDE PERCENT SOLIDS %

FOOTNOTES FOR REPORTING RESULTS TO EPA STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED DEFINITION OF SUCH FLAGS MUST BE EXPLICIT AND CONTAINED ON COVER PAGE HOWEVER -

COMMENTS-

LAB MANAGER Kathy A. Mitchell

FORM I

U S EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P O BOX 818 - ALEXANDRIA VA 22313
703 557-2490 FTS 8-557-2490

EPA SAMPLE NO
6

DATE 86/ 1

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO 784
LAB SAMPLE ID NO 8607-1005

CASE NO BURNS
QC REPORT NO BURNS

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION LOW ( ) MEDIUM
MATRIX WATER SOIL ( ) SLUDGE OTHER

UG L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1	ALUMINUM		13	MAGNESIUM	
2	ANTIMONY		14	MANGANESE	
3	ARSENIC		15	MERCURY	
4	BARIUM		16	NICKEL	
5	BERYLLIUM		17	POTASSIUM	
6	CADMIUM		18	SELENIUM	
7	CALCIUM		19	SILVER	
8	CHROMIUM		20	SODIUM	
9	COBALT		21	THALLIUM	
10	COPPER		22	TIN	
11	IRON		23	VANADIUM	
12	LEAD	125000 P	24	ZINC	
13	CYANIDE			PERCENT SOLIDS ( )	

FOOTNOTES FOR SPECIFIC RESULTS TO EPA STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE ADDITIONAL FLAGS OR FOOT NOTES EXPLAINING RESULTS ARE ENCOURAGED DEFINITION OF SUCH FLAGS MUST BE EXPLICIT AND CONTAINED ON COVER PAGE HOWEVER

COMMENTS

AE MANAGER Kathy A Mitchell

FORM I

U S EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P O BOX 818 - ALEXANDRIA VA 22313
703-557-2490 FTS 557-2490

EPA SAMPLE NO

DATE 86/07/11

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SDW NO 784
LAB SAMPLE ID NO 8607-1008

CASE NO
QC REPORT NO

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION LOW > MEDIUM
WATER SOIL < SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1	ALUMINUM		13	MAGNESIUM	
2	ANTIMONY		14	MANGANESE	
3	ARSENIC		15	MERCURY	
	BARIUM		16	NICKEL	
5	BERYLLIUM		17	POTASSIUM	
6	CADMIUM		18	SELENIUM	
7	CALCIUM		19	SILVER	
8	CHROMIUM		20	SODIUM	
9	COBALT		21	THALLIUM	
10	COPPER		22	TIN	
11	IRON		23	VANADIUM	
12	LEAD	3400 P	24	ZINC	
13	CYANIDE			PERCENT SOLIDS	53

FOOTNOTES FOR REPORTING RESULTS TO EPA STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED DEFINITION OF SUCH FLAGS MUST BE EXPLICIT AND CONTAINED ON COVER PAGE HOWEVER

COMMENTS

LAB MANAGER Kathy A. Mitchell

G C REPORT NO _ _BURNS _

INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME WILSON LABORATORIES CASE NO _ _ BLANK

SOW NO _ _ _ 784

DATE _ _ _ 86 OCT 11 UNITS _ _ _ _ UG/L

COMPOUND	INITIAL CALIB 1 TRUE VALUE	FOUND	P	II	CONTINUING CALIBRATION 2 TRUE VALUE	FOUND	%R	I	FOUND	P	II	METHOD
METALS												
1 ALUMINUM				II				I			II	
2 ANTIMONY				II				I			II	
3 ARSENIC				II				I			I	I
4 BARIUM				II				I			I	I
5 BERYLLIUM				II				I			II	I
6 CADMIUM				II				I			II	I
7 CALCIUM				II				I			II	I
8 CHROMIUM				II				I			II	I
9 COBALT				II				I			II	
10 COPPER				II				I			II	I
11 IRON				II				I			II	
12 LEAD	5000	4700	95	II	5000	4820	96	I	4700	95	II	I
13 MAGNESIUM				II				I			II	I
14 MANGANESE				II				I			II	I
15 MERCURY				II				I			II	I
16 NICKEL				II				I			II	I
17 POTASSIUM				II				I			II	
18 SELENIUM				II				I			II	I
19 SILVER				II				I			II	I
20 SODIUM				II				I			II	I
21 THALLIUM				II				I			II	
22 TIN				II				I			II	I
23 VANADIUM				II				I			II	
24 ZINC				II				I			II	I
OTHER												
CYANIDE				II				I			I	

1 INITIAL CALIBRATION SOURCE EPA 2 CONTINUING CALIBRATION SOURCE EPA
2 CONTROL LIMITS MERCURY AND TIN 80-120 ALL OTHER COMPOUNDS 90-110
I INDICATE ANALYTICAL METHOD USED P - ICP FLAME AA F - FURNACE

Q C REPORT NO BURNS

INITIAL AND CONTINUING CALIBRATION VERIFICATION[3]

LAB NAME WILSON LABORATORIES CASE NO BURNS

SDW NO 784

DATE 86/07/11 UNITS UG L

COMPOUND	INITIAL CALIB[1]				CONTINUING CALIBRATION[2]					
METALS	TRUE VALUE	FOUND	%	II	TRUE VALUE	FOUND	%	I	FOUND	%	II	METHOD
1 ALUMINUM				II				I			II	
2 ANTIMONY				II				I			II	I
3 ARSENIC				II				I			II	
4 BARIUM				II				I			II	I
5 BERYLLIUM				II				I			II	
6 CADMIUM				II				I			II	I
7 CALCIUM				II				I			II	
8 CHROMIUM				II				I			II	I
9 COBALT				II				I			II	I
10 COPPER				II				I			II	I
11 IRON				II				I			II	I
12 LEAD	500	480	98	II	5000	1920	98	I			II	P I
13 MAGNESIUM				II				I			II	I
14 MANGANESE				II				I			II	I
15 MERCURY				II				I			I	
16 NICKEL				II				I			II	
17 POTASSIUM				II				I			II	
18 SELENIUM				II				I			II	
19 SILVER				II				I			I	
20 SODIUM				II				I			II	I
21 THALLIUM				II				I			II	
22 TIN				II				I			II	I
23 VANADIUM				II				I			II	I
24 ZINC				II				I			II	
OTHER												
CYANIDE				II				I			I	

1 INITIAL CALIBRATION SOURCE EPA 2 CONTINUING CALIBRATION SOURCE EPA

CONT. CALIB. LIMITS MERCURY AND TIN 80-120 ALL OTHER COMPOUNDS -10

INITIAL ANALYTICAL METHOD USED P - ICP FLAME AA F - FURNACE

D C REPORT NO BURNS

INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME WILSON LABORATORIES CASE NO BURNS

SDW NO 784

DATE 86 07 11 UNITS UG/L

COMPOUND	INITIAL CALIB 1				CONTINUING CALIBRATION 2							
METALS	TRUE VALUE	FOUND	% R	I II	TRUE VALUE	FOUND	% R	I	FOUND	% R	I	METHOD
1 ALUMINUM				II				I			I	
2 ANTIMONY				II				I			I	
3 ARSENIC				II				I			II	
4 BARIUM				II				I			II	I
5 BERYLLIUM				II				I			II	
6 CADMIUM				II				I			II	
7 CALCIUM				II				I			I	
8 CHROMIUM				II				I			II	
9 COBALT				II				I			II	
10 COPPER				II				I			II	I
11 IRON				II				I			I	
12 LEAD	1 6	1 1	95	II	106	95	90	I	100	97	II	E I
13 MAGNESIUM				II				I			II	
14 MANGANESE				II				I			I	I
15 MERCURY				II				I			II	
16 NICKEL				II				I			II	I
17 POTASSIUM				II				I			I	
18 SELENIUM				II				I			II	
19 SILVER				II				I			I	
20 SODIUM				II				I			I	
21 THALLIUM				II				I			II	
22 TIN				II				I			I	I
23 VANADIUM				II				I			I	
24 ZINC				II				I			II	I
OTHER												
C ANALYTE				II				I			I	

1 INITIAL CALIBRATION SOURCE EPA 2 CONTINUING CALIBRATION SOURCE EPA

I CRITERIA LIMITS MERCURY AND TIN P -120, ALL OTHER COMPOUNDS P -10

I INDICATE ANALYTICAL METHOD USED P - ICP/FLAME AA E - FURNACE

T C REPORT NO BUPNS

INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB WILCOX LABORATORIES CASE NO BUPNS

SDW NO 784

DATE 86/07/11 UNITS UG/L

COMPOUND	INITIAL CALIB				CONTINUING CALIBRATION						
METALS	TRUE VALUE	FOUND	R	II	TRUE VALUE	FOUND	%R	I	FOUND	%R	II METHOD
1 ALUMINUM				II				I			II
2 ANTIMONY				II				I			II I
3 ARSENIC				II				I			II
4 BARIUM				II				I			II I
5 BERYLLIUM				II				I			II I
6 CADMIUM				II				I			II
7 CALCIUM				II				I			II
8 CHROMIUM				II				I			II I
9 COBALT				II				I			II I
10 COPPER				II				I			II I
11 IRON				II				I			II
12 LEAD				II	100	101	75	I			II
13 MAGNESIUM				II				I			II
14 MANGANESE				II				I			II I
15 MERCURY				II				I			II
16 NICKEL				II				I			II
17 POTASSIUM				II				I			II
18 SELENIUM				II				I			II I
19 SILVER				II				I			II
20 SODIUM				II				I			II I
21 THALLIUM				II				I			II I
22 TIN				II				I			II I
23 VANADIUM				II				I			I
24 ZINC				II				I			II
OTHER											
25 ANALYZE				II				I			I

1 INITIAL CALIBRATION SOURCE EPA 2 CONTINUING CALIBRATION SOURCE EPA
3 CONTROL LIMITS MERCURY AND TIN 8 -12% ALL OTHER COMPOUNDS 9 -11
4 INDICATE ANALYTICAL METHOD USED P - ICP/FLAME AA F - FURNACE

FORM III A

Q C REPORT NO BURNS

PLANTS

LAB NAME WILSON LABORATORIES CASE NO BURNS

DATE 80/07/11 UNITS UG L

MATRIX WATER

		INITIAL CALIBRATION PLANT VALUE	CONTINUING CALIBRATION PLANT VALUE 1	2	3	4	PREPARATION PLANT MATRIX 1 (5 JUL)	PLANT MATRIX 2
01	ALUMINUM	I	II	I	I	I	II	I
		I	II	I	I	I	II	
02	ANTIMONY	I	II	I	I	I	I	
03	ARSENIC	I	II	I	I	I	I	I
04	BARIUM	I	II	I	I	I	I	I
05	BERYLLIUM	I	II	I	I	I	I	I
06	CADMIUM	I	II	I	I	I	I	I
07	CALCIUM	I	II	I	I	I	I	I
08	CHROMIUM	I	II	I	I	I	I	
09	COBALT	I	II	I	I	I	I	I
10	COPPER	I	II	I	I	I	I	
11	IRON	I	II	I	I	I	I	
12	LEAD	I	200 U II 200 U	I 200 U	I	I	II 2 5 U	
13	MAGNESIUM	I	II	I	I	I	I	I
14	MANGANESE	I	II	I	I	I	I	
15	MERCURY	I	II	I	I	I	I	I
16	NICKEL	I	II	I	I	I	I	
17	POTASSIUM	I	II	I	I	I	I	I
18	SELENIUM	I	II	I	I	I	I	
19	SILVER	I	II	I	I	I	I	
20	SODIUM	I	II	I	I	I	I	
21	THALLIUM	I	II	I	I	I	I	
22	TIN	I	II	I	I	I	I	
23	VANADIUM	I	II	I	I	I	I	
24	ZINC	I	II	I	I	I	I	
OTHER								
25	[illegible]	I	II	I	I	I	I	

ICPM III B

Q C REPORT NO BURNS

BLANKS

L B NAME WILSON LABORATORIES CASE NO BURNS

DATE 86/07 11 UNITS UG L

MATRIX WATER

COMPOUND	INITIAL CALIBRATION BLANK VALUE	CONTINUING CALIBRATION BLANK VALUE 1	2	3	4	PREPARATION BLANK MATRIX 1	MATRIX 2
METALS	I	II	I	I	I	II	I
	I	II	I	I	I	II	I
1 ALUMINUM	I	II	I	I	I	II	I
2 ANTIMONY	I	II	I	I	I	II	I
3 ARSENIC	I	II	I	I	I	II	I
4 BARIUM	I	II	I	I	I	II	I
5 BERYLLIUM	I	II	I	I	I	II	I
6 CADMIUM	I	II	I	I	I	II	I
7 CALCIUM	I	II	I	I	I	II	I
8 CHROMIUM	I	II	I	I	I	II	I
9 COBALT	I	II	I	I	I	II	
10 COPPER	I	II	I	I	I	II	I
11 IRON	I	II	I	I	I	II	
12 LEAD	I 200 U	II 200 U	I	I	I	I	I
13 MAGNESIUM	I	II	I	I	I	II	I
14 MANGANESE	I	II	I	I	I	II	I
15 MERCURY	I	II	I	I	I	II	I
16 NICKEL	I	II	I	I	I	II	I
17 POTASSIUM	I	II	I	I	I	II	
18 SELENIUM	I	II	I	I	I	II	I
19 SILVER	I	II	I	I	I	II	I
20 SODIUM	I	II	I	I	I	II	I
21 THALLIUM	I	II	I	I	I	II	I
22 TIN	I	II	I	I	I	II	I
23 VANADIUM	I	II	I	I	I	II	I
24 ZINC	I	II	I	I	I	II	I
OTHER							
25 [illegible]	I	II	I	I	I	II	I

FORM III C

C C REPORT NO _ BURNS

BLANKS

LAB NAME WILSON LABORATORIES CASE NO _ BURNS

SDG 11 UNITS UG L

MATRIX WATER

COMPOUND	INITIAL CALIBRATION BLANK VALUE	CONTINUING CALIBRATION BLANK VALUE 1	2	3	4	PREPARATION BLANK MATRIX 1	MATRIX 2
METALS	I	II	I	I	I	II	I
	I	II	I	I	I	II	I
1 ALUMINUM	I	II	I	I	I	II	I
2 ANTIMONY	I	II	I	I	I	II	I
3. ARSENIC	I	II	I	I	I	II	I
4 BARIUM	I	II	I	I	I	II	I
5 BERYLLIUM	I	II	I	I	I	II	I
CADMIUM	I	II	I	I	I	II	I
7. CALCIUM	I	II	I	I	I	II	I
8 CHROMIUM	I	II	I	I	I	II	I
9. COBALT	I	II	I	I	I	II	
10 COPPER	I	II	I	I	I	II	I
11 IRON	I	II	I	I	I	II	I
12 LEAD	I 2 5 U	II 2 5 U	I 2 5 U	I 2 5 U	I	II	I
13 MAGNESIUM		II	I	I	I	II	I
14 MANGANESE	I	II	I	I	I	II	I
15 MERCURY	I	II	I	I	I	II	
16 NICKEL	I	II	I	I	I	II	I
17 POTASSIUM	I	II	I	I	I	II	I
18. SELENIUM	I	II	I	I	I	II	I
19 SILVER	I	II	I	I	I	II	I
20 SODIUM	I	II	I	I	I	II	I
21 THALLIUM	I	II	I	I	I	II	I
22 TIN	I	II	I	I	I	II	I
23 VANADIUM	I	II	I	I	I	II	I
24 ZINC	I	II	I	I	I	II	I
OTHER							
2 4'[illegible]	I	II	I	I	I	II	

FORM III A

Q C REPORT NO BURNS

ICP INTERFERENCE CHECK SAMPLE

AI NAME WILSON LABORATORIES — CASE NO — SDG NO

DATE 80/07/11 — CHECK SAMPLE I — ICP

CHECK SAMPLE SOURCE — EPA

UNITS UG/L

COMPOUND	CONTROL LIMITS 1 MEAN	CONTROL LIMITS 1 STD DEV	TRUE 2	INITIAL OBSERVED	%	FINAL OBSERVED	%
STALS							
ALUMINUM	5,5000	138	500000				
ANTIMONY	60 U	0	---				
ARSENIC							
BARIUM	400	16	472				
BERYLLIUM	407	19	456				
CADMIUM	908	54	964				
CALCIUM	500000	145,0	400000				
CHROMIUM	960	14	965				
COBALT	403	26	473				
COPPER	49	10	509				
IRON	210000	17000	178000				
LEAD	5520	54	46404	4920	106	475	1.7
MAGNESIUM	513 00	16,00	400000				
MANGANESE	500	26	522				
MERCURY							
NICKEL	875	25	910				
POTASSIUM	13 00 U	0	---				
SELENIUM							
SILVER			905				
SODIUM	5000 U	0	---				
THALLIUM	750	73	10904				
TIN	40 U	0	---				
VANADIUM	469	18	471				
ZINC	905	71	946				

NOTES

1 MEAN VALUE BASED ON N = 10

2 TRUE VALUE OF EPA ICP INTERFERENCE CHECK SAMPLE OR CONTRACTOR STANDARD

* ESTIMATED NO TRUE VALUE ACCEPTED BECAUSE OF HIGH INTERFERENCE

FORM V A

Q C REPORT NO FUPNS_

SPIKE SAMPLE RECOVERY

LAB NAME WILSON LABORATORIES CASE NO FUPNS
EPA SAMPLE NO
DATE 86 07 11_ LAB SAMPLE ID NO 6[illegible]
UNITS _ MG L

MATRIX SOLID

COMPOUND	CONTROL LIMIT % R	SPIKED SAMPLE RESULT (SSR)	SAMPLE RESULT (SR)	SPIKED ADDED (SA)	% R
METALS					
1 ALUMINUM	75 - 125				
2 ANTIMONY					
3 ARSENIC					
4 BARIUM					
5 BERYLLIUM					
6 CHROMIUM					
7 CALCIUM					
8 CHROMIUM					
9 COBALT					
10 COPPER					
11 IRON					
12 LEAD		1060	67[illegible]	13[illegible]	1400[illegible] R
13 MAGNESIUM					
14 MANGANESE					
15 MERCURY					
16 NICKEL					
17 POTASSIUM					
18 SELENIUM					
19 SILVER					
20 SODIUM					
21 THALLIUM					
22 TIN					
23 VANADIUM					
24 ZINC					
25-29					
CN, TOTAL					

% R = [SSR - SR] / SA] 100
* = - OUT OF CONTROL
- NO SPIKE REQUIRED
COMMENTS MERCURY AND CYANIDE DATA EXPRESSED IN MG/KG

FORM VI A

Q C REPORT NO BURNS

DUPLICATES

LAB NAME WILSON LABORATORIES

CASE NO SDG NO

EPA SAMPLE NO

DATE 80/07/11

LAB SAMPLE ID NO 8[illegible]-1[illegible]

UNITS MG/KG

MATRIX SOLID

COMPOUND	CONTROL LIMIT 1	SAMPLE(S)	DUPLICATE D	RPD 2
METALS				
1 ALUMINUM				
2 ANTIMONY				
3 ARSENIC				
4 BARIUM				
BERYLLIUM				
6 CADMIUM				
7 CALCIUM				
8 CHROMIUM				
9 COBALT				
10 COPPER				
11 IRON				
12 LEAD		8[illegible]	814	8
13 MAGNESIUM				
14 MANGANESE				
15 MERCURY				
16 NICKEL				
17 POTASSIUM				
18 SELENIUM				
19 SILVER				
20 SODIUM				
21 THALLIUM				
22 TIN				
23 VANADIUM				
24 ZINC				
OTHER				
CYANIDE				

1 OUT OF CONTROL

TO BE ADDED AT A LATER DATE 2 RPD = [S - D] / [S + D] / 2 * 100

[illegible] CALCULABLE RPD DUE TO VALUES LESS THAN CRDL

[illegible] MERCURY AND CYANIDE DATA IS PRESSED IN MG/KG

FORM VIII A

C C REPORT NO BURNC

INSTRUMENT DETECTION LIMITS AND

LABORATORY CONTROL SAMPLE

LAB NAME WILSON LABORATORIES CASE NO BURNT

DATE 30 07/11 LCC UNITS UG/L MG/KG (CIRCLE ONE)

COMPOUND	REQUIRED DETECTION LIMITS CRDL -UG/L	INSTRUMENT DETECTION LIMITS (IDL -UG/L ICP/A	FURNACE	LAB CONTROL SAMPLE TRUE	FOUND	%
METALS						
1 ALUMINUM	200	160				
2 ANTIMONY	60	60				
3 ARSENIC	10		5			
4 BARIUM	200	60				
5 BERYLLIUM	5	3				
6 CADMIUM	5	5				
7 CALCIUM	5000	4300				
8 CHROMIUM	10	10				
9 COBALT	50	38				
10 COPPER	25	17				
11 IRON	100	80				
12 LEAD	5	200	2.5	150	144	96
13 MAGNESIUM	5000	3600				
14 MANGANESE	15	11				
15 MERCURY	0.2		0.2			
16 NICKEL	40	31				
17 POTASSIUM	5000	4800				
18 SELENIUM	5		2.5			
19 SILVER	10	10				
20 SODIUM	5000	240				
21 THALLIUM	10		5			
22 TIN	40	40				
23 VANADIUM	50	35				
24 ZINC	20	17				
OTHER						
CYANIDE	10	1				

FORM VIII A

Q C REPORT NO _ _ BURNS

STANDARD ADDITION RESULTS

LAB NAME _ WILSON LABORATORIES CASE NO _ _ BURNS

DATE _ 80/07 11 _ LOG UNITS _ _ UG L

SAMPLE#	ELEMENT	0 ADD ABS	1 ADD CON /ABS	2 ADD CON /ABS	3 ADD CON /ABS	FINAL CON	BY
LINE CON SAM/2 NEXT LINE							
	PI	131	50/ 219	100/ 295	200/ 485	72	0 85

CON IS THE CONCENTRATION ADDED ABS IS THE INSTRUMENT READOUT IN ABSORBANCE OR CONCENTRATION

CONCENTRATION AS DETERMINED BY MSA

- - IS THE CORRELATION COEFFICIENT

- - CORRELATION COEFFICIENT IS OUTSIDE OF CONTROL WINDOW OF 0 995

Form IX (Quarterly)
Instrument Detection Limits

oratory Name Wilson Laboratories ICP/Flame AA (Circle One) Model Number PE 5000

Date 86/04/15 Furnace AA Number PE 5000

Element	Wavelength (nm)	CRDL (ug/L)	IDL (ug/L)	Element	Wavelength (nm)	CRDL (ug/L)	IDL (ug/L)
Aluminum		200		13 Magnesium		5000	
Antimony		60		14 Manganese		15	
Arsenic	193 7 B	10	5 F	15 Mercury		c 2	
Barium		200		16 Nickel		40	
Beryllium		5		17 Potassium	766 5 B	5000	1000 P
Cadmium		5		18 Selenium	196 0 B	5	25 F
Calcium		5000		19 Silver	328 1 B	10	10 P
Chromium		10		20 Sodium	589 5 B	5000	5000 P
Cobalt		50		21 Thallium	276 8 B	10	5 F
Copper		25		22 Tin		40	
Iron		100		23 Vanadium		50	
Lead	283 3 B	5	25 F	24 Zinc		20	

otnotes

- Indicate the instrument for which the IDL applies with a P (for ICP/Flame AA) or a F (for Furnace AA) behind the IDL value
- Indicate elements commonly run with background correction (AA) with a B behind the analytical wavelength
- If more than one ICP/Flame or Furnace AA is used submit separate Forms IX XI for each instrument

omments

Lab Manager Kathy A Mitchell

Form IX (Quarterly)
Instrument Detection Limits

'atory Name Wilson Laboratories (ICP) Flame AA (Circle One) Model Number PE 6000

Date 86/04/15 Furnace AA Number

Element	Wavelength (nm)	CRDL (ug/L)	IDL (ug/L)	Element	Wavelength (nm)	CRDL (ug/L)	IDL (ug/L)
Aluminum	237 335	200	160 P	13 Magnesium	285 213	5000	3600 P
Antimony	206 833	60	60 P	14 Manganese	257 610	15	11 P
Arsenic	—	10	—	15 Mercury	—	0.2	—
Barium	233 527	200	60 P	16 Nickel	231 604	40	31 P
Beryllium	313 042	5	3 P	17 Potassium	766 491	5000	4800 P
Cadmium	214 438	5	5 P	18 Selenium	—	5	—
Calcium	422 673	5000	4500 P	19 Silver	328 068	10	10 P
Chromium	205 552	10	10 P	20 Sodium	588 995	5000	2400 P
Cobalt	228 616	50	38 P	21 Thallium	—	10	—
Copper	324 754	25	17 P	22 Tin	189 980	40	40 P
Iron	259 940	100	80 P	23 Vanadium	292 402	50	35 P
Lead	220 353	5	200 P	24 Zinc	213 856	20	17 P

Notes

- Indicate the instrument for which the IDL applies with a P (for ICP/Flame AA, or a F (for Furnace AA) behind the IDL value
- Indicate elements commonly run with background correction (AA) with a B behind the analytical wavelength
- If more than one ICP/Flame or Furnace AA is used submit seperate Forms IX XI for each instrument

Comments

Lab Manager Karen A Mitchell

Form X (Quarterly)
ICP Interelement Correction Fac ors

ɔratory Wilson Lab: ICP Model Number PE 6000

Date

		Inte ɔ em_nt Correction Factors for						
nalyte	Analyte Wavelength (nm)							
:imony								
enic								
ium								
ylium								
dmium								
romium								
balt								
~er								
:d								
nganese								
ercury								
ckel								
tassium								
lenium								
iver								
ɔdium								
allium								
n								
nadium								
nc								

NOT APPLICABLE

nents

Lab Manager [signature]

Form XI (Quarterly)
ICP Linear Ranges

Laboratory Name Wilson Laboratories

ICP Model Number PE 6000

Date 86/04/15

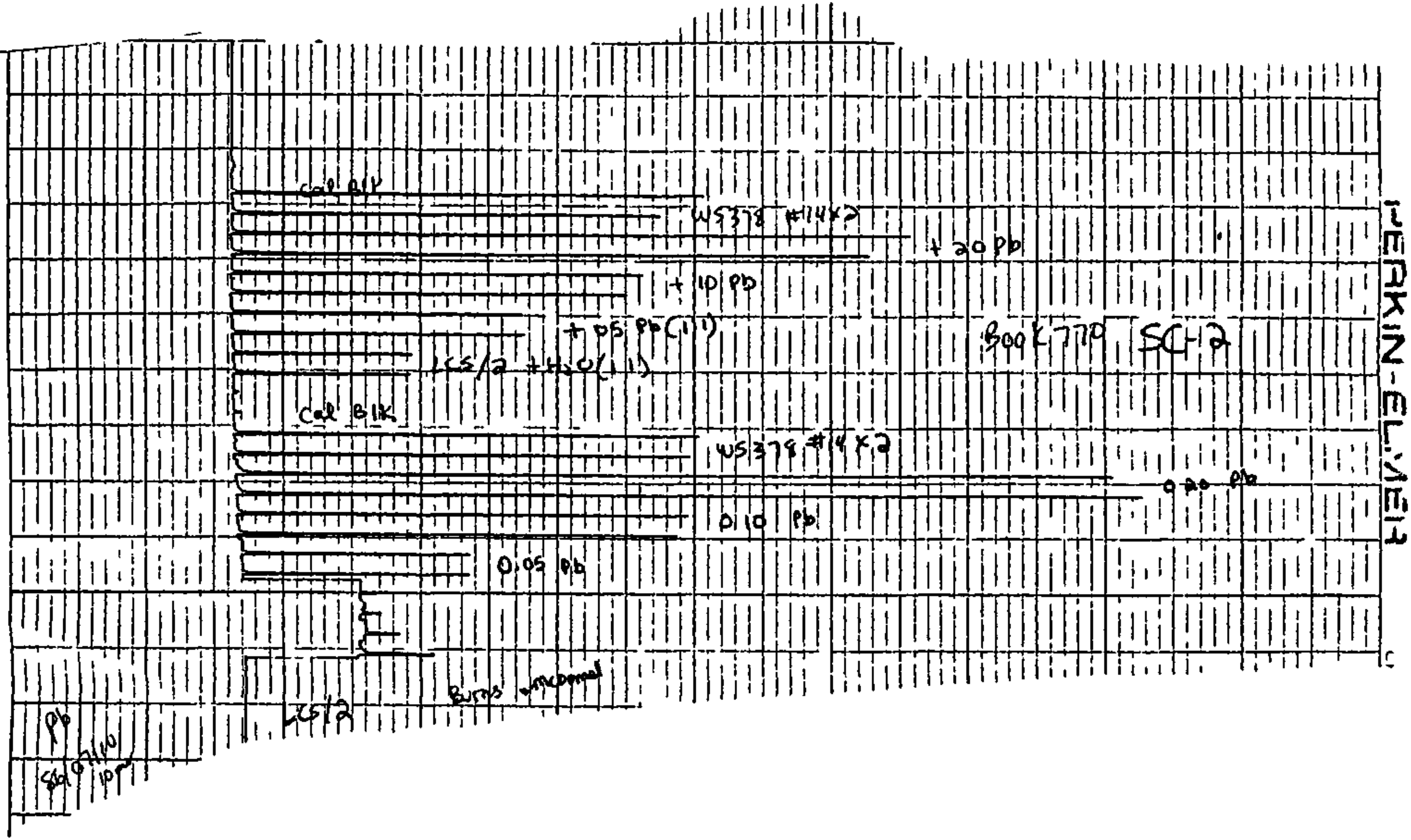
Upper ICP Linearity Limits

Analyte	Integration Time (Seconds)	Concentration (µg/L)	Analyte	Integration Time (Seconds)	Concentration (µg/L)
1 Aluminum	20	100000	13 Magnesium	20	100000
2 Antimony	30	5000	14 Manganese	2.0	10000
3 Arsenic	NA	NA	15 Mercury	NA	NA
4 Barium	20	10000	16 Nickel	20	10000
5 Beryllium	20	1000	17 Potassium	20	60000
6 Cadmium	20	1000	18 Selenium	NA	NA
7 Calcium	20	500000	19 Silver	20	500
8 Chromium	20	10000	20 Sodium	20	300000
9 Cobalt	20	3000	21 Thallium	NA	NA
10 Copper	20	10000	22 Tin	30	10000
11 Iron	20	75000	23 Vanadium	20	3000
12 Lead	20	10000	24 Zinc	20	1000

Footnotes • Indicate elements not analysed by ICP with the notation NA

Comments

Lab Manager Kathi O Mitc


Cal Blk
WS378 #14x2
+ 20 pb
+ 10 pb
+ 05 pb (1:1)
LCS/2 + H2O (1:1)
Book 770 SC-2
Cal Blk
WS378 #14x2
0.20 pb
0.10 pb
0.05 pb
LCS/2
Pb
PERKIN-ELMER

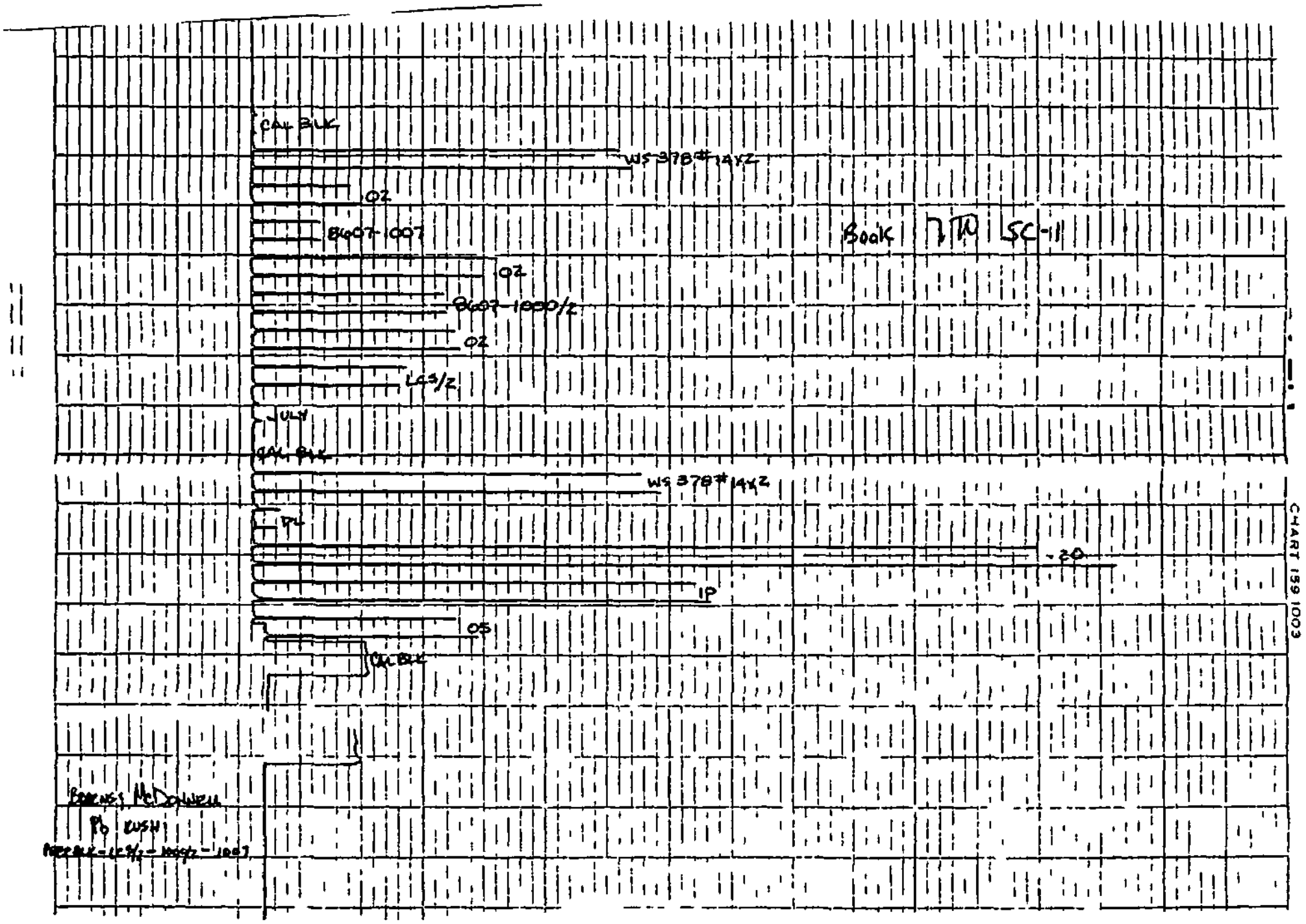


CHART 159 1003

Perkin-Elmer ICP/6000 Analytical Report

Method File Burn — Date Collected 86/07/10 — Time 09 15
Date of Report 86/07/10 — Time 09 51

	Pb
Standard	10 00
Blank	0 00
CS X85	464/4 92/106
cal ver	500/4 73/095
cal blk	<0 2
8607-000	0 2 -do on furnace
8607-1001	3 57
8607-1002	5 23
8607-003	1 51
8607-1004	2 40
8607-1004/5	8 13x5-40 65
8607-1005	2 94
8607-1005/5	4 45
8607-1006	1 35
con cal ver	500/4 82/096
con cal blk	<0 2
8607-037dup	1 25
8607-10 Pspl	1 63/000
8607-1007	<0 2 do on furnace
8607-1008	4 04
8607 1008/5 sd	0 82
con cal ver	500/4 90/098
con cal blk	<0 2
CS X85	464/4 95/107

RUN COMPLETED 0930

Tony Hernan 86/07/10

[illegible]	Tb	-0 03
8/07 1037aup	Tb	25
9607-1038spr	Tb	1 63
8607 1707	Tb	0 08
8/07 [illegible] 008	Tb	4 04
8607- 008/5 sd	Tb	0 82
[illegible] ver	Tb	4 90
[illegible] bII	Tb	-0 03
[illegible]	Tb	4 95

Perkin-Elmer ICP/6000 Analytical Report

Method File Burn — Date Collected 86/07/10 — Time 09 39
Date of Report 86/07/10 — Time 09 54

DILUTIONS

	Pb
Standard 1	10 00
Blank	0 00
TCSx95	464/F 03/108
Cal ver	500/4 90/098
Cal blk	<0 2
8607-100%/0	16 58
8607-100%/20	8 78x20=175 60
con cal ver	500/4 92/098
con cal blk	<0 2
TCSx85	464/4 98/107

RUN COMPLETED 0945

86/07/10

Tur ^ nual Mode 86/07/10 09 38

Method Name Durn Replicates 1 Read Delay 30
Print Format A I Data ID Name Data Name D60710093^
Remarks

Pb

Element Pure Pb Gain 744

Standard 1

Pb	EM	99271	CONC	10 00

B rl

Pb	EM	47	CONC	0 00

ICSxPS

Pb	5 03	

Cu vel

Pb	4 90	

Cu b r

Pb	0 02	

8607-1005/10

Pb	16 58	Over Calib

8607-1005/20

Pb	8 78	

cor cal ver

Pb	4 92	

cor cal blk

Pb	0 04	

ICSx85

Pb	4 98	

[illegible] BURNS & McDONNEL [illegible]

	CONCENTRATION 1 SAMPLE NO.	DATE	PLACE	CONCENTRATION DETECTED NO.	FOUND	ABSORBANCES #1	#2	#3	RE
[illegible]	10E	1[illegible] / 95	F	.10[illegible]	[illegible]	[illegible]	.0[illegible]		[illegible]
[illegible]		0[illegible]25	F	0		0[illegible]	001		0
[illegible]		0[illegible]25	F	< 0		[illegible]01	.001		[illegible]
FISHER [illegible]	15[illegible]	0[illegible]5[illegible]	F	0[illegible]8	51	1[illegible]	.28		[illegible]
[illegible]				.051	130	152	164		1[illegible]
		1 PART SAMPLE DILUTED WITH PARTS WATER							
	SPIKE RECOVERY 115 %			SPIKE WITH 5 STANDARD ADDITIONS					
	SAMPLE DILUTED TO 1/2			TRUE ANSWER = 15/ 150/1 1					
[illegible]	0556[illegible]		F	.0[illegible]9		.1[illegible]	.159		[illegible]
[illegible]	0196			9[illegible]	110	13	[illegible]		[illegible]
	1 PART SAMPLE DILUTED WITH 1 PARTS WATER								
[illegible]	.05[illegible]		F	0[illegible]		05[illegible]	05[illegible]		[illegible]
[illegible]				[illegible]	10[illegible]	09	091		0
	1 PART SAMPLE DILUTED WITH 1 PARTS WATER								
WE[illegible]	10[illegible]	05[illegible]	[illegible]	.05[illegible]	9[illegible]	.3[illegible]	3[illegible]		[illegible]
[illegible]		[illegible]	F	0		00[illegible]	001		0

1 COUNT = [illegible] ABSORBANCE UNITS
B = [illegible] INTERCEPT ON ABSORBANCE AXIS
M = [illegible] SLOPE OF THE STANDARD CURVE
R2 = [illegible] R SQUARED IDEAL EQUAL TO ONE

STD POINT #	STANDARD	VALUE OF STANDARD	DIFFERENCE	COUNTS
1	0	-[illegible] 7[illegible]27E-04	[illegible] 7[illegible]27E- 4	1
2	.055	[illegible] 3150[illegible]E-02	1 8[illegible]985E-[illegible]	1[illegible]
3	1	1 [illegible]21	[illegible] 52[illegible]4E-02	[illegible]
4	2[illegible]	218[illegible]	1 298[illegible]1E-03	705

CALIBRATION STANDARD IDENTIFICATION NUMBERS FOR PB WERE # 1686-1695
AND WERE PREPARED ON 05/[illegible]/9[illegible]

SIGNED Tony Hyman TONY GUZMAN 05/07/1[illegible]
STRIP CHART RECORDER DATA ARE CONTAINED IN BOOK 770 PAGE 50-1

REVIEWED BY Kathy A. Mitchell DATE 05/07/16

[illegible]

[illegible]	EPA LAB NUMBER	WILSON LAB NUMBER	GRAMS	VOLUME MLS	PER CENT SOLIDS	SAMPLE TYP
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ICP INT CH	ICP INT CH	100	100	0	W
[illegible]	CHL [illegible]	CHL [illegible]	100	100	[illegible]	W
[illegible]	CHL [illegible]	CHL BLK	1[illegible]	10	[illegible]	W
[illegible]	PREP [illegible]	8 JUL	1 01	[illegible]	[illegible]	W
[illegible]	LAB CONT [illegible]	LAB CONT SAM	1[illegible]	1[illegible]	[illegible]	W
[illegible]	1	SL07-1000	1 01	500	66	S
[illegible]	[illegible]	SL07-1001	1 01	500	71	S
[illegible]	3	SL07-1002	1 01	[illegible]	[illegible]	S
[illegible]	4	SL07-1003	1 01	500	[illegible]	S
[illegible]	5	SL07-1004	1 01	50	[illegible]	S
[illegible]	6	SL07-1005	1 01	500	[illegible]	S
10	CONT CHL [illegible]	CONT CHL [illegible]	100	100	[illegible]	[illegible]
[illegible]	CHL BLK	CHL BLK	100	100	[illegible]	W
[illegible]	[illegible]	SL07-1006	1 01	500	76	S
[illegible]	[illegible]	SL07-1 07F	1 01	500	76	S
[illegible]	[illegible]	SL07-1 08A	1 01	500	76	S
[illegible]	[illegible]	SL07-1007	1 01	500	[illegible]	S
[illegible]	[illegible]	SL07-1008	1 01	500	52	S
[illegible]	CONT CHL [illegible]	CONT CHL [illegible]	100	100	0	W
[illegible]	CHL [illegible]	CHL [illegible]	100	100	0	W
[illegible]	ICP INT CH	ICP INT CH	10	100	[illegible]	W

ILE EPA Superfund Metals Prep Book No

LAB NUMBER	WT/VOL	EPA #	CASE #	% solid	pH	start	stop
8607-1000	1.01g	#1	Burns + McDonnell	66	NA	8 June	9 June
8607-1001	1.01g	#2		71			
8607-1002	1.01g	#3		67			
8607-1003	1.01g	#4		64			
8607-1004	1.01g	#5		71			
8607-1005	1.01g	#6		70			
8607-1006	1.01g	#7		76			
8607-1007	1.01g	-7		76			
8607-1008	1.01g	#7		76			
8607-1007	1.01g	#8		70			
8607-1008	1.01g	#9		58			
LCS							
BLK	1.01g						

Witnessed & Understood by me | Date | Invented by | D

Recorded by Lauren F Swanson