This document was too large to scan as a whole document, therefore it required breaking into smaller sections.

Document number: SD-WM-DP-145

Section 2 **of** 12

Title: REVISED 60 DAY SAFETY SCREENING + FERROCYANIDE RESULTS FOR TANK 241-BY-108 ROTARY SAMPLES CORE 98 + CORE 104

Date: 02/02/96 **Revision:** R001

Originator: BALDWIN JH
Co: WHC

Recipient:
Co:

References: ECN-629001

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INORGANIC ANALYSES

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LABCORE Data Entry Template for Worklist# 2527

Analyst: BDV **Instrument:** DSC01 **Book #** —

Method: LA-514-113 Rev/Mod —

Worklist Comment: Dry DSC for BY-108. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	1 SAMPLE	S95T001419	0		DSC-02	SOLID	N/A	295.1		Joules/g Dry
95000104	BY-108 (R)	2 DUP	S95T001419	0		DSC-02	SOLID	295.1	390.8	N/A	Joules/g Dry
95000104	BY-108 (R)	3 SAMPLE	S95T001420	0		DSC-02	SOLID	N/A	509.1		Joules/g Dry
95000104	BY-108 (R)	4 DUP	S95T001420	0		DSC-02	SOLID	509.1	438.1	N/A	Joules/g Dry
95000104	BY-108 (R)	5 SAMPLE	S95T001420	1		DSC-02	SOLID	N/A	481.3		Joules/g Dry
95000104	BY-108 (R)	6 DUP	S95T001420	1		DSC-02	SOLID	481.3	409.5	N/A	Joules/g Dry

Final page for worklist # 2527

Blandina Valenzuela 9/21/95
Analyst Signature Date

[illegible] 9-21-95
Analyst Signature Date

Verified by Blandina Valenzuela 9/22/95

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2417

Analyst: rag **Instrument:** TGA0 1 **Book #** 65N8A

Method: LA-560-112 Rev/Mod B-0

Worklist Comment: Please run BY-108 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.45	N/A	%
95000118	BY-108 (R)	2	SAMPLE	S95T001967	0		TGA-01	SOLID	N/A	33.54		%
95000118	BY-108 (R)	3	DUP	S95T001967	0		TGA-01	SOLID	33.54	~~27.11~~ 29.9	N/A	%

24/10/95

Final page for worklist # 2417

Rae Ann Green 9-29-95
Analyst Signature Date

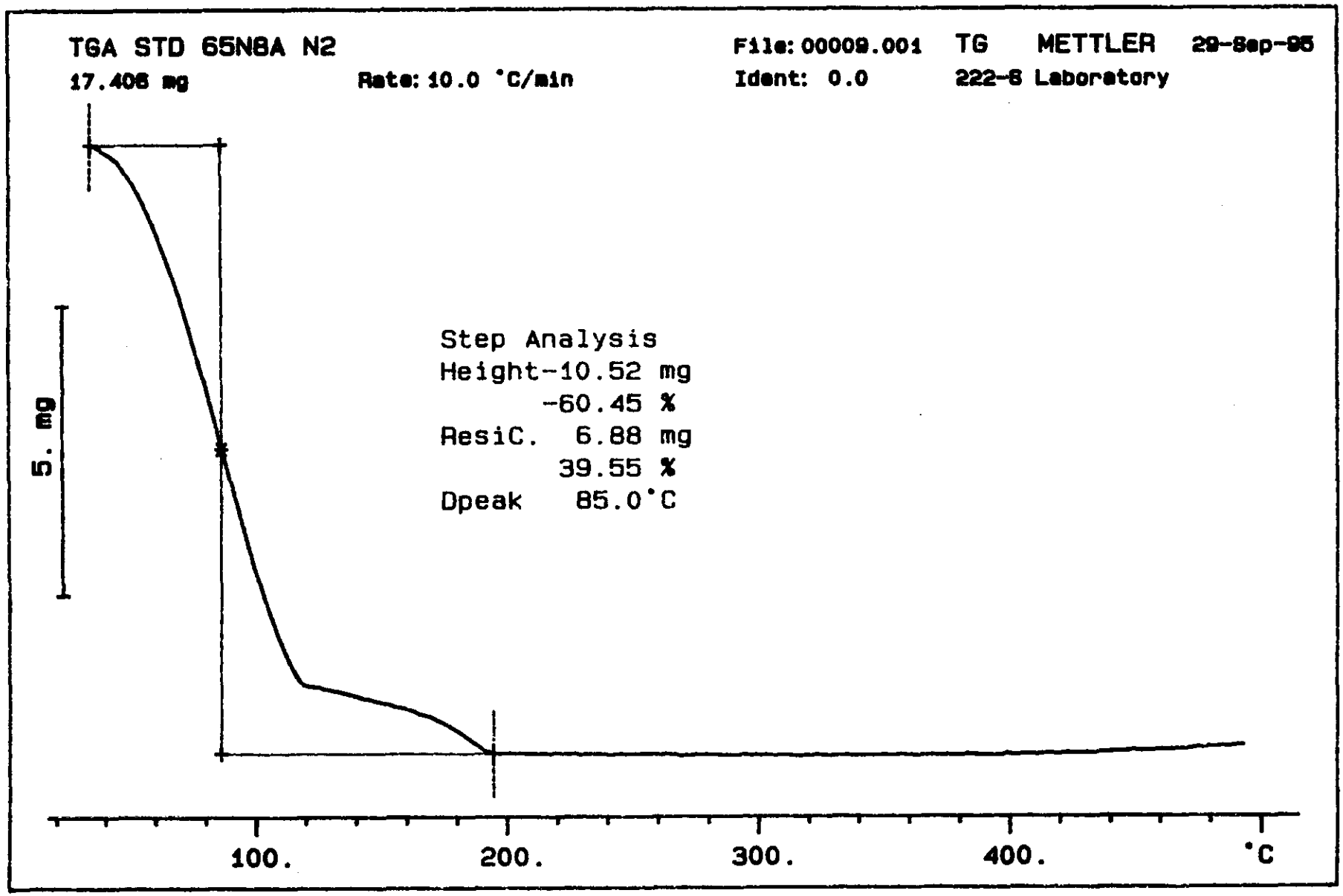
Verified by Blandina Valenzuela 10-6-95

Analyst Signature Date 10-5-95 1058 DH

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

BEST AVAILABLE COPY



160

WHC-SD-WM-DP-145, REV. 1

Rae Ann Green 9/29/95

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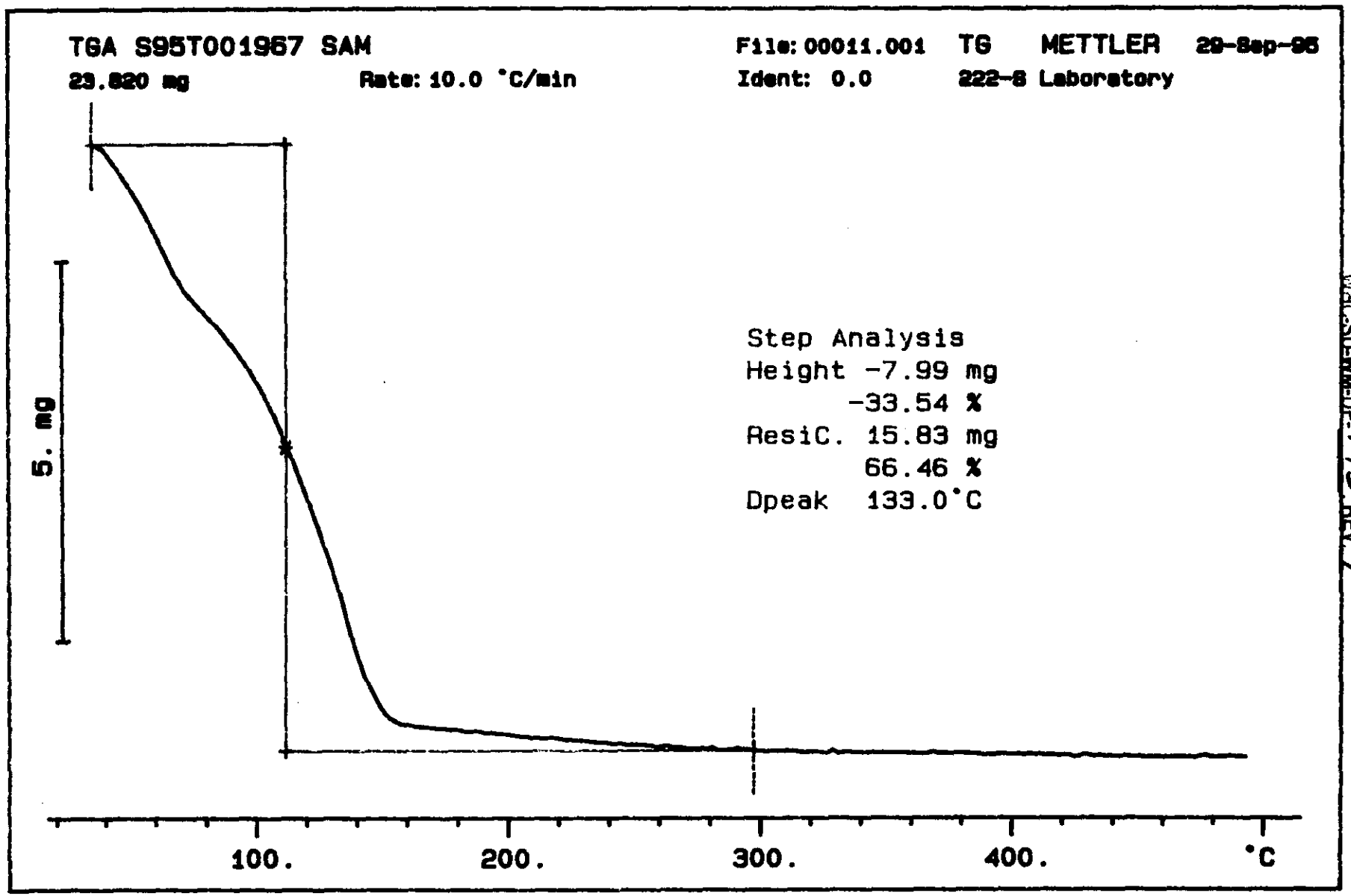

Rae Ann Green 9/29/95

WHC-SD-WM-DP-145 REV. 1

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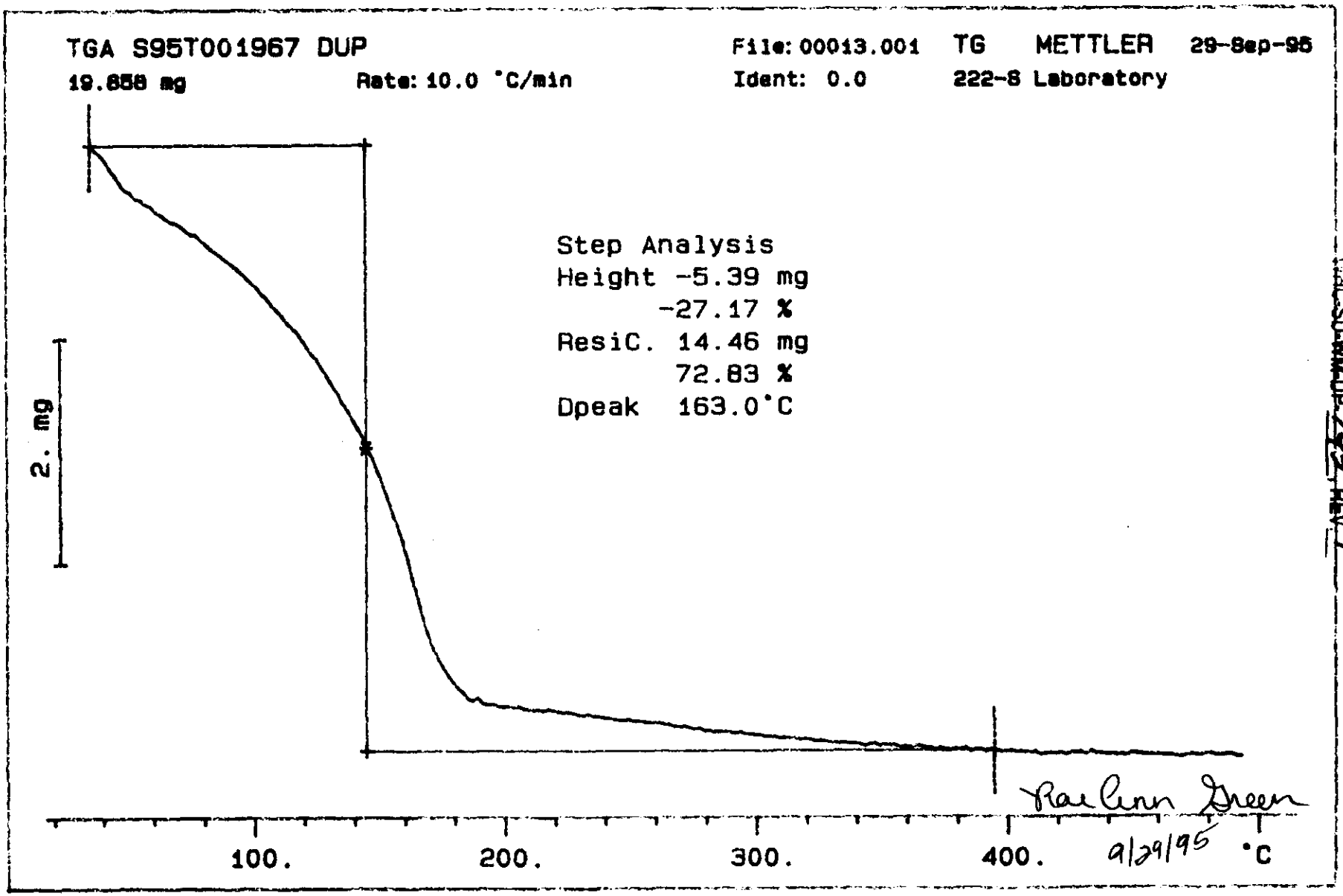


WHC-SD-WM-DP-145 REV. 1

LABCORE Data Entry Template for Worklist# 2423

Analyst: PJM **Instrument:** TGA0 3 **Book #** 65N8A

Method: LA-514-114 Rev/Mod C-0

Worklist Comment: Please run BY-108 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.74	59.92	N/A	%
										7.08		
95000118	BY-108 (R)	2	SAMPLE	S95T001904	0		TGA-03	SOLID	N/A	~~32.34~~		%
									7.08	7.49		
95000118	BY-108 (R)	3	DUP	S95T001904	0		TGA-03	SOLID	~~32.34~~	~~34.59~~	N/A	%
										32.34		
95000118	BY-108 (R)	4	SAMPLE	S95T001978	0		TGA-03	SOLID	N/A	~~7.08~~		%
									32.34	34.59		
95000118	BY-108 (R)	5	DUP	S95T001978	0		TGA-03	SOLID	~~7.08~~	~~7.19~~	N/A	%

Final page for worklist # 2423

See attached for Signature
Analyst Signature Date

[signature] 10-5-95
Analyst Signature Date

Verified by Blandina Valenzuela 10-5-95

Data Entry Comments: S95T001978 produced a second weight loss of 24.07 Wt % at approximately 195°C

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2423

Analyst: RJ McCown **Instrument:** TGA0 _____ **Book #** 65N8A

Method: LA-~~560-112~~ 514-114 Rev/Mod C-0
RJM 10/1/95

Worklist Comment: Please run BY1-08 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID			N/A	%
95000118	BY-108 (R)	2 SAMPLE	S95T001978	0		TGA-01	SOLID	N/A			%
95000118	BY-108 (R)	3 DUP	S95T001978	0		TGA-01	SOLID			N/A	%
95000118	BY-108 (R)	4 SAMPLE	S95T001904	0		TGA-01	SOLID	N/A			%
95000118	BY-108 (R)	5 DUP	S95T001904	0		TGA-01	SOLID			N/A	%

Final page for worklist # 2423

RJ McCown 10/1/95
Analyst Signature **Date**

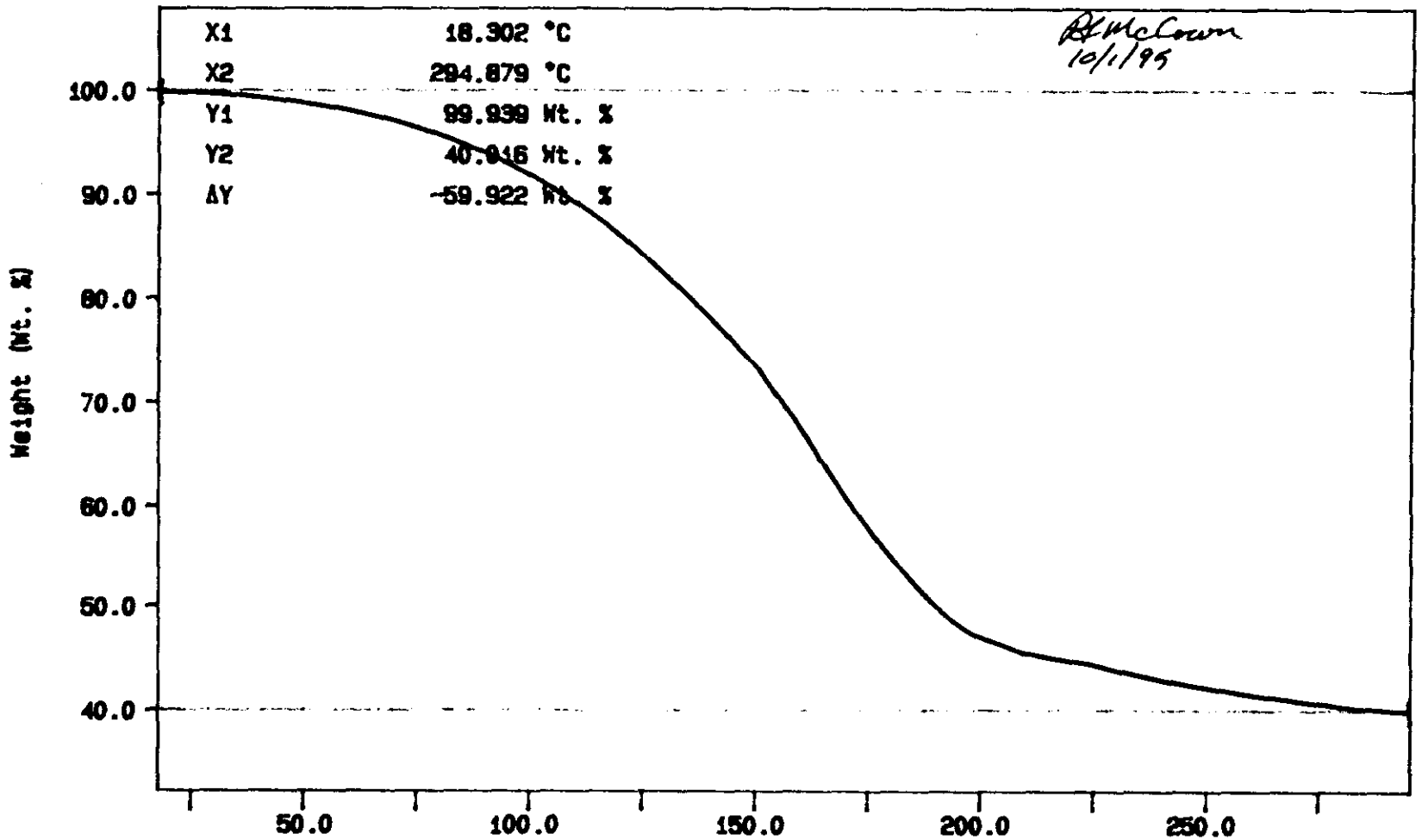
Analyst Signature **Date**

Other instrument
Was used
10-5-95
BDV

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA
File info: TER100102 Sun Oct 1 16:49:25 1995
Sample Weight: 20.739 mg
65N8-A Terliq
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 165 TO 169.



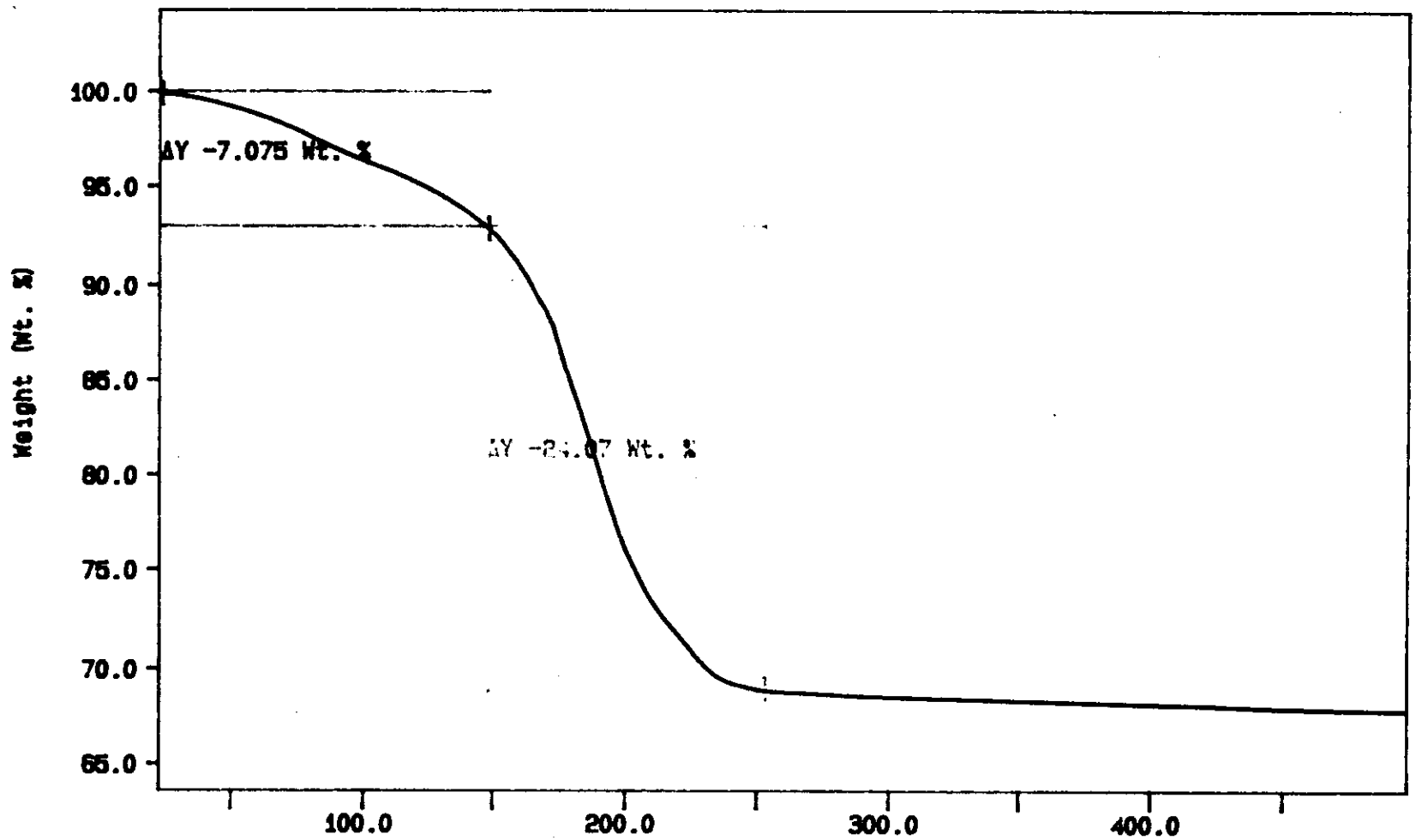
RJ McCown
10/1/95

N2 10C/MIN
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Oct 1 16:54:01 1995

WHC-SD-WM-DP-145, REV 1

Curve 1: TGA
File info: SAM100107 Sun Oct 1 20:52:10 1995
Sample Weight: 23.361 mg
S95T001904 SAM

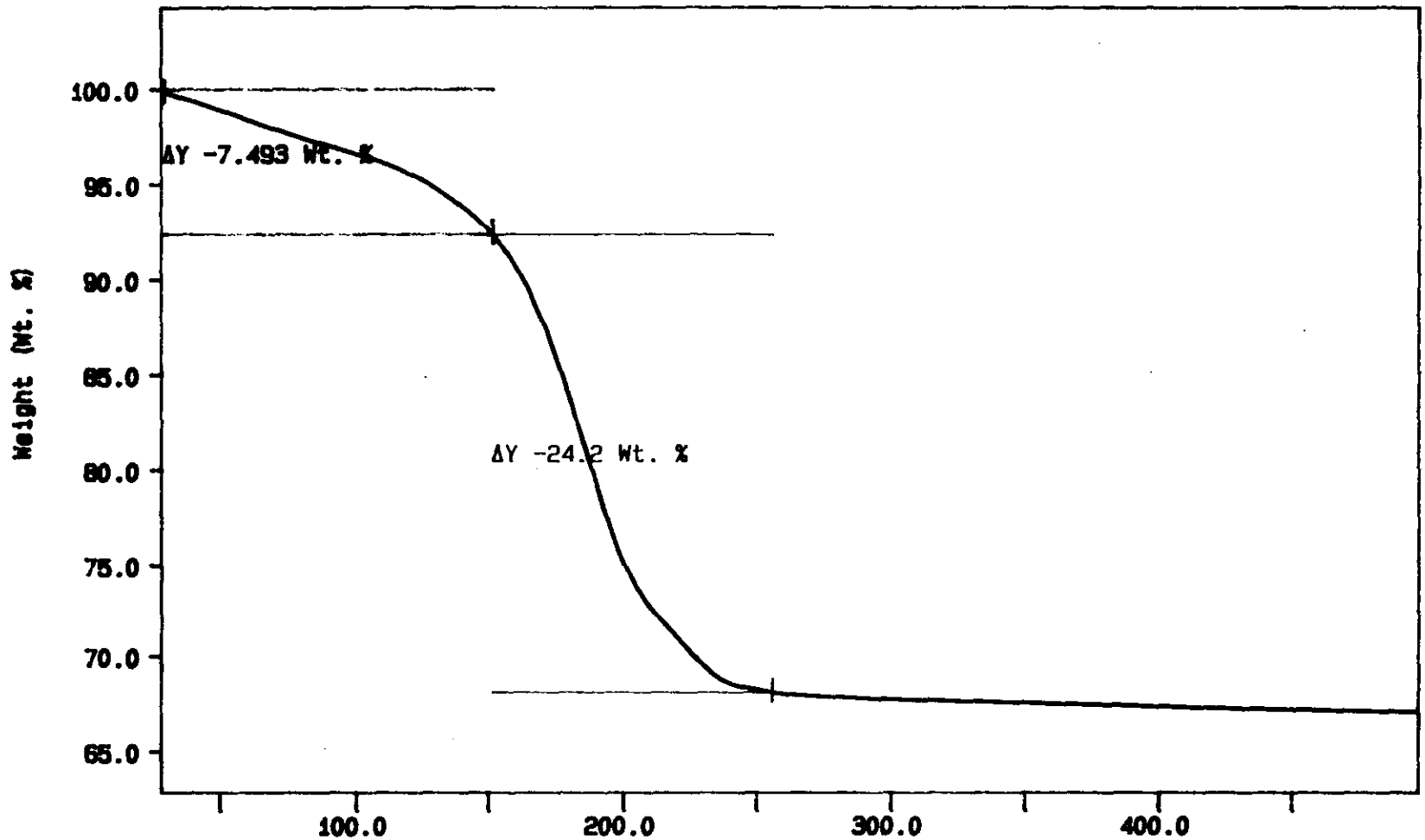


N2
TEMP: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP: 400.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Oct 4 09:12:25 1995

WHC-SD-WM-DP-145, REV. 1

Curve 1: TGA
File info: SAM100108 Sun Oct 1 22:03:02 1995
Sample Weight: 22.492 mg
S95T001904 DUP

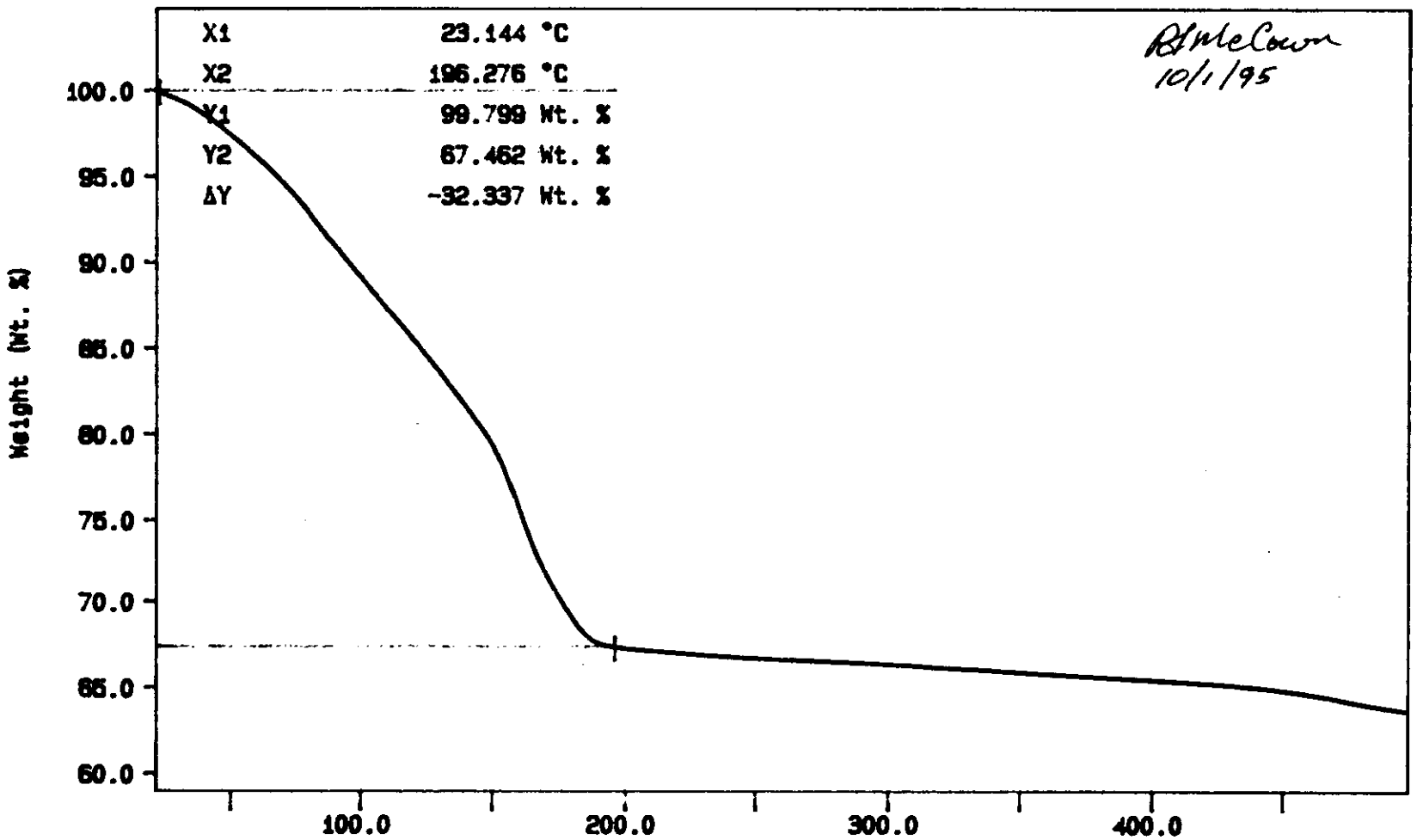


N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 400.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Oct 4 09:21:01 1995

WHC-SD-WM-DP-145, REV. 1

Curve 1: TGA
File info: SAM100105 Sun Oct 1 18:00:05 1995
Sample Weight: 8.014 mg
S95T001978 SAM

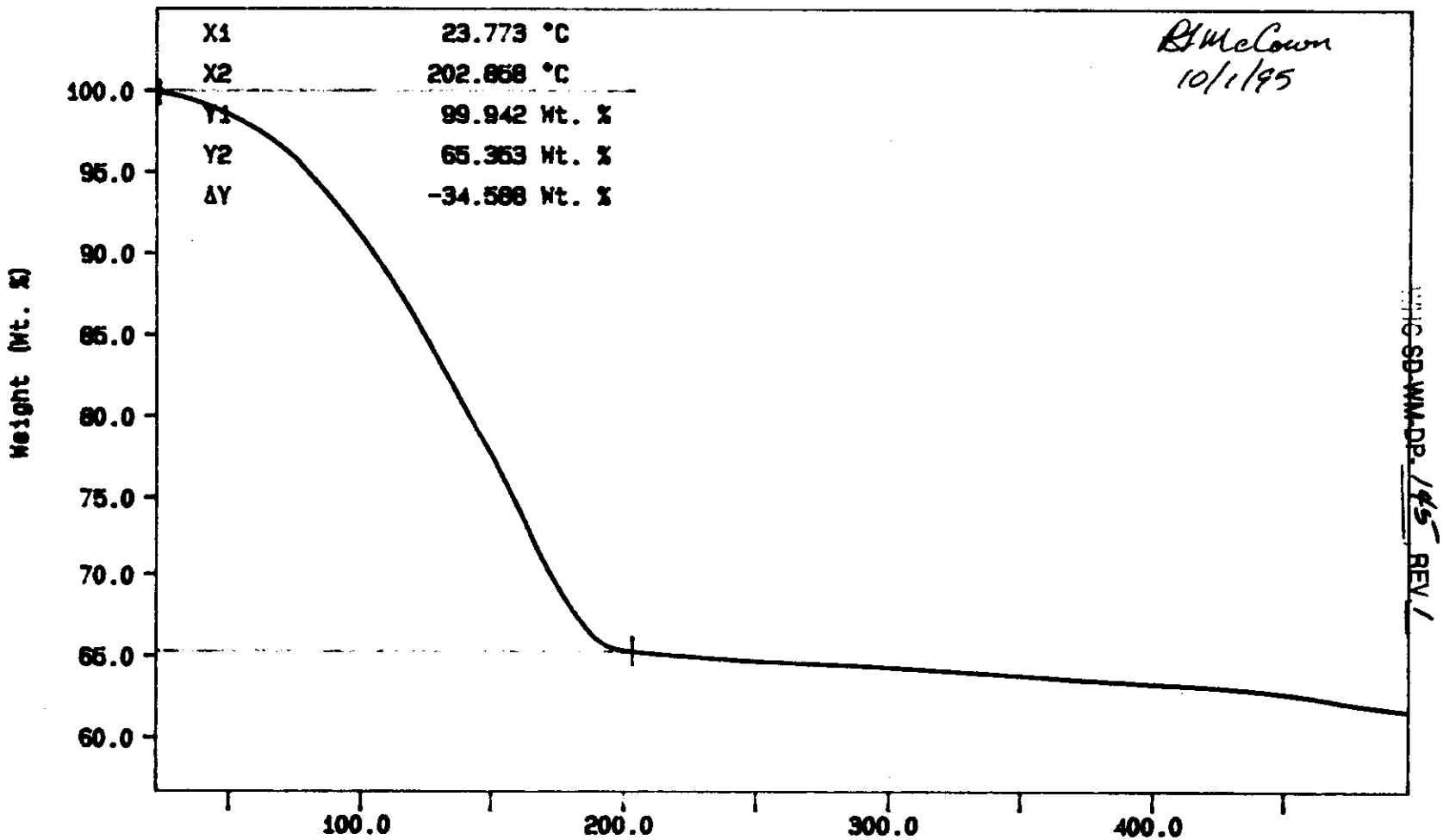


N2
TEMP1: 25.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 800.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Oct 1 18:11:05 1995

WHC-SD-WM-DP-145, REV. 1

Curve 1: TGA
File info: SAM100106 Sun Oct 1 19:13:26 1995
Sample Weight: 9.246 mg
S95T001978 DUP



BJ McCown
10/1/95

N2
TEMP: 25.0 C TIME: 0.0 min RATE: 10.0 C/min
TEMP: 600.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Oct 1 19:47:42 1995

SD-WM-DP-145 REV 1

LABCORE Data Entry Template for Worklist# 2427

Analyst: RDH **Instrument:** TGA0 B 1 **Book #** 65N 8-A

9-22-95 BDV

Method: LA-560-112 Rev/Mod B-0

Worklist Comment: Please run BY-108 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID	~~28.45~~ 59.74 9-22-95 BDV	60.13	N/A	%
95000118	BY-108 (R)	2 SAMPLE	S95T001916	0		TGA-01	SOLID	N/A	35.23		%
95000118	BY-108 (R)	3 DUP	S95T001916	0		TGA-01	SOLID	35.23	37.56	N/A	%
95000118	BY-108 (R)	4 SAMPLE	S95T001917	0		TGA-01	SOLID	N/A	33.04		%
95000118	BY-108 (R)	5 DUP	S95T001917	0		TGA-01	SOLID	33.04	26.36	N/A	%

Final page for worklist # 2427

RDHayn 9/22/95
Analyst Signature **Date**

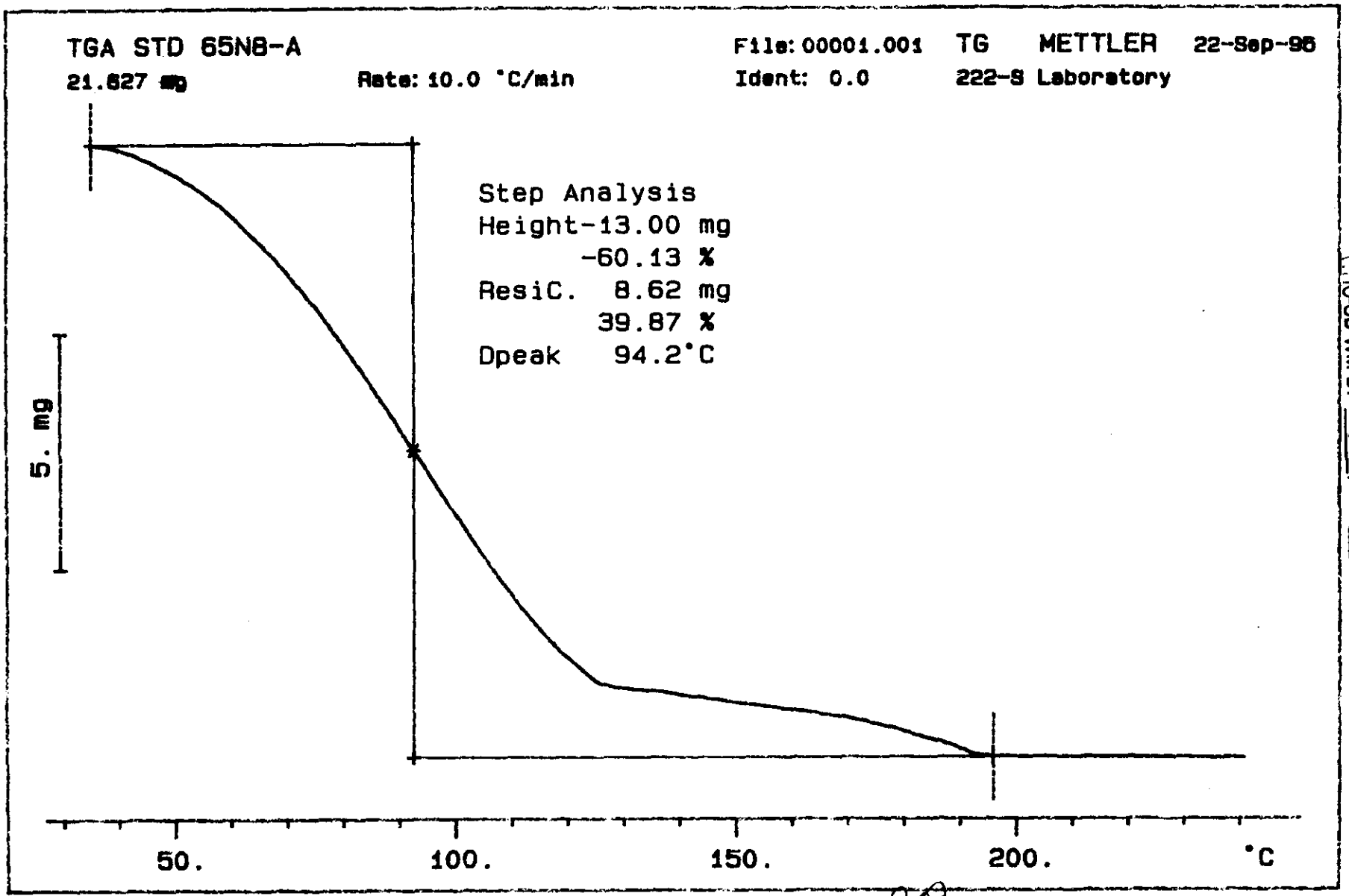
Verified by Blandina Valenzuela 9-26-95

[signature] 9/22/95 2220
Analyst Signature **Date**

Data Entry Comments: The final temperature for these samples was 250°C it is suppose to be 500°C the samples will be rerun to 500°C.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

BEST AVAILABLE COPY



P Dhusy 1/22/45

WHC-SD-WM-DP-145, REV. 1

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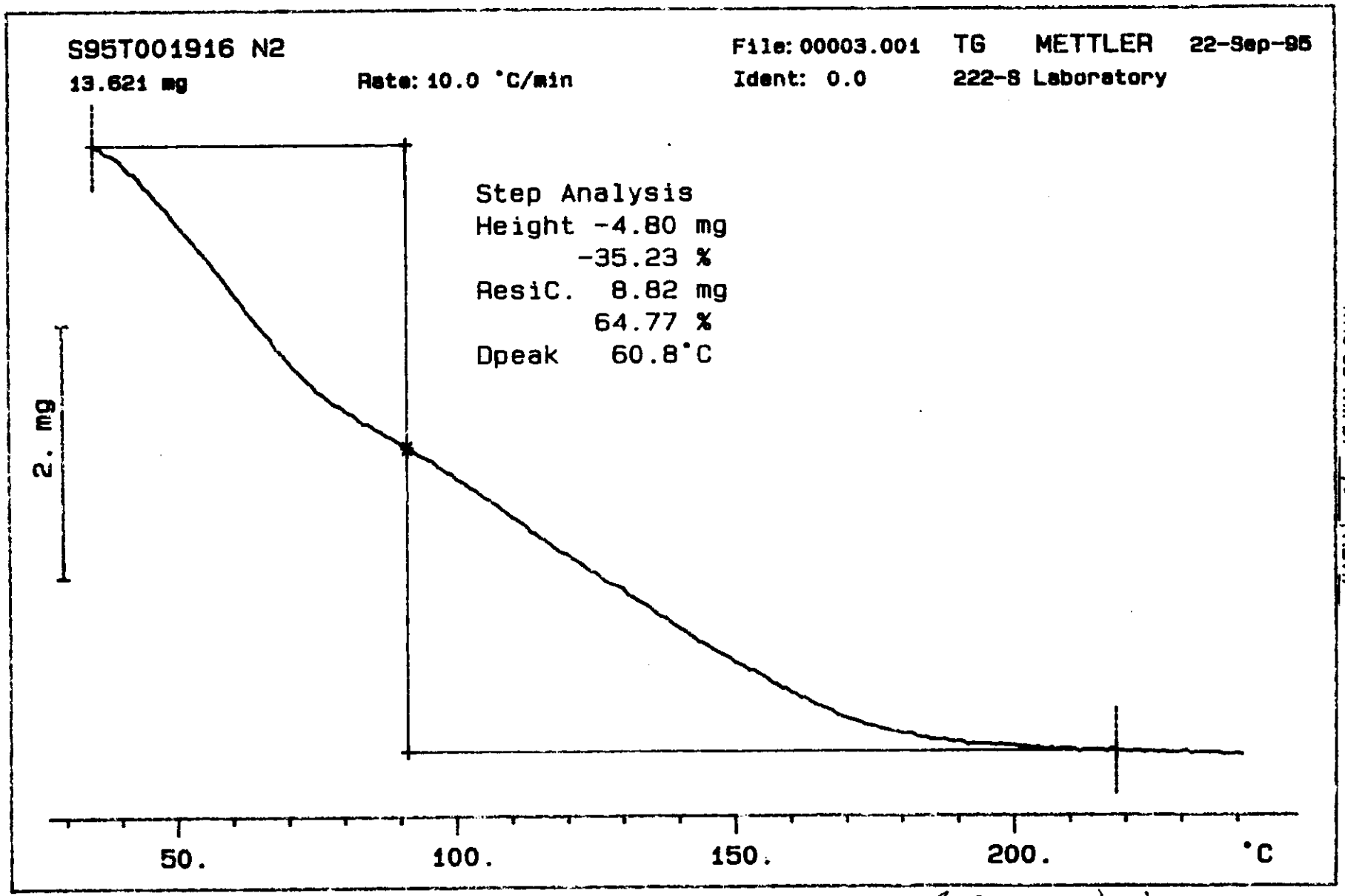
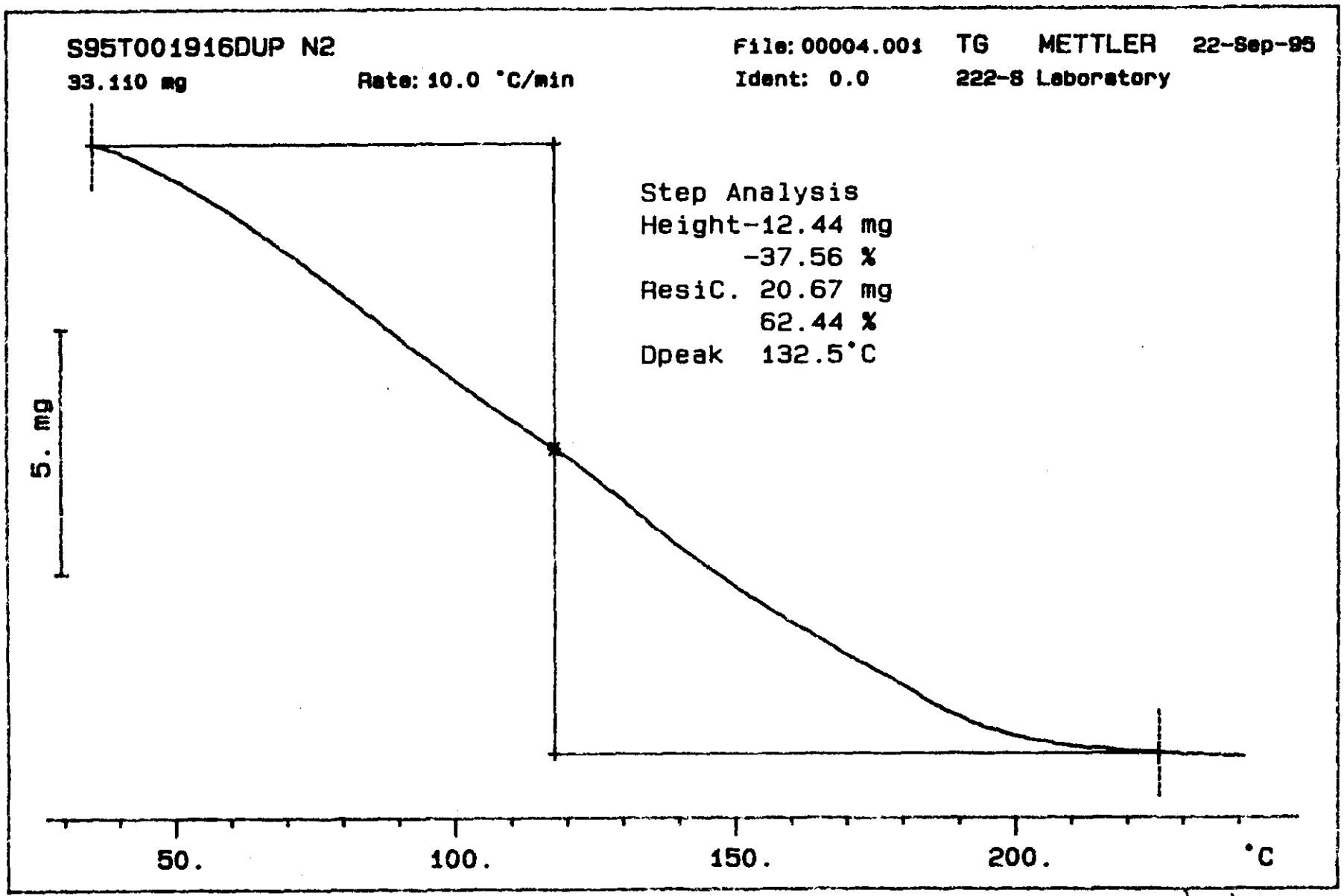


WHC-SD-WM-DP-145, REV. 1

RC Dawson 9/22/95

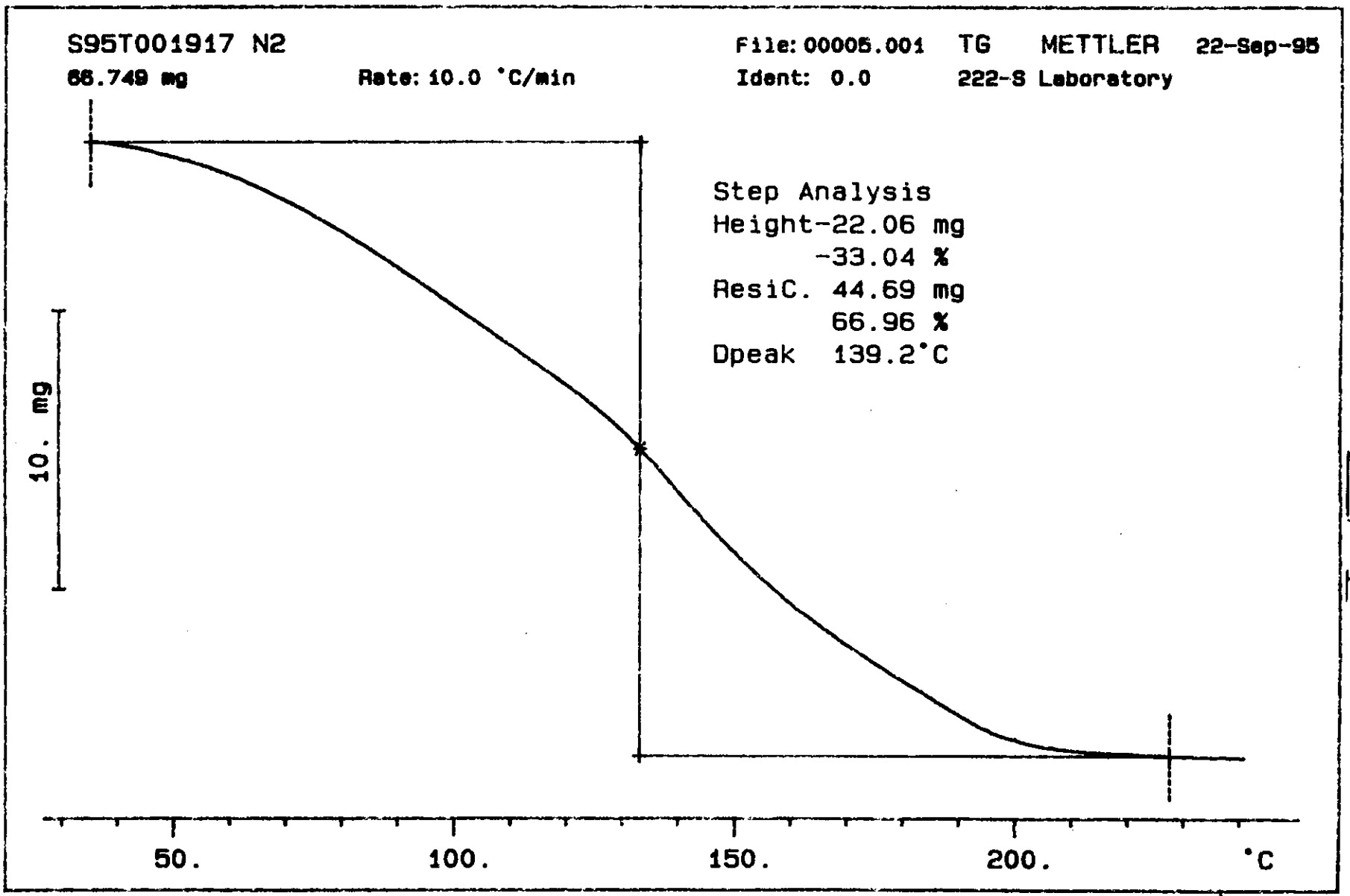
BEST AVAILABLE COPY



RDBrown 9/22/95

WHC-SD-WM-DP-145, REV. 1

BEST AVAILABLE COPY



174

WHC-SD-WM-DP-145, REV. 1

RDMeyer 9/22/95

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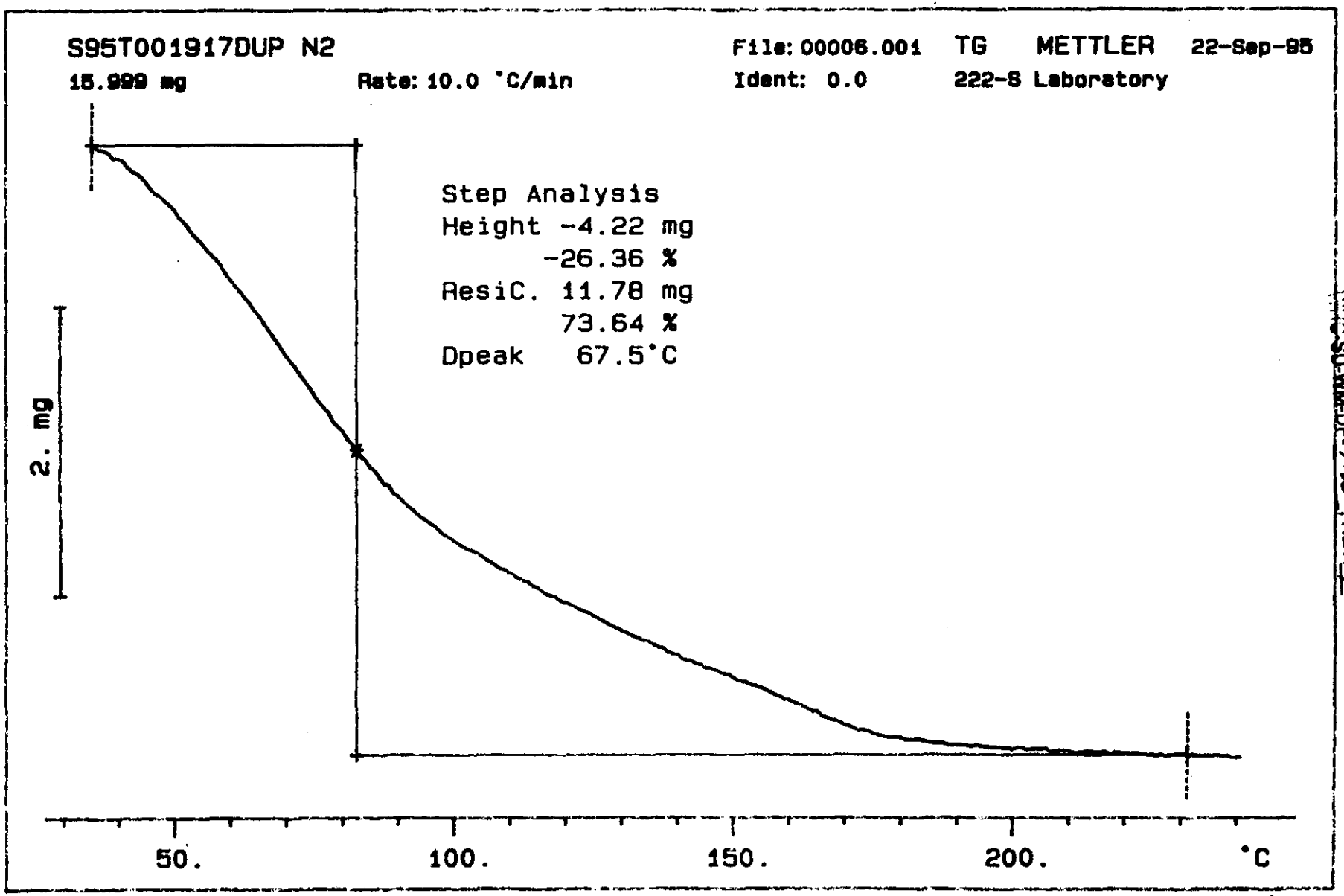


RCDaugh 9/27/95

SD-WM-DP-1445 REV. 1

LABCORE Data Entry Template for Worklist# 2616

Analyst: ADP **Instrument:** TGA0 1 **Book #** 65N8A

Method: LA-560-112 Rev/Mod B-0

Worklist Comment: Please run BY-108 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID	59.74	60.69	N/A	%
95000118	BY-108 (R)	2 SAMPLE	S95T001917	1		TGA-01	SOLID	N/A	29.84		%
95000118	BY-108 (R)	3 DUP	S95T001917	1		TGA-01	SOLID	29.84	32.40	N/A	%

Final page for worklist # 2616

Blandina Valenzuela for ADP
Analyst Signature **Date**

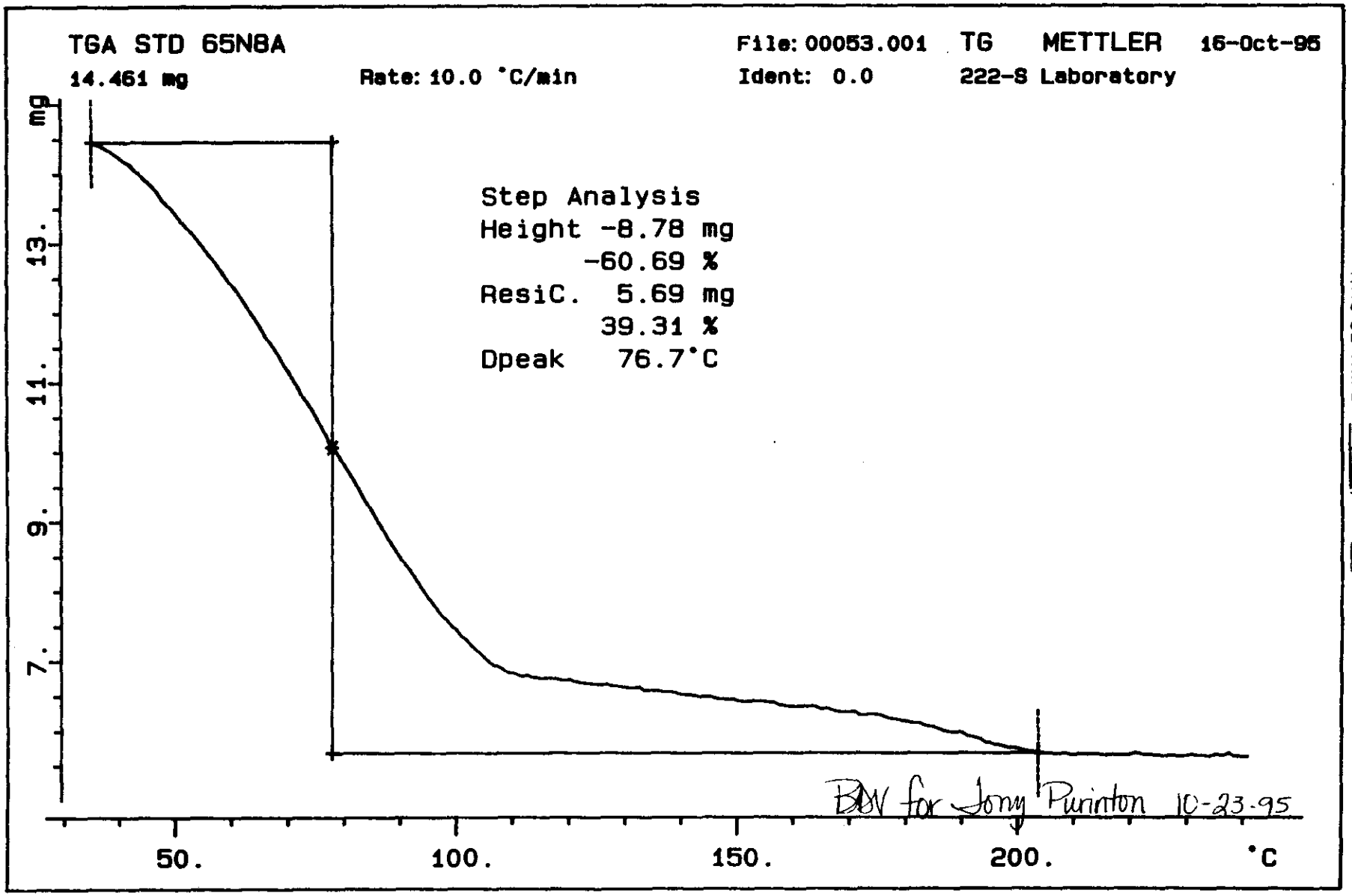
Verified by Blandina Valenzuela 10-30-95

[illegible] 10-25-95
Analyst Signature **Date**

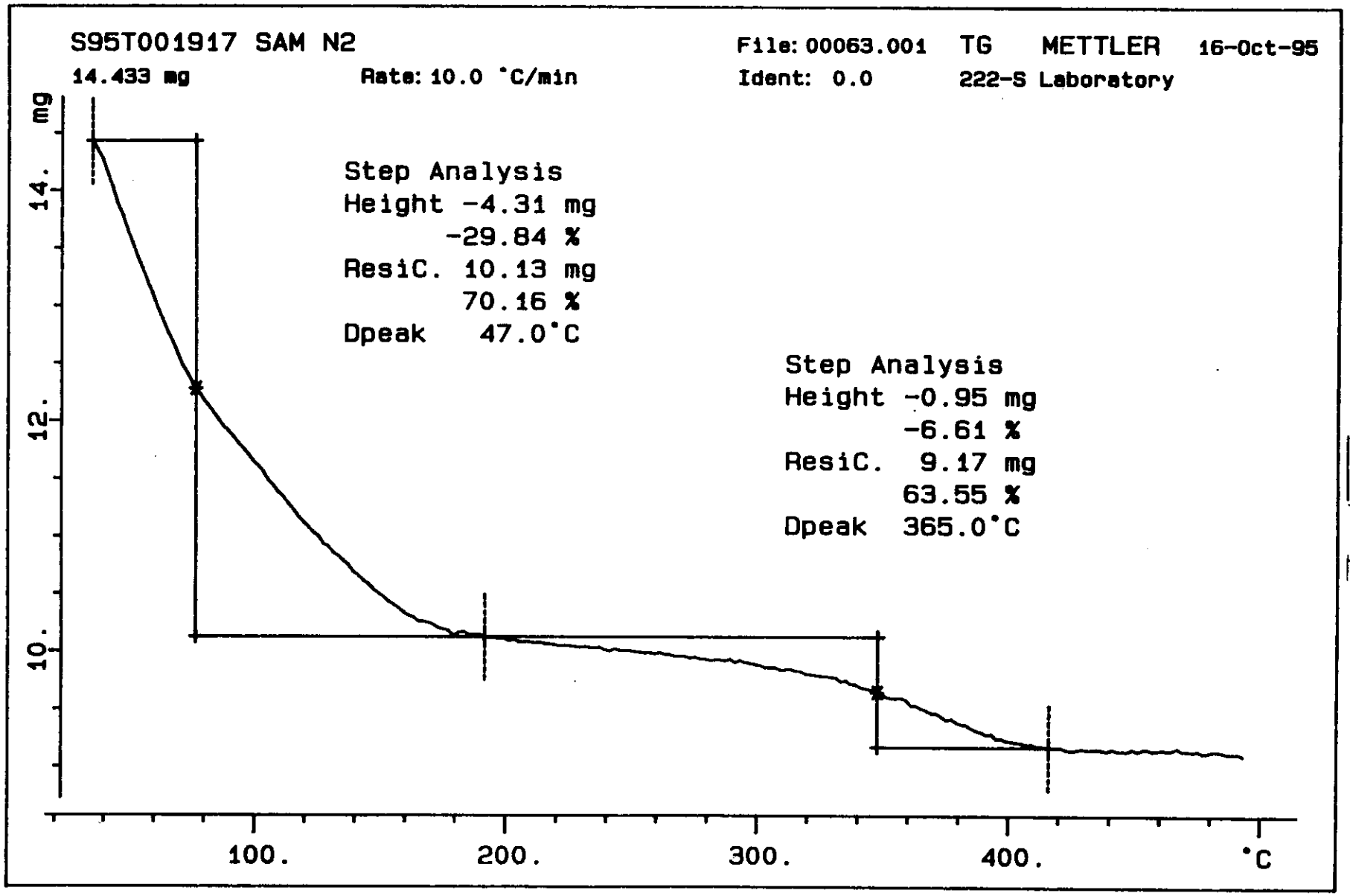
Data Entry Comments: Sample produced a second weight loss step of 6.61% at approximately 345°C

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

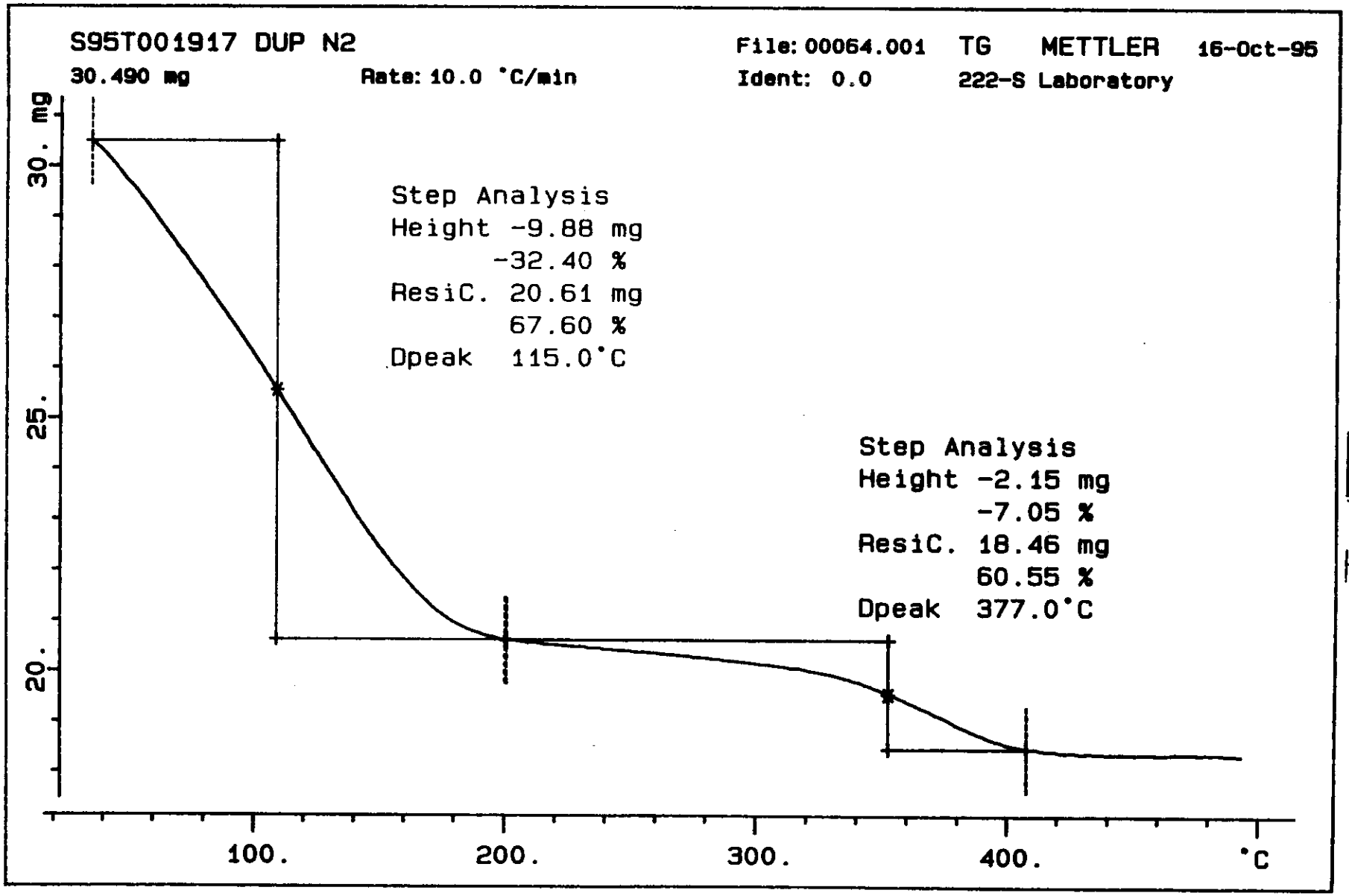
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 177 TO 179.



BW for Jony Purinton 10-23-95



HNF-SD-WM-DP-145, REV 1



WHC-SD-WM-DP-145, REV. 1

LABCORE Data Entry Template for Worklist# 2116

Analyst: [illegible] **Instrument:** CN01 **Book #** 54N86

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108(R) Cyanide

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	5.4e-2	N/A	ug/~~g~~ml gwb 9/11/95
		2	STD				CN-01	SOLID	912	870	N/A	ug/~~g~~ml gwb 9/11/95
95000104	BY-108 (R)	3	SAMPLE	S95T001390	0		CN-01	SOLID	N/A	3.50e2	2.1	ug/g
95000104	BY-108 (R)	4	DUP	S95T001390	0		CN-01	SOLID	3.50e2	3.64e2	N/A	ug/g
95000104	BY-108 (R)	5	SPK	S95T001390	0		CN-01	SOLID	100	116	N/A	% ~~ug/g~~ gwb 9/11/95
95000104	BY-108 (R)	6	SAMPLE	S95T001396	0		CN-01	SOLID	N/A	3.51e2	2.7	ug/g
95000104	BY-108 (R)	7	DUP	S95T001396	0		CN-01	SOLID	3.51e2	3.40e2	N/A	ug/g
95000104	BY-108 (R)	8	SPK	S95T001396	0		CN-01	SOLID	100	93.5	N/A	% ~~ug/g~~ gwb 9/11/95
		9	CCV				CN-01	SOLID	912	928	N/A	ug/~~g~~ml gwb 9/11/95
		10	CCB				CN-01	SOLID	1	5.3e-2	N/A	ug/~~g~~ml gwb 9/11/95

Final page for worklist # 2116

[illegible] 8.31.95
Analyst Signature **Date**

[illegible] 9/11/95
Analyst Signature **Date**

Reviewed
Ron Schroeder
9/11/95

S95T001390 → .6995g in 5ml EDTA/en; .100ml used
S95T001396 → .5604g in 5ml EDTA/en; .100ml used
Std Dil → .250ml of 54N86 to 25 ml Volume; .500ml used
Spike = .250ml of Std dil
Blank = 5ml
Instrument Blank = 0.000

1	.020
2	.580
3	.652
4	.678
5	1.001
6	.524
7	.509
8	.806
9	.618
10	.019

Data Entry Comments:

Dissolution in EDTA/en. RWS 9/11/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		0.00000
		0.00000
2116	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
	Absorbance of Blank (Reagent, Prep)	0.020
	Digest Dilution Factor	1
liquid	Y-Intercept Value	-0.015840
	Slope Value	0.132321
Blank	µg of Cyanide	0.271
	µg CN- /mL	5.42E-02
CN01		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J. Knight jr.	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
08/31/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL)	5.42E-02
		Detection Limit µg CN- / mL
08/28/95		3.60E-02

Data Entry by:	R W Schroeder	Date:	09/11/95
Approved by:	[signature]	Date:	9/11/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

IC-SD-WM-DP- 145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		NA	STANDARD
Standard	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		912
	Absorbance of Blank		0.020
	Absorbance of Standard		0.580
	Y-Intercept Value		-0.015840
	Slope Value		0.132321
Standard	µg of CN in Standard		4.352
J. Knight jr.			
	µg of CN-/mL in Standard		870
08/24/95			
	Standard % Recovery		95.4%
	Slope and Y-Intercept calculated from working curve calibration		
08/28/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	Ken Schroeder	Date:	09/11/95
Approved by:		Date:	9/11/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.69950
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2116	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
	Absorbance of Blank	0.020
	Absorbance of Sample	0.652
SOLID	Y-Intercept Value	-0.015840
	Slope Value	0.132321
S95T001390	µg of Cyanide	4.896
	µg CN- /g	3.50E+02

CN01

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

J. Knight jr. µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

RWS 9/11/95

08/31/95 Detection Limit = (1.5µg Cyanide / A) * ~~(DV~~ / SS) * ~~DF~~ RWS 9/11/95

v RESULTS v

	Cyanide Concentration (µg/g)	3.50E+02	Detection Limit µg CN- / g
			~~4.07E+02~~ 2.1 RWS 9/11/95
08/28/95			

Data Entry by:	RW Schroeder	Date:	09/11/95
Approved by:	Jones Hall	Date:	9/11/95

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.69950
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2116	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
	Absorbance of Blank	0.020
	Absorbance of Sample	0.678
SOLID	Y-Intercept Value	-0.015840
	Slope Value	0.132321
S95T001390DUP	µg of Cyanide	5.092
	µg CN- /g	3.64E+02
CN01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-intercept)] / Slope Value	
J. Knight jr.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
08/31/95	Detection Limit = (1.5µg Cyanide / A) * ~~(DV~~ RWS 9/11/95 / SS) * ~~DF~~ RWS 9/11/95	
	v RESULTS v	

	Cyanide Concentration (µg/g)	3.64E+02	Detection Limit µg CN- / g
08/28/95			~~1.07E+02~~ 2.1 RWS 9/11/95

Data Entry by:	Rex Schroeder	Date:	09/11/95
Approved by:	[signature]	Date:	9/11/95

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	0.000
[redacted]	Diluent + Spike Standard Volume	25.00	0.00
[redacted]	Diluted Spike Standard in mL	0.250	0.000
[redacted]	True Value CN- Concentration (µg/mL)	912	[redacted]
[redacted]	Absorbance of Blank	0.020	0.000
[redacted]	Absorbance of Sample+Spike	1.001	0.000
[redacted]	Y-Intercept Value	-0.015840	
[redacted]	Slope Value	0.132321	
696T001390	µg of CN- in Sample+Spike	7.533	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	4.8968	[redacted]
J. Knight Jr.			
[redacted]	µg of CN- in Spike	2.2800	
08/31/95			
[redacted]	Spike % Recovery	115.7%	
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
08/28/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	09/11/95
Approved by:	[signature]	Date:	9/11/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.56040
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2116	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
	Absorbance of Blank	0.020
	Absorbance of Sample	0.524
SOLID	Y-Intercept Value	-0.015840
	Slope Value	0.132321
S95T001396	µg of Cyanide	3.929
	µg CN- /g	3.51E+02
CN01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. Knight jr.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	RWS 9/11/95	
08/31/95	Detection Limit = (1.5µg Cyanide / ~~A) * (DV~~ / SS) * ~~DF~~ RWS 9/11/95	
	v RESULTS v	

	Cyanide Concentration (µg/g)	3.51E+02	Detection Limit µg CN- / g
			~~1.34E+02~~ 2.7 RWS 9/11/95
08/28/95			

Data Entry by:	Ken Schroeder	Date:	09/11/95
Approved by:	[signature]	Date:	9/11/95

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.56040
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2116	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
	Absorbance of Blank	0.020
	Absorbance of Sample	0.509
SOLID	Y-Intercept Value	-0.015840
	Slope Value	0.132321
S95T001396DUP	µg of Cyanide	3.815
	µg CN- /g	3.40E+02
CN01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. Knight jr.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	RWS 9/11/95 RWS 9/11/95	
08/31/95	Detection Limit = (1.5µg Cyanide / ~~A)~~ * ~~(DV~~ / SS) * ~~DF~~	
	v RESULTS v	
	Cyanide Concentration (µg/g) 3.40E+02	Detection Limit µg CN- / g
08/28/95		~~1.34E+02~~ 22.7 RWS 9/11/95

Data Entry by:	Ken Schroeder	Date:	09/11/95
Approved by:	Jim Ball	Date:	9/11/95

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WIC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	0.000
[redacted]	Diluent + Spike Standard Volume	25.00	0.00
[redacted]	Diluted Spike Standard in mL	0.250	0.000
[redacted]	True Value CN- Concentration (µg/mL)	912	0
[redacted]	Absorbance of Blank	0.020	0.000
[redacted]	Absorbance of Sample+Spike	0.806	0.000
[redacted]	Y-Intercept Value	-0.015840	
[redacted]	Slope Value	0.132321	
[redacted]	µg of CN- in Sample+Spike	6.060	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	3.9290	
[redacted]			
[redacted]	µg of CN- in Spike	2.2800	
08/31/95			
[redacted]	Spike % Recovery	93.5%	
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
08/28/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	Ron Schroeder	Date:	09/11/95
Approved by:	[signature]	Date:	9/11/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WMC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		NA	STANDARD
[redacted]	Standard Aliquot in mL		0.250
[redacted]	Diluent + Standard Volume		25.00
[redacted]	Diluted Standard in mL to be Analyzed		0.500
[redacted]	True Value CN- Concentration (µg/mL)		912
[redacted]	Absorbance of Blank		0.020
[redacted]	Absorbance of Standard		0.618
[redacted]	Y-Intercept Value		-0.015840
[redacted]	Slope Value		0.132321
[redacted]	µg of CN in Standard		4.639
[redacted]			
[redacted]			
[redacted]			
J. Knight [redacted]			
[redacted]	µg of CN-/mL in Standard		928
08/31/95 [redacted]			
[redacted]	Standard % Recovery		101.7%
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
08/28/95 [redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	Ron Schroeder	Date:	09/11/95
Approved by:	[signature]	Date:	9/11/95

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		0.00000
		0.00000
2116	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
	Absorbance of Blank (Reagent, Prep)	0.019
	Digest Dilution Factor	1
Liquid	Y-Intercept Value	-0.015840
	Slope Value	0.132321
CCB	µg of Cyanide	0.263
	µg CN- /mL	5.27E-02

CN01

µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value

J. Knight jr. µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)

08/31/95 Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor

v RESULTS v

			Detection Limit µg CN- / mL
	Cyanide Concentration (µg/mL)	5.27E-02	
08/28/95			3.60E-02

Data Entry by:	Ken Schroeder	Date:	09/11/95
Approved by:		Date:	9/11/95

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Cyanide Calibration: EDTA

Date: August 28, 1995
Calibration Standard: 70N8A
Instrument ID: WA93252

WHC-SD-WM-DP-145, REV. 1

ug CN	Net Abs.
0	0
0.508	0.035
2.032	0.24
4.064	0.525
6.096	0.796
10.16	1.365
12.19	1.566

Regression Output:

Constant		-0.01584
Std Err of Y Est		0.024599
R Squared		0.998716
No. of Observations		7
Degrees of Freedom		5
X Coefficient(s)	0.132321	
Std Err of Coef.	0.002122	

LABCORE Data Entry Template for Worklist# 2206

Analyst: [illegible] **Instrument:** CN01 _____ **Book #** 71N8A

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108(R) cyanide

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT	
		1	BLNK				CN-01	SOLID	1	1.35-1	N/A	ug/g	
		2	STD				CN-01	SOLID	915	1002	N/A	ug/g	3.35E+2
95000104	BY-108 (R)	3	SAMPLE	S95T001419	0		CN-01	SOLID	N/A	1.74 E+3 ~~2.65 E+3~~	~~2.65 E+3~~	ug/g	RWS 9/25/95
95000104	BY-108 (R)	4	DUP	S95T001419	0		CN-01 RWS 9/25/95	SOLID	1.74 E+3 ~~2.65 E+3~~	1.90 E+3 ~~2.65 E+3~~	N/A	ug/g	
95000104	BY-108 (R)	5	SPK	S95T001419	0		CN-01	SOLID	100	116.2	N/A	ug/g	
95000104	BY-108 (R)	6	SAMPLE	S95T001420	0		CN-01	SOLID	N/A	2.01 E+3	1.82 E+2 ~~1.44 E+2~~	ug/g	RWS 9/25/95
95000104	BY-108 (R)	7	DUP	S95T001420	0		CN-01	SOLID	2.01 E+3	1.72 E+3	N/A	ug/g	
95000104	BY-108 (R)	8	SPK	S95T001420	0		CN-01	SOLID	100	108.8	N/A	ug/g	
		9	CCV				CN-01	SOLID	915	1025	N/A	ug/g	
		10	CCB				CN-01	SOLID	1	1.35 E-1	N/A	ug/g	

Final page for worklist # 2206

[illegible] 9.20.95
Analyst Signature **Date**

Reviewed RWS 9/25/95
Analyst Signature **Date**

S95T001419 = .3115g in 5ml EDTA/En (Diluted into 10ml) then .100ml used
S95T001420 = .574g in 5ml EDTA/En (Diluted into 10ml) then .100ml used
Standard Dilution = .250ml of 71N8A to 25ml then .500ml for Std.
Spike = .250ml of Standard Dilution
Blank = 5ml EDTA/En

.086
.787
.216
.229
.593
.374
.331
.727
.803
.086

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2206	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
cn-01	Absorbance of Blank (Reagent, Prep)	0.086
	Digest Dilution Factor	1
liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLNK	µg of Cyanide	0.675
	µg CN- /mL	1.35E-01

cn01

µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value

j. knight µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)

09/20/95 Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor

v RESULTS v

	Cyanide Concentration (µg/mL)	1.35E-01	Detection Limit µg CN- / mL
09/19/95			3.60E-02

Data Entry by: R. Peek Date: 09/21/95

Approved by: RW Schroeder Date: 9/21/95

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		NA	STANDARD
[redacted]	Standard Aliquot in mL		0.250
[redacted]	Diluent + Standard Volume		25.00
[redacted]	Diluted Standard in mL to be Analyzed		0.500
[redacted]	True Value CN- Concentration (µg/mL)		915
[redacted]	Absorbance of Blank		0.080
[redacted]	Absorbance of Standard		0.787
[redacted]	Y-Intercept Value		-0.009760
[redacted]	Slope Value		0.141810
[redacted]	µg of CN in Standard	ERR	5.012
[redacted]			
[redacted]			
[redacted]		0.0000	
[redacted]			
[redacted]	µg of CN-/mL in Standard	ERR	1002
[redacted]			
[redacted]	Standard % Recovery		109.6%
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	RT Steele	Date:	09/21/95
Approved by:	Ron Schroeder	Date:	9/21/95

Form X2 Rev. 1.0

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

[illegible]C-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.31150
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2206	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
cn-01	Absorbance of Blank	0.086
	Absorbance of Sample	0.216
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001419	µg of Cyanide	0.986
	µg CN- /g	1.74E+03
cn01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-intercept)] / Slope Value	
j. knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 9/25/95	
09/20/95	Detection Limit = ~~(1.5µg~~ Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	1.74E+3 RWS 9/25/95 3.35E+2

	Cyanide Concentration (µg/g)	~~< Detection Limit~~	Detection Limit µg CN- / g
09/19/95			~~2.65E+03~~ RWS 9/25/95

Data Entry by: [illegible] Date: 09/21/95

Approved by: Rui Schwerdtfeger Date: 9/21/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

HC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.31150
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2206	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
cn-01	Absorbance of Blank	0.086
	Absorbance of Sample	0.229
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001419 DUP	µg of Cyanide	1.077
	µg CN- /g	1.90E+03
cn01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
j. knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 9/25/95	
09/20/95	Detection Limit = ~~(4.5pg~~ Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	1.90E+3 RWS 9/25/95

	Cyanide Concentration (µg/g)	~~< Detection Limit~~	Detection Limit µg CN- / g
			3.35E+2
09/19/95			~~2.65E+03~~ RWS 9/25/95

Data Entry by:	RWS	Date:	09/21/95
Approved by:	Rui Schroeder	Date:	9/21/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

[illegible]C-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	0.250
[redacted]	Diluent + Spike Standard Volume	25.00	25.00
[redacted]	Diluted Spike Standard in mL	0.250	0.500
[redacted]	True Value CN- Concentration (µg/mL)	915	915
[redacted]	Absorbance of Blank	0.086	0.076
[redacted]	Absorbance of Sample+Spike	0.593	0.742
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted] SPK	µg of CN- in Sample+Spike	3.644	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	0.9880	
[redacted]			
[redacted]	µg of CN- in Spike	2.2875	
[redacted]			
[redacted]	Spike % Recovery	116.2%	
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[illegible]	Date:	09/21/95
Approved by:	R W Schroeder	Date:	9/21/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.57440
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2206	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
cn-01	Absorbance of Blank	0.086
	Absorbance of Sample	0.374
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001420	µg of Cyanide	2.100
	µg CN- /g	2.01E+03

cn01

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

j. knight

µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

0.19 RWS 9/25/95

09/20/96

Detection Limit = (~~1.5~~µg Cyanide / A) * (DV / SS) * DF

v RESULTS v

1.82E+2

	Cyanide Concentration (µg/g)	2.01E+03	Detection Limit µg CN- / g
			~~1.44E+03~~
09/19/96			

RWS 9/25/95

Data Entry by: [illegible] Date: 09/21/95

Approved by: RW Schroeder Date: 9/21/95

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

[illegible]C-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.57440
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2206	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
cn-01	Absorbance of Blank	0.086
	Absorbance of Sample	0.331
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001420 DUP	µg of Cyanide	1.796
	µg CN- /g	1.72E+03
cn01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
j. knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 9/25/95	
09/20/95	Detection Limit = (~~1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	1.82E+2
	Cyanide Concentration (µg/g) 1.72E+03	Detection Limit µg CN- / g
		~~1.44E+03~~
09/19/95		RWS 9/25/95

Data Entry by:	[illegible]	Date:	09/21/95
Approved by:	RW Schroeder	Date:	9/21/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

C-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		SPIKE	NA
	Spike Aliquot in mL	0.250	0.250
	Diluent + Spike Standard Volume	25.00	25.00
	Diluted Spike Standard in mL	0.250	0.500
	True Value CN- Concentration (µg/mL)	915	915
	Absorbance of Blank	0.086	0.076
	Absorbance of Sample+Spike	0.727	0.742
	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
	µg of CN- in Sample+Spike	4.589	ERR
	Known µg of CN- in Original Sample	2.1000	
	µg of CN- in Spike	2.2875	
	Spike % Recovery	108.8%	
	Slope and Y-Intercept calculated from working curve calibration		
	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[illegible]	Date:	09/21/95
Approved by:	R W Schroeder	Date:	9/21/95

Form X2 Rev. 1.0 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

...IC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2233	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		915
cn-01	Absorbance of Blank		0.086
	Absorbance of Standard		0.803
liquid	Y-Intercept Value		-0.009760
	Slope Value		0.141810
71NBA	µg of CN in Standard	ERR	5.125
cn-01			
		0.0000	
L knight			
	µg of CN-/mL in Standard	ERR	1025
09/20/95			
	Standard % Recovery		112.0%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[illegible]	Date:	09/21/95
Approved by:	R W Schroeder	Date:	9/21/95

Form X2 Rev. 1.0 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2206	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
cn-01	Absorbance of Blank (Reagent, Prep)	0.086
	Digest Dilution Factor	1
liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB-BLNK	µg of Cyanide	0.675
	µg CN- /mL	1.35E-01
cn01		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
j. knight	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
09/20/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL) 1.35E-01	Detection Limit µg CN- / mL
09/19/95		3.60E-02

Data Entry by:	[illegible]	Date:	09/21/95
Approved by:	RW Schroeder	Date:	9/21/95

Form 695102C1 Rev. 1.6

LABCORE Data Entry Template for Worklist# 2207

Analyst: R **Instrument:** CN01 **Book #** 71N8A

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108(R) cyanide

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	<3.60 E-2 ~~.008~~	~~RDL~~ 07/14/95 N/A	ug/g
		2	STD				CN-01	SOLID	915	983	N/A	ug/g
95000104	BY-108 (R)	3	SAMPLE	S95T001421	0		CN-01	SOLID	N/A	1.85 E+3 ~~2.05 E+3~~	2.60 E+3 ~~2.05 E+3~~	ug/g Rows 9/25/95
95000104	BY-108 (R)	4	DUP	S95T001421	0		CN-01	SOLID	1.85 E+3 ~~2.05 E+3~~	1.88 E+3 ~~2.05 E+3~~	N/A	ug/g Rows 9/25/95
95000104	BY-108 (R)	5	SPK	S95T001421	0		CN-01	SOLID	100	105.4	N/A	ug/g
95000104	BY-108 (R)	6	SAMPLE	S95T001404	0		CN-01	SOLID	N/A	2.93 E+2	2.46 E+1 ~~1.94 E+2~~	ug/g Rows 9/25/95
95000104	BY-108 (R)	7	DUP	S95T001404	0		CN-01	SOLID	2.93 E+2	3.02 E+2	N/A	ug/g
95000104	BY-108 (R)	8	SPK	S95T001404	0		CN-01	SOLID	100	109.4 %	N/A	ug/g
		9	CCV				CN-01	SOLID	915	1009	N/A	ug/g
		10	CCB				CN-01	SOLID	1	<3.60 E-2	N/A	ug/g

Final page for worklist # 2207

Reviewed Ra Schroeder 9/21/95

S. Knight 9/14/95 — Analyst Signature — Date

[signature] 9/21/95 — Analyst Signature — Date

S95T001421 → .8044 grams in 5ml EDTA (Dilution 1-10) then .050ml used — .008
S95T001404 → .7731 grams in 5ml EDTA .050ml used — .695
Std Dilution → .250ml of 71N8-A to 25ml Volume then .500ml for Std — .190
Spike → .250ml of Std Dil — .193
Blank → 5ml EDTA/en — .532
std Val 9.15 E+2 — .320
.329
.675
.714
.009

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Cyanide Calibration: EDTA

Date : September 19, 1995
Instrument: WA93252
Calibration Std: 70N8A

ug CN	Net Abs.
0	0
0.508	0.057
2.032	0.271
4.064	0.518
6.096	0.897
8.128	1.176
10.16	1.441
12.19	1.685

Regression Output:

Constant		-0.00976
Std Err of Y Est		0.033342
R Squared		0.997684
No. of Observations		8
Degrees of Freedom		6
X Coefficient(s)	0.14181	
Std Err of Coef.	0.002789	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2207	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.008
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLNK	µg of Cyanide	0.125
	µg CN- /mL	2.50E-02
CN01		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J. KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
09/14/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / mL
09/19/95			3.60E-02

Data Entry by:		Date:	09/20/95
Approved by:	RW Schroeder	Date:	9/21/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

[illegible]C-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2287	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		918
[illegible]	Absorbance of Blank		0.008
	Absorbance of Standard		0.695
[illegible]	Y-Intercept Value		-0.009760
	Slope Value		0.141810
71198A	µg of CN in Standard		4.913
[illegible]			
J. KNIGHT			
	µg of CN-/mL in Standard		983
09/14/95			
	Standard % Recovery		107.4%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by: [illegible]		Date:	09/20/95
Approved by:	Ken Schroeder	Date:	9/21/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

[illegible]C-SD-WM-DP- 145, REV. 1

D.L. = ~~1.5 µg~~ 0.19 µg × ~~[illegible]~~ 5.0 ml / 0.80440 g × 1 / 0.05 ml = 186 x 11 d.f.

RWS 9/25/95

RWS 9/25/95

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.80440
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2207	Aliquot Analyzed from Dissolution (A)	0.05000
	Dilution Factor (DF)	11.000
CN-01	Absorbance of Blank	0.008
	Absorbance of Sample	0.19
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001421	µg of Cyanide	1.352
	µg CN- /g	1.85E+03

CN01

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

J. KNIGHT µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

RWS 9/25/95 0.19 µg ~~RWS 9/20/95~~ RWS 9/20/95

09/14/95 Detection Limit = ~~(1.5~~ µg Cyanide / ~~A) * (DV~~ / SS) * DF

v RESULTS v 1.85 E+3 RWS 9/25/95

	Cyanide Concentration (µg/g)	~~Detection Limit~~	Detection Limit µg CN- / g
09/19/95			~~2.05E+03~~ 2.548 E+2

Data Entry by: [illegible] Date: 09/20/95

Approved by: Rw Schroeder Date: 9/21/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.80440
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2207	Aliquot Analyzed from Dissolution (A)	0.05000
	Dilution Factor (DF)	11.000
CN-01	Absorbance of Blank	0.008
	Absorbance of Sample	0.193
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001421-DUP	µg of Cyanide	1.373
	µg CN- /g	1.88E+03
CN01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 9/25/95	
09/14/95	Detection Limit = ~~(1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v 1.88E+3 RWS 9/25/95	2.60E+2

	Cyanide Concentration (µg/g)	~~Detection Limit~~	Detection Limit µg CN- / g
09/19/95			~~9.05E+03~~
			RWS 9/25/95

Data Entry by:		Date:	09/20/95
Approved by:	Ron Schroeder	Date:	9/21/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

	SPIKE	NA
Spike Aliquot in mL	0.250	
Diluent + Spike Standard Volume	25.00	
Diluted Spike Standard in mL	0.250	
True Value CN- Concentration (µg/mL)	915	
Absorbance of Blank	0.008	
Absorbance of Sample+Spike	0.532	
Y-Intercept Value	-0.009760	
Slope Value	0.141810	
µg of CN- in Sample+Spike	3.764	ERR
Known µg of CN- in Original Sample	1.[illegible]	
µg of CN- in Spike	2.2875	
Spike % Recovery	105.4%	

Slope and Y-Intercept calculated from working curve calibration
Original Sample Calculation from Form 695102C1

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by: JK		Date:	09/20/95
Approved by:	RW Schroeder	Date:	9/21/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.77310
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2207	Aliquot Analyzed from Dissolution (A)	0.05000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.008
	Absorbance of Sample	0.32
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001404	µg of Cyanide	2.269
	µg CN- /g	2.93E+02

CN01

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

J. KNIGHT µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

0.19 RWS 9/25/95

09/14/95 Detection Limit = ~~(1.5µg~~ Cyanide / A) * (DV / SS) * DF

v RESULTS v

2.46 E+1

	Cyanide Concentration (µg/g)	2.93E+02	Detection Limit µg CN- / g
09/19/95			~~1.94E+02~~

RWS 9/25/95

Data Entry by: RH Date: 09/20/95

Approved by: Ron Schmerder Date: 9/21/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.77310
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2207	Aliquot Analyzed from Dissolution (A)	0.05000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.008
	Absorbance of Sample	0.329
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001404 DUP	µg of Cyanide	2.332
	µg CN- /g	3.02E+02
CN01		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 9/25/95	
09/14/95	Detection Limit = ~~(1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g) 3.02E+02	Detection Limit µg CN- / g
		2.46E+1
09/19/95		~~1.94E+02~~ RWS 9/25/95

Data Entry by: [illegible] Date: 09/20/95

Approved by: Ron Schroeder Date: 9/21/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	915	
[redacted]	Absorbance of Blank	[redacted]	
[redacted]	Absorbance of Sample+Spike	[redacted]	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	4.772	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	[redacted]	
[redacted]			
[redacted]	µg of CN- in Spike	2.2875	
[redacted]			
[redacted]	Spike % Recovery	109.4%	
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:		Date:	09/20/95
Approved by:	Ruth Schroeder	Date:	9/21/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) SPIKE, STANDARD

	NA	STANDARD
Standard Aliquot in mL		0.250
Diluent + Standard Volume		25.00
Diluted Standard in mL to be Analyzed		0.500
True Value CN- Concentration (µg/mL)		910
Absorbance of Blank		0.006
Absorbance of Standard		0.714
Y-Intercept Value		-0.009760
Slope Value		0.141810
µg of CN in Standard		5.047
µg of CN-/mL in Standard		1009
Standard % Recovery		110.3%

Slope and Y-Intercept calculated from working curve calibration
Original Sample Calculation from Form 695102C1

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:		Date:	09/20/95
Approved by:	RW Schroeder	Date:	9/21/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (C-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		0.00000
		0.00000
2207	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.009
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.132
	µg CN- /mL	2.65E-02
CN01		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J. KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
09/14/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / mL
09/19/95			3.60E-02

Data Entry by:		Date:	09/20/95
Approved by:	RW Schroeder	Date:	9/21/95

Form 695102C1 Rev. 1.6 Page 1 of 1

LABCORE Data Entry Template for Worklist# 2233

Analyst: [illegible] **Instrument:** CN01 _____ **Book #** 71N8A

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108(R) cyanide - Rerun

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	0.148	N/A	ug/g
		2	STD				CN-01	SOLID	915	967	N/A	ug/g me JWB 10/16/95
95000104	BY-108 (R)	3	SAMPLE	S95T001431	0		CN-01	SOLID	N/A	1.66e2	1.12e1	ug/g RWS 10/17/95
95000104	BY-108 (R)	4	DUP	S95T001431	0		CN-01	SOLID	1.66e2	1.65e2	N/A	ug/g
95000104	BY-108 (R)	5	SPK	S95T001431	0		CN-01	SOLID	100	81.4	N/A	% ~~ug/g~~ JWB 10/16/95
95000104	BY-108 (R)	6	SAMPLE	S95T001432	0		CN-01	SOLID	N/A	9.28e1	1.16E1	ug/g
95000104	BY-108 (R)	7	DUP	S95T001432	0		CN-01	SOLID	9.28e1	1.11e2	N/A	ug/g
95000104	BY-108 (R)	8	SPK	S95T001432	0		CN-01	SOLID	100	99.0	N/A	% ~~ug/g~~ JWB 10/16/95
		9	CCV				CN-01	SOLID	915	942	N/A	ug/g me JWB 10/16
		10	CCB				CN-01	SOLID	1	0.028	N/A	ug/g

Final page for worklist # 2233

[illegible] 10-10-95 — Analyst Signature / Date

[illegible] 10-13-95 — Analyst Signature / Date

S95T001431 → .7388g in 5ml EDTA/en (1-10 Dilution) 1ml used .095
S95T001432 → .7135g in 5ml EDTA/en (1-10 Dilution) 1.0ml used .771
Std Dil → .250ml of 71N8A to 25ml Vol → .500ml Used .401
Spike = .250ml of Std Dil .400
Blank = 5ml EDTA/en .665
.256
.289
.577
.753
.058

Data Entry Comments:

915 ppm std

[illegible] 10/16/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2233	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN01	Absorbance of Blank (Reagent, Prep)	0.095
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
blnk	µg of Cyanide	0.739
	µg CN- /mL	1.48E-01

µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value

J.T.KNIGHT µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)

10/10/95 Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor

v RESULTS v

			Detection Limit µg CN- / mL
	Cyanide Concentration (µg/mL)	1.48E-01	
09/19/95			3.60E-02

Data Entry by: RW Schroeder Date: 10/11/95

Approved by: RW Schroeder Date: 10/11/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
Standard	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
[illegible]	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		915
[illegible]	Absorbance of Blank		0.098
	Absorbance of Standard		0.771
[illegible]	Y-Intercept Value		-0.009760
	Slope Value		0.141810
[illegible]	µg of CN in Standard		4.836
[illegible]			
J.T. KNIGHT			
[illegible]	µg of CN-/mL in Standard		967
10/10/95			
	Standard % Recovery		105.7%
[illegible]			
[illegible]	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	RW Schroeder	Date:	10/11/95
Approved by:	RW Schroeder	Date:	10/11/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.73880
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2233	Aliquot Analyzed from Dissolution (A)	1.00000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.095
	Absorbance of Sample	0.401
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001431	µg of Cyanide	2.227
	µg CN- /g	1.66E+02

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

J.T.KNIGHT µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

10/10/95 Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF

v RESULTS v

			Detection Limit µg CN- / g
	Cyanide Concentration (µg/g)	1.66E+02	
09/19/95			1.12E+02

Data Entry by:	RW Schroeder	Date:	10/11/95
Approved by:	RW Schroeder	Date:	10/11/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.73880
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2233	Aliquot Analyzed from Dissolution (A)	1.00000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.095
	Absorbance of Sample	0.4
SOLID	Y-intercept Value	-0.009760
	Slope Value	0.141810
S95T001431-DUP	µg of Cyanide	2.220
	µg CN- /g	1.65E+02

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

J.T.KNIGHT µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

10/10/95 Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF

v RESULTS v

			Detection Limit µg CN- / g
	Cyanide Concentration (µg/g)	1.65E+02	
09/19/95			1.12E+02

Data Entry by:	RW Schroeder	Date:	10/11/95
Approved by:	RW Schroeder	Date:	10/11/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	[redacted]	
[redacted]	Absorbance of Blank	[redacted]	
[redacted]	Absorbance of Sample+Spike	[redacted]	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	4.088	
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	[redacted]	
[redacted]			
[redacted]	µg of CN- in Spike	2.2875	
[redacted]			
[redacted]	Spike % Recovery	81.4%	
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	Rui Schroeder	Date:	10/11/95
Approved by:	Rui Schroeder	Date:	10/11/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.71350
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2233	Aliquot Analyzed from Dissolution (A)	1.00000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.095
	Absorbance of Sample	0.256
SOLID	Y-intercept Value	-0.009760
	Slope Value	0.141810
S95T001432	µg of Cyanide	1.204
	µg CN- /g	9.28E+01

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-intercept)] / Slope Value

J.T.KNIGHT µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

0.15 RWS 10/11/95

10/10/95 Detection Limit = (~~1.5~~µg Cyanide / A) * (DV / SS) * DF

v RESULTS v

	Cyanide Concentration (µg/g)	< Detection Limit	Detection Limit µg CN- / g
09/19/95			1.16E+02

Data Entry by:	Rus Schroeder	Date:	10/11/95
Approved by:	Rus Schroeder	Date:	10/11/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.71350
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2233	Aliquot Analyzed from Dissolution (A)	1.00000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.095
	Absorbance of Sample	0.289
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001432-DUP	µg of Cyanide	1.437
	µg CN- /g	1.11E+02

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

J.T.KNIGHT µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

10/10/95 Detection Limit = ~~(1.5~~ 0.15 RWS 10/11/95 µg Cyanide / A) * (DV / SS) * DF

v RESULTS v

	Cyanide Concentration (µg/g)	< Detection Limit	Detection Limit µg CN- / g
09/19/95			1.16E+02

Data Entry by: RW Schroeder Date: 10/11/95

Approved by: RW Schroeder Date: 10/11/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-146, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

	SPIKE	NA
Spike Aliquot in mL	0.250	
Diluent + Spike Standard Volume	25.00	
Diluted Spike Standard in mL	0.250	
True Value CN- Concentration (µg/mL)	915	
Absorbance of Blank	0.095	
Absorbance of Sample+Spike	0.577	
Y-Intercept Value	-0.009760	
Slope Value	0.141810	
µg of CN- in Sample+Spike	3.468	
Known µg of CN- in Original Sample	1.2600	
µg of CN- in Spike	2.2875	
Spike % Recovery	99.0%	

Slope and Y-Intercept calculated from working curve calibration
Original Sample Calculation from Form 695102C1

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	Ru Schroeder	Date:	10/11/95
Approved by:	Ru Schroeder	Date:	10/11/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

	NA	STANDARD
Standard Aliquot in mL		0.250
Diluent + Standard Volume		25.00
Diluted Standard in mL to be Analyzed		0.500
True Value CN- Concentration (µg/mL)		940
Absorbance of Blank		0.0096
Absorbance of Standard		0.755
Y-Intercept Value		-0.009760
Slope Value		0.141810
µg of CN in Standard		4.709
µg of CN-/mL in Standard		942
Standard % Recovery		102.9%

Slope and Y-Intercept calculated from working curve calibration
Original Sample Calculation from Form 695102C1

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	RW Schroeder	Date:	10/11/95
Approved by:	RW Schroeder	Date:	10/11/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2233	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN01	Absorbance of Blank (Reagent, Prep)	0.058
	Digest Dilution Factor	0.289
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.478
	µg CN- /mL	2.76E-02

µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value

J.T.KNIGHT µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)

10/10/95 Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor

v RESULTS v

	Cyanide Concentration (µg/mL)	2.76E-02	Detection Limit µg CN- / mL
09/19/95			1.04E-02

Data Entry by:	RW Schroeder	Date:	10/11/95
Approved by:	RW Schroeder	Date:	10-11-95

Form 695102C1 Rev. 1.6

Page 1 of 1

LABCORE Data Entry Template for Worklist# 2237

Analyst: R **Instrument:** CN01 WA93252 **Book #** 71N8A

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108(R) cyanide

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	0.118	N/A	ug/g
		2	STD				CN-01	SOLID	915	908	N/A	ug/g me gwb 9/25
95000104	BY-108 (R)	3	SAMPLE	S95T001422	0		CN-01	SOLID	N/A	2.89e3	3.95e2	ug/g
95000104	BY-108 (R)	4	DUP	S95T001422	0		CN-01	SOLID	2.89e3	3.08e3	N/A	ug/g
95000104	BY-108 (R)	5	SPK	S95T001422	0		CN-01	SOLID	100	99.9	N/A	~~ug/g~~ % gwb 9/25/
95000104	BY-108 (R)	6	SAMPLE	S95T001433	0		CN-01	SOLID	N/A	2.86e2	1.44e2	ug/g
95000104	BY-108 (R)	7	DUP	S95T001433	0		CN-01	SOLID	2.86e2	2.65e2	N/A	ug/g
95000104	BY-108 (R)	8	SPK	S95T001433	0		CN-01	SOLID	100	93.7	N/A	~~ug/g~~ % gwb 9/25/95
		9	CCV				CN-01	SOLID	915	792	N/A	ug/g me gwb 9/25/95
		10	CCB				CN-01	SOLID	1	~~0.014~~ 0.121 RWS 9/25/95	N/A	ug/g

Final page for worklist # 2237

Reviewed RW Schroeder 9/27/95

S Knight 9.21.95 — Analyst Signature — Date

Analyst Signature — Date 09/26/95

S95T001422 → .2643 grams in 5 ml EDTA/en (1-10 Dilution) .100 ml used .074
S95T001433 → .7283 grams in 5 ml EDTA/en (1-10 Dilution) .100 ml used .708
Standard Dilution = .250 ml of 71N8A to 25 ml Volume .500 ml used .261
Spike = .250 ml of Standard Dilution .274
Blank = 5 ml EDTA/en .585
.118
.114
.422
.626
.076

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Cyanide Calibration: EDTA

WHC-SD-WM-DP-145, REV. 1

Date : September 19, 1995
Instrument: WA93252
Calibration Std: 70N8A

ug CN	Net Abs.
0	0
0.508	0.057
2.032	0.271
4.064	0.518
6.096	0.897
8.128	1.176
10.16	1.441
12.19	1.685

Regression Output:

Constant		-0.00976
Std Err of Y Est		0.033342
R Squared		0.997684
No. of Observations		8
Degrees of Freedom		6
X Coefficient(s)	0.14181	
Std Err of Coef.	0.002789	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		
2237	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN01	Absorbance of Blank (Reagent, Prep)	0.074
	Digest Dilution Factor	1
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLK	µg of Cyanide	0.591
	µg CN- /mL	1.18E-01
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J. Knight	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
09/21/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL) 1.18E-01	Detection Limit µg CN- / mL
09/19/95		3.60E-02

Data Entry by:	Ric Schneider	Date:	09/25/95
Approved by:	[signature]	Date:	9/25/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
[redacted]	Standard Aliquot in mL		0.250
[redacted]	Diluent + Standard Volume		25.00
[redacted]	Diluted Standard in mL to be Analyzed		0.500
[redacted]	True Value CN- Concentration (µg/mL)		910
[redacted]	Absorbance of Blank		0.074
[redacted]	Absorbance of Standard		0.706
[redacted]	Y-Intercept Value		-0.009760
[redacted]	Slope Value		0.141810
[redacted]	µg of CN in Standard		4.540
[redacted]			
[redacted]			
[redacted]			
J. Knight			
[redacted]	µg of CN-/mL in Standard		908
09/21/95			
[redacted]	Standard % Recovery		99.2%
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	Ru Schroeder	Date:	09/25/95
Approved by:	[signature]	Date:	9/25/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.26430
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2237	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.074
	Absorbance of Sample	0.261
Solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001422	µg of Cyanide	1.387
	µg CN- /g	2.89E+03
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. Knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 9/25/95	
09/21/95	Detection Limit = (~~1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	2.89E+3 RWS 9/25/95 3.95E2

	Cyanide Concentration (µg/g)	~~< Detection Limit~~	Detection Limit µg CN- / g
09/19/95			~~3.12E+03~~ RWS 9/25/95

Data Entry by:	RW Schroeder	Date:	09/25/95
Approved by:		Date:	9/25/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.26430
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2237	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.074
	Absorbance of Sample	0.274
Solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001422 Dup	µg of Cyanide	1.479
	µg CN- /g	3.08E+03
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. Knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 9/25/95	
09/21/95	Detection Limit = ~~(1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v 3.08E+3 RWS 9/25/95 3.95E2	
	Cyanide Concentration (µg/g) ~~< Detection Limit~~ 9/25	Detection Limit µg CN- / g
09/19/95		~~3.12E+03~~ RWS 9/25/95

Data Entry by:	RW Schroeder	Date:	09/25/95
Approved by:		Date:	9/25/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
Spike	Spike Aliquot in mL	0.250	
	Diluent + Spike Standard Volume	25.00	
2237	Diluted Spike Standard in mL	0.250	
	True Value CN- Concentration (µg/mL)	915	
0001	Absorbance of Blank	0.074	
	Absorbance of Sample+Spike	0.585	
	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
3951001422	µg of CN- in Sample+Spike	3.672	ERR
WA88252			
	Known µg of CN- in Original Sample	1.3870	
J. Knight			
	µg of CN- in Spike	2.2875	
09/21/95			
	Spike % Recovery	99.9%	
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	Ru Schroeder	Date:	09/25/95
Approved by:		Date:	9/25/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.72830
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2237	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.074
	Absorbance of Sample	0.118
Solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001433	µg of Cyanide	0.379
	µg CN- /g	2.86E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. Knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
09/21/95	Detection Limit = (~~1.5µg~~ QWS 9/25/95 Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	

	Cyanide Concentration (µg/g)	~~< Detection Limit~~ 2.86E+2 QWS 9/25/95	Detection Limit µg CN- / g
			1.44E2
09/19/95			~~1.13E+03~~ RWS 9/25/95

Data Entry by:	RW Schroeder	Date:	09/25/95
Approved by:	[illegible]	Date:	9/25/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.72830
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2237	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	11.000
CN01	Absorbance of Blank	0.074
	Absorbance of Sample	0.114
Solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001433 Dup	µg of Cyanide	0.351
	µg CN- /g	2.65E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J. Knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
09/21/95	Detection Limit = ~~(1.5~~ 0.19 RWS 9/25/95 µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	2.65E+2 RWS

	Cyanide Concentration (µg/g)	~~< Detection Limit~~ 9/25/95	Detection Limit µg CN- / g
			1.44E+2
09/19/95			~~1.13E+03~~ RWS 9/25/95

Data Entry by:	RW Schroeder	Date:	09/25/95
Approved by:		Date:	9/25/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	915	
[redacted]	Absorbance of Blank	0.074	
[redacted]	Absorbance of Sample+Spike	0.422	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]001433	µg of CN- in Sample+Spike	2.523	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	0.3790	
J. Knight			
[redacted]	µg of CN- in Spike	2.2875	
09/21/95			
[redacted]	Spike % Recovery	93.7%	
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	RW Schroeder	Date:	09/25/95
Approved by:	[signature]	Date:	9/25/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
[redacted]	Standard Aliquot in mL		0.250
[redacted]	Diluent + Standard Volume		25.00
[redacted]	Diluted Standard in mL to be Analyzed		0.500
[redacted]	True Value CN- Concentration (µg/mL)		9.[illegible]
[redacted]	Absorbance of Blank		0.07[illegible]
[redacted]	Absorbance of Standard		0.62[illegible]
[redacted]	Y-Intercept Value		-0.009760
[redacted]	Slope Value		0.141810
[redacted]	µg of CN in Standard		3.961
[redacted]			
[redacted]			
[redacted]			
J. Knight			
[redacted]	µg of CN-/mL in Standard		792
09/21/95			
[redacted]	Standard % Recovery		86.6%
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	RW Schroeder	Date:	09/25/95
Approved by:	[signature]	Date:	9/25/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		
2237	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN01	Absorbance of Blank (Reagent, Prep)	0.076
	Digest Dilution Factor	1
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.605
	µg CN- /mL	1.21E-01
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J. Knight	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
09/21/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL)	1.21E-01
09/19/95		

Data Entry by:	Ric Johnson	Date:	09/25/95
Approved by:		Date:	9/25/95

Form 695102C1 Rev. 1.6

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WHC-SD-WM-DP-145, REV. 1

LABCORE Data Entry Template for Worklist# 2741

Analyst: [illegible] **Instrument:** CN01 WA93252 **Book #** 7N8B

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108 CN - RERUN (poor std recovery)

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK				CN-01	SOLID	1	1.29^{E-01}	N/A	ug/g
		2 STD				CN-01	SOLID	924	1032	N/A	ug/g ml gwB 10/16/95
95000118	BY-108 (R)	3 SAMPLE	S95T001925	0		CN-01	SOLID	N/A	6.02^{E01}	4.73^{E01}	ug/g
95000118	BY-108 (R)	4 DUP	S95T001925	0		CN-01	SOLID	6.02^{E01}	5.74^{E01}	N/A	ug/g
95000118	BY-108 (R)	5 SPK	S95T001925	0		CN-01	SOLID	100	75.4	N/A	D/O ~~ug/g~~ gwB 10/16/95
95000104	BY-108 (R)	6 SAMPLE	S95T001399	0		CN-01	SOLID	N/A	2.01^{E02}	1.06^{E02}	ug/g
95000104	BY-108 (R)	7 DUP	S95T001399	0		CN-01	SOLID	2.01^{E02}	1.95^{E02}	N/A	ug/g
95000104	BY-108 (R)	8 SPK	S95T001399	0		CN-01	SOLID	100	97.1	N/A	D/O ~~ug/g~~ gwB 10/16/95
		9 CCV				CN-01	SOLID	924	1049	N/A	ug/g ml gwB 10/16/95
		10 CCB				CN-01	SOLID	1	$<3.60^{E-02}$	N/A	ug/g

Final page for worklist # 2741

[illegible] 10.13.95
Analyst Signature **Date**

RHolt 10/16/95
Analyst Signature **Date**

1 .082
2 .804
3 .343
4 .330
5 .590
6 .476
7 .464
8 .794
9 .816
10 .075

595T001925 → .3169 grams in 5ml EDTA/en Sample Size → .500 ml
595T001399 → .7800 grams in 5ml EDTA/en Sample Size → 1ml - 10ml - 1ml
Standard dilution = .250ml of 7N8B to 25ml Vol
Standard Aliquot = .500ml
Spike = .250ml of Std dil
Blank = 5ml of EDTA/en

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2741	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.082
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
SLK	µg of Cyanide	0.647
	µg CN- /mL	1.29E-01
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/13/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL) 1.29E-01	Detection Limit µg CN- / mL
09/19/95		3.60E-02

Data Entry by:	Gary Dunnette	Date:	10/15/95
Approved by:	[signature]	Date:	10/16/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHO-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
[redacted]	Standard Aliquot in mL		0.250
[redacted]	Diluent + Standard Volume		25.00
[redacted]	Diluted Standard in mL to be Analyzed		0.500
[redacted]	True Value CN- Concentration (µg/mL)		924
[redacted]	Absorbance of Blank		0.082
[redacted]	Absorbance of Standard		0.804
[redacted]	Y-Intercept Value		-0.009760
[redacted]	Slope Value		0.141810
[redacted]	µg of CN in Standard		5.160
[redacted]			
[redacted]			
[redacted]			
[redacted]			
[redacted]	µg of CN-/mL in Standard		1032
[redacted]			
[redacted]	Standard % Recovery		111.7%
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/15/95
Approved by:	[signature]	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.31690
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2741	Aliquot Analyzed from Dissolution (A)	0.50000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.343
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001925	µg of Cyanide	1.909
	µg CN- /g	6.02E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/13/95	Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g) 6.02E+01	Detection Limit µg CN- / g
09/19/95		4.73E+01

Data Entry by: Date: 10/15/95

Approved by: Date: 10/16/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.31690
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2741	Aliquot Analyzed from Dissolution (A)	0.50000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.33
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001925 / DUP	µg of Cyanide	1.818
	µg CN- /g	5.74E+01

WA93252

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

JT KNIGHT µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

10/13/95 Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF

v RESULTS v

			Detection Limit µg CN- / g
	Cyanide Concentration (µg/g)	5.74E+01	
09/19/95			4.73E+01

Data Entry by: Date: 10/15/95

Approved by: Date: 10/16/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
SPIKE	Spike Aliquot in mL	0.250	
	Diluent + Spike Standard Volume	25.00	
[illegible]	Diluted Spike Standard in mL	0.250	
	True Value CN- Concentration (µg/mL)	924	
CN-01	Absorbance of Blank	0.082	
	Absorbance of Sample+Spike	0.590	
[illegible]	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
[illegible]	µg of CN- in Sample+Spike	3.651	
[illegible]			
	Known µg of CN- in Original Sample	1.9680	
JT KNIGHT			
	µg of CN- in Spike	2.3100	
10/13/95			
	Spike % Recovery	75.4%	
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	10/15/95
Approved by:	[signature]	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.78000
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2741	Aliquot Analyzed from Dissolution (A)	1.00000
	Dilution Factor (DF)	11.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.476
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001399	µg of Cyanide	2.847
	µg CN- /g	2.01E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/13/95	Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g) 2.01E+02	Detection Limit µg CN- / g
		1.06E+02
09/19/95		

Data Entry by: [signature] Date: 10/15/95

Approved by: [signature] Date: 10/16/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.78000
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2741	Aliquot Analyzed from Dissolution (A)	1.00000
	Dilution Factor (DF)	11.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.464
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001399 / DUP	µg of Cyanide	2.763
	µg CN- /g	1.95E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/13/95	Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g)	1.95E+02
		Detection Limit µg CN- / g
09/19/95		1.06E+02

Data Entry by:		Date:	10/15/95
Approved by:		Date:	10/16/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WNC-CD-WM-DP-145, REV.1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	924	
[redacted]	Absorbance of Blank	0.082	
[redacted]	Absorbance of Sample+Spike	0.794	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	5.090	
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	[redacted]	
JT KNIGHT			
[redacted]	µg of CN- in Spike	2.3100	
[redacted]			
[redacted]	Spike % Recovery	97.1%	
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	10/15/95
Approved by:	[signature]	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
[illegible]	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
[illegible]	Absorbance of Blank		0.062
	Absorbance of Standard		0.818
[illegible]	Y-Intercept Value		-0.009760
	Slope Value		0.141810
[illegible]	µg of CN in Standard		5.245
[illegible]			
JT KNIGHT			
	µg of CN-/mL in Standard		1049
[illegible]			
	Standard % Recovery		113.5%
[illegible]			
[illegible]	Slope and Y-Intercept calculated from working curve calibration		
[illegible]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/15/95
Approved by:	[signature]	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CD-WM DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2741	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.082
CN-01	Absorbance of Blank (Reagent, Prep)	0.075
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.118
	µg CN- /mL	2.36E-02
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/13/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / mL
09/19/95			3.60E-02

Data Entry by: [signature] Date: 10/15/95

Approved by: [signature] Date: 10/16/95

Form 695102C1 Rev. 1.6

LABCORE Data Entry Template for Worklist# 2804

Analyst: [illegible] **Instrument:** CN01 _____ **Book #** 71N8B

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: By-108 cyanide solids with EDTA/en

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	0.120	N/A	ug/g
		2	STD				CN-01	SOLID	924	1018	N/A	ug/g
95000118	BY-108 (R)	3	SAMPLE	S95T001968	0		CN-01	SOLID	N/A	390	14.4	ug/g
95000118	BY-108 (R)	4	DUP	S95T001968	0		CN-01	SOLID	390	310	N/A	ug/g
95000118	BY-108 (R)	5	SPK	S95T001968	0		CN-01	SOLID	100	104	N/A	ug/g
95000118	BY-108 (R)	6	SAMPLE	S95T001969	0		CN-01	SOLID	N/A	163	16.1	ug/g
95000118	BY-108 (R)	7	DUP	S95T001969	0		CN-01	SOLID	163	161	N/A	ug/g
95000118	BY-108 (R)	8	SPK	S95T001969	0		CN-01	SOLID	100	110	N/A	ug/g
		9	CCV				CN-01	SOLID	924	994	N/A	ug/g
		10	CCB				CN-01	SOLID	1	0.112	N/A	ug/g

Final page for worklist # 2804

Reviewed RW Schwoch 10/17/95

[illegible] 10.12.95 — Analyst Signature / Date

[illegible] 10/16/95 — Analyst Signature / Date

S95T001968-1 = .6571g in 5ml EDTA/en → SS = .100ml
S95T001968-2 = .3827g in 5ml EDTA/en → SS = .100ml
S95T001969-1 = .5883g in 5ml EDTA/en → SS = .100ml
S95T001969-2 = .5940g in 5ml EDTA/en → SS = .100ml
Standard Dilution = .250ml of 71N8B to 25ml Volume then .500ml Sample Size
Spike = .250 ml of Standard Dilution
Blank = 5ml EDTA/en

1	.075
2	.787
3	.397
5	.744
6	.333
7	.331
8	.697
9	.770
10	.070

Data Entry Comments: #4 Membrane broke (Data will be Accepted
Dissolution #1 used for Sample & Spike (per customer) Does not
Dissolution #2 used for Duplicate (Exceed Hasqap) [illegible]

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

No Homogenous

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WI10-CD-WM DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		
2804	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.075
	Digest Dilution Factor	1
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
Blank	µg of Cyanide	0.598
	µg CN- /mL	1.20E-01
WA93252		
Analyst	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT Knight Jr.	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/12/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
12:00 PM	Cyanide Concentration (µg/mL)	1.20E-01
Calibration Date		
09/19/95		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by: [signature] Date: 10/16/95

Approved by: [signature] Date: 10/16/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

UNO-CD-WM DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
Standard	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2/04	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.075
	Absorbance of Standard		0.787
Liquid	Y-Intercept Value		-0.009760
	Slope Value		0.141810
Std	µg of CN in Standard		5.090
WAB3752			
JT Knight Jr.			
Date	µg of CN-/mL in Standard		1018
10/12/95			
	Standard % Recovery		110.2%
12:00 PM			
Calibration Date	Slope and Y-Intercept calculated from working curve calibration		
09/10/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/16/95
Approved by:	RW Schroeder	Date:	10/16/95

Form X2 Rev. 1.0 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WI10-CD-WM DP-245, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.65710
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2804	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.070
	Absorbance of Sample	0.787
solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001968	µg of Cyanide	5.125
	µg CN- /g	3.90E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT Knight Jr.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 gm 10/16/95	
10/12/95	Detection Limit = (~~1.5~~ µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
12:00 PM	Cyanide Concentration (µg/g)	3.90E+02
Calibration Date		
09/19/95		

Detection Limit µg CN- / g
~~1.14E+02~~ 141

Data Entry by: [signature] Date: 10/16/95

Approved by: [signature] Date: 10/16/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CO-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.38290
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2804	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.070
	Absorbance of Sample	0.397
Solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001968_DUP	µg of Cyanide	2.375
	µg CN- /g	3.10E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT Knight Jr.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/12/95	Detection Limit = ~~(1.5~~ 0.19 RWS 10/16/95 µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
12:00 PM	Cyanide Concentration (µg/g) 3.10E+02	Detection Limit µg CN- / g
		~~1.96E+02~~ 2.48E1 RWS 10/16/95
09/19/95		

Data Entry by: [signature] Date: 10/16/95

Approved by: Rus Schroeder Date: 10/16/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CS-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
Spike	Spike Aliquot in mL	0.250	
	Diluent + Spike Standard Volume	25.00	
2004	Diluted Spike Standard in mL	0.250	
	True Value CN- Concentration (µg/mL)	924	
CN-01	Absorbance of Blank	0.075	
	Absorbance of Sample+Spike	0.744	
Liquid	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
[illegible]	µg of CN- in Sample+Spike	4.786	ERR
WA83252			
	Known µg of CN- in Original Sample	2.3750	
JT Knight Jr.			
Date	µg of CN- in Spike	2.3100	
10/12/95			
	Spike % Recovery	104.4%	
12:00 PM			
Calibration Date	Slope and Y-Intercept calculated from working curve calibration		
08/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	10/16/95
Approved by:	RW Schroeder	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

[illegible] DP- 145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.58830
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2804	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.070
	Absorbance of Sample	0.333
solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001969	µg of Cyanide	1.923
	µg CN- /g	1.63E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT Knight Jr.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/12/95	Detection Limit = (~~1.5~~ 0.19/pub volume µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
12:00 PM	Cyanide Concentration (µg/g)	1.63E+02
Calibration Date		
09/19/95		

Detection Limit
µg CN- / g
~~1.275+02~~ 16.1 µg/g wet weight

Data Entry by: [signature] Date: 10/16/95

Approved by: [signature] Date: 10/16/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

LMC-CS-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.59400
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2804	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.070
	Absorbance of Sample	0.331
solid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T091969_DUP	µg of Cyanide	1.909
	µg CN- /g	1.61E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT Knight Jr.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/12/95	Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
12:00 PM	Cyanide Concentration (µg/g)	1.61E+02
		Detection Limit µg CN- / g
09/19/95		1.26E+02

Data Entry by: [signature] Date: 10/16/95

Approved by: Ru Schroeder Date: 10/16/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

[illegible] DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
Spike	Spike Aliquot in mL	0.250	
	Diluent + Spike Standard Volume	25.00	
2004	Diluted Spike Standard in mL	0.250	
	True Value CN- Concentration (µg/mL)	924	
CN-01	Absorbance of Blank	0.075	
	Absorbance of Sample+Spike	0.697	
Liquid	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
[illegible]	µg of CN- in Sample+Spike	4.455	ERR
[illegible]			
	Known µg of CN- in Original Sample	1.9230	
JT Knight Jr.			
[illegible]	µg of CN- in Spike	2.3100	
10/12/95			
	Spike % Recovery	109.6%	
12:00 PM			
[illegible]	Slope and Y-Intercept calculated from working curve calibration		
08/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[illegible]	Date:	10/16/95
Approved by:	Ru Schroeder	Date:	10/16/95

Form X2 Rev.0.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-SP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
Standard	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2604	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.075
	Absorbance of Standard		0.770
Liquid	Y-Intercept Value		-0.009760
	Slope Value		0.141810
CCV	µg of CN in Standard		4.970
TA83262			
JT Knight Jr.			
Date	µg of CN-/mL in Standard		994
10/12/95			
	Standard % Recovery		107.6%
12:00 PM			
Calibration Date	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:		Date:	10/16/95
Approved by:	Ron Schroeder	Date:	10/16/95

Form X2 Rev. 1/0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		
2804	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.070
	Digest Dilution Factor	1
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.562
	µg CN- /mL	1.12E-01
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT Knight Jr.	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/12/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
12:00 PM	Cyanide Concentration (µg/mL)	1.12E-01
09/19/95		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by: [signature] Date: 10/16/95

Approved by: Ruth Schroeder Date: 10/16/95

Form 695102C1 Rev. 1.6 Page 1 of 1

LABCORE Data Entry Template for Worklist# 2805

Analyst: R **Instrument:** CN01 WA93252 **Book #** 71N8B

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108 CN- SOLIDS

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT	
		1	BLNK				CN-01	SOLID	1	1.03E-01	N/A	ug/g	
		2	STD				CN-01	SOLID	924	997	N/A	ug/g	
95000118	BY-108 (R)	3	SAMPLE	S95T001966	0		CN-01	SOLID	N/A	RWS 10/17/95 6.98E1 ~~1.71E02~~	2.42E1 ~~1.91E02~~	ug/g	RWS 10/17/95
95000118	BY-108 (R)	4	DUP	S95T001966	0		CN-01	SOLID	~~5.49E02~~	6.98E1 ~~5.54E02~~ RWS 10/17/95	N/A	ug/g	RWS 10/17/95
95000118	BY-108 (R)	5	SPK	S95T001966	0		CN-01	SOLID	100	104.7	N/A	ug/g	
95000118	BY-108 (R)	6	SAMPLE	S95T001967	0		CN-01	SOLID	N/A	RWS 10/17/95 1.12E2 ~~5.85E02~~	2.32E1 ~~1.82E02~~	ug/g	RWS 10/17/95
95000118	BY-108 (R)	7	DUP	S95T001967	0		CN-01	SOLID	~~5.82E02~~	1.12E2 ~~5.48E02~~ RWS 10/17/95	8.08E1	ug/g	RWS 10/17/95
95000118	BY-108 (R)	8	SPK	S95T001967	0		CN-01	SOLID	100	104.1	N/A	ug/g	
		9	CCV				CN-01	SOLID	924	997	N/A	ug/g	
		10	CCB				CN-01	SOLID	1	8.99E-2 ~~3.00E-2~~	N/A	ug/g	RWS 10/17/95

Final page for worklist # 2805

L Knight 10/16/95 — Analyst Signature — Date

Analyst Signature — Date 10-16-95

S95T001966-1 → .3929 grams in 5ml EDTA/en Sample Size .100ml
S95T001966-2 → .4867 grams in 5ml EDTA/en Sample Size .100ml
S95T001967-1 → .4101 grams in 5ml EDTA/en Sample Size .100ml
S95T001967-2 → .5271 grams in 5ml EDTA/en Sample Size .100ml
Standard Dilution = .250ml of 71N8B to 25ml Volume → Std amount .500ml
Spike = .250ml Std dil.

1 .063
2 .760
3 .131
4 .140
5 .474
6 .184
7 .174
8 .525
9 .760
10 .054

Data Entry Comments: Blank = 5ml EDTA/en

Reviewed RW Schroeder 10/17/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CD-WM DP-145 REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2905	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.063
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLANK	µg of Cyanide	0.513
	µg CN- /mL	1.03E-01
WA93282		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/16/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
02:30 PM	Cyanide Concentration (µg/mL)	1.03E-01
09/19/95		

Data Entry by:	Gary Hammond	Date:	10/16/95
Approved by:	Ruth Schroeder	Date:	10/17/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHO-CD-WM DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
[illegible]	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
[illegible]	Absorbance of Blank		0.063
	Absorbance of Standard		0.760
[illegible]	Y-Intercept Value		-0.009760
	Slope Value		0.141810
[illegible]	µg of CN in Standard		4.984
[illegible]			
JT KNIGHT			
	µg of CN-/mL in Standard		997
10/16/95			
	Standard % Recovery		107.9%
[illegible]			
	Slope and Y-Intercept calculated from working curve calibration		
[illegible]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	Gary Hammett	Date:	10/16/95
Approved by:	RW Schroeder	Date:	10/17/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.39290
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2805	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.063
	Absorbance of Sample	0.131
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001966	µg of Cyanide	0.548
	µg CN- /g	6.98E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	.19 RWS 10/17/95	
10/16/95	Detection Limit = ~~(1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	6.98 E+1 RWS 10/17/95

02:30 PM	Cyanide Concentration (µg/g)	~~< Detection Limit~~	Detection Limit µg CN- / g
09/19/95			~~1.01E+02~~ 2.42 E+1 10/17/95 RWS

Data Entry by:	Gary Hammer	Date:	10/16/95
Approved by:	Rui Schroeder	Date:	10/17/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WI10-CD-AVM DP-146, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.48670
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2805	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.063
	Absorbance of Sample	0.14
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001966 / DUP	µg of Cyanide	0.612
	µg CN- /g	6.29E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/16/95	Detection Limit = (~~1.5~~ .19 µg Cyanide / A) * (DV / SS) * DF RWS 10/17/95	
	v RESULTS v	6.29E+1 RWS 10/17/95
02:30 PM	Cyanide Concentration (µg/g)	~~Detection Limit~~ / Detection Limit µg CN- / g
		~~1.84E+02~~ 1.95E1 10/17/95 RWS
09/19/95		

Data Entry by: [signature] Date: 10/16/95

Approved by: [signature] Date: 10/17/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WRO-CD-WM DP- 145 REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	924	
[redacted]	Absorbance of Blank	0.083	
[redacted]	Absorbance of Sample+Spike	0.474	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	2.967	
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	[redacted]	
JT KNIGHT			
[redacted]	µg of CN- in Spike	2.3100	
10/16/95			
[redacted]	Spike % Recovery	104.7%	
12:30 PM			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	10/16/95
Approved by:	R.W. Schroeder	Date:	10/17/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.41010
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2805	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.063
	Absorbance of Sample	0.184
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001967	µg of Cyanide	0.922
	µg CN- /g	1.12E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 10/17/95	
10/16/95	Detection Limit = ~~(1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	1.12E2 CWS 10/17/95
02:30 PM	Cyanide Concentration (µg/g)	~~< Detection Limit~~ / Detection Limit µg CN- / g
09/19/95		~~4.83E+02~~ 2.32E1 10/17 RWS

Data Entry by: Gary Hammett Date: 10/16/95

Approved by: RW Schroeder Date: 10/17/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.52710
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2805	Aliquot Analyzed from Dissolution (A)	0.10000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.063
	Absorbance of Sample	0.174
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001967 / DUP	µg of Cyanide	0.852
	µg CN- /g	8.08E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 10/17/95	
10/16/95	Detection Limit = ~~(1.8µg~~ Cyanide / A) * (DV / SS) * DF	
	v RESULTS v 8.08E+1 RWS 10/17/95	

02:30 PM	Cyanide Concentration (µg/g)	~~Detection Limit~~	Detection Limit µg CN- / g
09/19/95			~~1.42E+03~~ 1.80 E1 10/17/95 RWS

Data Entry by:	Mary Hammond	Date:	10/16/95
Approved by:	RW Schroeder	Date:	10/17/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	924	
[redacted]	Absorbance of Blank	0.063	
[redacted]	Absorbance of Sample+Spike	0.525	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	3.327	
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	0.9228	
[redacted]			
[redacted]	µg of CN- in Spike	2.3100	
10/16/95			
[redacted]	Spike % Recovery	104.1%	
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	Tony Hammett	Date:	10/16/95
Approved by:	RW Schroeder	Date:	10/17/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
[redacted]	Standard Aliquot in mL		0.250
[redacted]	Diluent + Standard Volume		25.00
[redacted]	Diluted Standard in mL to be Analyzed		0.606
[redacted]	True Value CN- Concentration (µg/mL)		924
[redacted]	Absorbance of Blank		0.065
[redacted]	Absorbance of Standard		0.766
[redacted]	Y-Intercept Value		-0.009760
[redacted]	Slope Value		0.141810
[redacted]	µg of CN in Standard		4.984
[redacted]			
[redacted]			
[redacted]			
JT KNIGHT			
[redacted]	µg of CN-/mL in Standard		997
[redacted]			
[redacted]	Standard % Recovery		107.9%
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/16/95
Approved by:	Rus Schroeder	Date:	10/17/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2906	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000 ~~0.063~~ RWS 10/17/95
CN-01	Absorbance of Blank (Reagent, Prep)	0.054
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.132
	µg CN- /mL	2.65E-02
WA93262		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/16/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	8.99E-2 RWS 10/17/95

02:30 PM	Cyanide Concentration (µg/mL)	≤ Detection Limit	Detection Limit µg CN- / mL
09/19/95			~~3.60E-02~~ RWS ~~8.99~~ 3.60E-2 10/17/95 RWS

Data Entry by: [signature] Date: 10/16/95

Approved by: RW Schroeder Date: 10/17/95

Form 695102C1 Rev. 1.6 Page 1 of 1

LABCORE Data Entry Template for Worklist# 2816

Analyst: R **Instrument:** CN01 WA93255 **Book #** 71N8B

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108 CN - EDTA/en dissolution

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	8.43E-02	N/A	ug/g
		2	STD				CN-01	SOLID	924	974	N/A	ug/g
95000118	BY-108 (R)	3	SAMPLE	S95T001970	0		CN-01	SOLID	N/A	1.50E02	8.2	ug/g
95000118	BY-108 (R)	4	DUP	S95T001970	0		CN-01	SOLID	1.50E02	1.60E02	N/A	ug/g
95000118	BY-108 (R)	5	SPK	S95T001970	0		CN-01	SOLID	100	100.7	N/A	ug/g
95000118	BY-108 (R)	6	SAMPLE	S95T001971	0		CN-01	SOLID	N/A	1.81E02	9.3	ug/g
95000118	BY-108 (R)	7	DUP	S95T001971	0		CN-01	SOLID	1.81E02	1.66E02	N/A	ug/g
95000118	BY-108 (R)	8	SPK	S95T001971	0		CN-01	SOLID	100	98.3	N/A	ug/g
		9	CCV				CN-01	SOLID	924	969	N/A	ug/g
		10	CCB				CN-01	SOLID	1	8.71E-02	N/A	ug/g

Final page for worklist # 2816

10-17-95 — Analyst Signature / Date

10-21-95 — Analyst Signature / Date

S95T001970-1 → .4646 gram in 5ml → .250ml used
S95T001970-2 → .4704 grams in 5ml → .250ml used
S95T001971-1 → .4097 grams in 5ml → .250ml used.
S95T001971-2 → .4448 grams in 5ml → .250ml used
Standard Dilution → .250ml of 71N8B to 25ml Volume → .500ml used
Spike → .250ml Std Dil
Blank = 5ml EDTA/en

1	.050
2	.731
3	.536
4	.573
5	.866
6	.567
7	.563
8	.889
9	.727
10	.052

Data Entry Comments:

Heather Anastor 10-23-95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
	vol mL gmb 10/19/95	
2816	Blank ~~Weight in g~~ (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN01	Absorbance of Blank (Reagent, Prep)	0.050
	Digest Dilution Factor	1
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLANK	µg of Cyanide	0.421
	µg CN- /g/mL gmb 10/17/95	8.43E-02
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/17/95	Detection Limit = 1.5µg Cyanide * Digest Dilution Factor / SS (mL)	

v RESULTS v

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / g/mL gmb 10/19/95
09/19/95			3.00E-01

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

10/19/95

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL	0.250	0.250
	Diluent + Standard Volume	25.00	25.00
2000	Diluted Standard in mL to be Analyzed	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
[illegible]	Absorbance of Blank	0.067	0.050
	Absorbance of Standard	0.665	0.731
LIQUID	Y-Intercept Value		-0.009760
	Slope Value		0.141810
[illegible]	µg of CN in Standard	ERR	4.871
WM00252			
		2.1778	
J KNIGHT			
	µg of CN-/mL in Standard	ERR	974
10/17/95			
	Standard % Recovery		105.4%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.46460
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2816	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.050
	Absorbance of Sample	0.536
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001970	µg of Cyanide	3.496
	µg CN- /g	1.50E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	c.m gwb 10/19/95	
10/17/95	Detection Limit = (~~1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	

	Cyanide Concentration (µg/g)	1.50E+02	Detection Limit µg CN- / g
09/19/95			~~5.46E+01~~ 0.2

gwb 10/19/95

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.47040
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2816	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.050
	Absorbance of Sample	0.573
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001970DUP	µg of Cyanide	3.757
	µg CN- /g	1.60E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	.19 gwD 10/19/95	
10/17/95	Detection Limit = (~~1.5~~ µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	

	Cyanide Concentration (µg/g)	1.60E+02	Detection Limit µg CN- / g
09/19/95			~~0.38E+01~~ 21

Data Entry by: Date: 10/19/95

Approved by: Date: 10/19/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

10/19/95

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	0.250
[redacted]	Diluent + Spike Standard Volume	25.00	25.00
[redacted]	Diluted Spike Standard in mL	0.250	0.500
[redacted]	True Value CN- Concentration (µg/mL)	924	924
[redacted]	Absorbance of Blank	0.056	0.056
[redacted]	Absorbance of Sample+Spike	0.866	0.727
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	5.823	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	3.4868	
J KNIGHT			
[redacted]	µg of CN- in Spike	2.3100	
[redacted]			
[redacted]	Spike % Recovery	100.7%	
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.40970
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2816	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.050
	Absorbance of Sample	0.567
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001971	µg of Cyanide	3.715
	µg CN- /g	1.81E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	19 gwb 10/19/95	
10/17/95	Detection Limit = ~~(1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g) 1.81E+02	Detection Limit µg CN- / g
09/19/95		~~7.32E+01~~ 73 gwb 10/19/95

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.44480
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2816	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.050
	Absorbance of Sample	0.563
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001971DUP	µg of Cyanide	3.686
	µg CN- /g	1.66E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	.19 gas 10/19/95	
10/17/95	Detection Limit = ~~(1.5~~ µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g)	1.66E+02
		µg CN- / g
09/19/95		~~-6.74E+01~~ 9.5

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form 695102C1 Rev. 1.0

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

10/19/95

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
SPIKE	Spike Aliquot in mL	0.250	0.250
	Diluent + Spike Standard Volume	25.00	25.00
2018	Diluted Spike Standard in mL	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
CN01	Absorbance of Blank	0.050	0.050
	Absorbance of Sample+Spike	0.889	0.727
LIQUID	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
395T001971SPK	µg of CN- in Sample+Spike	5.985	ERR
WA93262			
	Known µg of CN- in Original Sample	3.7150	
J KNIGHT			
	µg of CN- in Spike	2.3100	
10/17/95			
	Spike % Recovery	98.3%	
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

10/19/95

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL	0.250	0.250
	Diluent + Standard Volume	25.00	25.00
2818	Diluted Standard in mL to be Analyzed	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
CN01	Absorbance of Blank	0.067	0.050
	Absorbance of Standard	0.655	0.727
LIQUID	Y-Intercept Value		-0.009760
	Slope Value		0.141810
CCV	µg of CN in Standard	ERR	4.843
WA93252			
		2.9778	
J KNIGHT			
	µg of CN-/mL in Standard	ERR	969
10/17/95			
	Standard % Recovery		104.8%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2816	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN01	Absorbance of Blank (Reagent, Prep)	0.052
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.436
	µg CN- /mL	8.71E-02
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/17/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL)	8.71E-02
09/19/95		

			Detection Limit µg CN- / mL
			3.60E-02

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form 695102C1 Rev. 1.6

LABCORE Data Entry Template for Worklist# 2817

Analyst: R **Instrument:** CN01 WA93252 **Book #** 71N8B

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108 CN EDTA/en dissolution

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT	
		1	BLNK				CN-01	SOLID	1	1.08E-01	N/A	ug/g	
		2	STD				CN-01	SOLID	924	943	N/A	ug/g	
95000118	BY-108 (R)	3	SAMPLE	S95T001972	0		CN-01	SOLID	N/A	6.80E01	~~6.79E01~~ 2.00E+1	ug/g	RWS 10/19/95
95000118	BY-108 (R)	4	DUP	S95T001972	0		CN-01	SOLID	6.80E01	4.99E01	N/A	ug/g	
95000118	BY-108 (R)	5	SPK	S95T001972	0		CN-01	SOLID	100	105.9	N/A	ug/g	
95000118	BY-108 (R)	6	SAMPLE	S95T001973	0		CN-01	SOLID	N/A	7.98E01	~~5.50E01~~ 1.74E+1	ug/g	RWS 10/19/95
95000118	BY-108 (R)	7	DUP	S95T001973	0		CN-01	SOLID	7.98E01	7.54E01	N/A	ug/g	
95000118	BY-108 (R)	8	SPK	S95T001973	0		CN-01	SOLID	100	88.2	N/A	ug/g	
		9	CCV				CN-01	SOLID	924	940	N/A	ug/g	
		10	CCB				CN-01	SOLID	~~1.08E-01~~ 1	~~4.00E-01~~ <3.00E-1	N/A	ug/g	RWS 10/19/95 RWS 10/19/95

Final page for worklist # 2817

Analyst Signature: [signature] Date: 10/17/95

Analyst Signature: [signature] Date: 10-19-95

S95T001972-1 → .4742 grams in 5ml → .250ml used
S95T001972-2 → .3783 grams in 5ml → .250ml used
S95T001973-1 → .5454 grams in 5ml → .250ml used
S95T001973-2 → .5100 grams in 5ml → .250ml used
Standard Dilution → .250ml of 71N8B to 25ml Volume → .500ml used
Spike → .250ml
Blank → 5ml EDTA/en

2	~~.76~~ .762
3	.286
4	.191
5	.633
6	.366
7	.330
8	.655
9	.724
10	.047

Data Entry Comments:

Blank in Batch 2816 [signature] 10/20/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WHC-CD-WM-DP-145, REV. 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2817	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN01	Absorbance of Blank (Reagent, Prep)	0.067
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLANK	µg of Cyanide	0.541
	µg CN- /mL	1.08E-01
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/17/96	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL)	1.08E-01
09/19/96		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL	0.250	0.250
	Diluent + Standard Volume	25.00	25.00
2917	Diluted Standard in mL to be Analyzed	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
CN01	Absorbance of Blank	0.067	0.067
	Absorbance of Standard	0.655	0.726
LIQUID	Y-Intercept Value		-0.009760
	Slope Value		0.141810
71169	µg of CN in Standard	ERR	4.716
[illegible]			
		2.1770	
J KNIGHT			
	µg of CN-/mL in Standard	ERR	943
10/17/95			
	Standard % Recovery		102.1%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:		Date:	10/19/95
Approved by:		Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.47420
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2817	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.067
	Absorbance of Sample	0.286
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001972	µg of Cyanide	1.613
	µg CN- /g	6.80E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 10/19/95	
10/17/95	Detection Limit = ~~(1.8~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	

	Cyanide Concentration (µg/g)	6.80E+01	Detection Limit µg CN- / g
			~~6.33E+01~~ 2.00 E+1
09/19/95			

10/19/95 RWS

Data Entry by:		Date:	10/19/95
Approved by:	Ron Schroeder	Date:	

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CO-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.37830
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2817	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.067
	Absorbance of Sample	0.191
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001972DUP	µg of Cyanide	0.943
	µg CN- /g	4.99E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 RWS 10/19/95	
10/17/95	Detection Limit = ~~(1.5)~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	4.99 E+1 µg/g RWS 10/19/95
	Cyanide Concentration (µg/g) ~~< Detection Limit~~	Detection Limit µg CN- / g
		10/19/95 RWS
09/19/95		~~7.93E+01~~
		2.51 E+1 µg/g

Data Entry by:	[signature]	Date:	10/19/95
Approved by:	Ruth Schroeder	Date:	10/19/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHO-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
SPIKE	Spike Aliquot in mL	0.250	0.250
	Diluent + Spike Standard Volume	25.00	25.00
2657	Diluted Spike Standard in mL	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
CN001	Absorbance of Blank	0.067	0.067
	Absorbance of Sample+Spike	0.633	0.726
LIQUID	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
95ST001972SPK	µg of CN- in Sample+Spike	4.060	ERR
	Known µg of CN- in Original Sample	1.6138	
J KNIGHT			
	µg of CN- in Spike	2.3100	
	Spike % Recovery	105.9%	
	Slope and Y-Intercept calculated from working curve calibration		
	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:		Date:	10/19/95
Approved by:	Ron Schnaeder	Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.54540
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2817	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.067
	Absorbance of Sample	0.366
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001973	µg of Cyanide	2.177
	µg CN- /g	7.98E+01

WA93252

µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value

J KNIGHT JR.

µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF

0.19 RWS 10/19/95

10/17/95

Detection Limit = ~~1.6~~ µg Cyanide / A) * (DV / SS) * DF

v RESULTS v

	Cyanide Concentration (µg/g)	7.98E+01	Detection Limit µg CN- / g
			~~5.50E+01~~
09/19/95			1.79E+1 µg/g

Data Entry by:	[signature]	Date:	10/19/95
Approved by:	Ron Schroeder	Date:	10/19/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.51000
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2817	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN01	Absorbance of Blank	0.067
	Absorbance of Sample	0.33
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001973DUP	µg of Cyanide	1.923
	µg CN- /g	7.54E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 µg 10/18/95	
10/17/95	Detection Limit = ~~(1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g)	7.54E+01
09/19/95		

	Detection Limit µg CN- / g
	10/19/95
	~~5.88E+01~~ RWS
	1.86E+1 µg/g

Data Entry by:	[signature]	Date:	10/19/95
Approved by:	Ron Johnson	Date:	

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHO-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
	Spike Aliquot in mL	0.250	0.250
	Diluent + Spike Standard Volume	25.00	25.00
	Diluted Spike Standard in mL	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
	Absorbance of Blank	0.067	0.067
	Absorbance of Sample+Spike	0.655	0.728
	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
	µg of CN- in Sample+Spike	4.215	ERR
	Known µg of CN- in Original Sample	2.1770	
J KNIGHT			
	µg of CN- in Spike	2.3100	
10/17/95			
	Spike % Recovery	88.2%	
	Slope and Y-Intercept calculated from working curve calibration		
	Original Sample Calculation *from* Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:		Date:	10/19/95
Approved by:	RW Edwards	Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WI10-CD-WM DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL	0.250	0.250
	Diluent + Standard Volume	25.00	25.00
2217	Diluted Standard in mL to be Analyzed	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
C991	Absorbance of Blank	0.067	0.067
	Absorbance of Standard	0.655	0.724
LIQUID	Y-Intercept Value		-0.009760
	Slope Value		0.141810
CCV	µg of CN in Standard	ERR	4.702
WM95252			
		2.1779	
J KNIGHT			
	µg of CN-/mL in Standard	ERR	940
10/17/95			
	Standard % Recovery		101.8%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/19/95
Approved by:	Ron Schroeder	Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2817	Blank Weight in g (SS)	5.00000
	Absorbance of Instrument Blank	0.067
CN01	Absorbance of Blank (Reagent, Prep)	0.047
	Digest Dilution Factor	1
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.210
	µg CN- /g	4.20E-02
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J KNIGHT JR.	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/17/95	Detection Limit = 1.5µg Cyanide * Digest Dilution Factor / SS (mL)	
	v RESULTS v	

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / g
09/19/95			3.00E-01

Data Entry by:	[signature]	Date:	10/19/95
Approved by:	[signature]	Date:	10/19/95

Form 695102C1 Rev. 1.6

Page 1 of 1

LABCORE Data Entry Template for Worklist# 2866

Analyst: [illegible] **Instrument:** CN01 WA93252 **Book #** 71N8B

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108 CN- *PRIORITY*

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	1.29E-1	N/A	ug/g
		2	STD				CN-01	SOLID	924	991	N/A	ug/g
95000118	BY-108 (R)	3	SAMPLE	S95T001976	0		CN-01	SOLID	N/A	9.99E01	5.42E0	ug/g
95000118	BY-108 (R)	4	DUP	S95T001976	0		CN-01	SOLID	9.99E01	9.47E01	N/A	ug/g
95000118	BY-108 (R)	5	SPK	S95T001976	0		CN-01	SOLID	100	116.9	N/A	ug/g
95000118	BY-108 (R)	6	SAMPLE	S95T001977	0		CN-01	SOLID	N/A	1.48E02	4.75E0	ug/g
95000118	BY-108 (R)	7	DUP	S95T001977	0		CN-01	SOLID	1.48E02	1.28E02	N/A	ug/g
95000118	BY-108 (R)	8	SPK	S95T001977	0		CN-01	SOLID	100	58.6	N/A	ug/g
		9	CCV				CN-01	SOLID	924	1033	N/A	ug/g
		10	CCB				CN-01	SOLID	1	<3.60E-2	N/A	ug/g

Final page for worklist # 2866

L S Knight 10/13/95 — Analyst Signature / Date

[illegible] 10/16/95 — Analyst Signature / Date

S95T001976-1 = .2766g in 5ml EDTA/en → .5ml Sample Size
S95T001976-2 = .3728g in 5ml EDTA/en → .5ml Sample Size
S95T001977-1 = .3160g in 5ml EDTA/en → .5ml Sample Size
S95T001977-2 = .3945g in 5ml EDTA/en → .5ml Sample Size
Standard Dilution = .250ml of 71N8B to 25ml Volume → .5ml Sample Size
Spike = .250ml of Std D.1
Blank = 5ml EDTA/en

1 .082
2 .775
3 .464
4 .573
5 .847
6 .737
7 .787
8 .929
9 .805
10 .083

Data Entry Comments: Reviewed RW Schroeder 10/17/95

Result for S95T001977 will be rejected due to poor instrument QC. RWS 10/17/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2866	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.082
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLANK	µg of Cyanide	0.647
	µg CN- /mL	1.29E-01
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/13/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL)	1.29E-01
09/19/95		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by:	Gary Hammett	Date:	10/14/95
Approved by:	Ron Schroeder	Date:	10/16/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHO-CD-WM DP-146, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
[redacted]	Standard Aliquot in mL		0.250
[redacted]	Diluent + Standard Volume		25.00
[redacted]	Diluted Standard in mL to be Analyzed		0.500
[redacted]	True Value CN- Concentration (µg/mL)		924
[redacted]	Absorbance of Blank		0.082
[redacted]	Absorbance of Standard		0.775
[redacted]	Y-Intercept Value		-0.009760
[redacted]	Slope Value		0.141810
[redacted]	µg of CN in Standard		4.956
[redacted]			
[redacted]			
[redacted]			
JT KNIGHT			
[redacted]	µg of CN-/mL in Standard		991
[redacted]			
[redacted]	Standard % Recovery		107.3%
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/14/95
Approved by:	[signature]	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.27660
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2866	Aliquot Analyzed from Dissolution (A)	0.50000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.464
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001976	µg of Cyanide	2.763
	µg CN- /g	9.99E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.15 RWS 10/16/95	
10/13/95	Detection Limit = ~~(1.5µg~~ Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g) 9.99E+01	Detection Limit µg CN- / g
		~~5.42E+01~~
09/19/95		5.42 E0 RWS 10/16/95

Data Entry by: [signature] Date: 10/14/95

Approved by: RW Schroeder Date: 10/16/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.37280
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2866	Aliquot Analyzed from Dissolution (A)	0.50000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.573
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001976 / DUP	µg of Cyanide	3.531
	µg CN- /g	9.47E+01
WA93262		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/13/95	Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	

	Cyanide Concentration (µg/g)	9.47E+01	Detection Limit µg CN- / g
09/19/95			4.02E+01

Data Entry by: [signature] Date: 10/14/95

Approved by: [signature] Date: 10/16/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

	SPIKE	NA
Spike Aliquot in mL	0.250	
Diluent + Spike Standard Volume	25.00	
Diluted Spike Standard in mL	0.250	
True Value CN- Concentration (µg/mL)	924	
Absorbance of Blank	0.082	
Absorbance of Sample+Spike	0.847	
Y-Intercept Value	-0.009760	
Slope Value	0.141810	
µg of CN- in Sample+Spike	5.463	
Known µg of CN- in Original Sample	2.7[illegible]	
µg of CN- in Spike	2.3100	
Spike % Recovery	116.9%	

JT KNIGHT

Slope and Y-Intercept calculated from working curve calibration
Original Sample Calculation from Form 695102C1

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[illegible]	Date:	10/14/95
Approved by:	Russ Schroeder	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-VM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.31600
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2866	Aliquot Analyzed from Dissolution (A)	0.50000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.737
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001977	µg of Cyanide	4.688
	µg CN- /g	1.48E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.15 RWS 10/16/95	
10/13/95	Detection Limit = ~~(1.5µg~~ Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	4.75EU
	Cyanide Concentration (µg/g) 1.48E+02	Detection Limit µg CN- / g
09/19/95		~~4.75E+01~~
		RWS 10/16/95

Data Entry by:	[signature]	Date:	10/14/95
Approved by:	RW Schneider	Date:	10/16/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CD-WM-DP-145, REV.1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.39450
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2866	Aliquot Analyzed from Dissolution (A)	0.50000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.082
	Absorbance of Sample	0.787
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001977 / DUP	µg of Cyanide	5.040
	µg CN- /g	1.28E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/13/95	Detection Limit = (1.5µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	
	Cyanide Concentration (µg/g)	1.28E+02
		Detection Limit µg CN- / g
09/19/95		3.80E+01

Data Entry by: [signature] Date: 10/14/95

Approved by: RW Schroeder Date: 10/16/95

Form 695102C1 Rev. 1.6 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	924	
[redacted]	Absorbance of Blank	0.082	
[redacted]	Absorbance of Sample+Spike	0.929	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	6.042	
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	[redacted]	
JT KNIGHT			
[redacted]	µg of CN- in Spike	2.3100	
[redacted]			
[redacted]	Spike % Recovery	58.6%	
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	10/14/95
Approved by:	[signature]	Date:	10/16/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WNO-CO-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
[illegible]	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.082
	Absorbance of Standard		0.805
SOLID	Y-Intercept Value		-0.009760
	Slope Value		0.141810
[illegible]001977	µg of CN in Standard		5.167
[illegible]			
JT KNIGHT			
	µg of CN-/mL in Standard		1033
10/13/95			
	Standard % Recovery		111.8%
	Slope and Y-Intercept calculated from working curve calibration .		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/14/95
Approved by:	Ru Schroeder	Date:	10/16/95

Form X2 Rev. 1.0

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2866	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.082
CN-01	Absorbance of Blank (Reagent, Prep)	0.083
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.076
	µg CN- /mL	1.52E-02
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JT KNIGHT	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/13/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / mL
09/19/95			3.60E-02

Data Entry by:	Gary Hamm	Date:	10/14/95
Approved by:	Ken Schroeder	Date:	10/16/95

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LABCORE Data Entry Template for Worklist# 2944

Analyst: R **Instrument:** CN01 WA 93252 **Book #** 7/N8B

Method: LA-695-102 Rev/Mod D-0

Worklist Comment: BY-108 CN- Solids by EDTA/en

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	4.62E-2	N/A	ug/g
		2	STD				CN-01	SOLID	924	919	N/A	ug/g
95000118	BY-108 (R)	3	SAMPLE	S95T001974	0		CN-01	SOLID	N/A	3.98E1	BHQ20	ug/g
95000118	BY-108 (R)	4	DUP	S95T001974	0		CN-01	SOLID	3.98E1	3.87E1	N/A	ug/g
95000118	BY-108 (R)	5	SPK	S95T001974	0		CN-01	SOLID	100	99.5	N/A	ug/g
95000118	BY-108 (R)	6	SAMPLE	S95T001975	0		CN-01	SOLID	N/A	3.65E1	7.95E0	ug/g
95000118	BY-108 (R)	7	DUP	S95T001975	0		CN-01	SOLID	3.65E1	3.94E1	N/A	ug/g
95000118	BY-108 (R)	8	SPK	S95T001975	0		CN-01	SOLID	100	101.0	N/A	ug/g
		9	CCV				CN-01	SOLID	924	946	N/A	ug/g
		10	CCB				CN-01	SOLID	1	<3.60E-2 ~~235E-2~~	N/A	ug/g

WA 10-31-95

Final page for worklist # 2944

Analyst Signature: [signature] Date: 10/23/95

Analyst Signature: [signature] Date: 11-1-95

S95T001974-1 → .4388g in 5ml EDTA/en → .250ml used
S95T001974-2 → .5388g in 5ml EDTA/en → .250ml used
S95T001975-1 → .4777 in 5ml EDTA/en → .250ml used
S95T001975-2 → .4610 in 5ml EDTA/en → .250ml used
StdDil = .250ml of 7/N8B to 25ml Volume → .500ml used
Spike = .250ml of StdDil
Blank = 5ml EDTA/en

Data Entry Comments:

Reviewed RW Schwalm 11/06/95

1	.023
2	.665
3	.137
4	.161
5	.463
6	.137
7	.142
8	.468
9	.684
10	.014

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2044	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.023
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLANK	µg of Cyanide	0.231
	µg CN- /mL	4.62E-02
WA91252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JTK	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/23/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL)	4.62E-02
09/19/95		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by:	[signature]	Date:	10/27/95
Approved by:	[signature]	Date:	10/31/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2944	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.023
	Absorbance of Standard		0.665
LIQUID	Y-Intercept Value		-0.009760
	Slope Value		0.141810
71N8B	µg of CN in Standard		4.596
WA03252			
JTK			
	µg of CN-/mL in Standard		919
10/23/95			
	Standard % Recovery		99.5%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/27/95
Approved by:	[signature]	Date:	10/31/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.43880
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2044	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.023
	Absorbance of Sample	0.137
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001974	µg of Cyanide	0.873
	µg CN- /g	3.98E+01
WAS3282		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JTK	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 HLA 10-31-95	
10/23/95	Detection Limit = (~~1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	3.98 E01 HLA 10-31-95

	Cyanide Concentration (µg/g)	~~< Detection Limit~~	Detection Limit µg CN- / g
09/19/95			~~6.84E+01~~ 8.66 E0 HLA 10-31-95

Data Entry by:	[signature]	Date:	10/27/95
Approved by:	Heather Ouesta	Date:	10/31/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.53880
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2944	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.023
	Absorbance of Sample	0.161
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001974DUP	µg of Cyanide	1.042
	µg CN- /g	3.87E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JTK	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
	0.19 HLA 10-31-95	
10/23/95	Detection Limit = (~~1.5~~µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v 3.87E01 HLA 10-31-95	

Cyanide Concentration (µg/g)	~~< Detection Limit~~	Detection Limit µg CN- / g
		~~5.57E+01~~ 7.05E0 HLA 10-31-95

Data Entry by:	[signature]	Date:	10/27/95
Approved by:	Heather Ouesto	Date:	10/31/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
SPIKE	Spike Aliquot in mL	0.250	0.250
	Diluent + Spike Standard Volume	25.00	25.00
2944	Diluted Spike Standard in mL	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
CN-01	Absorbance of Blank	0.023	0.023
	Absorbance of Sample+Spike	0.463	0.684
SOLID	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
S95T001974SPK	µg of CN- in Sample+Spike	3.172	ERR
WA93252			
	Known µg of CN- in Original Sample	0.8730	
JTK			
	µg of CN- in Spike	2.3100	
10/23/95			
	Spike % Recovery	99.5%	
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[illegible]	Date:	10/27/95
Approved by:	[illegible]	Date:	10/31/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.47770
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2344	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.023
	Absorbance of Sample	0.137
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001975	µg of Cyanide	0.873
	µg CN- /g	3.65E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JTK	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/23/95	Detection Limit = (~~1.5~~ 0.19 Hea 10-31-95 µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	3.65E01 Hea 10-31-95

	Cyanide Concentration (µg/g)	~~<Detection Limit~~	Detection Limit µg CN- / g
[illegible]			
09/18/95			~~6.20E+01~~ 7.95 E0 Hea 11-8-95

Data Entry by:	[illegible]	Date:	10/27/95
Approved by:	Heather Beasley	Date:	10/31/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-146, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	9.46100
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2944	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.023
	Absorbance of Sample	0.142
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95TD0197SDUP	µg of Cyanide	0.908
	µg CN- /g	3.94E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JTK	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
[illegible]		
10/23/95	Detection Limit = (~~1.5~~ 0.19 µg Cyanide / A) * (DV / SS) * DF HEA 10-31-95	
	v RESULTS v	3.94E01 HEA 10-31-95
	Cyanide Concentration (µg/g)	~~< Detection Limit~~
[illegible]		
09/19/95		

Detection Limit µg CN- / g
~~6.61E+01~~ 9.24E0 HEA 10-31-95

Data Entry by:	[illegible]	Date:	10/27/95
Approved by:	Heather Roberts	Date:	10/30/95

Form 695102C1 Rev. 1.6

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PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
SPIKE	Spike Aliquot in mL	0.250	0.250
	Diluent + Spike Standard Volume	25.00	25.00
2944	Diluted Spike Standard in mL	0.250	0.500
	True Value CN- Concentration (µg/mL)	924	924
CN-01	Absorbance of Blank	0.023	0.023
	Absorbance of Sample+Spike	0.468	0.684
SOLID	Y-Intercept Value	-0.009760	
	Slope Value	0.141810	
S95T001975SPK	µg of CN- in Sample+Spike	3.207	ERR
WA93252			
	Known µg of CN- in Original Sample	0.8730	
JTK			
	µg of CN- in Spike	2.3100	
10/23/95			
	Spike % Recovery	101.0%	
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	10/27/95
Approved by:	Heather Ruesto	Date:	10/31/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHO-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2944	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.023
	Absorbance of Standard		0.684
LIQUID	Y-Intercept Value		-0.009760
	Slope Value		0.141810
CCV	µg of CN in Standard		4.730
WA93252			
JTK			
	µg of CN-/mL in Standard		946
10/23/95			
	Standard % Recovery		102.4%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/27/95
Approved by:	[signature]	Date:	10/31/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
2044	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.014
	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.168
	µg CN- /mL	3.35E-02
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
UTK	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/23/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / mL
09/19/95			3.60E-02

Data Entry by:	[signature]	Date:	10/27/95
Approved by:	[signature]	Date:	10/31/95

Form 695102C1 Rev. 1.6

LABCORE Data Entry Template for Worklist# 2945

Analyst: R **Instrument:** CN01 WA93252 **Book #** 71N8B

Method: LA-695-102 Rev/Mod D-O

Worklist Comment: BY-108 CN solid by EDTA/en

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	0.108	N/A	ug/g
		2	STD				CN-01	SOLID	924	1009	N/A	ug/g
95000118	BY-108 (R)	3	SAMPLE	S95T001977	0		CN-01	SOLID	N/A	1.25E2	3.01	ug/g
95000118	BY-108 (R)	4	DUP	S95T001977	0		CN-01	SOLID	1.25E2	1.17E2	N/A	ug/g
95000118	BY-108 (R)	5	SPK	S95T001977	0		CN-01	SOLID	100	81.5	N/A	ug/g
		6	CCV				CN-01	SOLID	924	932	N/A	ug/g
		7	CCB				CN-01	SOLID	1	<3.60E-2	N/A	ug/g

Final page for worklist # 2945

Analyst Signature 10/17/95 Date

Analyst Signature 10-19-95 Date

① .067 ~~.067~~
② .773
③ .337
④ .384
⑤ .604
⑥ .718
⑦ .061

S95T001977-1 = .3160g in 5ml EDTA/en = .250ml
S95T001977-2 = .3945g in 5ml EDTA/en = .250ml
Standard Dilution = .250ml of 71N8B to 25ml Volume = .500ml Sample Size
Spike = .250ml of Std Dil
Blank = 5ml of EDTA/en

Data Entry Comments: Reviewed by Ron Schneider 10/19/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		
2945	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.067
	Digest Dilution Factor	1
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
BLNK	µg of Cyanide	0.541
	µg CN- /mL	1.08E-01
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J.Knight	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/17/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	
	Cyanide Concentration (µg/mL)	1.08E-01
09/19/95		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by:	RW Schroeder	Date:	10/19/95
Approved by:	RW Schroeder	Date:	10/19/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHO-CD-WM DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
Standard	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2946	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
[illegible]	Absorbance of Blank		0.067
	Absorbance of Standard		0.773
Liquid	Y-Intercept Value		-0.009760
	Slope Value		0.141810
71N8B	µg of CN in Standard		5.047
[illegible]			
J.Knight			
	µg of CN-/mL in Standard		1009
10/17/95			
	Standard % Recovery		109.2%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	RW Schroeder	Date:	10/19/95
Approved by:	RW Schroeder	Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.31600
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2945	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.067
	Absorbance of Sample	0.337
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001977	µg of Cyanide	1.973
		1.25E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J.Knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/17/95		
	v RESULTS v	
	Cyanide Concentration (µg/g) 1.25E+02	Detection Limit µg CN- / g
		~~0.49E+01~~ 3.01 µg/g 10/19 RWS
09/19/95		

Data Entry by:	Ru Schroeder	Date:	10/19/95
Approved by:	Ru Schroeder	Date:	10/19/95

Form 695102C1 Rev. 1.6

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHO-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Solid	Sample Weight in grams (SS)	0.39450
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2945	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.067
	Absorbance of Sample	0.384
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001977/DUP	µg of Cyanide	2.304
		1.17E+02
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
J.Knight	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/17/95		
	v RESULTS v	
	Cyanide Concentration (µg/g) 1.17E+02	Detection Limit µg CN- / g ~~7.60E+01~~ 2.41 mg/g
09/19/95		

10/19/95 RWS

Data Entry by:	RW Schroeder	Date:	10/19/95
Approved by:	RW Schroeder	Date:	10/19/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV.1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	
[redacted]	Diluent + Spike Standard Volume	25.00	
[redacted]	Diluted Spike Standard in mL	0.250	
[redacted]	True Value CN- Concentration (µg/mL)	924	
[redacted]	Absorbance of Blank	0.067	
[redacted]	Absorbance of Sample+Spike	0.604	
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	3.856	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	1.9730	
J.Knight			
[redacted]	µg of CN- in Spike	2.3100	
[redacted]			
[redacted]	Spike % Recovery	81.5%	
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	RW Schroeder	Date:	10/19/95
Approved by:	RW Schroeder	Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
Standard	Standard Aliquot in mL		0.250
	Diluent + Standard Volume		25.00
2965	Diluted Standard in mL to be Analyzed		0.500
	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.067
	Absorbance of Standard		0.718
Liquid	Y-Intercept Value		-0.009760
	Slope Value		0.141810
CCV	µg of CN in Standard		4.659
WA9[illegible]			
J.Knight			
	µg of CN-/mL in Standard		932
10/17/95			
	Standard % Recovery		100.9%
	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[illegible] Schroeder	Date:	10/19/95
Approved by:	R W Schroeder	Date:	10/19/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
Blank		
2945	Blank Aliquot in mL (SS)	5.00000
	Absorbance of Instrument Blank	0.067
CN-01	Absorbance of Blank (Reagent, Prep)	0.061
	Digest Dilution Factor	1
Liquid	Y-Intercept Value	-0.009760
	Slope Value	0.141810
CCB	µg of Cyanide	0.111
	µg CN- /mL	2.22E-02
WA93252		
	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
J.Knight	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
10/17/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
	v RESULTS v	

	Cyanide Concentration (µg/mL)	< Detection Limit	Detection Limit µg CN- / mL
09/19/95			3.60E-02

Data Entry by:	RW Schroeder	Date:	10/19/95
Approved by:	RW Schroeder	Date:	10/19/95

Form 695102C1 Rev. 1.6

LABCORE Data Entry Template for Worklist# 2946

Analyst: K **Instrument:** CN01 WA93252 **Book #** 71N8B

Method: LA-695-102 Rev/Mod D-OK 11/29/95

Worklist Comment: BY-108 & BY-110 CN solid by EDTA/en

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK				CN-01	SOLID	1	4.20E-02	N/A	ug/g
		2	STD				CN-01	SOLID	924	789	N/A	ug/g
95000118	BY-108 (R)	3	SAMPLE	S95T001978	0		CN-01	SOLID	N/A	9.84E01	1.12E02 ~~2.88E01~~ HEA 10/30/95	ug/g
95000118	BY-108 (R)	4	DUP	S95T001978	0		CN-01	SOLID	9.84E01	9.83E01	N/A	ug/g
95000118	BY-108 (R)	5	SPK	S95T001978	0		CN-01	SOLID	100	98.3	N/A	ug/g
95000095	BY-110	6	SAMPLE	S95T001799	0		CN-01	SOLID	N/A	<4.28E0 ~~<3.38E01~~	<4.28E0 ~~3.38E01~~ HEA 10/30/95	ug/g
95000095	BY-110	7	DUP	S95T001799	0		CN-01	SOLID	<4.28E0 ~~<3.38E1~~	<4.41E0 <3.48E1 HEA 10/30/95	N/A	ug/g
95000095	BY-110	8	SPK	S95T001799	0		CN-01	SOLID	100	89.7	N/A	ug/g
		9	CCV				CN-01	SOLID	924	916	N/A	ug/g
		10	CCB				CN-01	SOLID	1	3.77E-2	N/A	ug/g

Final page for worklist # 2946

L. Knight 10/23/95 — Analyst Signature / Date

Gary Hammett 10/25/95 — Analyst Signature / Date

S95T001978-1 = .3380g in 5ml EDTA/en = .250ml used
S95T001978-2 = .2937g in 5ml EDTA/en = .250ml used
S95T001799-1 = .8884g in 5ml EDTA/en = .250ml used
S95T001799-2 = .8625g in 5ml EDTA/en = .250ml used
Std D.1 = .250ml of 71N8B to 25ml Volume = .500ml used
Spike = .250ml of Std D.1
Blank = 5ml EDTA/en

1	.020 R 10/23/95
2	~~.246~~ .570
3	.246
4	.215
5	.568
6	.035
7	.035
8	.329
9	.660
10	.017

Data Entry Comments:

Standard Value of 789 ug/g meets LABDAP requirements of 85% recovery

Heather Renuster 10/30/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WTIC-CD-WM DP- 145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

Type		SAMPLE
BLANK		
Work List		
2946	Blank Aliquot in mL (SS)	5.00000
Test Code	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.020
Matrix	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
Sample	Slope Value	0.141810
blank	µg of Cyanide	0.210
Instrument Code	µg CN- /mL	4.20E-02
WA93252		
Analyst	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JTK	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
Date		
10/23/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
Time	v RESULTS v	
	Cyanide Concentration (µg/mL)	4.20E-02
Calibration Date		
09/19/95		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by:	[signature]	Date:	10/25/95
Approved by:	[signature]	Date:	10/30/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV.1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

Type		NA	STANDARD
STANDARD	Standard Aliquot in mL		0.250
Work List	Diluent + Standard Volume		25.00
2946	Diluted Standard in mL to be Analyzed		0.500
Test Code	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.020
Matrix	Absorbance of Standard		0.570
LIQUID	Y-Intercept Value		-0.009760
Sample #	Slope Value		0.141810
71N8B	µg of CN in Standard		3.947
Instrument Code			
WA93252			
Analyst			
JTK			
Date	µg of CN-/mL in Standard		789
10/23/95			
Time	Standard % Recovery		85.4%
Calibration Date	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/25/95
Approved by:	[signature]	Date:	10/30/95

Form X2 Rev. 1.0 Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.33800
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2946	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.020
	Absorbance of Sample	0.246
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001978	µg of Cyanide	1.663
	µg CN- /g	9.84E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JTK	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/23/95	Detection Limit = (~~1.5~~ 0.19 µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	

	Cyanide Concentration (µg/g)	~~9.84E+01~~ 1.42E+01	Detection Limit µg CN- / g
09/19/95			~~8.88E+01~~ 1.32E+01

Data Entry by:		Date:	10/25/95
Approved by:	Heather Bracator	Date:	10/30/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
SOLID	Sample Weight in grams (SS)	0.29370
	Dissolution Volume (EDTA/en + sample) in mL	5.00000
2946	Aliquot Analyzed from Dissolution (A)	0.25000
	Dilution Factor (DF)	1.000
CN-01	Absorbance of Blank	0.020
	Absorbance of Sample	0.215
SOLID	Y-Intercept Value	-0.009760
	Slope Value	0.141810
S95T001978DUP	µg of Cyanide	1.444
	µg CN- /g	9.83E+01
WA93252		
	µg of Cyanide = [(Absorb. of Sample - Absorb. of Blank) - (Y-Intercept)] / Slope Value	
JTK	µg/g of Cyanide = (µg Cyanide / A) * (DV / SS (g)) * DF	
10/23/95	Detection Limit = (~~1.5~~ 0.19 HEA 10/30/95 µg Cyanide / A) * (DV / SS) * DF	
	v RESULTS v	9.83 E01 HEA 10/30/95
	Cyanide Concentration (µg/g)	~~< Detection Limit~~ Detection Limit µg CN- / g
09/19/95		~~1.02E+02~~ 1.29E+01 HEA 10/30/95

Data Entry by:	[signature]	Date:	10/25/95
Approved by:	[signature]	Date:	10/30/95

Form 695102C1 Rev. 1.6

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		SPIKE	NA
[redacted]	Spike Aliquot in mL	0.250	0.250
[redacted]	Diluent + Spike Standard Volume	25.00	25.00
[redacted]	Diluted Spike Standard in mL	0.250	0.500
[redacted]	True Value CN- Concentration (µg/mL)	924	924
[redacted]	Absorbance of Blank	0.028	0.028
[redacted]	Absorbance of Sample+Spike	0.569	0.669
[redacted]	Y-Intercept Value	-0.009760	
[redacted]	Slope Value	0.141810	
[redacted]	µg of CN- in Sample+Spike	3.933	ERR
[redacted]			
[redacted]			
[redacted]	Known µg of CN- in Original Sample	[redacted]	
[redacted]			
[redacted]	µg of CN- in Spike	2.3100	
[redacted]			
[redacted]	Spike % Recovery	98.3%	
[redacted]			
[redacted]	Slope and Y-Intercept calculated from working curve calibration		
[redacted]	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample (Correced) = Known µg of CN- in Original Sample * g of Sample in Spike / g Used in Original Sample
µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg of CN- in Spike = LMCS Value (ppm) / Dilution Factor * Diluted Spike Standard
Dilution Factor = Spike Dilution Volume / Spike Aliquot
Spike % Recovery = (µg of CN- in Sample+Spike) - (µg of CN- in Sample) / (µg of CN- in Spike) * 100%

Data Entry by:	[signature]	Date:	10/25/95
Approved by:	[signature]	Date:	10/30/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW-DO NOT WRITE IN SPACE

WHC-CD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) SPIKE, STANDARD

		NA	STANDARD
Type			
STANDARD	Standard Aliquot in mL		0.250
Work List	Diluent + Standard Volume		25.00
2946	Diluted Standard in mL to be Analyzed		0.500
Test Code	True Value CN- Concentration (µg/mL)		924
CN-01	Absorbance of Blank		0.020
Matrix	Absorbance of Standard		0.660
LIQUID	Y-Intercept Value		-0.009760
Sample #	Slope Value		0.141810
CCV	µg of CN in Standard		4.582
Instrument Code			
WA93252			
Analyst			
JTK			
Date	µg of CN-/mL in Standard		916
10/23/95			
	Standard % Recovery		99.2%
Calibration Date	Slope and Y-Intercept calculated from working curve calibration		
09/19/95	Original Sample Calculation from Form 695102C1		

µg of CN- in Sample+Spike = [(Absorbance of Sample+Spike - Absorbance of Blank) - (Y-Intercept)] / Slope Value
µg/mL of CN- = µg of CN- in Standard / Diluted Standard * Dilution Factor
Dilution Factor = Flask Volume / Standard Aliquot
Standard % Recovery = (µg of CN-/mL in Standard / True Value CN- Concentration (µg/mL)) * 100

Data Entry by:	[signature]	Date:	10/25/95
Approved by:	[signature]	Date:	10/30/95

Form X2 Rev. 1.0

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

WHC-SD-WM-DP-145, REV. 1

CN- DETERMINATION : LA-695-102 (D-0) BLANK, LIQUID, SOLID

		SAMPLE
BLANK		
Work List		
2946	Blank Aliquot in mL (SS)	5.00000
Test Code	Absorbance of Instrument Blank	0.000
CN-01	Absorbance of Blank (Reagent, Prep)	0.017
Matrix	Digest Dilution Factor	1
LIQUID	Y-Intercept Value	-0.009760
Sample	Slope Value	0.141810
CCB	µg of Cyanide	0.189
Instrument Code	µg CN- /mL	3.77E-02
WA93252		
Analyst	µg of Cyanide = [|Absorb. of Blank - Absorb. of Inst. Blank| - (Y-Intercept)] / Slope Value	
JTK	µg/mL of Cyanide = µg Cyanide * Digest Dilution Factor / SS (mL)	
Date		
10/23/95	Detection Limit = 0.18µg Cyanide / SS (mL) * Digest Dilution Factor	
Time	v RESULTS v	
	Cyanide Concentration (µg/mL)	3.77E-02
Calibration Date		
09/19/95		

Detection Limit µg CN- / mL
3.60E-02

Data Entry by:	[signature]	Date:	10/25/95
Approved by:	[signature]	Date:	10/30/95

Form 695102C1 Rev. 1.6

LABCORE Data Entry Template for Worklist# 2278

Analyst: EAC **Instrument:** IC01 IC01 **Book #** 106N9-C

Method: LA-533-105 Rev/Mod D-0

Worklist Comment: By-108 IC, especially Br. JMF

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK			@IC-01	F-02	LIQUID	1	2.062	N/A	ug/mL
		1	BLNK			@IC-01	CL-02	LIQUID	1	2.083	N/A	ug/mL
		1	BLNK			@IC-01	NO2-02	LIQUID	1	2.547	N/A	ug/mL
		1	BLNK			@IC-01	BR-02	LIQUID	1	2.632	N/A	ug/mL
		1	BLNK			@IC-01	NO3-02	LIQUID	1	2.699	N/A	ug/mL
		1	BLNK			@IC-01	PO4-02	LIQUID	1	2.596	N/A	ug/mL
		1	BLNK			@IC-01	SO4-02	LIQUID	1	2.678	N/A	ug/mL
		1	BLNK			@IC-01	OXALATE2	LIQUID	1	2.496	N/A	ug/mL
		2	STD			@IC-01	F-02	LIQUID	59	61.327	N/A	ug/mL
		2	STD			@IC-01	CL-02	LIQUID	79	78.327	N/A	ug/mL
		2	STD			@IC-01	NO2-02	LIQUID	532	543.371	N/A	ug/mL
		2	STD			@IC-01	BR-02	LIQUID	575	588.859	N/A	ug/mL
		2	STD			@IC-01	NO3-02	LIQUID	614	615.979	N/A	ug/mL
		2	STD			@IC-01	PO4-02	LIQUID	546	564.635	N/A	ug/mL
		2	STD			@IC-01	SO4-02	LIQUID	631	634.222	N/A	ug/mL
		2	STD			@IC-01	OXALATE2	LIQUID	525	539.859	N/A	ug/mL
95000101	BY-108 (R)	3	SAMPLE	S95T001365	0	@IC-01	F-02	LIQUID	JMF 9/19/95 N/A	~~2.10~~ 4.20e-1	3.72-1	ug/mL
95000101	BY-108 (R)	3	SAMPLE	S95T001365	0	@IC-01	CL-02	LIQUID	N/A	8.88	4.98-1	ug/mL

Data Entry Comments:

LMCS 106N9-C .100mL-10mL

SPIKE 106N9-C .100mL

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2278

ROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
95000101	BY-108 (R)	3 SAMPLE	S95T001365	0	aIC-01	NO2-02	LIQUID	N/A	1.47 +2	3.28	ug/mL
95000101	BY-108 (R)	3 SAMPLE	S95T001365	0	aIC-01	BR-02	LIQUID	N/A	gmF 9/19/95 <3.79e0 ~~<3.79~~	3.79	ug/mL
95000101	BY-108 (R)	3 SAMPLE	S95T001365	0	aIC-01	NO3-02	LIQUID	N/A	2.17 +2	4.19	ug/mL
95000101	BY-108 (R)	3 SAMPLE	S95T001365	0	aIC-01	PO4-02	LIQUID	N/A	134 +1	3.58	ug/mL
95000101	BY-108 (R)	3 SAMPLE	S95T001365	0	aIC-01	SO4-02	LIQUID	N/A	<4.07	4.07	ug/mL
95000101	BY-108 (R)	3 SAMPLE	S95T001365	0	aIC-01	OXALATE2	LIQUID	N/A	<2.98	2.98	ug/mL
95000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	F-02	LIQUID	gmF 9/19/95 4.20e-1 ~~2.10~~	4.41 -1	N/A	ug/mL
95000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	CL-02	LIQUID	8.88	8.61	N/A	ug/mL
95000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	NO2-02	LIQUID	1.47 +2	1.43 +2	N/A	ug/mL
95000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	BR-02	LIQUID	<3.79 ~~2.17 +1~~	<3.79	N/A	ug/mL
95000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	NO3-02	LIQUID	2.17 +2	2.14 +2	N/A	ug/mL
95000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	PO4-02	LIQUID	134 +1	1.32 +1	N/A	ug/mL
000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	SO4-02	LIQUID	<4.07	7.30 +0 ~~<4.07~~	N/A	ug/mL
95000101	BY-108 (R)	4 DUP	S95T001365	0	aIC-01	OXALATE2	LIQUID	<2.98	<2.98	N/A	ug/mL
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	F-02	LIQUID	100	37.7 ~~31.6~~ gmF 9/19/95	N/A	ug/mL
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	CL-02	LIQUID	100	125.3 ~~62.6~~ gmF 9/19/95	N/A	ug/mL
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	NO2-02	LIQUID	100	184.0 ~~72.0~~ gmF 9/19/95	N/A	ug/mL
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	BR-02	LIQUID	100	100.1 ~~53.1~~ gmF 9/19/95	N/A	ug/mL
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	NO3-02	LIQUID	100	158.3 ~~79.2~~ gmF 9/19/93	N/A	ug/mL
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	PO4-02	LIQUID	100	112.3 ~~56.1~~ gmF 9/19/93	N/A	ug/mL
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	SO4-02	LIQUID	100	113.8 ~~57.0~~ gmF 9/19/93	N/A	ug/mL

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2278

ROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	
95000101	BY-108 (R)	5 SPK	S95T001365	0	aIC-01	OXALATE2		LIQUID	100	~~58.2~~	N/A	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	F-02		LIQUID	N/A	<68.88	~~3.72e1~~ 6.89e1	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	CL-02		LIQUID	N/A	<92.21	~~4.98e1~~ 9.22e1	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	NO2-02		LIQUID	N/A	<607.72	~~3.28~~ 6.08e2	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	BR-02		LIQUID	N/A	2.17+4	~~3.99~~ ~~4.99~~ 7.02e2	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	NO3-02		LIQUID	N/A	<776.59	~~4.19~~ ~~2.98~~ 7.77e2	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	PO4-02		LIQUID	N/A	<662.16	~~3.58~~ ~~4.07~~ 6.62e2	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	SO4-02		LIQUID	N/A	<753.26	~~4.07~~ ~~3.79~~ 7.53e2	ug/mL
95000105	BY-108 (R)	6 SAMPLE	S95T001659	0	aIC-01	OXALATE2		LIQUID	N/A	<551.06	~~2.98~~ 5.51e2	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	F-02		LIQUID	<68.88	~~<68.88~~ <68.88	N/A	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	CL-02		LIQUID	<92.21	<92.21	N/A	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	NO2-02		LIQUID	<607.72	<607.72	N/A	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	BR-02		LIQUID	2.17+4	2.17+4	N/A	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	NO3-02		LIQUID	<776.59	<776.59	N/A	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	PO4-02		LIQUID	<662.16	<662.16	N/A	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	SO4-02		LIQUID	<753.26	<753.26	N/A	ug/mL
95000105	BY-108 (R)	7 DUP	S95T001659	0	aIC-01	OXALATE2		LIQUID	<551.06	<551.06	N/A	ug/mL

Final page for worklist # 2278

E.W. Cohn 9-14-95
Analyst Signature Date

Verified 9/20/95

Analyst Signature Date

Data Entry Comments:

The spike recovery for NO_2, NO_3 & F was bad. The Proj. Coordinator was notified. This is not being seen at this time. Poor spk recovery is probably due to matrix problems.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WHC-CD-WM-DP-145, REV. 1

LAB LEADER INFO	
Method:	ia-533-106d0
Matrix:	liquid
Test Code:	@ia-01
Work List #:	2278
Batch #:	
Result Units	
(µg/g or µg/mL):	µg/mL
Spike Book Number:	10098C
Spike Sample #:	1
Prepared By:	Jann Frye
Prepared Date:	09/18/96
Chemist:	Jann Frye
Analyst:	Ed Calvin
Analysis Date:	09/14/96
Time Complete:	
Instrument Code:	IC01(40000)
Rerun:	0
Sample Prep:	direct
Sample Point:	BY-108(r)
Sample Type	
STANDARD	106N9C
SAMPLE 1	S96T001366
DUPLICATE 1	S96T001366dup
SAMPLE 2	S96T001869
DUPLICATE 2	S96T001869dup
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S96T001366spk
SPIKE DUPLICATE	

TECH INFO	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.062	<.063	<.647	<.699	<.596	<.678	<.632	<.496
Standard Data (µg/mL)	61.3	78.9	543.3	616	594.6	634.2	666.9	636.9
Sample 1 Data (µg/mL)	4.20E-01	8.96E+00	1.47E+02	2.17E+02	1.34E+01	<.678	<.632	<.496
Sample 1 Dilution Factor	0	0	0	0	0	0	0	0
Sample 1 Prep DF	1	1	1	1	1	1	1	1
Duplicate 1 Data (µg/mL)	4.41E-01	8.61E+00	1.43E+02	2.14E+02	1.32E+01	7.30E+00	<.632	<.496
Duplicate 1 Dilution Factor	0	0	0	0	0	0	0	0
Duplicate 1 Prep DF	1	1	1	1	1	1	1	1
Sample 2 Data (µg/mL)	<.062	<.063	<.647	<.699	<.596	<.678	2.17E+04	<.496
Sample 2 Dilution Factor	1111	1111	1111	1111	1111	1111	1111	1111
Sample 2 Prep DF	1	1	1	1	1	1	1	1
Duplicate 2 Data (µg/mL)	<.062	<.063	<.647	<.699	<.596	<.678	2.17E+04	<.496
Duplicate 2 Dilution Factor	1111	1111	1111	1111	1111	1111	1111	1111
Duplicate 2 Prep DF	1	1	1	1	1	1	1	1
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	1.53E+00	1.38E+01	1.96E+02	2.66E+02	4.41E+01	3.56E+01	3.06E+01	3.06E+01
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Std. Conc. (µg/mL)	59	79	532	614	649	631	676	529
Detection Limit	0.062	0.063	0.647	0.699	0.596	0.678	0.632	0.496
Matrix Detection Limit 1	3.72E-01	4.86E-01	3.28E+00	4.19E+00	3.56E+00	4.07E+00	3.79E+00	2.96E+00
Matrix Detection Limit 2	6.89E+01	8.22E+01	6.09E+02	7.77E+02	6.92E+02	7.53E+02	7.02E+02	5.51E+02
Matrix Detection Limit 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Matrix Detection Limit 4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]*100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	103.9%	99.9%	102.1%	100.3%	103.4%	100.9%	102.4%	102.9%
Sample 1 in µg/mL	4.20E-01	8.96E+00	1.47E+02	2.17E+02	1.34E+01	<4.07	<3.79	<2.98
Duplicate 1 in µg/mL	4.41E-01	8.61E+00	1.43E+02	2.14E+02	1.32E+01	7.30E+00	<3.79	<2.98
Duplicate 1 RPD	4.9%	3.0%	3.1%	1.9%	1.9%	N/A	N/A	N/A
Sample 2 in µg/mL	<98.98	<92.21	<907.72	<776.59	<892.16	<753.26	2.17E+04	<561.09
Duplicate 2 in µg/mL	<98.98	<92.21	<907.72	<776.59	<892.16	<753.26	2.17E+04	<561.09
Duplicate 2 RPD	N/A	N/A	N/A	N/A	N/A	N/A	0.1%	N/A
Spike % Recovery	37.7%	126.3%	144.0%	168.3%	112.3%	113.8%	108.1%	116.6%

Data Entry by: Jann Frye Date: 09/19/96
Approved by: Jann Frye Date: 9/19/96
Form DIONEX.WB1 Rev. 1.3

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T001365 & S95T001659		
TEST CODE:	@ic-01	ANALYST:	Ed Colvin
INSTRUMENT:	IC01(4000i)	ANALYSIS DATE:	09/14/95
WORK LIST #:	2278	SAMPLE POINT:	BY-106(r)
BATCH ID:		SAMPLE PREP:	direct

Result Units µg/mL	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
106N9C	103.9%	99.9%	102.1%	100.3%	103.4%	100.5%	102.4%	102.8%
S95T001365	4.20E-01	8.88E+00	1.47E+02	2.17E+02	1.34E+01	<4.07	<3.79	<2.98
S95T001365dup	4.41E-01	8.61E+00	1.43E+02	2.14E+02	1.32E+01	7.30E+00	<3.79	<2.98
Duplicate 1 RPD	4.9%	3.0%	3.1%	1.5%	1.6%	N/A	N/A	N/A
S95T001659	<68.88	<92.21	<607.72	<776.59	<662.16	<753.26	2.17E+04	<551.06
S95T001659dup	<68.88	<92.21	<607.72	<776.59	<662.16	<753.26	2.17E+04	<551.06
Duplicate 2 RPD	N/A	N/A	N/A	N/A	N/A	N/A	0.1%	N/A
S95T001365spk	37.7%	125.3%	144.0%	158.3%	112.3%	113.8%	106.1%	116.6%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Form Completed By:	Joann Fuge	Date:	9/19/95
Chemist Approval:	Joann Fuge	Date:	9/19/95

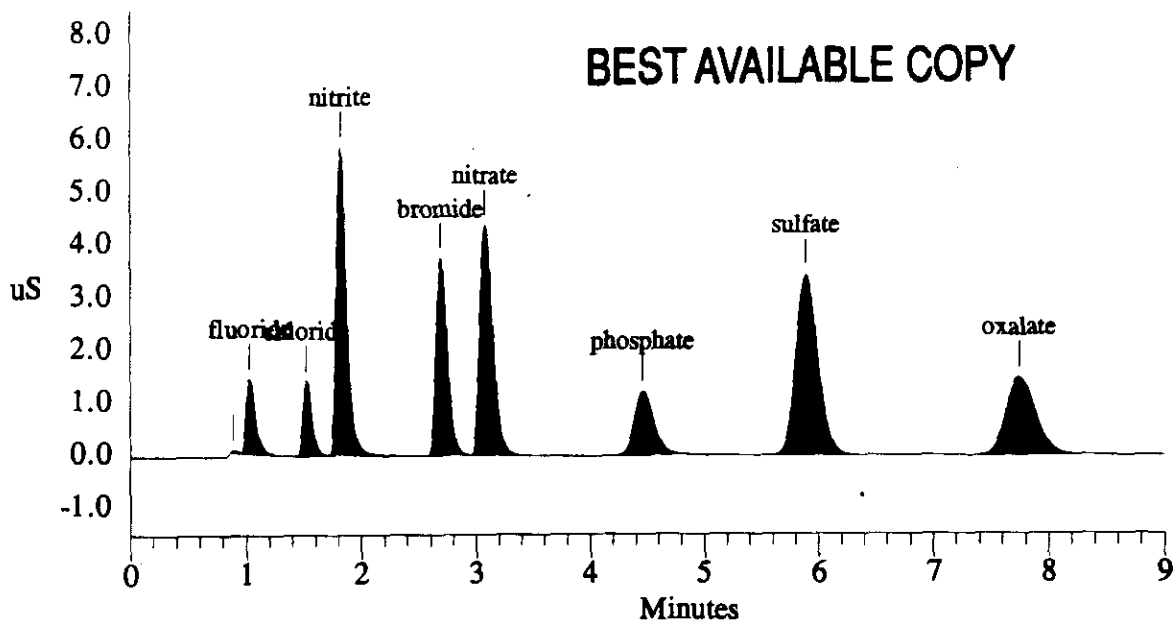
Sample Name: 106N9-C STD Date: 09/14/1995 07:52:45
Data File : C:\DX\DATA\95091451.D02
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 2 Detector:CDM-1
Analyst : E.M. Cohn Column: AG4A/AS4A anion column/SRS
9-14-95

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.03	fluoride	61.327	1421	7714	2	-2.83
3	1.52	chloride	78.895	1415	7517	1	0.00
4	1.82	nitrite	543.371	5860	34727	1	0.00
5	2.69	bromide	588.859	3746	25202	1	-0.37
6	3.08	nitrate	615.979	4388	34024	1	0.00
7	4.46	phosphate	564.635	1220	14126	1	-0.45
8	5.89	sulfate	634.222	3444	45367	1	-0.34
9	7.75	oxalate	539.859	1482	26231	1	-0.39
		Totals	3627.147	22977	194908		

File: 95091451.D02 Sample: 106N9-C STD



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 336 TO 346.

WHC-CD-WM-DP-145, REV. 1

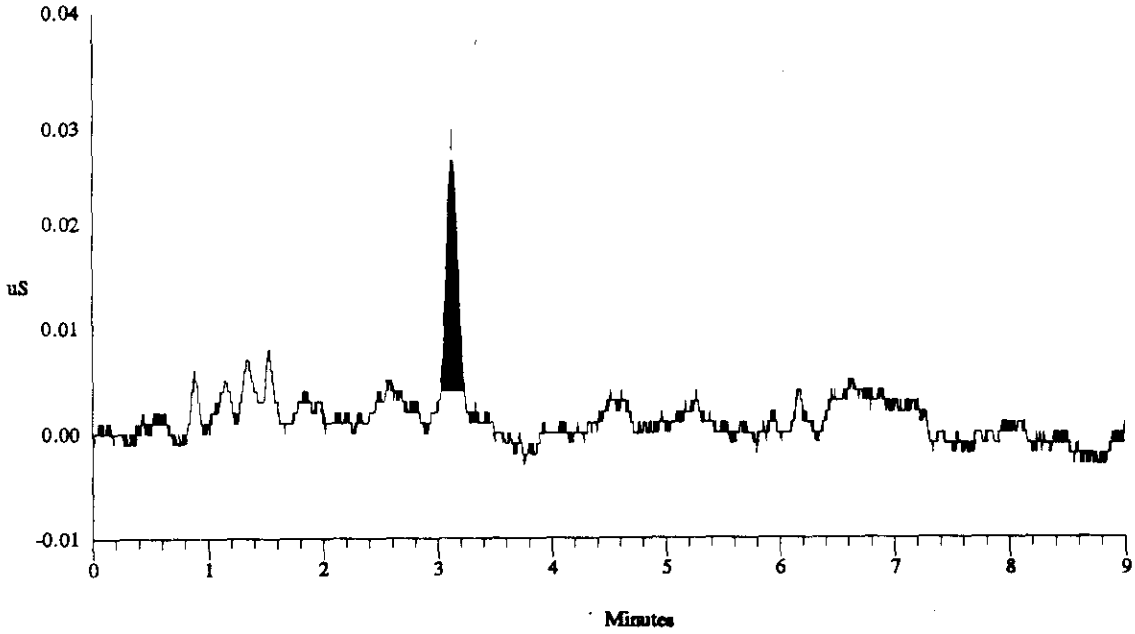
```
==========================================================================
| Sample Name: BLANK                          Date: 09/14/1995 07:41:23   |
| Data File  : C:\DX\DATA\95091451.D01                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
  ACI Address: 1  System: 1  Inject#: 1                  Detector:CDM-1   |
, Analyst    :                Column: AG4A/AS4A anion column/SRS          |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95091451.D01 Sample: BLANK



WHC-CD-WM-DP-145, REV. 1

Data Reprocessed On 09/18/1995 14:42:19

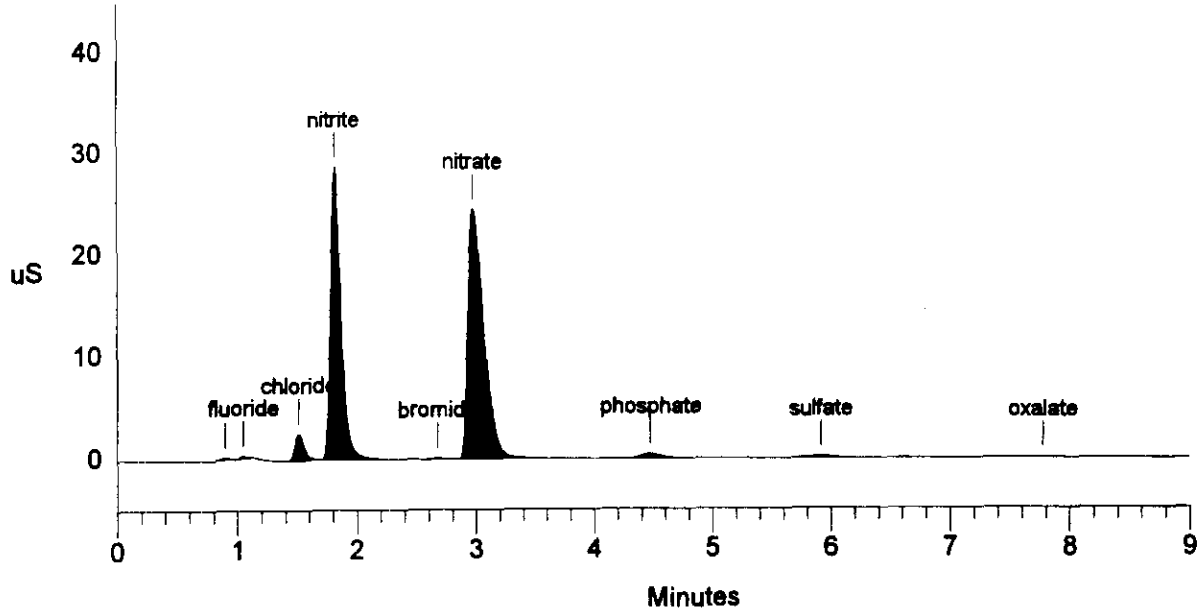
Sample Name: S95T001365	Date: 09/14/1995 08:47:31
Data File : C:\DX\DATA\95091451.D06	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 6	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	6	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	172	832	1	
2	1.05	fluoride	0.420	239	826	1	-0.94
3	1.51	chloride	8.878	2600	14118	1	-0.66
4	1.82	nitrite	147.415	28796	170509	1	0.00
5	2.68	bromide	2.100	147	888	1	-0.74
6	2.98	nitrate	217.123	24600	225302	1	-3.25
7	4.48	phosphate	13.419	458	5312	1	0.00
8	5.92	sulfate	2.401	194	2512	1	0.17
9	7.78	oxalate	2.513	75	1202	1	0.00
		Totals	394.269	57280	421502		

File: 95091451.D06 Sample: S95T001365



WHO-CD-WM-DP-145, REV. 1

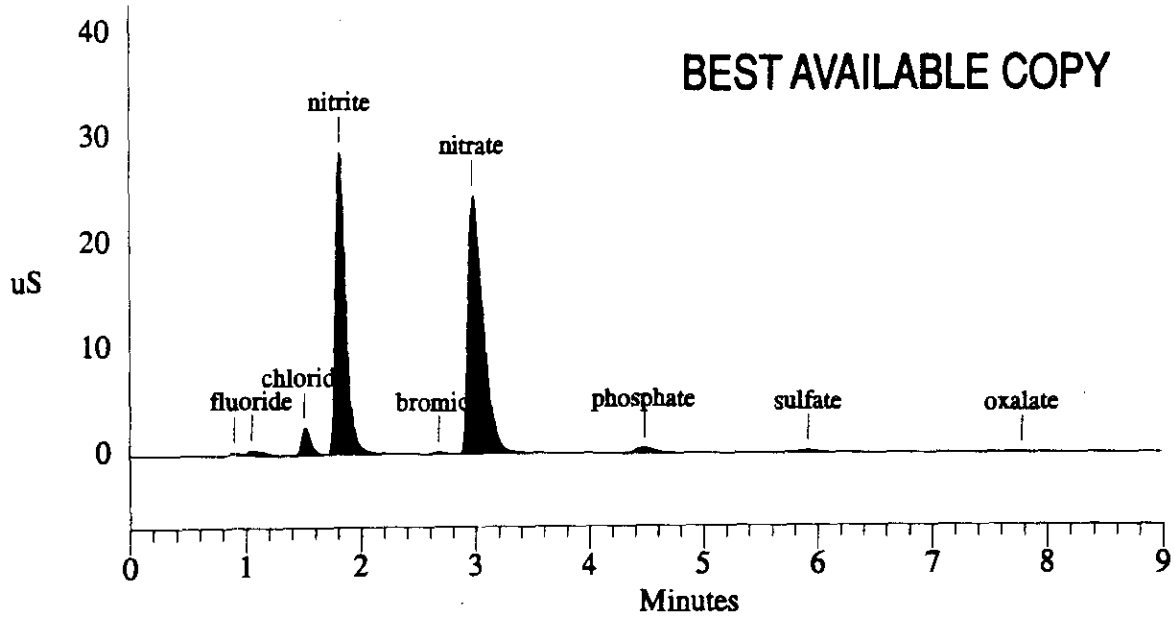
```
==========================================================================
| Sample Name: S95T001365                    Date: 09/14/1995 08:47:31    |
| Data File  : C:\DX\DATA\95091451.D06                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
  ACI Address: 1  System: 1  Inject#: 6                  Detector:CDM-1   |
  Analyst    :                Column: AG4A/AS4A anion column/SRS          |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	6	2700	5Hz	0.00	9.00	200	

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	188	1001	2	
2	1.05	fluoride	2.095	432	4377	2	-0.94
3	1.51	chloride	8.878	2600	14118	1	-0.66
4	1.82	nitrite	147.415	28796	170509	1	0.00
5	2.68	bromide	2.100	147	888	1	-0.74
6	2.98	nitrate	217.123	24600	225302	1	-3.25
7	4.48	phosphate	13.419	458	5312	1	0.00
8	5.92	sulfate	2.401	194	2512	1	0.17
9	7.78	oxalate	2.513	75	1202	1	0.00
		Totals	395.944	57489	425222		

File: 95091451.D06 Sample: S95T001365



WHO-CD-WM-DP-145, REV. 1

Data Reprocessed On 09/18/1995 14:42:53

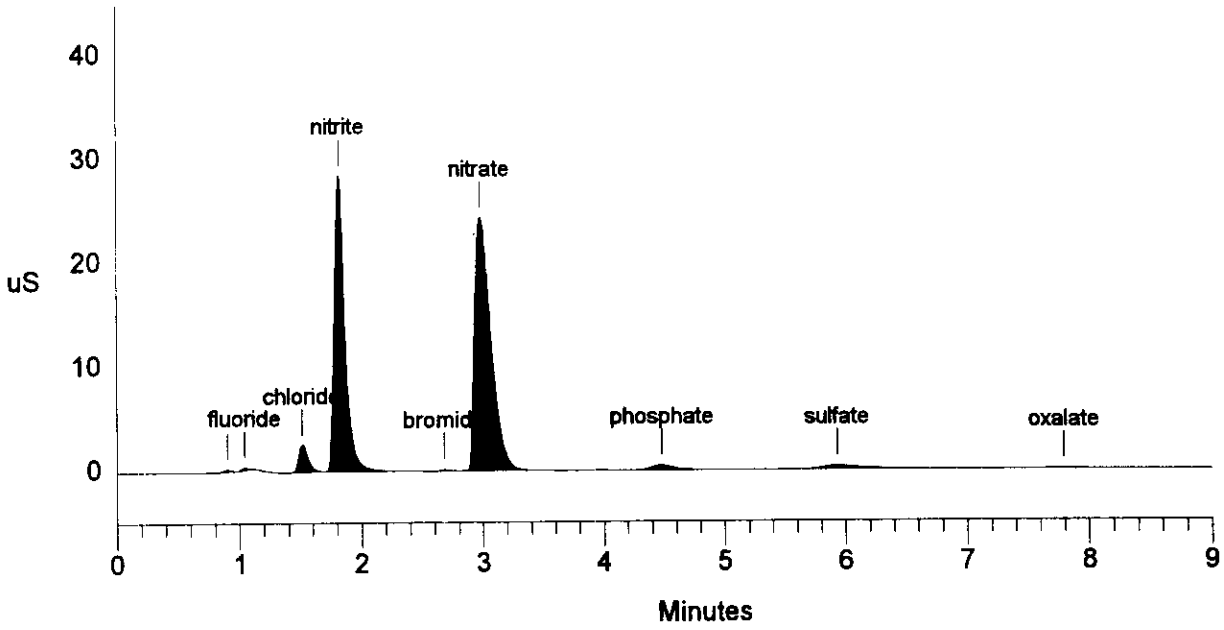
Sample Name: S95T001365 DUP	Date: 09/14/1995 08:58:42
Data File : C:\DX\DATA\95091451.D07	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 7	Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS	

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	6	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	184	874	1	
2	1.04	fluoride	0.441	242	870	1	-1.89
3	1.51	chloride	8.613	2560	13695	1	-0.66
4	1.82	nitrite	142.932	28545	164858	1	0.00
5	2.68	bromide	2.107	150	894	1	-0.74
6	2.98	nitrate	213.813	24425	221340	1	-3.25
7	4.48	phosphate	13.191	452	5213	1	0.00
8	5.93	sulfate	7.302	342	8371	1	0.34
9	7.79	oxalate	2.488	75	1181	1	0.13
		Totals	390.888	56975	417297		

File: 95091451.D07 Sample: S95T001365 DUP



WHO-OD-WM-DP-145, REV. 1

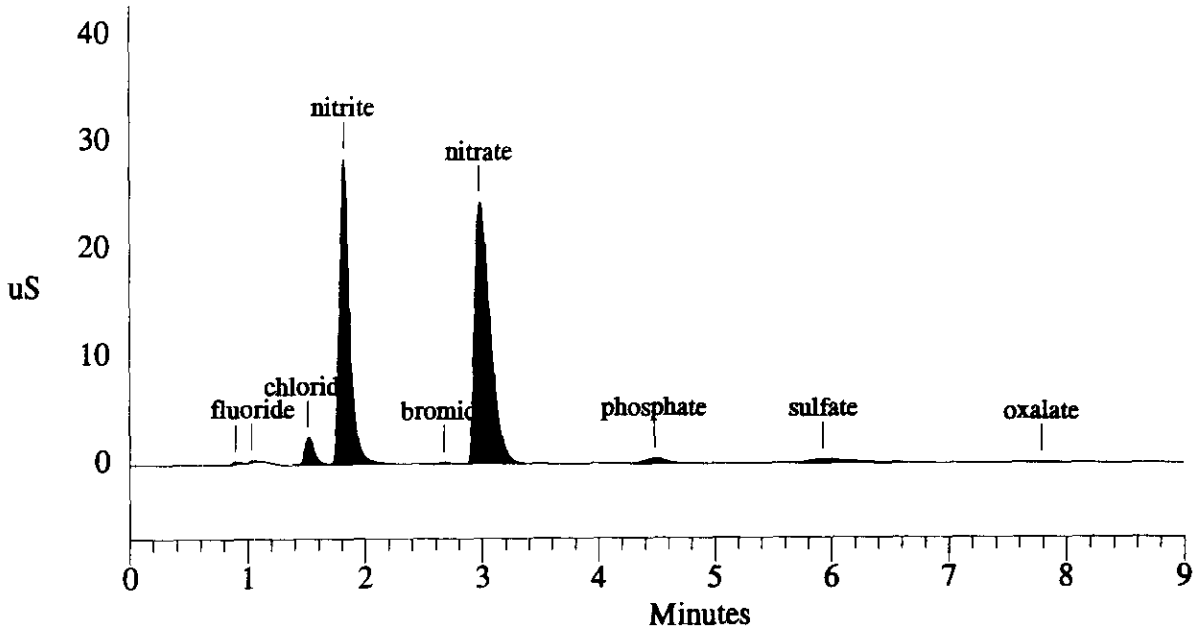
```
==========================================================================
| Sample Name: S95T001365  DUP                Date: 09/14/1995 08:58:42   |
| Data File  : C:\DX\DATA\95091451.D07                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 7                  Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	6	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	184	874	1	
2	1.04	fluoride	0.441	242	870	1	-1.89
3	1.51	chloride	8.613	2560	13695	1	-0.66
4	1.82	nitrite	142.932	28545	164858	1	0.00
5	2.68	bromide	2.107	150	894	1	-0.74
6	2.98	nitrate	213.813	24425	221340	1	-3.25
7	4.48	phosphate	13.191	452	5213	1	0.00
8	5.93	sulfate	7.302	342	8371	1	0.34
9	7.79	oxalate	2.488	75	1181	1	0.13
		Totals	390.888	56975	417297		

File: 95091451.D07 Sample: S95T001365 DUP



WHO-OS-WM-DP-146, REV. 1

Data Reprocessed On 09/18/1995 14:43:30

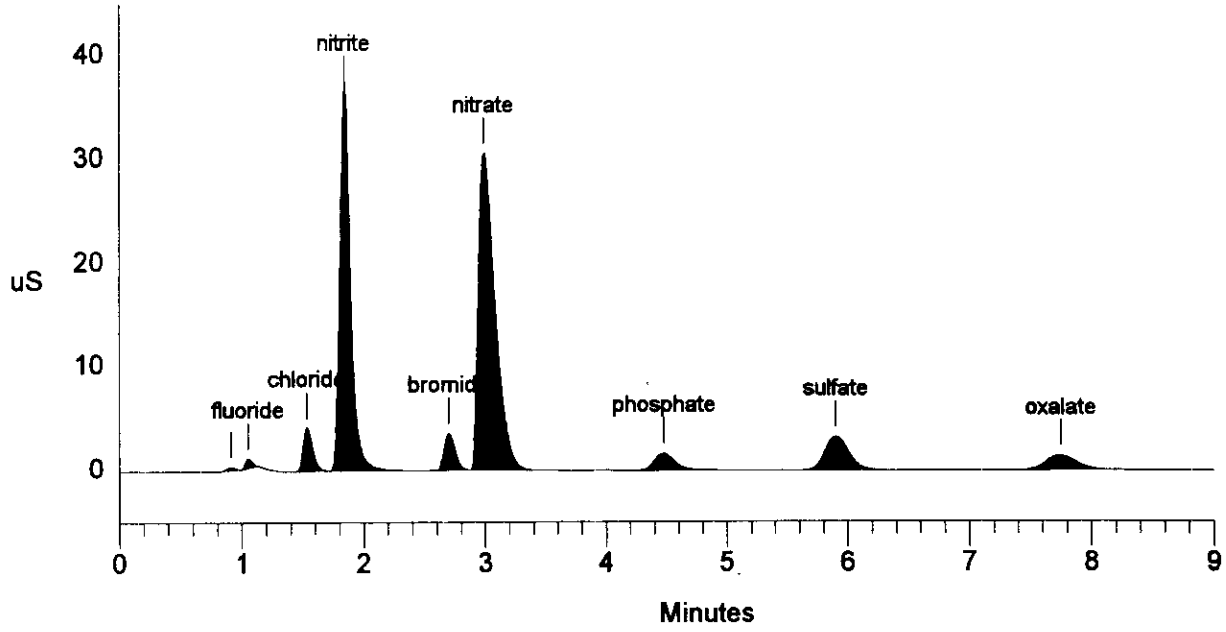
Sample Name: S95T001365 + SPIKE	Date: 09/14/1995 09:58:54
Data File : C:\DX\DATA\95091451.D10	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 10	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	6	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.91		0.000	246	1115	1	
2	1.05	fluoride	1.532	823	3177	1	-0.94
3	1.53	chloride	13.826	4112	22184	1	0.66
4	1.84	nitrite	185.701	36535	220232	1	1.10
5	2.70	bromide	30.520	3541	21852	1	0.00
6	2.99	nitrate	265.728	30546	286222	1	-2.92
7	4.48	phosphate	44.063	1649	18827	1	0.00
8	5.90	sulfate	35.982	3227	43270	1	-0.17
9	7.75	oxalate	30.575	1419	24944	1	-0.39
		Totals	607.927	82099	641824		

File: 95091451.D10 Sample: S95T001365 + SPIKE



WHO-CD-WM-DP-145, REV.1

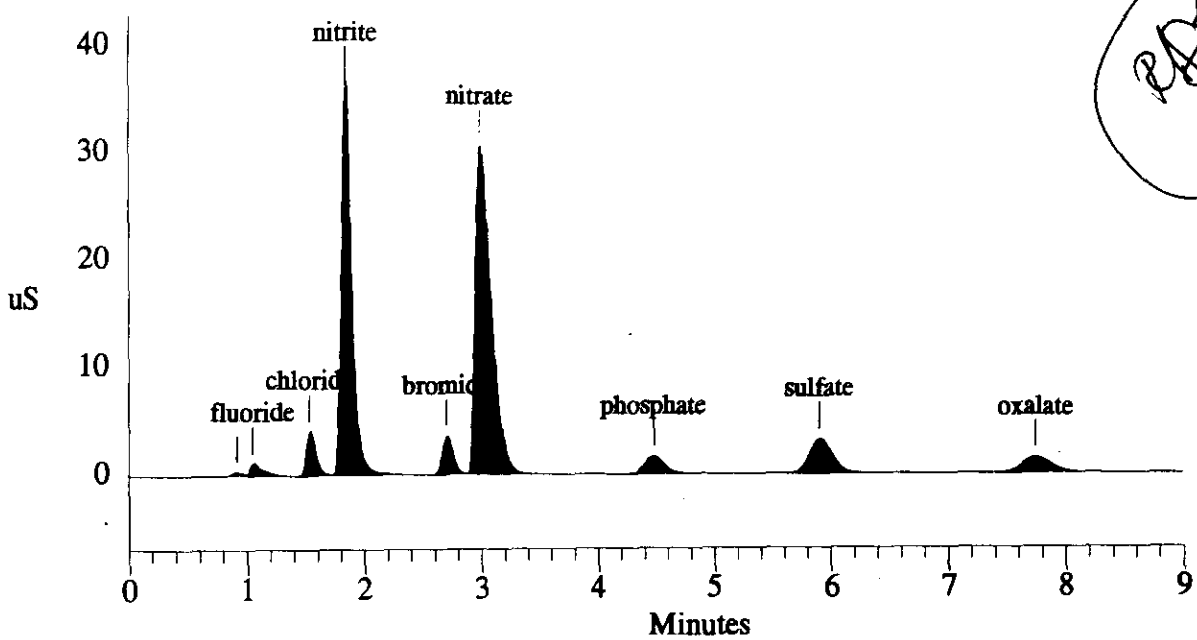
```
==========================================================================
| Sample Name: S95T001365  + SPIKE            Date: 09/14/1995 09:58:54  |
| Data File  : C:\DX\DATA\95091451.D10                                   |
| Method     : C:\DX\METHOD\KIT.MET                                      |
| ACI Address: 1  System: 1  Inject#: 10                Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	6	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.91		0.000	271	1372	2	
2	1.05	fluoride	3.962	1103	8408	2	-0.94
3	1.53	chloride	13.826	4112	22184	1	0.66
4	1.84	nitrite	185.701	36535	220232	1	1.10
5	2.70	bromide	30.520	3541	21852	1	0.00
6	2.99	nitrate	265.728	30546	286222	1	-2.92
7	4.48	phosphate	44.063	1649	18827	1	0.00
8	5.90	sulfate	35.982	3227	43270	1	-0.17
9	7.75	oxalate	30.575	1419	24944	1	-0.39
		Totals	610.357	82405	647312		

File: 95091451.D10 Sample: S95T001365 + SPIKE



WHO-CD-VIM DP-145, REV. 1

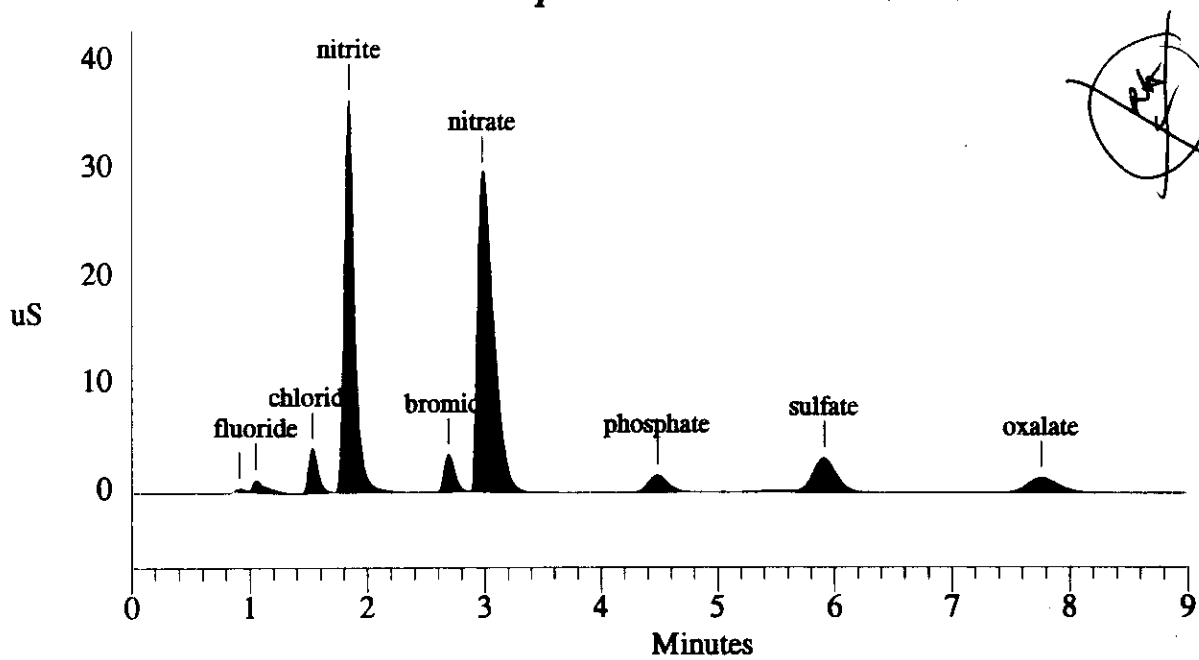
```
==============================================================================
| Sample Name: S95T001365  + SPIKE            Date: 09/14/1995 09:10:23       |
| Data File  : C:\DX\DATA\95091451.D08                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 8                    Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS             |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	6	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.91		0.000	210	982	2	
2	1.05	fluoride	3.921	1092	8320	2	-0.94
3	1.53	chloride	13.423	4051	21517	1	0.66
4	1.84	nitrite	181.207	36449	214252	1	1.10
5	2.69	bromide	29.758	3430	21282	1	-0.37
6	2.98	nitrate	259.942	29693	278678	1	-3.25
7	4.48	phosphate	43.083	1589	18386	1	0.00
8	5.91	sulfate	39.207	3213	47263	1	0.00
9	7.76	oxalate	29.937	1370	24397	1	-0.26
		Totals	600.479	81097	635076		

File: 95091451.D08 Sample: S95T001365 + SPIKE



WHO-CD-WM-DP-145, REV. 1

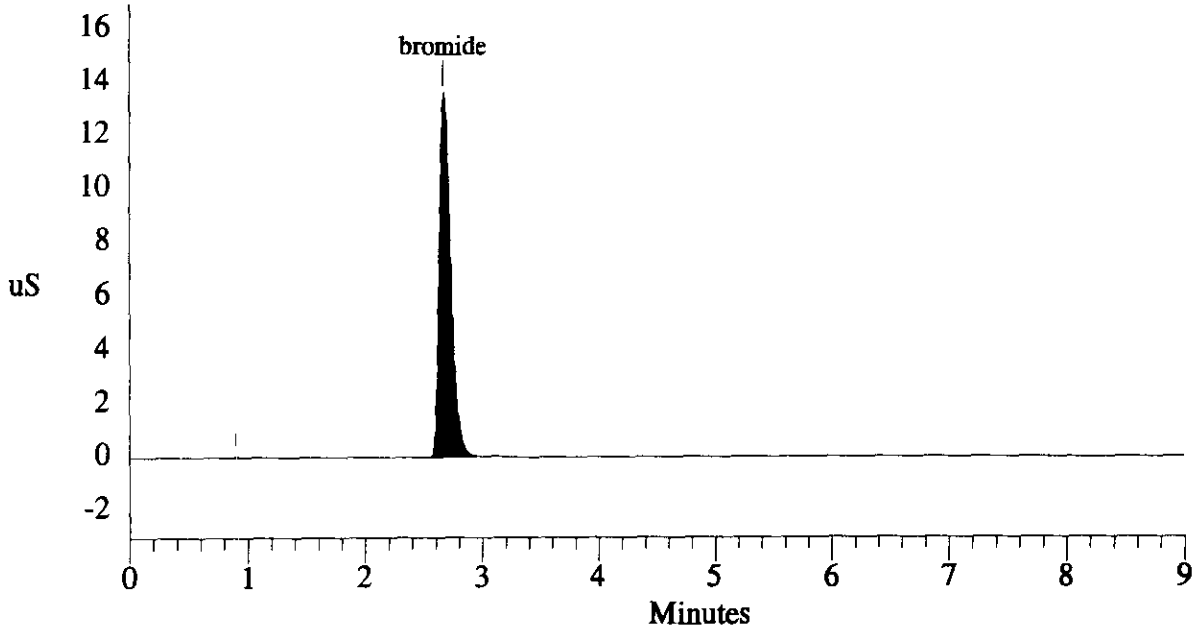
```
==============================================================================
| Sample Name: S95T001659                      Date: 09/14/1995 10:22:05      |
| Data File  : C:\DX\DATA\95091451.D12                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 12                   Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS             |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1111	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	2.67	bromide	21674.300	13446	90108	1	-1.11
		Totals	21674.300	13446	90108		

File: 95091451.D12 Sample: S95T001659



WHO-CD-WM-DP-145, REV. 1

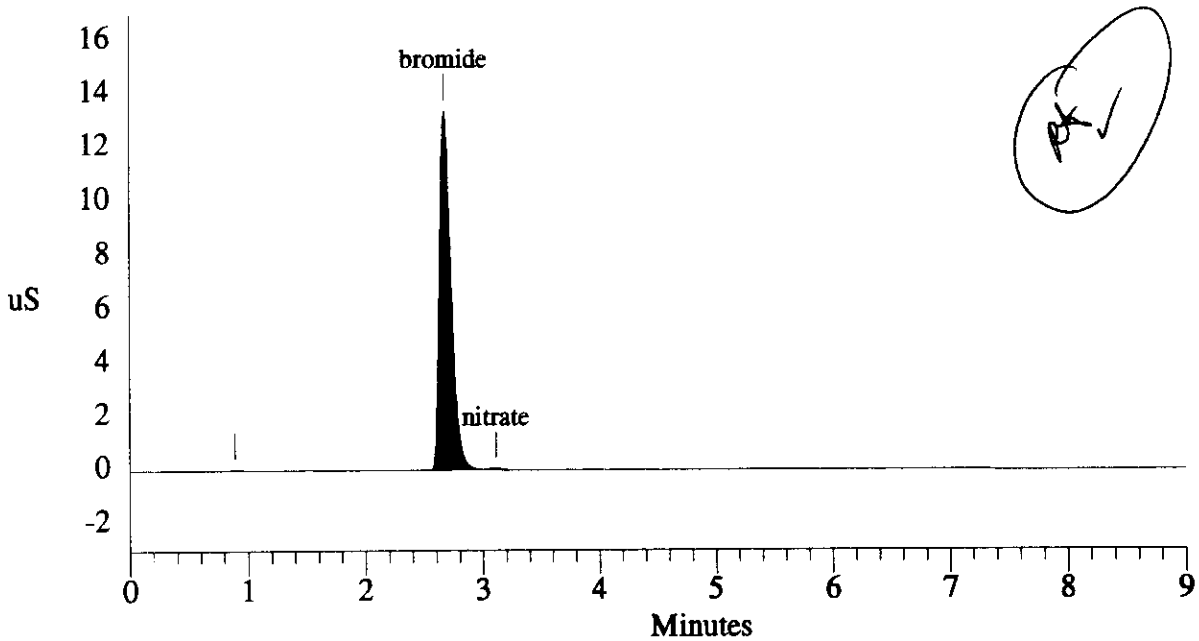
```
==========================================================================
| Sample Name: S95T001659  DUP                Date: 09/14/1995 10:32:38   |
| Data File  : C:\DX\DATA\95091451.D13                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 13                Detector:CDM-1    |
| Analyst    : EW Cole      Column: AG4A/AS4A anion column/SRS            |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1111	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	2.67	bromide	21658.560	13380	90037	1	-1.11
3	3.11	nitrate	94.840	64	428	1	0.97
		Totals	21753.401	13444	90466		

File: 95091451.D13 Sample: S95T001659 DUP



WHO-CD-WM-DP-146, REV.1

LABCORE Data Entry Template for Worklist# 2571

Analyst: DCD **Instrument:** IC01 IC01 **Book #** 106N9-D STD & SPIKE

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: IC BY-108, liquid. JMF Please write down sample size on SPK.

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK			@IC-01	F-02		LIQUID		<.062	N/A	ug/mL
		1	BLNK			@IC-01	CL-02		LIQUID		<.083	N/A	ug/mL
		1	BLNK			@IC-01	NO2-02		LIQUID		<.347	N/A	ug/mL
		1	BLNK			@IC-01	BR-02		LIQUID		<.632	N/A	ug/mL
		1	BLNK			@IC-01	NO3-02		LIQUID		<.699	N/A	ug/mL
		1	BLNK			@IC-01	PO4-02		LIQUID		<.596	N/A	ug/mL
		1	BLNK			@IC-01	SO4-02		LIQUID		<.678	N/A	ug/mL
		1	BLNK			@IC-01	OXALATE2		LIQUID		<.496	N/A	ug/mL
		2	STD			@IC-01	F-02		LIQUID		60.6	N/A	ug/mL
		2	STD			@IC-01	CL-02		LIQUID		79.8	N/A	ug/mL
		2	STD			@IC-01	NO2-02		LIQUID		549.4	N/A	ug/mL
		2	STD			@IC-01	BR-02		LIQUID		589.3	N/A	ug/mL
		2	STD			@IC-01	NO3-02		LIQUID		642.7	N/A	ug/mL
		2	STD			@IC-01	PO4-02		LIQUID		570.7	N/A	ug/mL
		2	STD			@IC-01	SO4-02		LIQUID		648.6	N/A	ug/mL
		2	STD			@IC-01	OXALATE2		LIQUID		532.2	N/A	ug/mL
95000104	BY-108 (R)	3	SAMPLE	S95T001373	0	@IC-01	F-02		LIQUID	N/A	<6.32e2	6.32e2	ug/mL
95000104	BY-108 (R)	3	SAMPLE	S95T001373	0	@IC-01	CL-02		LIQUID	N/A	4.92e3	8.47e2	ug/mL

Data Entry Comments: All samples and Dups ran at 10201 DF. .100 - 10 - .100 - 10. Spike was ran at .100 - 10 - .100 - 9.9 + .100 spike.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2571

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	3 SAMPLE	S95T001373	0	aIC-01	NO2-02	LIQUID	N/A	9.09e4	5.58e3	ug/mL
95000104	BY-108 (R)	3 SAMPLE	S95T001373	0	aIC-01	BR-02	LIQUID	N/A	<6.45e3	6.45e3	ug/mL
95000104	BY-108 (R)	3 SAMPLE	S95T001373	0	aIC-01	NO3-02	LIQUID	N/A	3.56e5	7.13e3	ug/mL
95000104	BY-108 (R)	3 SAMPLE	S95T001373	0	aIC-01	PO4-02	LIQUID	N/A	<6.08e3	6.08e3	ug/mL
95000104	BY-108 (R)	3 SAMPLE	S95T001373	0	aIC-01	SO4-02	LIQUID	N/A	<6.92e3	6.92e3	ug/mL
95000104	BY-108 (R)	3 SAMPLE	S95T001373	0	aIC-01	OXALATE2	LIQUID	N/A	<5.06e3	5.06e3	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	F-02	LIQUID	<6.32e2	<6.32e2	N/A	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	CL-02	LIQUID	4.92e3	5.02e3	N/A	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	NO2-02	LIQUID	9.09e4	9.15e4	N/A	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	BR-02	LIQUID	<6.45e3	<6.45e3	N/A	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	NO3-02	LIQUID	3.56e5	3.60e5	N/A	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	PO4-02	LIQUID	<6.08e3	<6.08e3	N/A	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	SO4-02	LIQUID	<6.92e3	<6.92e3	N/A	ug/mL
95000104	BY-108 (R)	4 DUP	S95T001373	0	aIC-01	OXALATE2	LIQUID	<5.06e3	<5.06e3	N/A	ug/mL
95000104	BY-108 (R)	5 SPK	S95T001373	0	aIC-01	F-02	LIQUID		104.8	N/A	ug/mL
95000104	BY-108 (R)	5 SPK	S95T001373	0	aIC-01	CL-02	LIQUID		106.1	N/A	ug/mL
95000104	BY-108 (R)	5 SPK	S95T001373	0	aIC-01	NO2-02	LIQUID		61.5	N/A	ug/mL
95000104	BY-108 (R)	5 SPK	S95T001373	0	aIC-01	BR-02	LIQUID		101.7	N/A	ug/mL
95000104	BY-108 (R)	5 SPK	S95T001373	0	aIC-01	NO3-02	LIQUID		-43.0	N/A	ug/mL
95000104	BY-108 (R)	5 SPK	S95T001373	0	aIC-01	PO4-02	LIQUID		106.4	N/A	ug/mL
95000104	BY-108 (R)	5 SPK	S95T001373	0	aIC-01	SO4-02	LIQUID		103.5	N/A	ug/mL

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2571

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	5 SPK	S95T001373	0		@IC-01	OXALATE2	LIQUID		100.1	N/A	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	F-02	LIQUID	N/A	<6.32e2	6.32e2	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	CL-02	LIQUID	N/A	3.74e3	8.47e2	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	NO2-02	LIQUID	N/A	7.09e4	5.58e3	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	BR-02	LIQUID	N/A	<6.45e3	6.45e3	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	NO3-02	LIQUID	N/A	2.71e5	7.13e3	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	PO4-02	LIQUID	N/A	<6.08e3	6.08e3	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	SO4-02	LIQUID	N/A	<6.92e3	6.92e3	ug/mL
95000104	BY-108 (R)	6 SAMPLE	S95T001427	0		@IC-01	OXALATE2	LIQUID	N/A	<5.06e3	5.06e3	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	F-02	LIQUID	<6.32e2	<6.32e2	N/A	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	CL-02	LIQUID	3.74e3	3.79e3	N/A	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	NO2-02	LIQUID	2.09e4	2.24e4	N/A	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	BR-02	LIQUID	<6.45e3	<6.45e3	N/A	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	NO3-02	LIQUID	2.71e5	2.73e5	N/A	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	PO4-02	LIQUID	<6.08e3	<6.08e3	N/A	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	SO4-02	LIQUID	<6.92e3	<6.92e3	N/A	ug/mL
95000104	BY-108 (R)	7 DUP	S95T001427	0		@IC-01	OXALATE2	LIQUID	<5.06e3	<5.06e3	N/A	ug/mL
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		@IC-01	F-02	LIQUID	N/A	<6.32e2	6.32e2	ug/mL
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		@IC-01	CL-02	LIQUID	N/A	4.01e3	8.47e2	ug/mL
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		@IC-01	NO2-02	LIQUID	N/A	7.38e4	5.58e3	ug/mL
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		@IC-01	BR-02	LIQUID	N/A	<6.45e2	6.45e3	ug/mL
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		@IC-01	NO3-02	LIQUID	N/A	2.54e5	7.13e3	ug/mL

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2571

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		aIC-01	PO4-02	LIQUID	N/A	<6.08e3	6.08e3	ug/mL
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		aIC-01	SO4-02	LIQUID	N/A	<6.92e3	6.92e3	ug/mL
95000104	BY-108 (R)	8 SAMPLE	S95T001430	0		aIC-01	OXALATE2	LIQUID	N/A	<5.06e3	5.06e3	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	F-02	LIQUID	<6.32e2	<6.32e2	N/A	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	CL-02	LIQUID	4.01e3	4.03e3	N/A	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	NO2-02	LIQUID	7.38e4	7.20e4	N/A	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	BR-02	LIQUID	<6.45e3	<6.45e3	N/A	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	NO3-02	LIQUID	2.54e5	2.51e5	N/A	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	PO4-02	LIQUID	<6.08e3	<6.08e3 ~~<6.08~~	N/A gms 10/2/95	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	SO4-02	LIQUID	<6.92e3	<6.92e3	N/A	ug/mL
95000104	BY-108 (R)	9 DUP	S95T001430	0		aIC-01	OXALATE2	LIQUID	<5.06e3	<5.06e3	N/A	ug/mL

Final page for worklist # 2571

David C. Durham 9-26-95
Analyst Signature **Date**

Analyst Signature **Date**

Entered + Verified 10/2/95
Jann Fuge

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T001373 & S95T001427 & S95T001430		
TEST CODE:	@ic-01	ANALYST:	David Dunham
INSTRUMENT:	ic01	ANALYSIS DATE:	09/26/95
WORK LIST #:	2571	SAMPLE POINT:	BY-108(r)
BATCH ID:		SAMPLE PREP:	direct

Result Units µg/mL	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
106N9D	102.7%	101.0%	102.9%	104.7%	104.5%	102.8%	102.5%	101.2%
S95T001373	<632.46	4.92E+03	9.09E+04	3.56E+05	<6079.80	<6916.28	<6447.03	<5059.70
S95T001373dup	<632.46	5.02E+03	9.15E+04	3.60E+05	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 1 RPD	N/A	2.1%	0.7%	0.9%	N/A	N/A	N/A	N/A
S95T001427	<632.46	3.74E+03	7.09E+04	2.71E+05	<6079.80	<6916.28	<6447.03	<5059.70
S95T001427dup	<632.46	3.79E+03	7.24E+04	2.73E+05	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 2 RPD	N/A	1.2%	2.1%	0.6%	N/A	N/A	N/A	N/A
S95T001430	<632.46	4.01E+03	7.38E+04	2.54E+05	<6079.80	<6916.28	<6447.03	<5059.70
S95T001430dup	<632.46	4.03E+03	7.20E+04	2.51E+05	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 3 RPD	N/A	0.5%	2.5%	1.0%	N/A	N/A	N/A	N/A
S95T001373spk	104.8%	106.1%	61.5%	-43.0%	106.4%	103.5%	101.7%	100.1%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Form Completed By:	Jana Fuge	Date:	10/2/95
Chemist Approval:	Jana Fuge	Date:	10/2/95

LAB LEADER INFO	
Method:	LA-533-106 d-1
Matrix:	liquid
Test Code:	@ic-01
Work List #:	2571
Batch #:	
Result Units	
(µg/g or µg/mL):	µg/mL
Spike Book Number:	106N9D
Spike Sample #:	1
Prepared By:	Jann Frye
Prepared Date:	10/02/95
Chemist:	Jann Frye
Analyst:	David Dunham
Analysis Date:	09/26/95
Time Complete:	03:40 AM
Instrument Code:	ic01
Rerun:	0
Sample Prep:	direct
Sample Point:	BY-108(r)
Sample Type	
STANDARD	106N9D
SAMPLE 1	S95T001373
DUPLICATE 1	S95T001373dup
SAMPLE 2	S95T001427
DUPLICATE 2	S95T001427dup
SAMPLE 3	S95T001430
DUPLICATE 3	S95T001430dup
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T001373spk
SPIKE DUPLICATE	

PRINT

TECH INFO	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<0.062	<.083	<.647	<.699	<.596	<.678	<.632	<.496
Standard Data (µg/mL)	80.6	79.8	549.4	642.7	570.7	648.6	589.3	532.2
Sample 1 Data (µg/mL)	<.062	4.92E+03	9.09E+04	3.58E+06	<.596	<.678	<.632	<.496
Sample 1 Dilution Factor	10201	10201	10201	10201	10201	10201	10201	10201
Sample 1 Prep DF	1	1	1	1	1	1	1	1
Duplicate 1 Data (µg/mL)	<.062	5.02E+03	9.15E+04	3.60E+06	<.596	<.678	<.632	<.496
Duplicate 1 Dilution Factor	10201	10201	10201	10201	10201	10201	10201	10201
Duplicate 1 Prep DF	1	1	1	1	1	1	1	1
Sample 2 Data (µg/mL)	<.062	3.74E+03	7.09E+04	2.71E+06	<.596	<.678	<.632	<.496
Sample 2 Dilution Factor	10201	10201	10201	10201	10201	10201	10201	10201
Sample 2 Prep DF	1	1	1	1	1	1	1	1
Duplicate 2 Data (µg/mL)	<.062	3.79E+03	7.24E+04	2.73E+06	<.596	<.678	<.632	<.496
Duplicate 2 Dilution Factor	10201	10201	10201	10201	10201	10201	10201	10201
Duplicate 2 Prep DF	1	1	1	1	1	1	1	1
Sample 3 Data (µg/mL)	<.062	4.01E+03	7.38E+04	2.64E+06	<.596	<.678	<.632	<.496
Sample 3 Dilution Factor	10201	10201	10201	10201	10201	10201	10201	10201
Sample 3 Prep DF	1	1	1	1	1	1	1	1
Duplicate 3 Data (µg/mL)	<.062	4.03E+03	7.20E+04	2.61E+06	<.596	<.678	<.632	<.496
Duplicate 3 Dilution Factor	10201	10201	10201	10201	10201	10201	10201	10201
Duplicate 3 Prep DF	1	1	1	1	1	1	1	1
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	6.24E+03	1.34E+04	1.24E+06	3.30E+06	5.87E+04	6.60E+04	5.90E+04	5.32E+04
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
Std. Conc. (µg/mL)	80	79	534	614	546	631	575	528
Detection Limit	0.062	0.083	0.647	0.699	0.596	0.678	0.632	0.496
Matrix Detection Limit 1	6.32E+02	8.47E+02	5.58E+03	7.13E+03	6.08E+03	6.92E+03	6.45E+03	5.06E+03
Matrix Detection Limit 2	6.32E+02	8.47E+02	5.58E+03	7.13E+03	6.08E+03	6.92E+03	6.45E+03	5.06E+03
Matrix Detection Limit 3	6.32E+02	8.47E+02	5.58E+03	7.13E+03	6.08E+03	6.92E+03	6.45E+03	5.06E+03
Matrix Detection Limit 4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Spike Recovery = [(Spike+Sample)-(Sample)*(Total Volume)]/[(Spike Vol.)*(Spike Std.)*(Sample DF)]*100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	102.7%	101.0%	102.9%	104.7%	104.8%	102.8%	102.8%	101.2%
Sample 1 in µg/mL	<632.46	4.92E+03	9.09E+04	3.58E+06	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 1 in µg/mL	<632.46	5.02E+03	9.15E+04	3.60E+06	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 1 RPD	N/A	2.1%	0.7%	0.9%	N/A	N/A	N/A	N/A
Sample 2 in µg/mL	<632.46	3.74E+03	7.09E+04	2.71E+06	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 2 in µg/mL	<632.46	3.79E+03	7.24E+04	2.73E+06	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 2 RPD	N/A	1.2%	2.1%	0.8%	N/A	N/A	N/A	N/A
Sample 3 in µg/mL	<632.46	4.01E+03	7.38E+04	2.64E+06	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 3 in µg/mL	<632.46	4.03E+03	7.20E+04	2.61E+06	<6079.80	<6916.28	<6447.03	<5059.70
Duplicate 3 RPD	N/A	0.5%	2.5%	1.0%	N/A	N/A	N/A	N/A
Spike % Recovery	104.5%	106.1%	61.5%	-43.0%	106.4%	103.6%	101.7%	100.1%

Data Entry by: Jann Frye Date: 10/02/95
Approved by: Jann Frye Date: 10/2/95
Form DIONEX.WB1 Rev. 1.3

```
==========================================================================
| Sample Name: BLANK                          Date: 09/26/1995 00:56:17   |
| Data File  : C:\DX\DATA\95092601.D19                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 19                Detector:CDM-1    |
| Analyst    : Dawn Dunham  Column: AG4A/AS4A anion column/SRS            |
==========================================================================
```

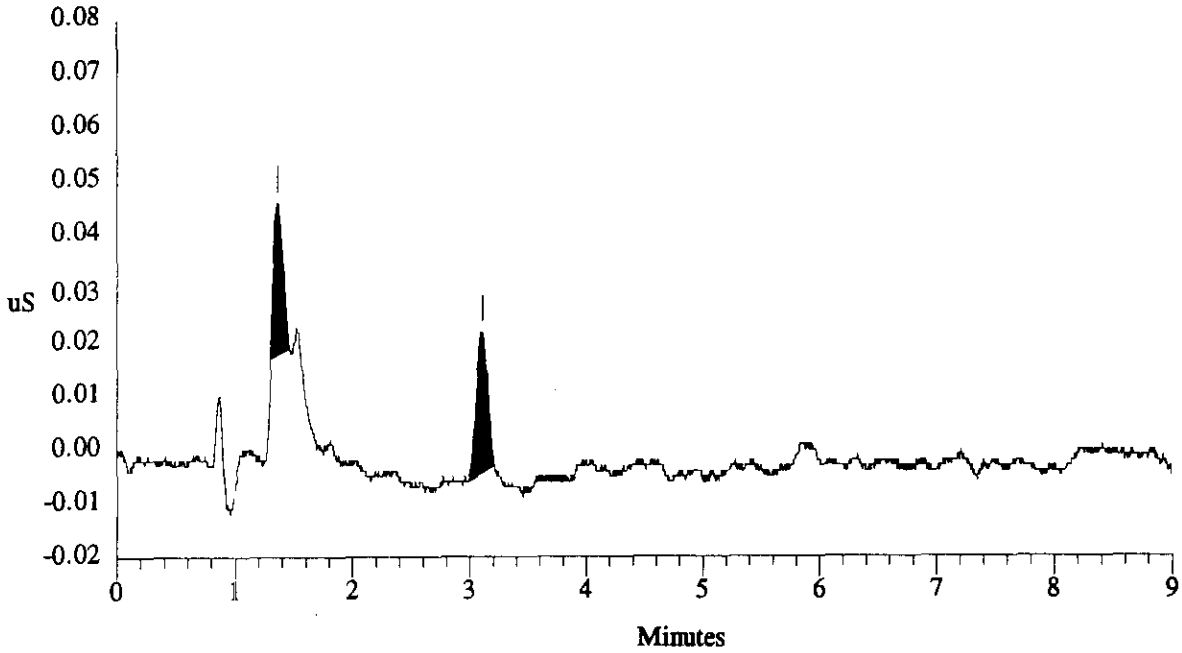
9-26-95

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95092601.D19 Sample: BLANK



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 353 TO 363.

WHC-SD-WM-DP-145, REV. 1

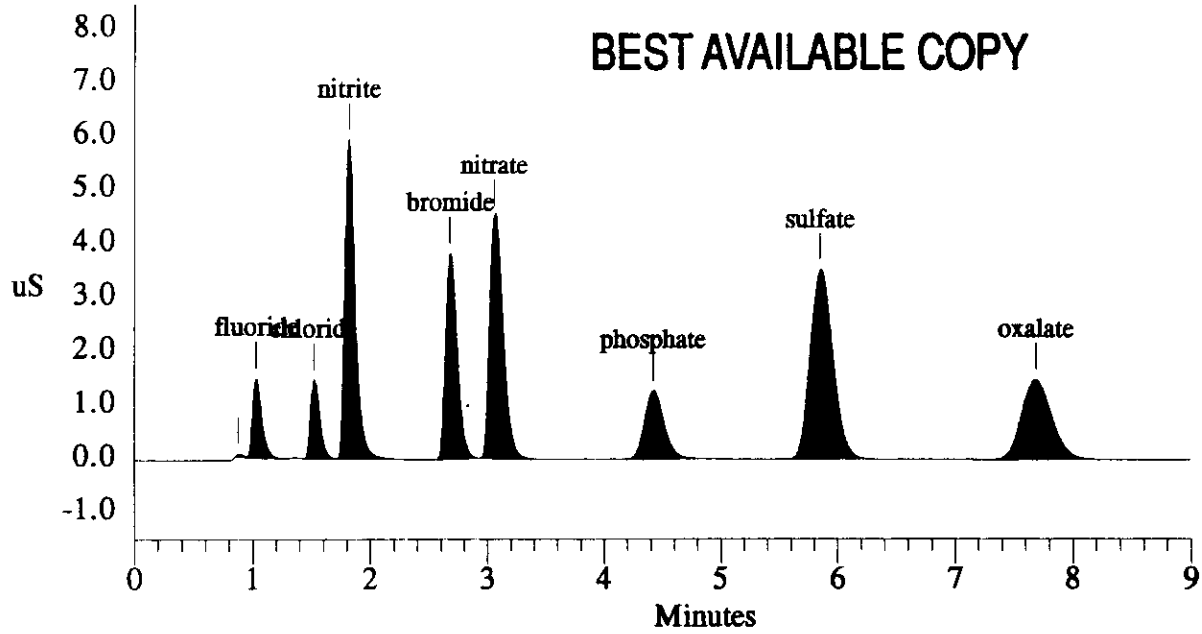
Sample Name: 106N9-D Date: 09/26/1995 00:44:30
Data File : C:\DX\DATA\95092601.D18
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 18 Detector:CDM-1
Analyst : David Dunham Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	49	207	2	
2	1.03	fluoride	60.679	1463	7631	2	-2.83
3	1.52	chloride	79.838	1447	7604	1	0.00
4	1.82	nitrite	549.360	5940	35120	1	0.00
5	2.68	bromide	589.315	3819	25223	1	-0.74
6	3.06	nitrate	642.743	4507	35533	1	-0.65
7	4.42	phosphate	570.688	1269	14286	1	-1.34
8	5.85	sulfate	648.601	3529	46425	1	-1.02
9	7.69	oxalate	532.193	1491	25839	1	-1.16
		Totals	3673.418	23514	197867		

File: 95092601.D18 Sample: 106N9-D



WHO-CD-WM-DP-145, REV. 1

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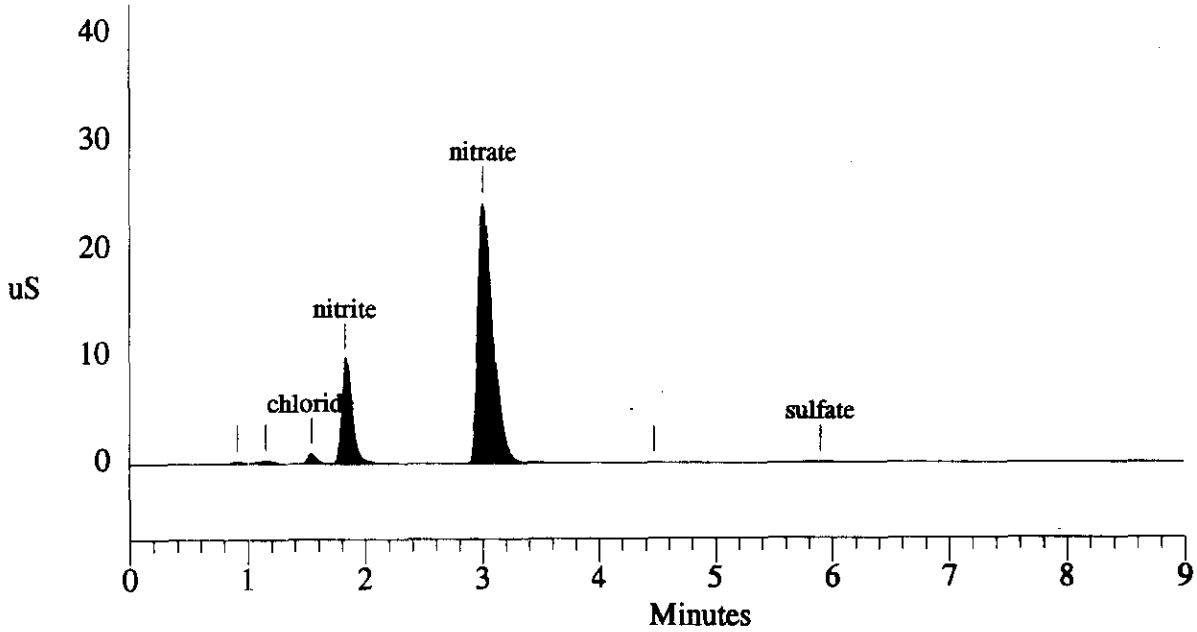
==========================================================================
| Sample Name: S95T001373                    Date: 09/26/1995 01:06:13    |
| Data File  : C:\DX\DATA\95092601.D20                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 20                Detector:CDM-1    |
| Analyst    :                Column: AG4A/AS4A anion column/SRS          |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	10201	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name		Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.91			0.000	185	993	2	
2	1.15			0.000	320	2978	2	
3	1.54	chloride	OK	4921.532	917	4753	1	1.32
4	1.83	nitrite	OK	90882.149	9764	58385	1	0.55
5	3.01	nitrate	OK	356478.588	24382	216414	1	-2.27
7	5.90	sulfate	<THAN	1713.454	68	853	1	-0.17
			Totals	453995.724	35637	284375		

File: 95092601.D20 Sample: S95T001373



WHO-SD-WM-DP-145, REV. 1

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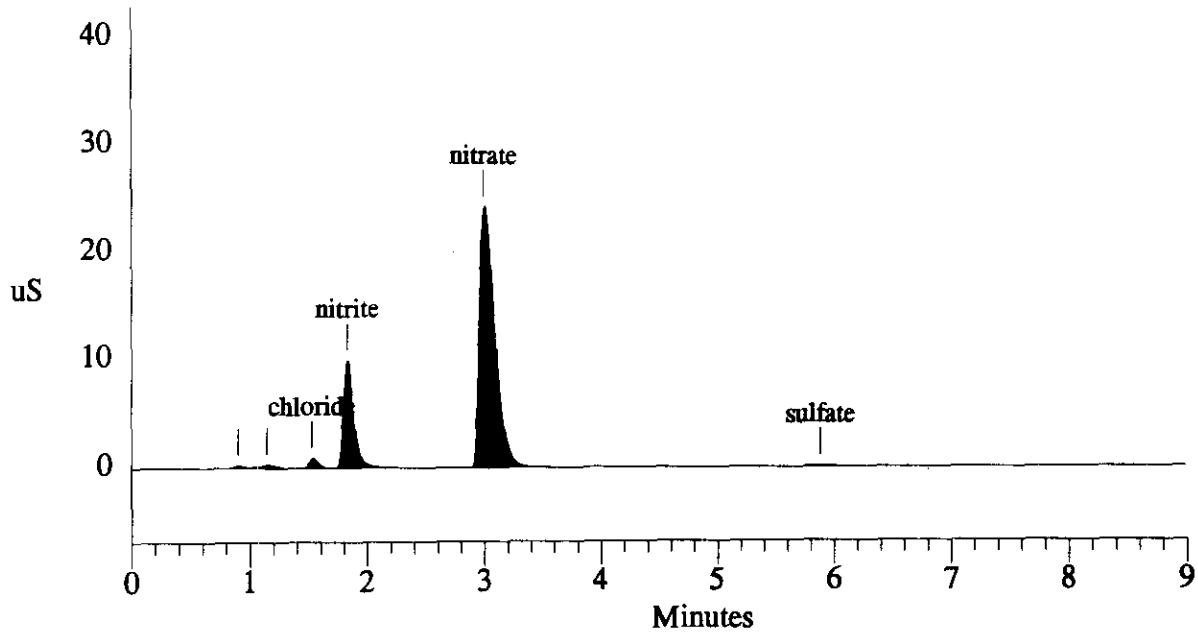
==================================================================================
| Sample Name: S95T001373  DUP                    Date: 09/26/1995 01:15:59      |
| Data File  : C:\DX\DATA\95092601.D21                                           |
| Method     : C:\DX\METHOD\KIT.MET                                              |
| ACI Address: 1  System: 1  Inject#: 21                      Detector:CDM-1     |
| Analyst    :                  Column: AG4A/AS4A anion column/SRS              |
==================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	10201	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name		Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90			0.000	175	923	2	
2	1.15			0.000	322	2868	2	
3	1.53	chloride	OK	5023.682	914	4845	1	0.66
4	1.83	nitrite	OK	91488.184	9965	58788	1	0.55
5	3.00	nitrate	OK	359730.790	24265	218686	1	-2.60
6	5.89	sulfate	LTHAN	1903.082	78	985	1	-0.34
			Totals	458145.738	35718	287095		

File: 95092601.D21 Sample: S95T001373 DUP



WHO-SD-WM-DP-145, REV.1

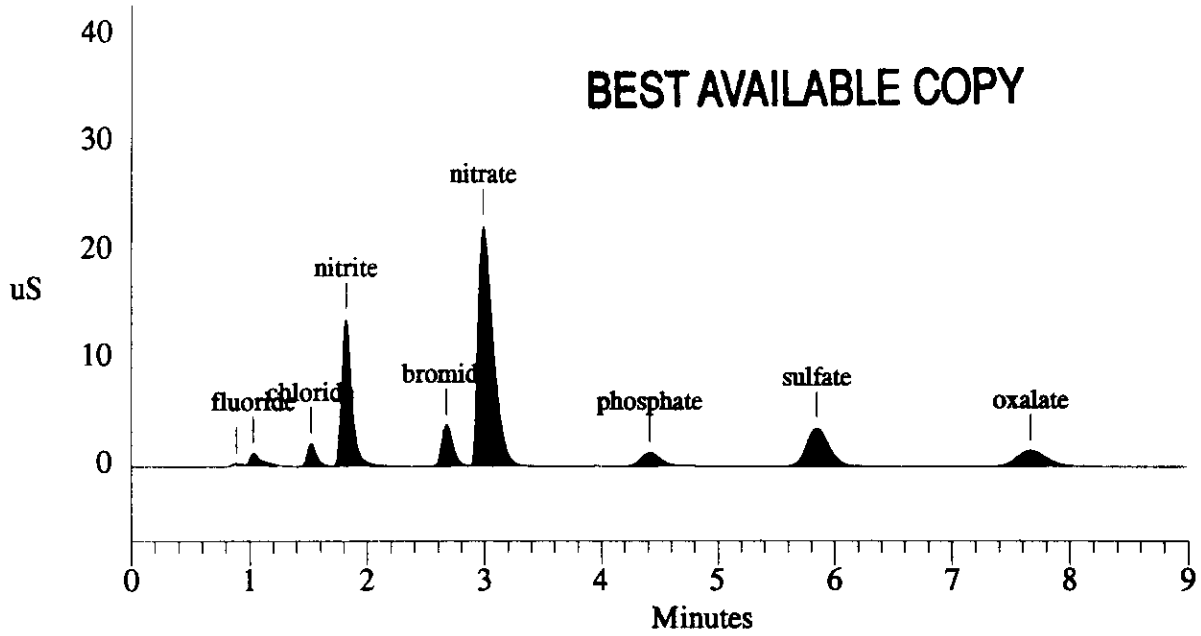
```
==========================================================================
| Sample Name: S95T001373  SPIKE              Date: 09/26/1995 01:26:43   |
| Data File  : C:\DX\DATA\95092601.D22                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 22                Detector:CDM-1    |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS        |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	10201	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	147	650	2	
2	1.03	fluoride	6055.990	1137	7538	2	-2.83
3	1.52	chloride	11737.987	2122	10984	1	0.00
4	1.82	nitrite	121599.405	13750	78999	1	0.00
5	2.67	bromide	57655.552	3835	24397	1	-1.11
6	2.99	nitrate	324154.403	22412	194210	1	-2.92
7	4.42	phosphate	57963.876	1275	14371	1	-1.34
8	5.85	sulfate	66455.462	3584	47115	1	-1.02
9	7.67	oxalate	53396.877	1488	25659	1	-1.41
		Totals	699019.552	49752	403924		

File: 95092601.D22 Sample: S95T001373 SPIKE



VHO-CD-WM-DP-145, REV. 1

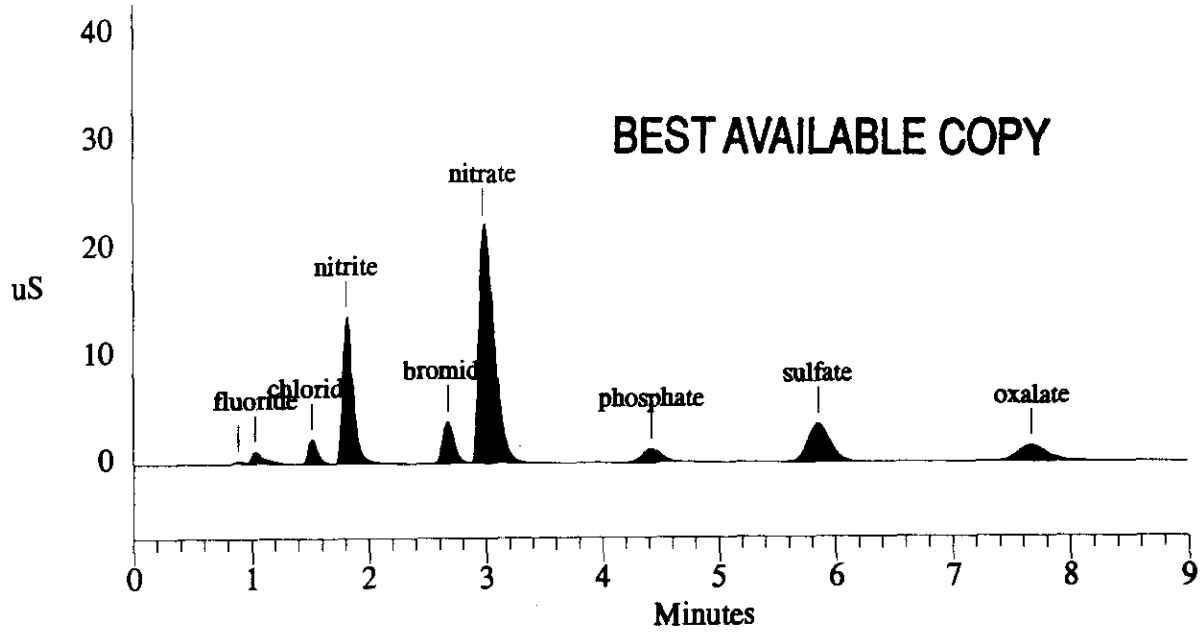
```
==============================================================================
| Sample Name: S95T001373 SPIKE                Date: 09/26/1995 02:01:05      |
| Data File  : C:\DX\DATA\95092601.D25                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 25                   Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS             |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	10201	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	143	647	2	
2	1.03	fluoride	6243.312	1116	7777	2	-2.83
3	1.51	chloride	13389.620	2303	12521	1	-0.66
4	1.81	nitrite	124069.563	13656	80675	1	-0.55
5	2.67	bromide	59036.988	3888	25009	1	-1.11
6	2.98	nitrate	329818.476	22227	198053	1	-3.25
7	4.42	phosphate	58673.545	1274	14556	1	-1.34
8	5.85	sulfate	65992.033	3574	46777	1	-1.02
9	7.67	oxalate	53170.085	1486	25545	1	-1.41
		Totals	710393.624	49666	411560		

File: 95092601.D25 Sample: S95T001373 SPIKE



WMO-CD-WM-DP-145, REV. 1

1427 DCD 9-25-95

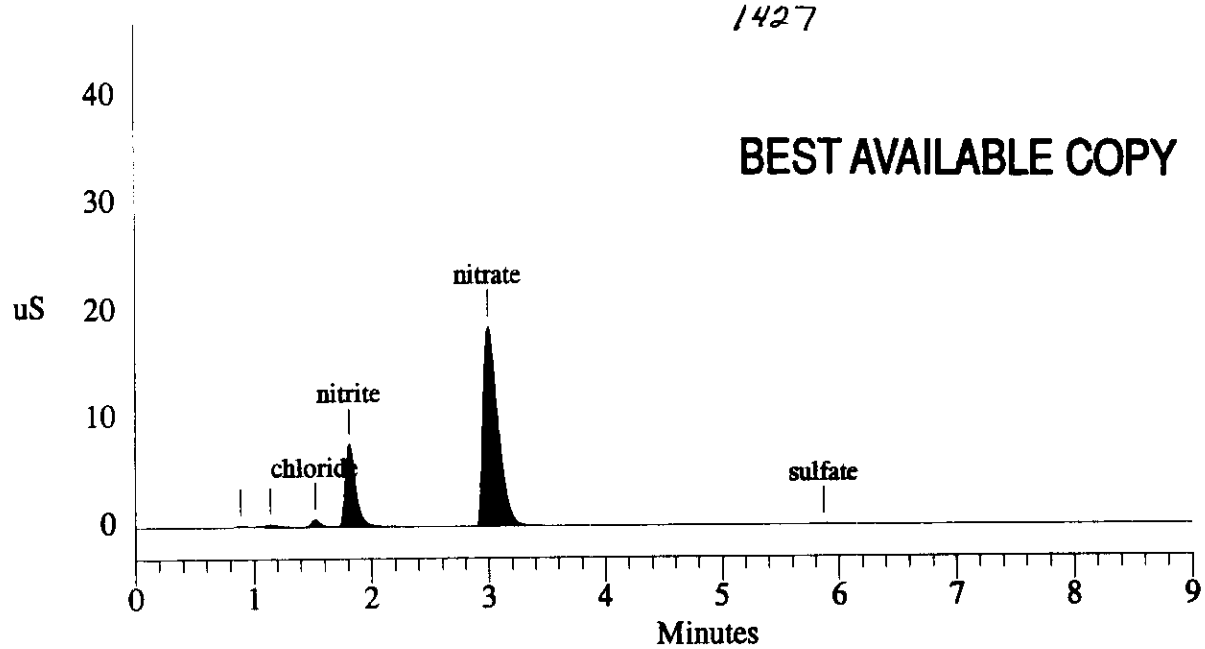
Sample Name: S95T00~~11427~~ Date: 09/26/1995 01:36:41
Data File : C:\DX\DATA\95092601.D23
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 23 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	10201	2700	5Hz	0.00	9.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name		Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89			0.000	138	697	2	
2	1.14			0.000	233	2011	2	
3	1.52	chloride	OK	3741.834	715	3692	1	0.00
4	1.81	nitrite	OK	70890.408	7641	45183	1	-0.55
5	3.00	nitrate	OK	271268.391	18664	159233	1	-2.60
6	5.87	sulfate	<THAN	1388.981	53	625	1	-0.68
			Totals	347289.614	27444	211442		

File: 95092601.D23 Sample: S95T00~~11427~~ DCD 9-25-95
1427



BEST AVAILABLE COPY

WHO-SD-WM-DP-145, REV. 1

1427 DCD 9-25-95

Sample Name: S95T001~~1427~~ DUP Date: 09/26/1995 01:46:34
Data File : C:\DX\DATA\95092601.D24
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 24 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	10201	2700	5Hz	0.00	9.00	200

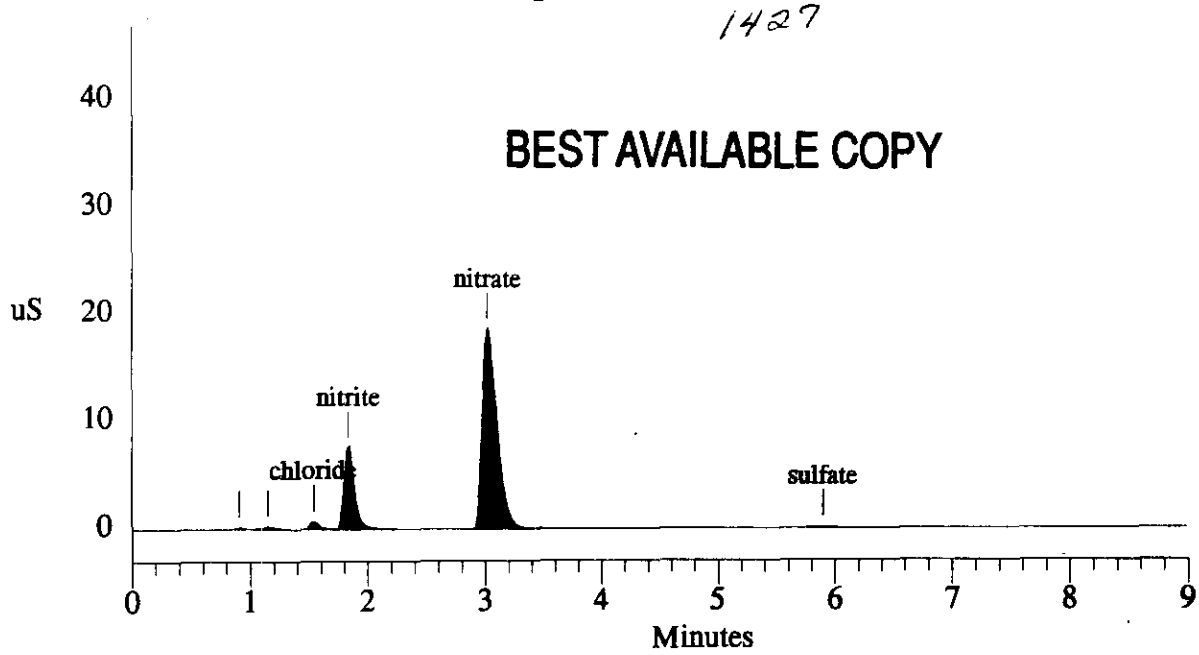
********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name		Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.91			0.000	143	767	2	
2	1.15			0.000	239	2146	2	
3	1.54	chloride	OK	3785.188	719	3731	1	1.32
4	1.83	nitrite	OK	72377.777	7537	46160	1	0.55
5	3.02	nitrate	OK	272964.272	18581	160331	1	-1.95
6	5.90	sulfate	<THAN	1609.350	63	780	1	-0.17
			Totals	350736.588	27281	213914		

DCD 9-25-95

File: 95092601.D24 Sample: S95T001~~1427~~ DUP

1427



WHO-CD-VIM-DP-145, REV. 1

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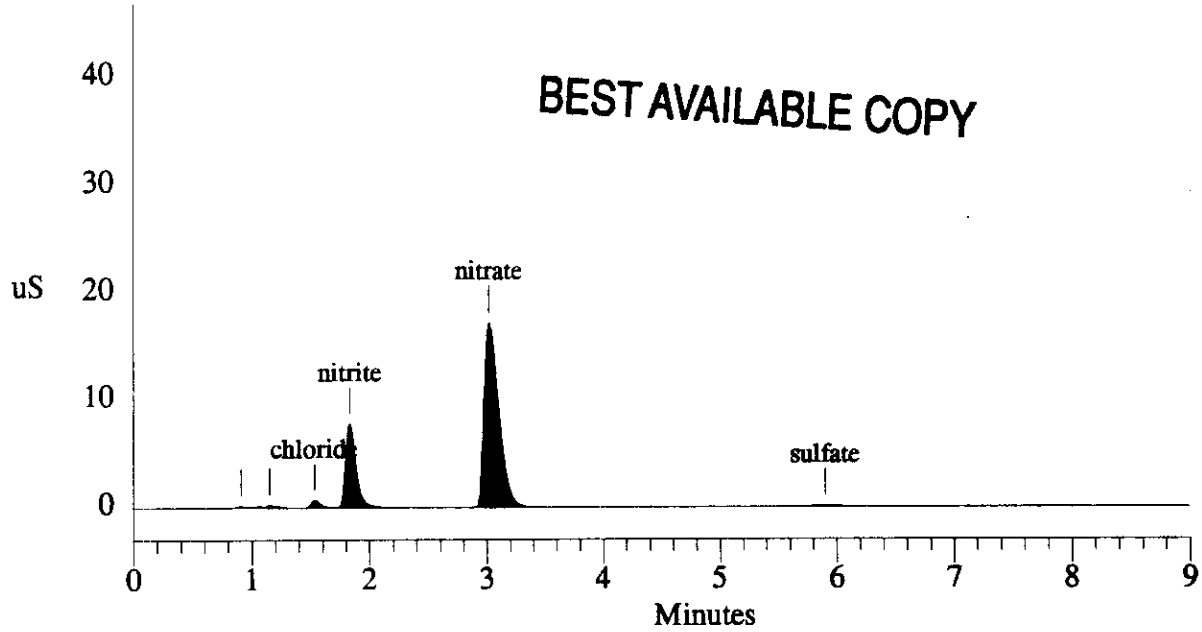
==============================================================================
| Sample Name: S95T001430                      Date: 09/26/1995 03:28:23      |
| Data File  : C:\DX\DATA\95092601.D27                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 27                  Detector:CDM-1      |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS            |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	10201	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.91		0.000	131	715	2	
2	1.15		0.000	240	2478	2	
3	1.53	chloride	4010.310	705	3933	1	0.66
4	1.83	nitrite	73785.302	7846	47085	1	0.55
5	3.02	nitrate	253914.515	17272	148090	1	-1.95
6	5.90	sulfate	2978.177	136	1739	1	-0.17
		Totals	334688.304	26330	204040		

File: 95092601.D27 Sample: S95T001430



WIQ-CD-WM-DP-145, REV. 1

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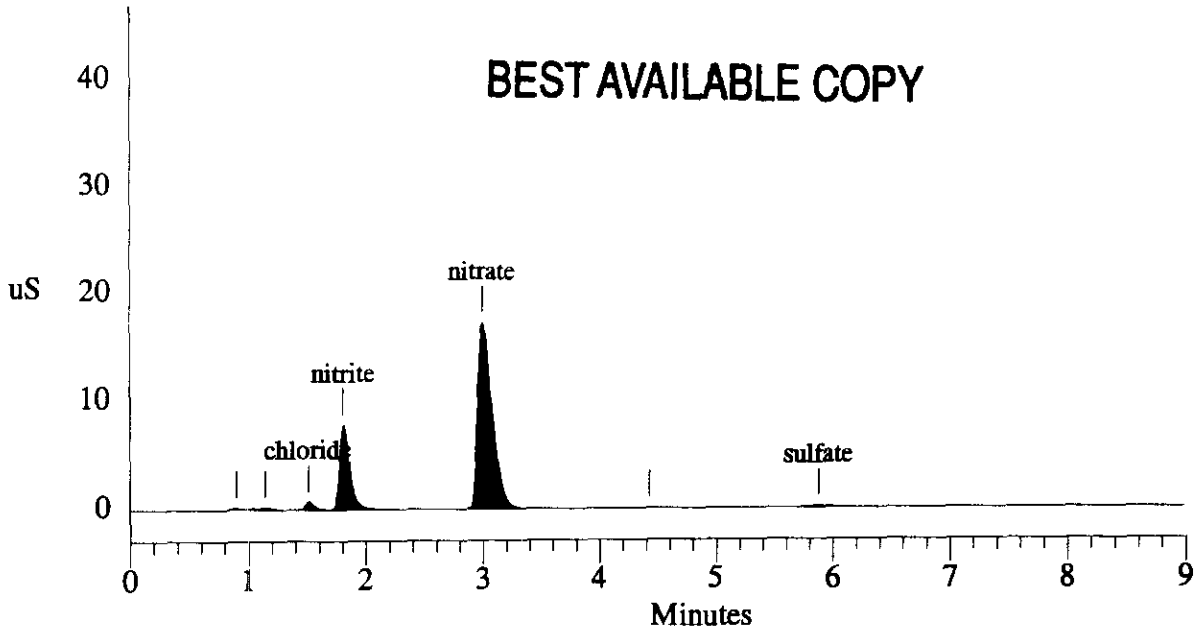
==================================================================================
| Sample Name: S95T001430   DUP                 Date: 09/26/1995 03:38:09        |
| Data File  : C:\DX\DATA\95092601.D28                                           |
| Method     : C:\DX\METHOD\KIT.MET                                              |
| ACI Address: 1  System: 1  Inject#: 28                    Detector:CDM-1       |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS                |
==================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	10201	2700	5Hz	0.00	9.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	131	680	2	
2	1.14		0.000	252	2510	2	
3	1.51	chloride	4030.128	730	3951	1	-0.66
4	1.81	nitrite	71996.241	7793	45909	1	-0.55
5	3.00	nitrate	251344.140	17259	146453	1	-2.60
7	5.88	sulfate	3247.270	152	1927	1	-0.51
		Totals	330617.779	26318	201430		

File: 95092601.D28 Sample: S95T001430 DUP



WWO-CD-WM-DP-146, REV.1

LABCORE Completed Worklist Report for Worklist# 2991

Analyst: ehc **Instrument:** IC01 **Book#** 109N9D

Method: LA533105 Rev/Mod D-1 95000118

Worklist Comment: BY-108 IC, water digests

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB			0	@IC-QC	F	QC	1	<.013		ug/mL
1	CCB			0	@IC-QC	CL	QC	1	<.017		ug/mL
1	CCB			0	@IC-QC	NO2	QC	1	<.107		ug/mL
1	CCB			0	@IC-QC	BR	QC	1	<.126		ug/mL
1	CCB			0	@IC-QC	NO3	QC	1	0.356		ug/mL
1	CCB			0	@IC-QC	PO4	QC	1	<.296		ug/mL
1	CCB			0	@IC-QC	SO4	QC	1	<.136		ug/mL
1	CCB			0	@IC-QC	OXALATE2	QC	1	<.105		ug/mL
2	CCV			0	@IC-QC	F	QC	59	56.7	96.100	% Recovery
2	CCV			0	@IC-QC	CL	QC	79	78.4	99.240	% Recovery
2	CCV			0	@IC-QC	NO2	QC	541	519.9	96.100	% Recovery
2	CCV			0	@IC-QC	BR	QC	575	558.3	97.100	% Recovery
2	CCV			0	@IC-QC	NO3	QC	614	590.1	96.110	% Recovery
2	CCV			0	@IC-QC	PO4	QC	546	510.8	93.550	% Recovery
2	CCV			0	@IC-QC	SO4	QC	631	607.3	96.240	% Recovery
2	CCV			0	@IC-QC	OXALATE2	QC	533	544.6	102.180	% Recovery
3	BLNK-PREP			0	@IC-01	F-02	SOLID	1	<.013		ug/g
3	BLNK-PREP			0	@IC-01	CL-02	SOLID	1	0.060		ug/g
3	BLNK-PREP			0	@IC-01	NO2-02	SOLID	1	<.107		ug/g
3	BLNK-PREP			0	@IC-01	BR-02	SOLID	1	<.126		ug/g
3	BLNK-PREP			0	@IC-01	NO3-02	SOLID	1	0.429		ug/g
3	BLNK-PREP			0	@IC-01	PO4-02	SOLID	1	<.296		ug/g
3	BLNK-PREP			0	@IC-01	SO4-02	SOLID	1	0.421		ug/g
3	BLNK-PREP			0	@IC-01	OXALATE2	SOLID	1	<.105		ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	F-02	SOLID	N/A	7.66e03	348.000	ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	CL-02	SOLID	N/A	1.84e03	455.000	ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	NO2-02	SOLID	N/A	2.27e04	2.860e+003	ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	BR-02	SOLID	N/A <	3.37e03	3.370e+003	ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	NO3-02	SOLID	N/A	2.02e05	3.750e+003	ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	PO4-02	SOLID	N/A	3.11e04	7.920e+003	ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	SO4-02	SOLID	N/A	2.57e04	3.640e+003	ug/g
4	SAMPLE	S95T002564	0	W	@IC-01	OXALATE2	SOLID	N/A	1.26e04	2.810e+003	ug/g
5	DUP	S95T002564	0	W	@IC-01	F-02	SOLID	7.66e03	8.65e03	12.200	RPD
5	DUP	S95T002564	0	W	@IC-01	CL-02	SOLID	1.84e03	2.06e03	11.000	RPD
5	DUP	S95T002564	0	W	@IC-01	NO2-02	SOLID	2.27e04	2.64e04	14.900	RPD
5	DUP	S95T002564	0	W	@IC-01	BR-02	SOLID	<3.37e03	<3.61e03		RPD
5	DUP	S95T002564	0	W	@IC-01	NO3-02	SOLID	2.02e05	2.40e05	17.000	RPD
5	DUP	S95T002564	0	W	@IC-01	PO4-02	SOLID	3.11e04	3.33e04	6.700	RPD
5	DUP	S95T002564	0	W	@IC-01	SO4-02	SOLID	2.57e04	2.93e04	13.000	RPD
5	DUP	S95T002564	0	W	@IC-01	OXALATE2	SOLID	1.26e04	1.26e04	0.200	RPD
6	SPK	S95T002564	0	W	@IC-01	F-02	SOLID	100	97.4	97.400	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 2991

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T002564	0	W	@IC-01	CL-02	SOLID	100	98.3	98.300	% Recovery
6	SPK	S95T002564	0	W	@IC-01	NO2-02	SOLID	100	92.0	92.000	% Recovery
6	SPK	S95T002564	0	W	@IC-01	BR-02	SOLID	100	97.6	97.600	% Recovery
6	SPK	S95T002564	0	W	@IC-01	NO3-02	SOLID	100	102.5	102.500	% Recovery
6	SPK	S95T002564	0	W	@IC-01	PO4-02	SOLID	100	94.2	94.200	% Recovery
6	SPK	S95T002564	0	W	@IC-01	SO4-02	SOLID	100	94.1	94.100	% Recovery
6	SPK	S95T002564	0	W	@IC-01	OXALATE2	SOLID	100	100.1	100.100	% Recovery
7	SAMPLE	S95T002565	0	W	@IC-01	F-02	SOLID	N/A	1.26e04	256.000	ug/g
7	SAMPLE	S95T002565	0	W	@IC-01	CL-02	SOLID	N/A	2.35e03	334.000	ug/g
7	SAMPLE	S95T002565	0	W	@IC-01	NO2-02	SOLID	N/A	3.10e04	2.100e+003	ug/g
7	SAMPLE	S95T002565	0	W	@IC-01	BR-02	SOLID	N/A <	2.48e03	2.480e+003	ug/g
7	SAMPLE	S95T002565	0	W	@IC-01	NO3-02	SOLID	N/A	1.52e05	2.750e+003	ug/g
7	SAMPLE	S95T002565	0	W	@IC-01	PO4-02	SOLID	N/A	2.33e04	5.820e+003	ug/g
7	SAMPLE	S95T002565	0	W	@IC-01	SO4-02	SOLID	N/A	4.86e04	2.670e+003	ug/g
7	SAMPLE	S95T002565	0	W	@IC-01	OXALATE2	SOLID	N/A	7.24e3	2.060e+003	ug/g
8	DUP	S95T002565	0	W	@IC-01	F-02	SOLID	1.26e04	1.27e04	1.100	RPD
8	DUP	S95T002565	0	W	@IC-01	CL-02	SOLID	2.35e03	2.09e03	12.100	RPD
8	DUP	S95T002565	0	W	@IC-01	NO2-02	SOLID	3.10e04	3.07e04	1.100	RPD
8	DUP	S95T002565	0	W	@IC-01	BR-02	SOLID	<2.48e03	<2.38e03		RPD
8	DUP	S95T002565	0	W	@IC-01	NO3-02	SOLID	1.52e05	1.38e05	9.700	RPD
8	DUP	S95T002565	0	W	@IC-01	PO4-02	SOLID	2.33e04	2.29e04	1.700	RPD
8	DUP	S95T002565	0	W	@IC-01	SO4-02	SOLID	4.86e04	4.85e04	0.200	RPD
8	DUP	S95T002565	0	W	@IC-01	OXALATE2	SOLID	7.24e03	6.96e3	4.000	RPD

Final page for worklist# 2991

Analyst Signature Date

Analyst Signature Date

Reviewer Signature Date 11/20/95

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 2991

Analyst: ehc EHC **Instrument:** IC01 IC01 **Book #** 109N9D

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC, water digests

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F	QC		<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2	QC		<.107	N/A	ug/mL
		1	CCB				@IC-QC	BR	QC		<.126	N/A	ug/mL
		1	CCB				@IC-QC	NO3	QC		0.356	N/A	ug/mL
		1	CCB				@IC-QC	PO4	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATE2	QC		<.105	N/A	ug/mL
		2	CCV				@IC-QC	F	QC		56.66	N/A	ug/mL
		2	CCV				@IC-QC	CL	QC		78.35	N/A	ug/mL
		2	CCV				@IC-QC	NO2	QC		519.8	N/A	ug/mL
		2	CCV				@IC-QC	BR	QC		558.3	N/A	ug/mL
		2	CCV				@IC-QC	NO3	QC		590.0	N/A	ug/mL
		2	CCV				@IC-QC	PO4	QC		510.7	N/A	ug/mL
		2	CCV				@IC-QC	SO4	QC		607.3	N/A	ug/mL
		2	CCV				@IC-QC	OXALATE2	QC		544.6	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID		5.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID		.060	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2991

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				@IC-01	NO2-02	SOLID		<.107	N/A	ug/g
		3	BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				@IC-01	NO3-02	SOLID		4.29e-1	N/A	ug/g
		3	BLNK-PREP				@IC-01	PO4-02	SOLID		<.296	N/A	ug/g
		3	BLNK-PREP				@IC-01	SO4-02	SOLID		4.21e-1	N/A	ug/g
		3	BLNK-PREP				@IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	F-02	SOLID	N/A	7.66e3	3.48e2	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	CL-02	SOLID	N/A	1.84e3	4.55e2	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	NO2-02	SOLID	N/A	2.27e4	2.86e3	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	BR-02	SOLID	N/A	<3.37e3	3.37e3	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	NO3-02	SOLID	N/A	2.02e5	3.75e3	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	PO4-02	SOLID	N/A	3.11e4	7.92e3	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	SO4-02	SOLID	N/A	2.57e4	3.64e3	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002564	0	W	@IC-01	OXALATE2	SOLID	N/A	1.26e4	2.81e3	ug/g
95000118	BY-108 (R)	5	DUP	S95T002564	0	W	@IC-01	F-02	SOLID	7.66e3	8.65e3	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002564	0	W	@IC-01	CL-02	SOLID	1.84e3	2.06e3	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002564	0	W	@IC-01	NO2-02	SOLID	2.27e4	2.64e4	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002564	0	W	@IC-01	BR-02	SOLID	<3.37e3	<3.61e3	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002564	0	W	@IC-01	NO3-02	SOLID	2.27e4	2.64e4	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002564	0	W	@IC-01	PO4-02	gmf 11/29/95 SOLID	~~2.34~~ 3.11e4	3.33e4	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002564	0	W	@IC-01	SO4-02	SOLID	2.57e4	2.93e4	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2991

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	IC-01	OXALATE2	SOLID	1.26e4	1.26e4	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	F-02	SOLID		97.4	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	CL-02	SOLID		98.3	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	NO2-02	SOLID		92.0	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	BR-02	SOLID		102.5	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	NO3-02	SOLID		94.2	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	PO4-02	SOLID		94.1	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	SO4-02	SOLID		97.6	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	IC-01	OXALATE2	SOLID		100.1	N/A	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	F-02	SOLID	N/A	1.26e4	2.56e2	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	CL-02	SOLID	N/A	2.35e3	3.34e2	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	NO2-02	SOLID	N/A	3.10e4	2.10e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	BR-02	SOLID	N/A	<2.48e3	2.48e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	NO3-02	SOLID	N/A	1.52e5	2.75e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	PO4-02	SOLID	N/A	2.33e4	5.82e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	SO4-02	SOLID	N/A	4.86e4	2.67e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	IC-01	OXALATE2	SOLID	N/A	7.24e3	2.06e3	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	IC-01	F-02	SOLID	1.26e4	1.27e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	IC-01	CL-02	SOLID	2.35e3	2.09e3	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	IC-01	NO2-02	SOLID	3.10e4	3.07e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	IC-01	BR-02	SOLID	<2.48e3	<2.38e3	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	IC-01	NO3-02	SOLID	1.52e5	1.38e5	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2991

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	@IC-01	PO4-02	SOLID	2.33e4	2.29e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	@IC-01	SO4-02	SOLID	4.86e4	4.85e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	@IC-01	OXALATE2	SOLID	7.24e3	6.96e3	N/A	ug/g

Final page for worklist # 2991

See attached for Orig. Sig. of Ed Colvin

Analyst Signature **Date** 11/6/95 **Analyst Signature** **Date**

Reprinted to correct data entry error

Verified 11/20/95 J. M. Lyle

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2991

Analyst: PP **Instrument:** IC01 IC01 **Book #** 109N9-D

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC, water digests

See new copy JM Fuge 11/20/95

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				aIC-QC	F-QC	QC	1	~~<.013~~ <.013	N/A	ug/mL
		1	CCB				aIC-QC	CL-QC	QC		~~0.060~~ <.017 JMF 11/15/95 ~~<.017~~	N/A	ug/mL
		1	CCB				aIC-QC	NO2-QC	QC		<.107	N/A	ug/mL
		1	CCB				aIC-QC	BR-QC	QC		<.126	N/A	ug/mL
		1	CCB				aIC-QC	NO3-QC	QC		~~0.429~~ 0.356 JMF 11/15/95 ~~<.140~~	N/A	ug/mL
		1	CCB				aIC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				aIC-QC	SO4-QC	QC		~~0.421~~ <.136 JMF 11/15/95 ~~<.136~~	N/A	ug/mL
		1	CCB				aIC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2	CCV				aIC-QC	F-QC	QC	59	56.7	N/A	ug/mL
		2	CCV				aIC-QC	CL-QC	QC	79	78.4	N/A	ug/mL
		2	CCV				aIC-QC	NO2-QC	QC	JMF 11/15/95 ~~534~~ 541	519.9	N/A	ug/mL
		2	CCV				aIC-QC	BR-QC	QC	575	~~590.1~~ 558.3	N/A	ug/mL
		2	CCV				aIC-QC	NO3-QC	QC	614	590.1	N/A	ug/mL
		2	CCV				aIC-QC	PO4-QC	QC	546	510.8	N/A	ug/mL
		2	CCV				aIC-QC	SO4-QC	QC	631	607.3	N/A	ug/mL
		2	CCV				aIC-QC	OXALATQC	QC	~~526~~ 533 11/10/95	544.6	N/A	ug/mL
		3	BLNK-PREP				aIC-01	F-02	SOLID	1	<.013	N/A	ug/g
		3	BLNK-PREP				aIC-01	CL-02	SOLID	1	~~<.017~~ 0.060 JMF 11/15/95	N/A	ug/g

Data Entry Comments:

	SAMPLE	DUP.
S95T002564	3.7730 g/L	3.5290 g/L
S95T002565	5.1360 g/L	5.3430 g/L

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2991

GMF 11/20/95

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3 BLNK-PREP				@IC-01	NO2-02	SOLID		<.107	N/A	ug/g
		3 BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3 BLNK-PREP				@IC-01	NO3-02	SOLID		~~<.140~~ 0.429 GMF 11/15/95	N/A	ug/g
		3 BLNK-PREP				@IC-01	PO4-02	SOLID		<.196	N/A	ug/g
		3 BLNK-PREP				@IC-01	SO4-02	SOLID		~~<.136~~ 0.421 GMF 11/15/95	N/A	ug/g
		3 BLNK-PREP				@IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	F-02	SOLID	N/A	7.66^{e3}	3.48^{e2}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	CL-02	SOLID	N/A	1.84^{e3}	4.55^{e2}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	NO2-02	SOLID	N/A	2.27^{e4}	2.86^{e3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	BR-02	SOLID	N/A	$<3.37^{e3}$	3.37^{e3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	NO3-02	SOLID	N/A	2.02^{e5}	3.75^{e3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	PO4-02	SOLID	N/A	3.11^{e4}	7.92^{e3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	SO4-02	SOLID	N/A	2.57^{e4}	3.64^{e3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002564	0	W	@IC-01	OXALATE2	SOLID	N/A	1.26^{e4}	2.81^{e3}	ug/g
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	@IC-01	F-02	SOLID	7.66^{e3}	5.94^{e3}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	@IC-01	CL-02	SOLID	1.84^{e3}	1.41^{e3}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	@IC-01	NO2-02	SOLID	2.27^{e4}	1.81^{e4}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	@IC-01	BR-02	SOLID	$<3.37^{e3}$	$<2.48^{e3}$	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	@IC-01	NO3-02	SOLID	2.02^{e5}	1.65^{e5}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	@IC-01	PO4-02	SOLID	3.11^{e4}	2.29^{e4}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	@IC-01	SO4-02	SOLID	2.57^{e4}	2.01^{e4}	N/A	ug/g

Data Entry Comments:

LMCS 109N9-D .1mL - 10mL

SPIKE 109N9-D .1mL

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2991

GMF 11/20/95

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5 DUP	S95T002564	0	W	aIC-01	OXALATE2	SOLID	4.26^{e4}	8.66^{e3}	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	F-02	SOLID	100	97.4	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	CL-02	SOLID		98.3	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	NO2-02	SOLID		92.0 GMF 11/15/95 ~~93.2~~	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	BR-02	SOLID		97.6	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	NO3-02	SOLID		102.5	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	PO4-02	SOLID		94.2	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	SO4-02	SOLID		94.1	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002564	0	W	aIC-01	OXALATE2	SOLID		100.1 GMF 11/15/95 ~~101.4~~	N/A	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	F-02	SOLID	N/A	1.83^{e4}	3.72^{e2}	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	CL-02	SOLID	N/A	3.43^{e3}	4.87^{e2}	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	NO2-02	SOLID	N/A	4.52^{e4}	3.06^{e3}	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	BR-02	SOLID	N/A	$<3.61^{e3}$	3.61^{e3}	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	NO3-02	SOLID	N/A	2.22^{e5}	4.10^{e3}	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	PO4-02	SOLID	N/A	3.39^{e4}	8.47^{e3}	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	SO4-02	SOLID	N/A	7.08^{e4}	3.89^{e3}	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002565	0	W	aIC-01	OXALATE2	SOLID	GMF 11/15/95 N/A	1.05^{e4} ~~$<3.02^{e4}$~~ ~~4.05^{e4}~~	3.01 e3 GMF 11/15/95 ~~3.02^{e4}~~	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	aIC-01	F-02	SOLID	1.83^{e4}	1.27^{e4}	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	aIC-01	CL-02	SOLID	3.43^{e3}	2.09^{e3}	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	aIC-01	NO2-02	SOLID	4.52^{e4}	3.07^{e4}	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	aIC-01	BR-02	SOLID	$<3.61^{e3}$	$<2.38^{e3}$	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	aIC-01	NO3-02	SOLID	2.22^{e5}	1.38^{e5}	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2991

GMF 11/20/95

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	@IC-01	PO4-02	SOLID	3.39e4	2.29e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	@IC-01	SO4-02	SOLID	7.08e4	4.85e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002565	0	W	@IC-01	OXALATE2	SOLID	~~1.05e4~~ 1.05e4	~~<3.02e4~~ ~~6.96e3~~ <3.02e4 6.96e3	N/A	ug/g

Final page for worklist # 2991

E.N. Cohn 11-6-95
Analyst Signature Date

Tom D. [illegible] 11/10/95
Analyst Signature Date

~~Verified 11/15/95 J.M. [illegible]~~ 11/20/95 gmF

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002564 & S95T002565		
TEST CODE:	@IC-01	ANALYST:	E. COLVIN
INSTRUMENT:	IC01	ANALYSIS DATE:	11/06/95
WORK LIST #:	2991	SAMPLE POINT:	BY-108
BATCH ID:	N/A	SAMPLE PREP:	H20-DIG

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9D	96.0%	99.2%	96.1%	96.1%	93.5%	96.3%	97.1%	102.2%
S95T002564	7.66E+03	1.84E+03	2.27E+04	2.02E+05	3.11E+04	2.57E+04	<3372.91	1.26E+04
S95T002564/DUP	8.65E+03	2.06E+03	2.64E+04	2.40E+05	3.33E+04	2.93E+04	<3606.12	1.26E+04
Duplicate 1 RPD	12.2%	11.0%	14.9%	17.0%	6.7%	13.0%	N/A	0.2%
S95T002565	1.26E+04	2.35E+03	3.10E+04	1.52E+05	2.33E+04	4.86E+04	<2477.80	7.24E+03
S95T002565/DUP	1.27E+04	2.09E+03	3.07E+04	1.38E+05	2.29E+04	4.85E+04	<2381.81	6.96E+03
Duplicate 2 RPD	1.1%	12.1%	1.1%	9.7%	1.7%	0.2%	N/A	4.0%
	97.4%	98.3%	92.0%	102.5%	94.2%	94.1%	97.6%	100.1%
S95T002564/SPK								

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Reprinted acc form to correct transposed prep dilution weights
J M Fuge

Form Completed By:	Jerry Fuge	Date:	11/15/95
Chemist Approval:	Jerry Fuge	Date:	11/15/95

LAB LEADER INFO	
Method:	LA-533-105
Matrix:	SOLID
Test Code:	@IC-01
Work List #:	2991
Batch #:	N/A
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9D
Spike Sample #:	1
Prepared By:	RT STEELE
Prepared Date:	11/07/95
Chemist:	JANN FRYE
Analyst:	E. COLVIN
Analysis Date:	11/08/95
Time Complete:	08:40 AM
Instrument Code:	IC01
Rerun:	0
Sample Prep:	H20-DIG
Sample Point:	BY-106
Sample Type	
STANDARD	109N9D
SAMPLE 1	S95T002564
DUPLICATE 1	S95T002564/DUP
SAMPLE 2	S95T002565
DUPLICATE 2	S95T002565/DUP
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	
SPIKE DUPLICATE	S95T002564/SPK

PRINT

TECH INFO	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	5.86E-02	<.107	4.29E-01	<.296	4.21E-01	<.126	<.106
Standard Data (µg/mL)	66.667	79.364	619.359	609.669	610.75	607.348	566.341	644.649
Sample 1 Data (µg/mL)	2.86E+01	6.96E+00	8.57E+01	7.64E+02	1.17E+02	9.71E+01	<.126	4.78E+01
Sample 1 Dilution Factor	101	101	101	101	101	101	101	101
Sample 1 Prep DF	3.773	3.773	3.773	3.773	3.773	3.773	3.773	3.773
Duplicate 1 Data (µg/mL)	3.08E+01	7.26E+00	9.30E+01	8.47E+02	1.17E+02	1.03E+02	<.126	4.46E+01
Duplicate 1 Dilution Factor	101	101	101	101	101	101	101	101
Duplicate 1 Prep DF	3.529	3.529	3.529	3.529	3.529	3.529	3.529	3.529
Sample 2 Data (µg/mL)	5.46E+01	1.21E+01	1.88E+02	7.53E+02	1.26E+02	2.50E+02	<.126	3.72E+01
Sample 2 Dilution Factor	101	101	101	101	101	101	101	101
Sample 2 Prep DF	5.136	5.136	5.136	5.136	5.136	5.136	5.136	5.136
Duplicate 2 Data (µg/mL)	5.90E+01	1.11E+01	1.64E+02	7.39E+02	1.23E+02	2.59E+02	<.126	3.72E+01
Duplicate 2 Dilution Factor	101	101	101	101	101	101	101	101
Duplicate 2 Prep DF	5.343	5.343	5.343	5.343	5.343	5.343	5.343	5.343
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	8.83E+01	8.46E+01	5.84E+02	1.39E+03	6.32E+02	6.91E+02	5.61E+02	5.81E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
Std. Conc. (µg/mL)	69	79	641	614	546	631	576	633
Detection Limit	0.013	0.017	0.107	0.140	0.296	0.136	0.126	0.106
Matrix Detection Limit 1	3.48E+02	4.55E+02	2.96E+03	3.76E+03	7.92E+03	3.64E+03	3.37E+03	2.81E+03
Matrix Detection Limit 2	2.66E+02	3.34E+02	2.10E+03	2.76E+03	5.82E+03	2.67E+03	2.48E+03	2.06E+03
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [(Spike+Sample)-(Sample)*(Total Volume)]/[(Spike Vol.)*(Spike Std.)*(Sample DF)]* 100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	96.0%	98.2%	96.1%	96.1%	93.8%	96.3%	97.1%	102.2%
Sample 1 in µg/g	7.58E+03	1.84E+03	2.27E+04	2.02E+05	3.11E+04	2.57E+04	<3372.91	1.26E+04
Duplicate 1 in µg/g	8.64E+03	2.06E+03	2.64E+04	2.40E+05	3.33E+04	2.93E+04	<3006.12	1.26E+04
Duplicate 1 RPD	12.2%	11.0%	14.9%	17.0%	6.7%	13.0%	N/A	0.2%
Sample 2 in µg/g	1.26E+04	2.35E+03	3.10E+04	1.62E+05	2.33E+04	4.66E+04	<2477.80	7.24E+03
Duplicate 2 in µg/g	1.27E+04	2.09E+03	3.07E+04	1.38E+05	2.29E+04	4.86E+04	<2381.81	6.96E+03
Duplicate 2 RPD	1.1%	12.1%	1.1%	9.7%	1.7%	0.2%	N/A	4.0%
Spike % Recovery	97.4%	96.3%	92.0%	102.5%	94.2%	94.1%	97.6%	100.1%

Data Entry by: Jann Frye Date: 11/15/95
Approved by: Jann Frye Date: 11/15/95
Form DIONEX.WB1 Rev. 1.3

375

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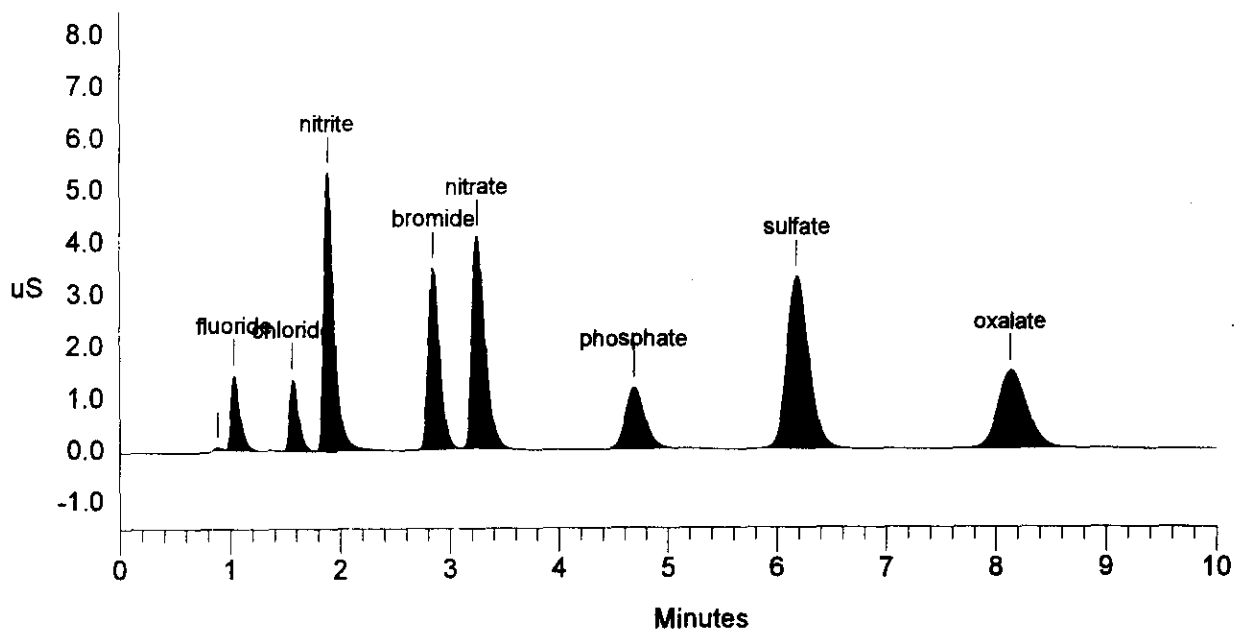
==================================================================================
| Sample Name: 109N9-D STD                          Date: 11/06/1995 08:40:29      |
| Data File  : C:\DX\DATA\95110601.D03                                             |
| Method     : C:\DX\METHOD\KIT.MET                                                |
| ACI Address: 1  System: 1  Inject#: 3                          Detector:CDM-1   |
| Analyst    : EM. Cohn        Column: AG4A/AS4A anion column/SRS                  |
==================================================================================
                                  11-06-95
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.04	fluoride	56.667	1446	7806	2	0.97
3	1.57	chloride	78.354	1389	7459	1	-0.63
4	1.89	nitrite	519.859	5360	34165	1	-1.56
5	2.85	bromide	558.341	3511	24541	1	1.42
6	3.25	nitrate	590.069	4097	33595	1	3.17
7	4.69	phosphate	510.750	1186	14360	1	-2.09
8	6.19	sulfate	607.348	3340	45780	1	-2.67
9	8.14	oxalate	544.648	1503	26920	1	-2.63
		Totals	3466.037	21832	194626		

File: 95110601.D03 Sample: 109N9-D STD



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 376 TO 383.

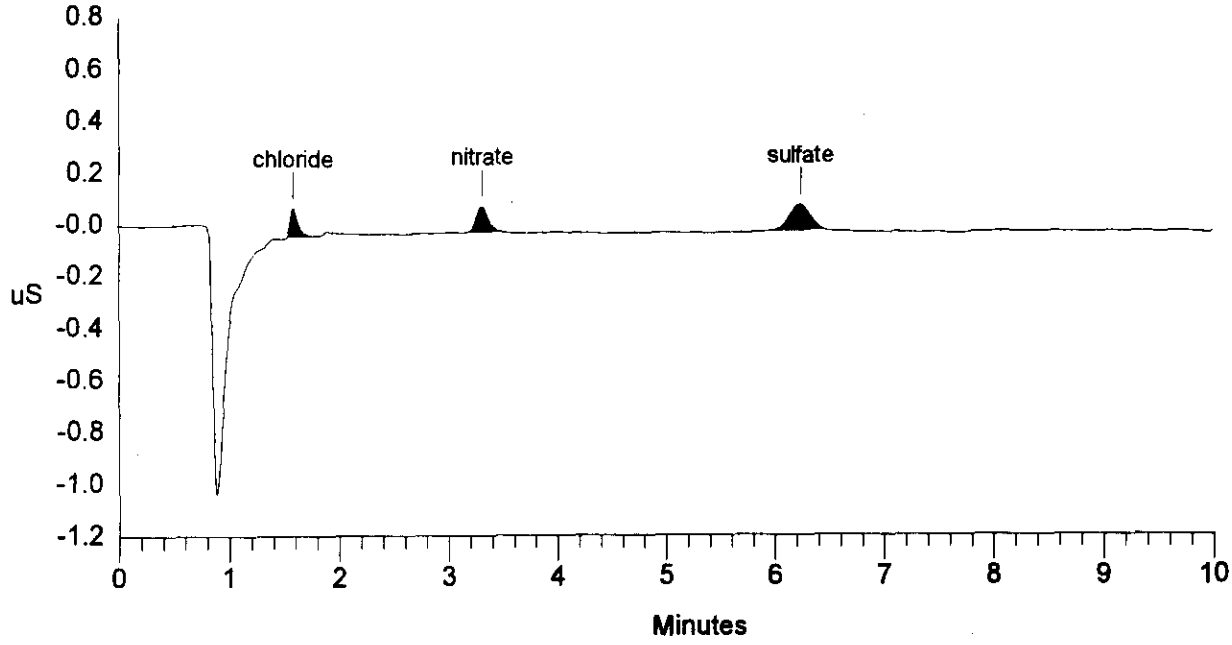
```
==========================================================================
| Sample Name: PREP BLANK                    Date: 11/06/1995 08:29:36    |
| Data File  : C:\DX\DATA\95110601.D02                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 2                Detector:CDM-1     |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.58	chloride	0.060	105	495	1	0.00
2	3.31	nitrate	0.429	99	719	1	5.08
3	6.24	sulfate	0.421	100	1286	1	-1.89
		Totals	0.911	303	2499		

File: 95110601.D02 Sample: PREP BLANK



WHC-SD-WM-DP-145, REV. 1

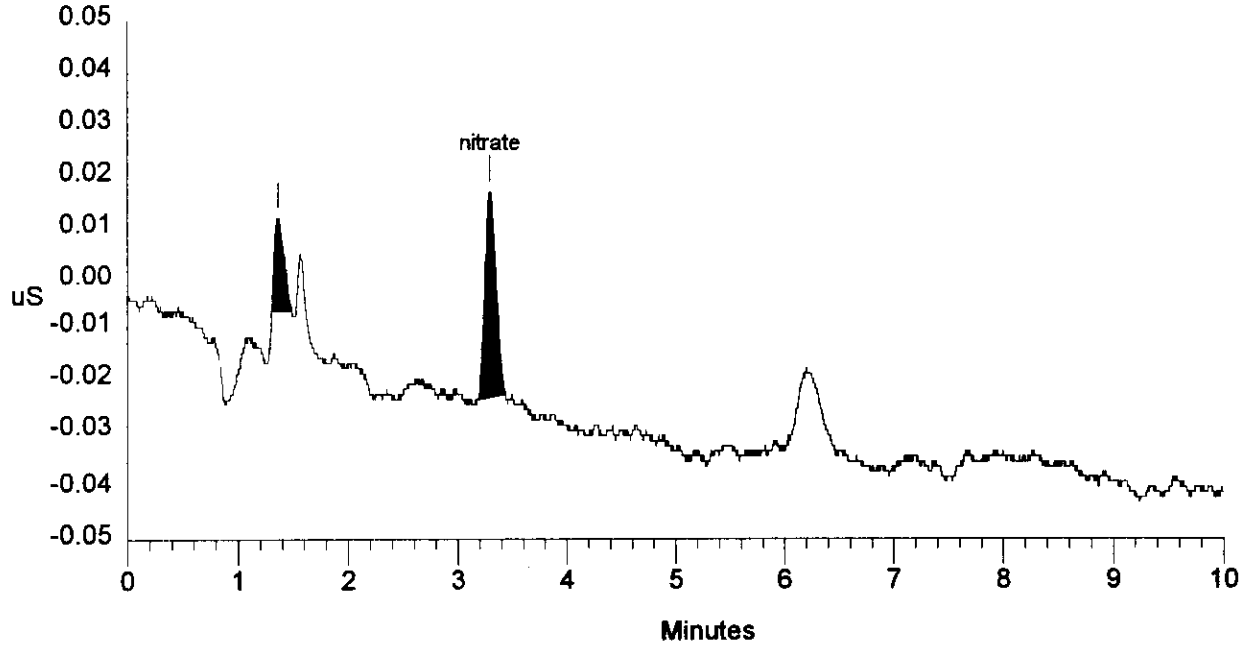
```
==============================================================================
| Sample Name: INSTR BLANK                    Date: 11/06/1995 08:18:08       |
| Data File  : C:\DX\DATA\95110601.D01                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 1                   Detector:CDM-1      |
| Analyst    :                Column: AG4A/AS4A anion column/SRS              |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	3.30	nitrate	0.356	40	280	1	4.76
		Totals	0.356	40	280		

File: 95110601.D01 Sample: INSTR BLANK



WHC-SD-WM-DP-145, REV. 1

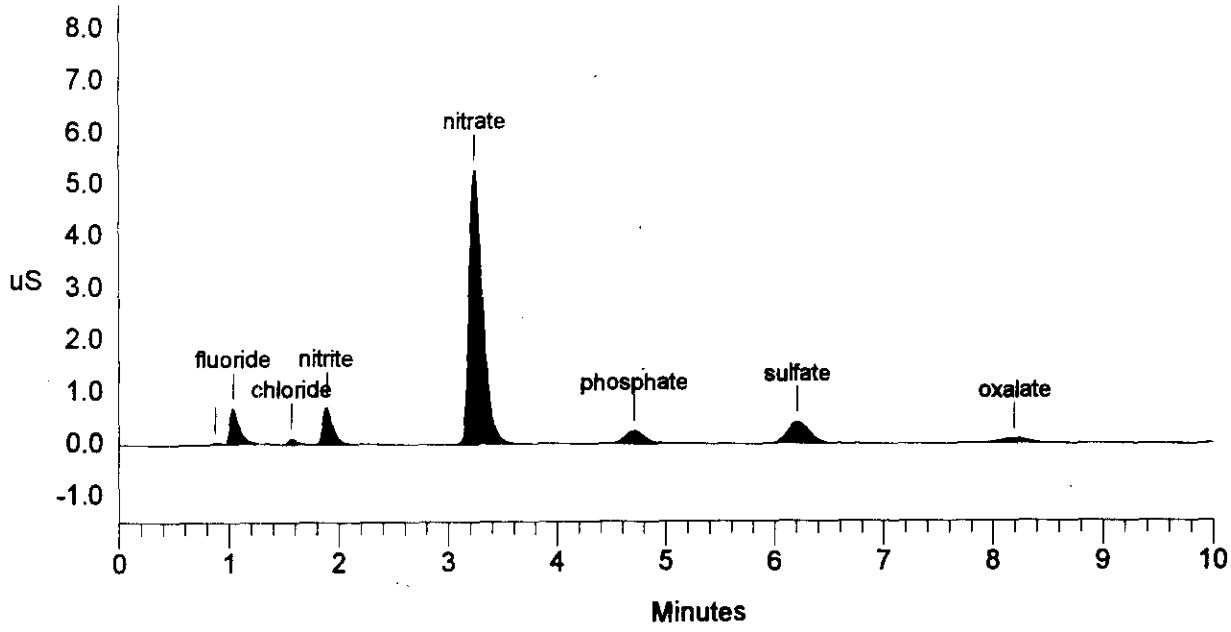
```
==========================================================================
| Sample Name: S95T002564 .1-10                Date: 11/06/1995 08:54:46  |
| Data File  : C:\DX\DATA\95110601.D04                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 4                  Detector:CDM-1   |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS        |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.04	fluoride	28.886	687	3816	2	0.97
3	1.57	chloride	6.954	112	578	1	-0.63
4	1.89	nitrite	85.692	717	4344	1	-1.56
5	3.24	nitrate	763.802	5292	44207	1	2.86
6	4.71	phosphate	117.415	242	2863	1	-1.67
7	6.21	sulfate	97.123	410	5526	1	-2.36
8	8.20	oxalate	47.496	84	1429	1	-1.91
		Totals	1147.369	7545	62763		

File: 95110601.D04 Sample: S95T002564 .1-10



WHC-SD-WM-DP-145, REV. 1

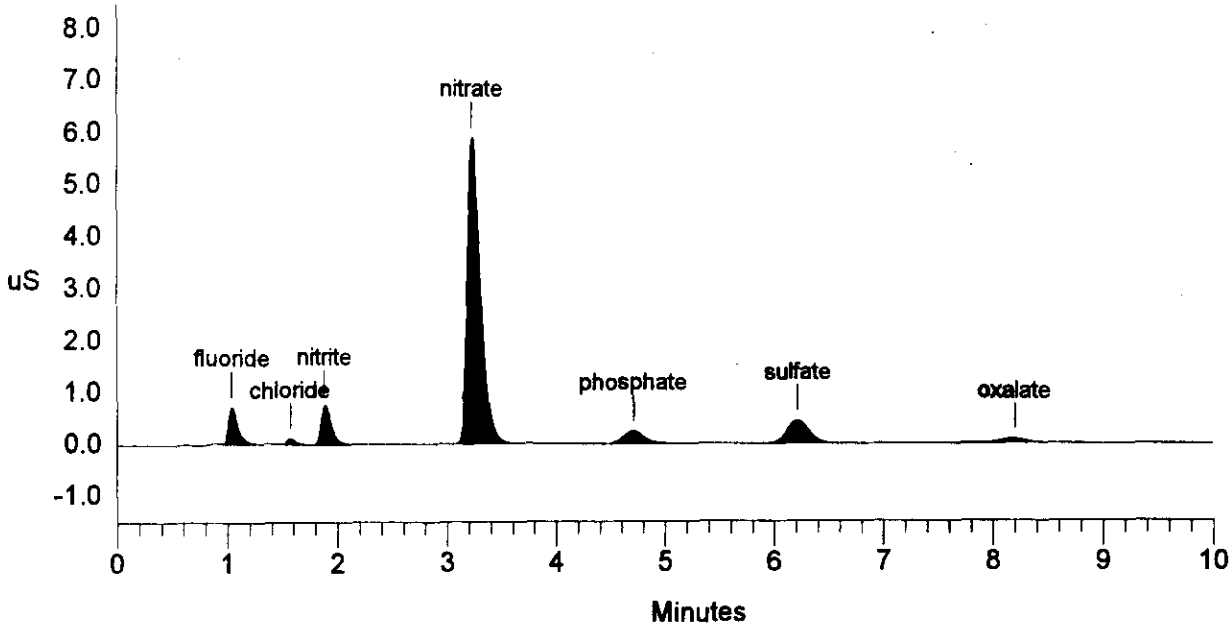
```
==========================================================================
| Sample Name: S95T002564 .1-10 DUP          Date: 11/06/1995 09:11:12    |
| Data File  : C:\DX\DATA\95110601.D05                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.04	fluoride	30.517	713	4049	1	0.97
2	1.57	chloride	7.260	115	607	1	-0.63
3	1.88	nitrite	93.038	763	4846	1	-2.08
4	3.23	nitrate	846.778	5905	49304	1	2.54
5	4.71	phosphate	117.478	239	2865	1	-1.67
6	6.22	sulfate	103.463	439	6020	1	-2.20
7	8.20	oxalate	44.494	79	1276	1	-1.91
		Totals	1243.028	8254	68968		

File: 95110601.D05 Sample: S95T002564 .1-10 DUP



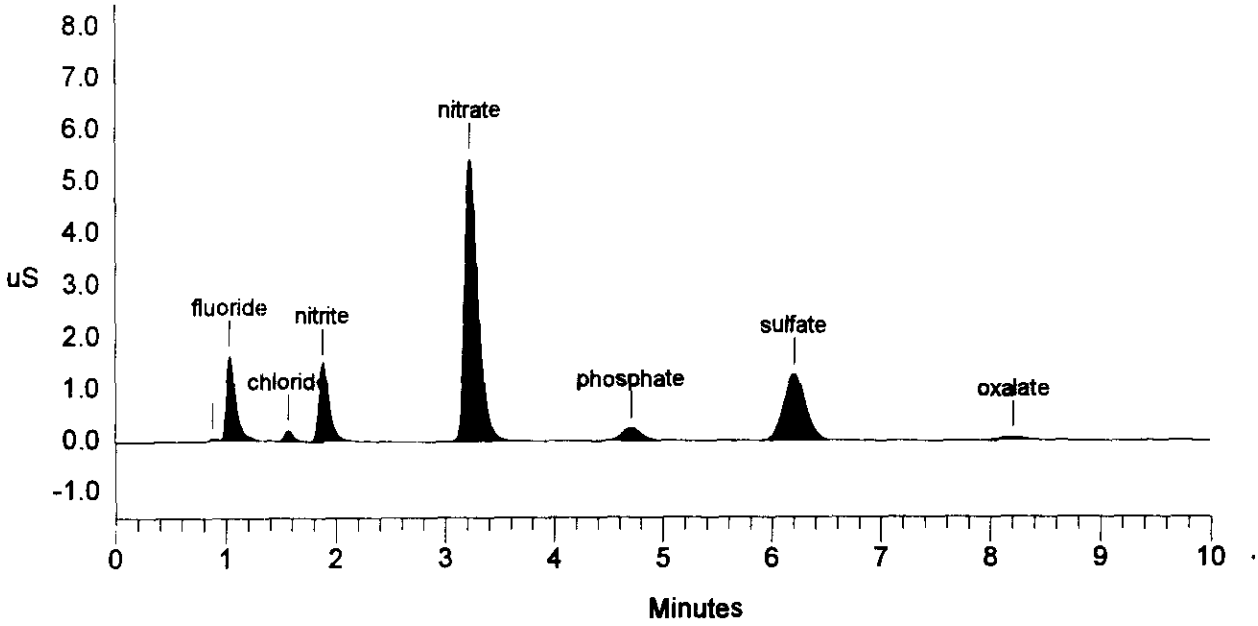
```
==========================================================================
| Sample Name: S95T002565 .1-10              Date: 11/06/1995 10:33:51   |
| Data File  : C:\DX\DATA\95110601.D07                                   |
| Method     : C:\DX\METHOD\KIT.MET                                      |
| ACI Address: 1  System: 1  Inject#: 7                  Detector:CDM-1  |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.04	fluoride	64.623	1621	8956	2	0.97
3	1.57	chloride	12.088	205	1068	1	-0.63
4	1.88	nitrite	159.389	1483	9388	1	-2.08
5	3.23	nitrate	782.528	5453	45356	1	2.54
6	4.71	phosphate	119.748	244	2931	1	-1.67
7	6.21	sulfate	249.829	1276	17461	1	-2.36
8	8.21	oxalate	37.189	55	905	1	-1.79
		Totals	1425.394	10337	86064		

File: 95110601.D07 Sample: S95T002565 .1-10



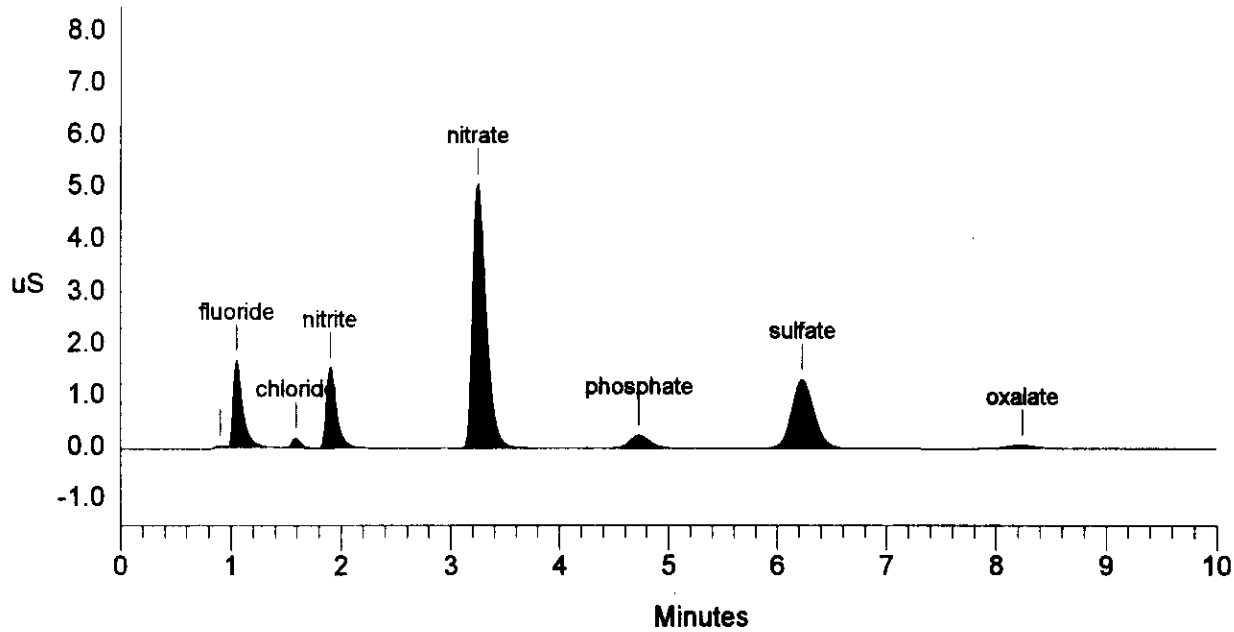
Sample Name: S95T002565 .1-10 DUP Date: 11/06/1995 10:50:51
Data File : C:\DX\DATA\95110601.D08
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8 Detector:CDM-1
Analyst : E.H. Cohn Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.05	fluoride	67.967	1674	9440	1	1.94
3	1.59	chloride	11.145	192	978	1	0.63
4	1.90	nitrite	163.974	1545	9702	1	-1.04
5	3.25	nitrate	739.093	5073	42693	1	3.17
6	4.73	phosphate	122.507	249	3010	1	-1.25
7	6.23	sulfate	259.272	1327	18202	1	-2.04
8	8.24	oxalate	37.169	55	904	1	-1.44
		Totals	1401.126	10114	84929		

File: 95110601.D08 Sample: S95T002565 .1-10 DUP



WHC-SD-WM-DP-145, REV. 1

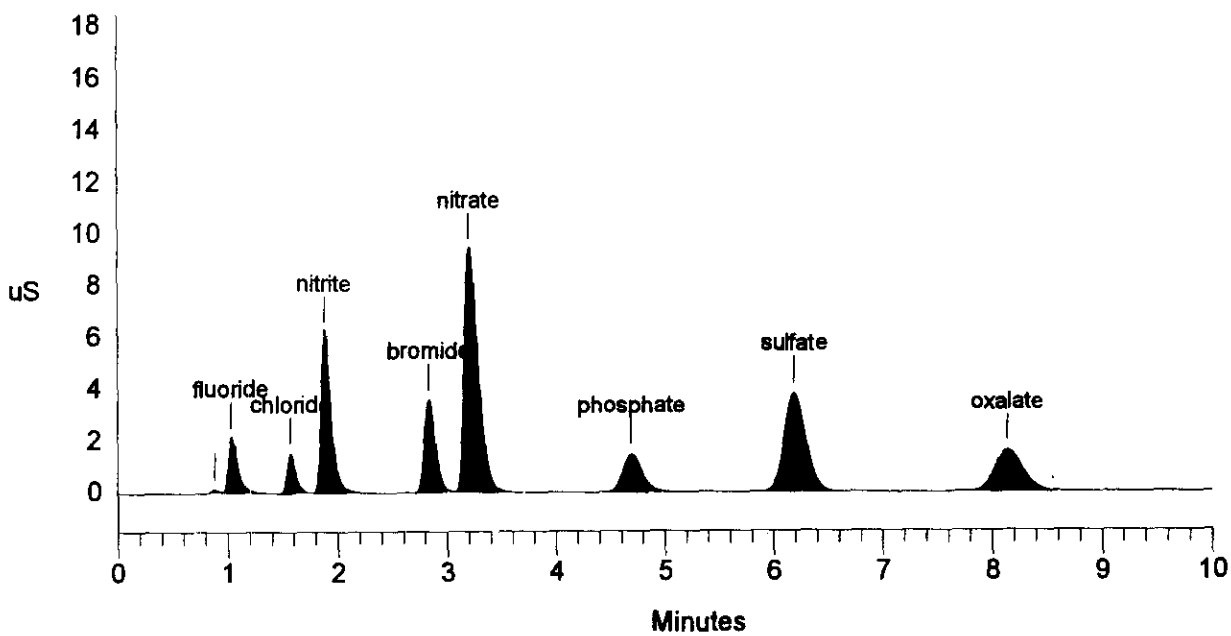
```
==================================================================================
| Sample Name: S95T002564 .1-10 SPK          Date: 11/06/1995 10:22:46            |
| Data File  : C:\DX\DATA\95110601.D06                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 6                    Detector:CDM-1         |
| Analyst    :                Column: AG4A/AS4A anion column/SRS                  |
==================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	77	349	2	
2	1.03	fluoride	86.335	2104	12108	2	0.00
3	1.57	chloride	84.644	1538	8072	1	-0.63
4	1.88	nitrite	583.593	6205	38565	1	-2.08
5	2.83	bromide	561.472	3581	24687	1	0.71
6	3.20	nitrate	1393.346	9396	83365	1	1.59
7	4.69	phosphate	631.598	1479	17948	1	-2.09
8	6.19	sulfate	690.609	3846	52453	1	-2.67
9	8.14	oxalate	580.847	1606	28795	1	-2.63
		Totals	4612.444	29833	266342		

File: 95110601.D06 Sample: S95T002564 .1-10 SPK



WHC-SD-WM-DP-145, REV. 1

LABCORE Completed Worklist Report for Worklist# 2992

Analyst: smf **Instrument:** IC01 **Book#** 109N9C

Method: LA533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC, water digests. JMF

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
1	CCB			0	@IC-QC	F-QC	QC	1		<.013		ug/mL
1	CCB			0	@IC-QC	CL-QC	QC	1		<.017		ug/mL
1	CCB			0	@IC-QC	NO2-QC	QC	1		<.107		ug/mL
1	CCB			0	@IC-QC	BR-QC	QC	1		<.126		ug/mL
1	CCB			0	@IC-QC	NO3-QC	QC	1		<.140		ug/mL
1	CCB			0	@IC-QC	PO4-QC	QC	1		<.296		ug/mL
1	CCB			0	@IC-QC	SO4-QC	QC	1		<.136		ug/mL
1	CCB			0	@IC-QC	OXALATQC	QC	1		<.105		ug/mL
2	CCV			0	@IC-QC	F-QC	QC	59		60.1	101.860	% Recovery
2	CCV			0	@IC-QC	CL-QC	QC	79		79.8	101.010	% Recovery
2	CCV			0	@IC-QC	NO2-QC	QC	533		530.3	99.490	% Recovery
2	CCV			0	@IC-QC	BR-QC	QC	575		564.8	98.230	% Recovery
2	CCV			0	@IC-QC	NO3-QC	QC	614		597.8	97.360	% Recovery
2	CCV			0	@IC-QC	PO4-QC	QC	546		529.1	96.900	% Recovery
2	CCV			0	@IC-QC	SO4-QC	QC	631		606.7	96.150	% Recovery
2	CCV			0	@IC-QC	OXALATQC	QC	526		571.9	108.730	% Recovery
3	BLNK-PREP			0	@IC-01	F-02	SOLID	1		<.013		ug/g
3	BLNK-PREP			0	@IC-01	CL-02	SOLID	1		<.017		ug/g
3	BLNK-PREP			0	@IC-01	NO2-02	SOLID	1		<.107		ug/g
3	BLNK-PREP			0	@IC-01	BR-02	SOLID	1		<.126		ug/g
3	BLNK-PREP			0	@IC-01	NO3-02	SOLID	1		<.140		ug/g
3	BLNK-PREP			0	@IC-01	PO4-02	SOLID	1		4.96e-01	0.500	ug/g
3	BLNK-PREP			0	@IC-01	SO4-02	SOLID	1		<.136		ug/g
3	BLNK-PREP			0	@IC-01	OXALATE2	SOLID	1		<.105		ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	F-02	SOLID	N/A		1.93e04	170.000	ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	CL-02	SOLID	N/A		2.01e03	46.100	ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	NO2-02	SOLID	N/A		3.88e04	290.000	ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	BR-02	SOLID	N/A	<	3.42e02	342.000	ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	NO3-02	SOLID	N/A		1.30e05	1.830e+003	ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	PO4-02	SOLID	N/A		6.28e03	803.000	ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	SO4-02	SOLID	N/A		8.64e04	1.770e+003	ug/g
4	SAMPLE	S95T002566	0	W	@IC-01	OXALATE2	SOLID	N/A		4.09e03	285.000	ug/g
5	DUP	S95T002566	0	W	@IC-01	F-02	SOLID	1.93e04		1.90e04	1.570	RPD
5	DUP	S95T002566	0	W	@IC-01	CL-02	SOLID	2.01e03		2.09e03	3.900	RPD
5	DUP	S95T002566	0	W	@IC-01	NO2-02	SOLID	3.88e04		4.00e04	3.050	RPD
5	DUP	S95T002566	0	W	@IC-01	BR-02	SOLID	<3.42e02		<3.42e02		RPD
5	DUP	S95T002566	0	W	@IC-01	NO3-02	SOLID	1.30e05		1.24e05	4.720	RPD
5	DUP	S95T002566	0	W	@IC-01	PO4-02	SOLID	6.28e03		3.54e03	55.800	RPD
5	DUP	S95T002566	0	W	@IC-01	SO4-02	SOLID	8.64e04		8.80e04	1.830	RPD
5	DUP	S95T002566	0	W	@IC-01	OXALATE2	SOLID	4.09e03		3.53e03	14.700	RPD
6	SPK	S95T002566	0	W	@IC-01	F-02	SOLID	100		104.2	104.200	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 2992

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T002566	0	W	@IC-01	CL-02	SOLID	100	98.1	98.100	% Recovery
6	SPK	S95T002566	0	W	@IC-01	NO2-02	SOLID	100	104.4	104.400	% Recovery
6	SPK	S95T002566	0	W	@IC-01	BR-02	SOLID	100	93.2	93.200	% Recovery
6	SPK	S95T002566	0	W	@IC-01	NO3-02	SOLID	100	98.1	98.100	% Recovery
6	SPK	S95T002566	0	W	@IC-01	PO4-02	SOLID	100	98.6	98.600	% Recovery
6	SPK	S95T002566	0	W	@IC-01	SO4-02	SOLID	100	95.5	95.500	% Recovery
6	SPK	S95T002566	0	W	@IC-01	OXALATE2	SOLID	100	102.7	102.700	% Recovery
7	SAMPLE	S95T002568	0	W	@IC-01	F-02	SOLID	N/A	2.64e04	206.000	ug/g
7	SAMPLE	S95T002568	0	W	@IC-01	CL-02	SOLID	N/A	2.39e03	56.100	ug/g
7	SAMPLE	S95T002568	0	W	@IC-01	NO2-02	SOLID	N/A	3.34e04	353.000	ug/g
7	SAMPLE	S95T002568	0	W	@IC-01	BR-02	SOLID	N/A <	4.16e02	416.000	ug/g
7	SAMPLE	S95T002568	0	W	@IC-01	NO3-02	SOLID	N/A	1.19e05	2.220e+003	ug/g
7	SAMPLE	S95T002568	0	W	@IC-01	PO4-02	SOLID	N/A	1.03e04	976.000	ug/g
7	SAMPLE	S95T002568	0	W	@IC-01	SO4-02	SOLID	N/A	1.16e05	2.160e+003	ug/g
7	SAMPLE	S95T002568	0	W	@IC-01	OXALATE2	SOLID	N/A	2.81e03	346.000	ug/g
8	DUP	S95T002568	0	W	@IC-01	F-02	SOLID	2.64e04	2.34e04	12.050	RPD
8	DUP	S95T002568	0	W	@IC-01	CL-02	SOLID	2.39e03	1.76e03	30.350	RPD
8	DUP	S95T002568	0	W	@IC-01	NO2-02	SOLID	3.34e04	3.60e04	7.490	RPD
8	DUP	S95T002568	0	W	@IC-01	BR-02	SOLID	<4.16e02	<4.16e02		RPD
8	DUP	S95T002568	0	W	@IC-01	NO3-02	SOLID	1.19e05	1.26e05	5.710	RPD
8	DUP	S95T002568	0	W	@IC-01	PO4-02	SOLID	1.03e04	1.16e04	11.870	RPD
8	DUP	S95T002568	0	W	@IC-01	SO4-02	SOLID	1.16e05	1.03e05	11.870	RPD
8	DUP	S95T002568	0	W	@IC-01	OXALATE2	SOLID	2.81e03	2.65e03	5.860	RPD

Final page for worklist# 2992

Analyst Signature Date

Analyst Signature Date

Reviewer Signature Date 11/7/95

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 2992

Analyst: SMF **Instrument:** IC01 IC01 **Book #** 109N9-A C JMF 10/31/95

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC, water digests. JMF

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC		<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<.107	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		~~<.14~~ .126	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		<.140	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC		60.1	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC		79.8	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC		530.3	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC		564.8	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC		597.8	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC		529.1	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC		606.7	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC		571.9	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID		<.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID		<.017	N/A	ug/g

JMF 10/31/95

Data Entry Comments:

	SAM.	DUP.
S95T002566	7.7430g/L	7.5060g/L
S95T002568	6.3660g/L	6.6300g/L

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2992

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
		3 BLNK-PREP				@IC-01	NO2-02	SOLID		<.107	N/A	ug/g
		3 BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3 BLNK-PREP				@IC-01	NO3-02	SOLID		<.140	N/A	ug/g
		3 BLNK-PREP				@IC-01	PO4-02	SOLID		4.96e-1	N/A	ug/g
		3 BLNK-PREP				@IC-01	SO4-02	SOLID		<.136	N/A	ug/g
		3 BLNK-PREP				@IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	F-02	SOLID	N/A	1.93e4	1.70e2	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	CL-02	SOLID	N/A	2.01e3	4.61e1	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	NO2-02	SOLID	N/A	3.88e4	2.90e2	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	BR-02	SOLID	N/A	<3.42e2	3.42e2	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	NO3-02	SOLID	N/A	1.30e5	1.83e3	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	PO4-02	SOLID	N/A	6.28e3	8.03e2	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	SO4-02	SOLID	N/A	8.64e4	1.77e3	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002566	0	W	@IC-01	OXALATE2	SOLID	N/A	4.09e3	2.85e2	ug/g
95000118	BY-108 (R)	5 DUP	S95T002566	0	W	@IC-01	F-02	SOLID	1.93e4	1.90e4	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002566	0	W	@IC-01	CL-02	SOLID	2.01e3	2.07e3	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002566	0	W	@IC-01	NO2-02	SOLID	3.88e4	4.06e4	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002566	0	W	@IC-01	BR-02	SOLID	<3.42e2	<3.42e2	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002566	0	W	@IC-01	NO3-02	SOLID	1.30e5	1.24e5	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002566	0	W	@IC-01	PO4-02	SOLID	6.28e3	3.54e3	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002566	0	W	@IC-01	SO4-02	SOLID	8.64e4	8.80e4	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2992

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5	DUP	S95T002566	0	W	aIC-01	OXALATE2	SOLID	4.09e3	3.53e3	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	F-02	SOLID	100	104.2	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	CL-02	SOLID	100	98.1	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	NO2-02	SOLID	100	104.4	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	BR-02	SOLID	100	93.2	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	NO3-02	SOLID	100	98.1	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	PO4-02	SOLID	100	98.6	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	SO4-02	SOLID	100	95.5	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002566	0	W	aIC-01	OXALATE2	SOLID	100	102.7	N/A	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	F-02	SOLID	N/A	2.64e4	2.06e2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	CL-02	SOLID	N/A	2.39e3	5.61e1	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	NO2-02	SOLID	N/A	3.34e4	3.53e2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	BR-02	SOLID	N/A	<4.16e2	4.16e2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	NO3-02	SOLID	N/A	1.19e5	2.22e3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	PO4-02	SOLID	N/A	1.03e4	9.76e2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	SO4-02	SOLID	N/A	1.16e5	2.16e3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002568	0	W	aIC-01	OXALATE2	SOLID	N/A	2.81e3	3.46e2	ug/g
95000118	BY-108 (R)	8	DUP	S95T002568	0	W	aIC-01	F-02	SOLID	2.64e4	2.34e4	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002568	0	W	aIC-01	CL-02	SOLID	2.39e3	1.76e3	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002568	0	W	aIC-01	NO2-02	SOLID	3.34e4	3.60e4	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002568	0	W	aIC-01	BR-02	SOLID	<4.16e2	<4.16e2	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002568	0	W	aIC-01	NO3-02	SOLID	1.19e5	1.26e5	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2992

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	8 DUP	S95T002568	0	W	aIC-01	PO4-02	SOLID	1.03e4	1.16e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002568	0	W	aIC-01	SO4-02	SOLID	1.16e5	1.03e5	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002568	0	W	aIC-01	OXALATE2	SOLID	2.81e3	2.65e3	N/A	ug/g

Final page for worklist # 2992

Susie M. Fulton 10-30-95 0700
Analyst Signature Date

Tom D. [illegible] 11/6/95
Analyst Signature Date

Verified
Jan D. Fryer 11/7/95

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002566 & S95T002568		
TEST CODE:	@IC-01	ANALYST:	SUZIE FULTON
INSTRUMENT:	IC01	ANALYSIS DATE:	10/30/95
WORK LIST #:	2992	SAMPLE POINT:	BY-108
BATCH ID:		SAMPLE PREP:	WATER DIGEST

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9C	101.9%	101.0%	98.9%	97.4%	96.9%	96.1%	98.2%	103.6%
S95T002566	1.93E+04	2.01E+03	3.88E+04	1.30E+05	6.28E+03	8.64E+04	<341.73	4.09E+03
S95T002566DUP	1.90E+04	2.09E+03	4.00E+04	1.24E+05	3.54E+03	8.80E+04	<352.52	3.53E+03
Duplicate 1 RPD	1.5%	3.9%	3.0%	4.7%	55.9%	1.8%	N/A	14.8%
S95T002568	2.64E+04	2.39E+03	3.34E+04	1.19E+05	1.03E+04	1.16E+05	<415.65	2.81E+03
S95T002568DUP	2.34E+04	1.76E+03	3.60E+04	1.26E+05	1.16E+04	1.03E+05	<399.10	2.65E+03
Duplicate 2 RPD	12.0%	30.1%	7.6%	5.5%	12.7%	11.9%	N/A	5.8%
S95T002566SPK	104.2%	98.1%	104.4%	98.1%	98.6%	95.5%	93.2%	102.7%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Form Completed By:	Jerry Flyn	Date:	10/31/95
Chemist Approval:	Jerry Flyn	Date:	10/31/95

WHC-SD-WM-DP-145, REV. 1

LAB LEADER INFO	
Method:	In-633-106 D-1
Matrix:	SOLID
Test Code:	IC-01
Work List #:	2992
Batch #:	
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9C
Spike Sample #:	1
Prepared By:	JANN FRYE
Prepared Date:	10/31/95
Chemist:	JANN FRYE
Analyst:	SUZIE FULTON
Analysis Date:	10/30/95
Time Complete:	
Instrument Code:	IC01
Rerun:	0
Sample Prep:	WATER DIGEST
Sample Point:	BY-106
Sample Type	
STANDARD	109N9C
SAMPLE 1	S95T002566
DUPLICATE 1	S95T002566DUP
SAMPLE 2	S95T002568
DUPLICATE 2	S95T002568DUP
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T002566SPK
SPIKE DUPLICATE	

PRINT

TECH INFO

	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	<.017	<.107	<.140	4.96E-01	<.136	<.126	<.106
Standard Data (µg/mL)	68.1	79.8	530.3	607.8	628.1	606.7	564.8	571.9
Sample 1 Data (µg/mL)	1.58E+02	1.56E+01	3.00E+02	1.09E+03	4.86E+01	6.69E+02	<.126	3.17E+01
Sample 1 Dilution Factor	101	21	21	101	21	101	21	21
Sample 1 Prep DF g/L	7.743	7.743	7.743	7.743	7.743	7.743	7.743	7.743
Duplicate 1 Data (µg/mL)	1.43E+02	1.57E+01	3.00E+02	9.28E+02	2.65E+01	6.61E+02	<.126	2.65E+01
Duplicate 1 Dilution Factor	101	21	21	101	21	101	21	21
Duplicate 1 Prep DF g/L	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Sample 2 Data (µg/mL)	1.88E+02	1.52E+01	2.13E+02	7.58E+02	6.83E+01	7.38E+02	<.126	1.79E+01
Sample 2 Dilution Factor	101	21	21	101	21	101	21	21
Sample 2 Prep DF g/L	6.366	6.366	6.366	6.366	6.366	6.366	6.366	6.366
Duplicate 2 Data (µg/mL)	1.55E+02	1.17E+01	2.39E+02	8.34E+02	7.72E+01	6.80E+02	<.126	1.76E+01
Duplicate 2 Dilution Factor	101	21	21	101	21	101	21	21
Duplicate 2 Prep DF g/L	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	2.11E+02	3.11E+01	4.12E+02	1.61E+03	1.86E+02	1.27E+03	1.07E+02	1.48E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.10	10.50	10.50	10.10	10.50	10.10	10.50	10.00
Std. Conc. (µg/mL)	69	79	536	614	646	631	575	582
Detection Limit	0.013	0.017	0.107	0.140	0.296	0.136	0.126	0.106
Matrix Detection Limit 1	1.70E+02	4.61E+01	2.90E+02	1.83E+03	8.03E+02	1.77E+03	3.42E+02	2.85E+02
Matrix Detection Limit 2	2.06E+02	5.61E+01	3.53E+02	2.22E+03	9.76E+02	2.16E+03	4.16E+02	3.46E+02
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]*100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	101.9%	101.0%	98.9%	97.4%	98.9%	98.1%	98.2%	103.8%
Sample 1 in µg/g	1.93E+04	2.01E+03	3.88E+04	1.38E+05	6.28E+03	8.64E+04	<341.73	4.09E+03
Duplicate 1 in µg/g	1.90E+04	2.09E+03	4.00E+04	1.24E+05	3.54E+03	8.80E+04	<342.62	3.53E+03
Duplicate 1 RPD	1.6%	3.9%	3.0%	4.7%	55.9%	1.8%	N/A	14.8%
Sample 2 in µg/g	2.64E+04	2.39E+03	3.34E+04	1.19E+05	1.03E+04	1.16E+05	<416.65	2.81E+03
Duplicate 2 in µg/g	2.34E+04	1.75E+03	3.60E+04	1.26E+05	1.16E+04	1.03E+05	<399.10	2.66E+03
Duplicate 2 RPD	12.0%	30.1%	7.6%	5.6%	12.7%	11.9%	N/A	5.8%
Spike % Recovery	104.2%	96.1%	104.4%	96.1%	96.6%	96.8%	93.2%	102.7%

Data Entry by: Jann Frye Date: 10/31/95
Approved by: Jann Frye Date: 10/31/95
Form DIONEX.WB1 Rev. 1.3

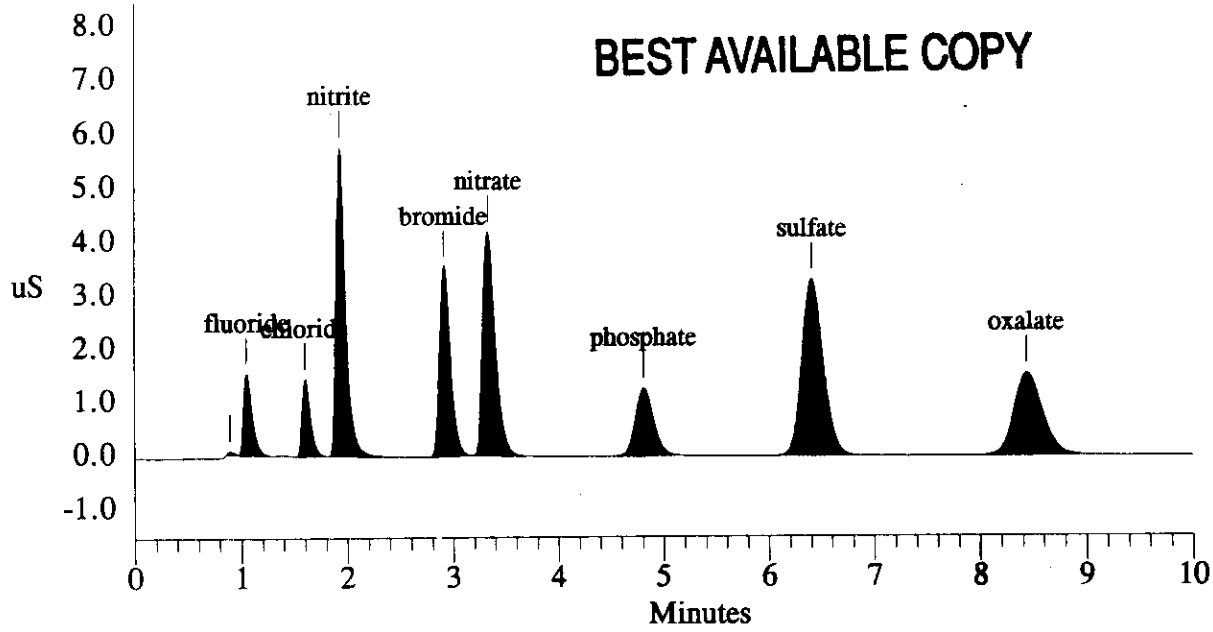
```
==============================================================================
| Sample Name: CCV  LMCS 109N9-C                Date: 10/30/1995 03:08:12     |
| Data File  : C:\DX\DATA\95103061.D05                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 5                   Detector:CDM-1      |
| Analyst    : Susie M. Fulton  Column: AG4A/AS4A anion column/SRS            |
==============================================================================
                                  10-30-95
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	59	272	2	
2	1.05	fluoride	60.159	1522	8310	2	1.94
3	1.60	chloride	79.844	1446	7604	1	1.27
4	1.93	nitrite	530.347	5766	34889	1	0.52
5	2.91	bromide	564.808	3544	24843	1	3.56
6	3.33	nitrate	597.875	4190	34070	1	5.71
7	4.81	phosphate	529.149	1276	14904	1	0.42
8	6.41	sulfate	606.725	3319	45730	1	0.79
9	8.44	oxalate	571.953	1558	28334	1	0.96
		Totals	3540.860	22681	198957		

File: 95103061.D05 Sample: CCV LMCS 109N9-C



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 392 TO 404.

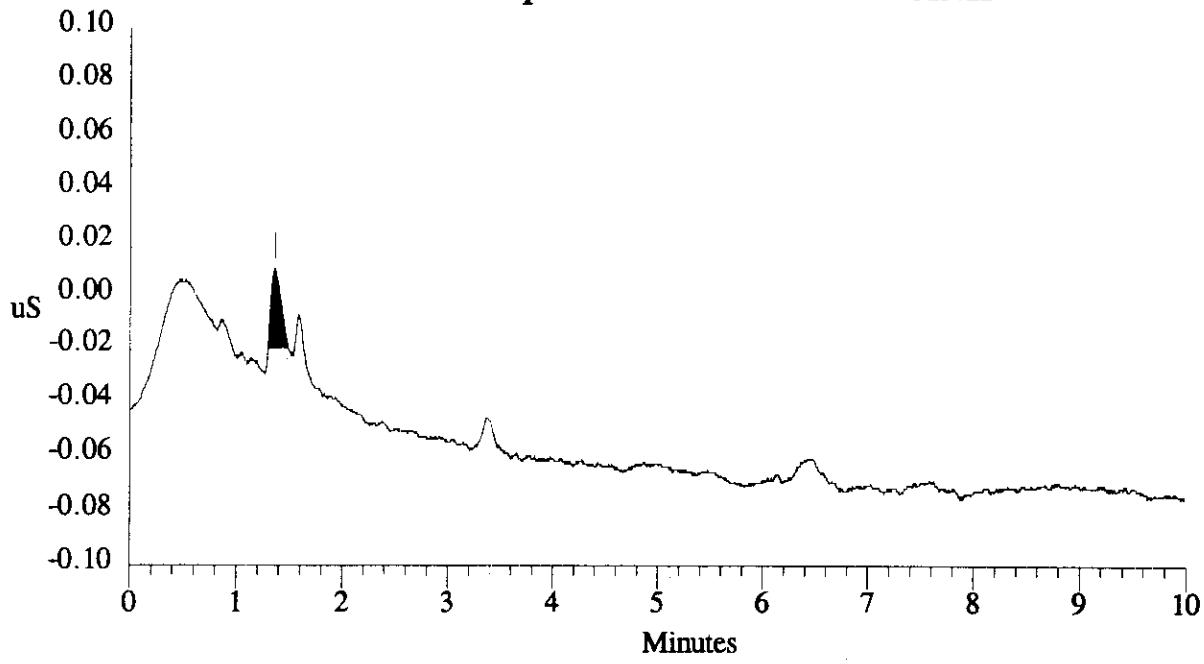
```
==============================================================================
| Sample Name: CCB   ELUENT BLANK              Date: 10/30/1995 00:59:36      |
| Data File  : C:\DX\DATA\95103061.D01                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 1                   Detector:CDM-1      |
| Analyst    :                Column: AG4A/AS4A anion column/SRS              |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95103061.D01 Sample: CCB ELUENT BLANK



WHC-SD-WM-DP-145, REV. 1

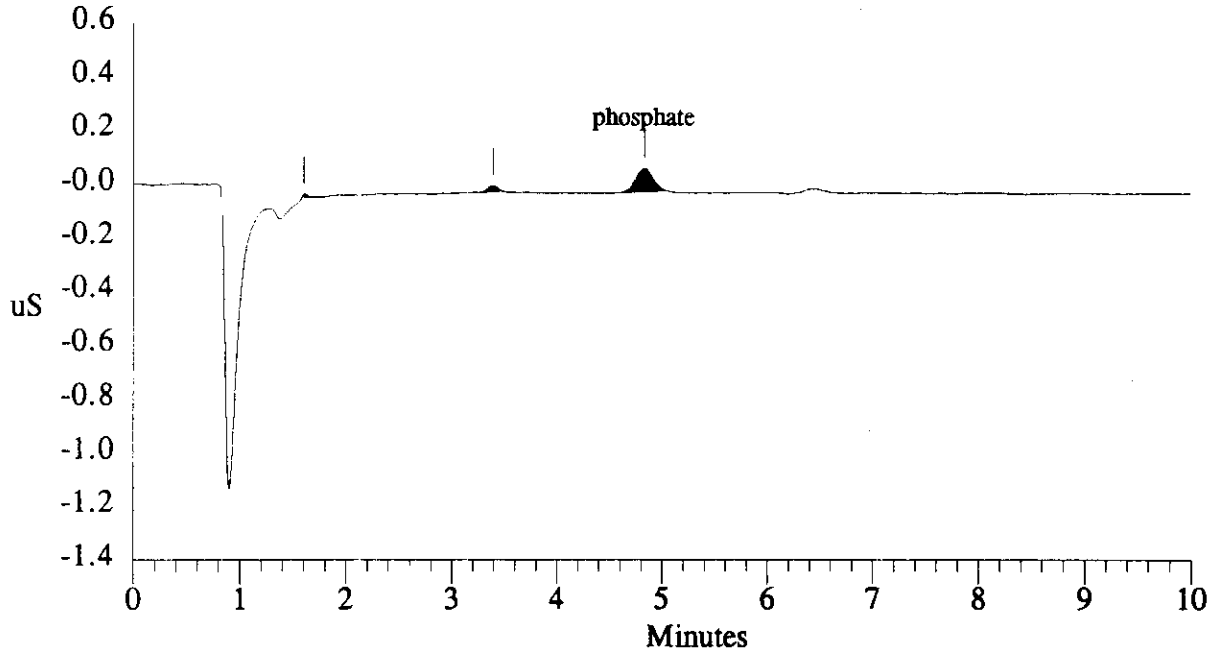
```
==============================================================================
| Sample Name: PREP BLANK                        Date: 10/30/1995 06:18:21    |
| Data File  : C:\DX\DATA\95103061.D14                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 14                   Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS            |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
3	4.83	phosphate	0.496	85	923	1	0.84
		Totals	0.496	85	923		

File: 95103061.D14 Sample: PREP BLANK



WHC-SD-WM-DP-165, REV. 1

Data Reprocessed On 10/30/1995 03:54:17

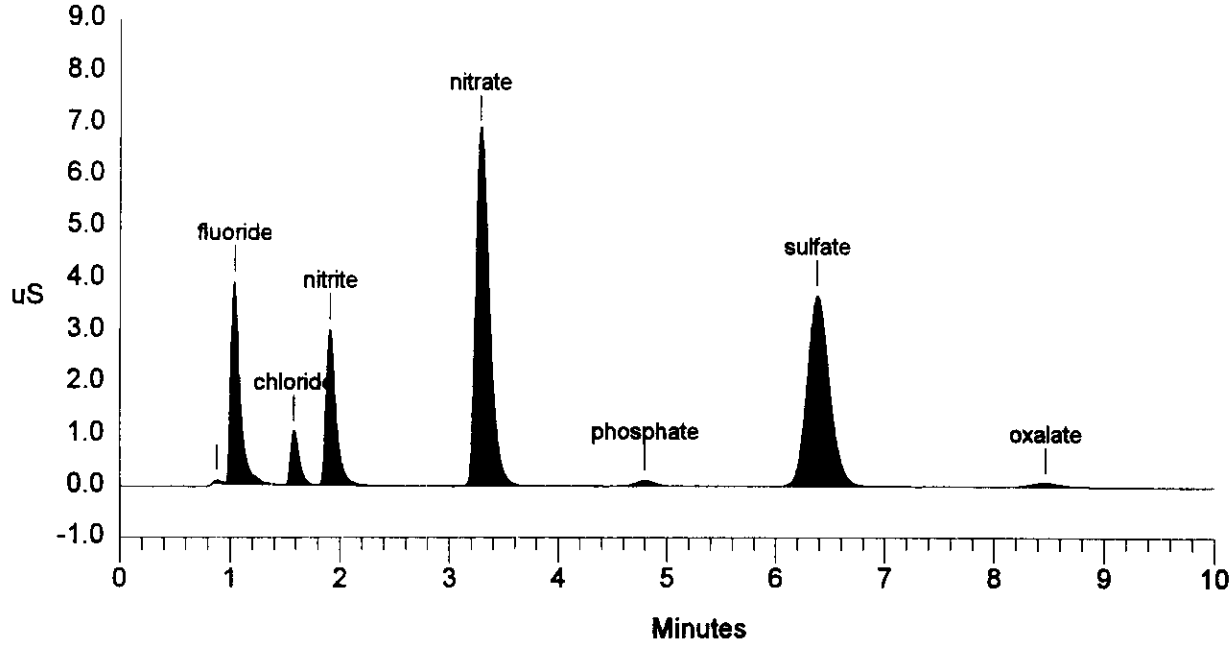
Sample Name: S95T002566 Date: 10/30/1995 03:21:50
Data File : C:\DX\DATA\95103061.D06
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 6 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	68	312	2	
●	1.04	fluoride	149.652	3890	21434	2	0.97
3	1.58	chloride	57.272	1037	5413	1	0.00
4	1.91	nitrite	288.743	3008	18258	1	-0.52
●	3.28	nitrate	1003.804	6863	59002	1	4.13
6	4.80	phosphate	58.199	104	1156	1	0.21
●	6.38	sulfate	669.074	3679	50724	1	0.31
8	8.47	oxalate	42.997	72	1200	1	1.32
		Totals	2269.741	18720	157500		

File: 95103061.D06 Sample: S95T002566



WHC-SD-WM-DP-145, REV. 1

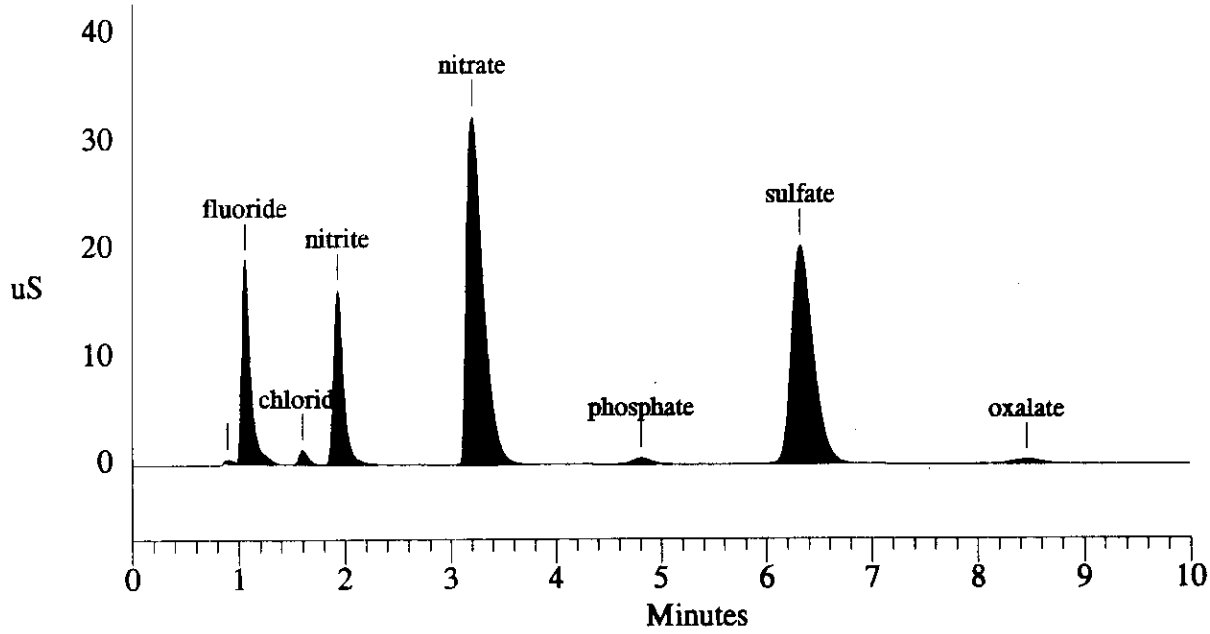
```
==========================================================================
| Sample Name: S95T002566                    Date: 10/30/1995 03:44:07    |
| Data File  : C:\DX\DATA\95103061.D07                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 7                  Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	21	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	324	1623	2	
2	1.06	fluoride	132.372	18962	101407	2	2.91
[illegible]	1.60	chloride	15.564	1299	7119	1	1.27
[illegible]	1.93	nitrite	300.212	16284	98521	1	0.52
5	3.20	nitrate	1058.624	32468	341722	1	1.59
[illegible]	4.81	phosphate	48.628	537	6239	1	0.42
7	6.32	sulfate	696.864	20431	284600	1	-0.63
[illegible]	8.46	oxalate	31.738	376	6781	1	1.20
		Totals	2284.002	90682	848011		

File: 95103061.D07 Sample: S95T002566



WHC-SD-WM-DP-145, REV. 1

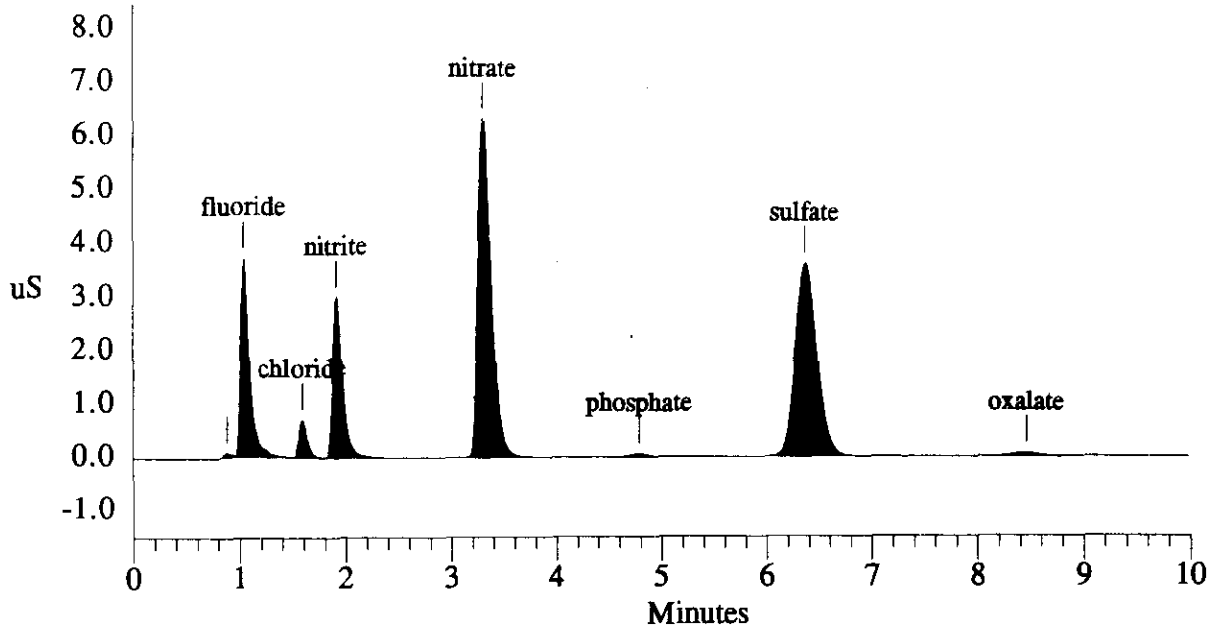
```
==================================================================================
| Sample Name: S95T002566  DUP                    Date: 10/30/1995 05:42:07      |
| Data File  : C:\DX\DATA\95103061.D11                                           |
| Method     : C:\DX\METHOD\KIT.MET                                              |
| ACI Address: 1  System: 1  Inject#: 11                    Detector:CDM-1       |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS                |
==================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	65	314	2	
[illegible]	1.04	fluoride	142.974	3714	20441	2	0.97
3	1.59	chloride	38.571	703	3608	1	0.63
4	1.91	nitrite	289.094	2996	18282	1	-0.52
[illegible]	3.30	nitrate	928.456	6307	54340	1	4.76
6	4.79	phosphate	36.900	51	543	1	0.00
[illegible]	6.37	sulfate	660.617	3608	50046	1	0.16
8	8.46	oxalate	36.767	56	884	1	1.20
		Totals	2133.379	17501	148458		

File: 95103061.D11 Sample: S95T002566 DUP



WHC-SD-WM-DP-145, REV. 1

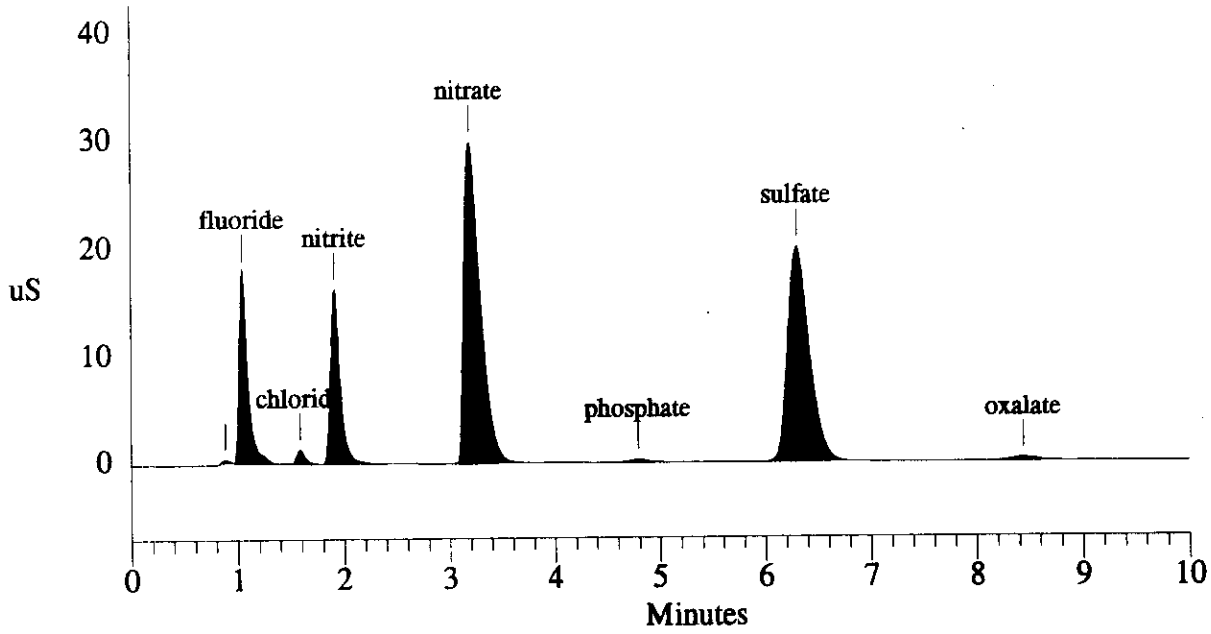
```
==========================================================================
| Sample Name: S95T002566   DUP                Date: 10/30/1995 03:59:30  |
| Data File  : C:\DX\DATA\95103061.D08                                   |
| Method     : C:\DX\METHOD\KIT.MET                                      |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-1  |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	21	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	293	1339	2	
2	1.04	fluoride	125.139	17948	95095	2	0.97
[illegible]	1.58	chloride	15.699	1325	7182	1	0.00
[illegible]	1.91	nitrite	300.001	16352	98449	1	-0.52
5	3.19	nitrate	976.889	29949	311396	1	1.27
[illegible]	4.79	phosphate	26.549	272	3160	1	0.00
7	6.30	sulfate	688.317	20174	280683	1	-0.94
[illegible]	8.44	oxalate	26.556	308	5510	1	0.96
		Totals	2159.148	86619	802815		

File: 95103061.D08 Sample: S95T002566 DUP



WHC-SD-WM-DP-145, REV. 1

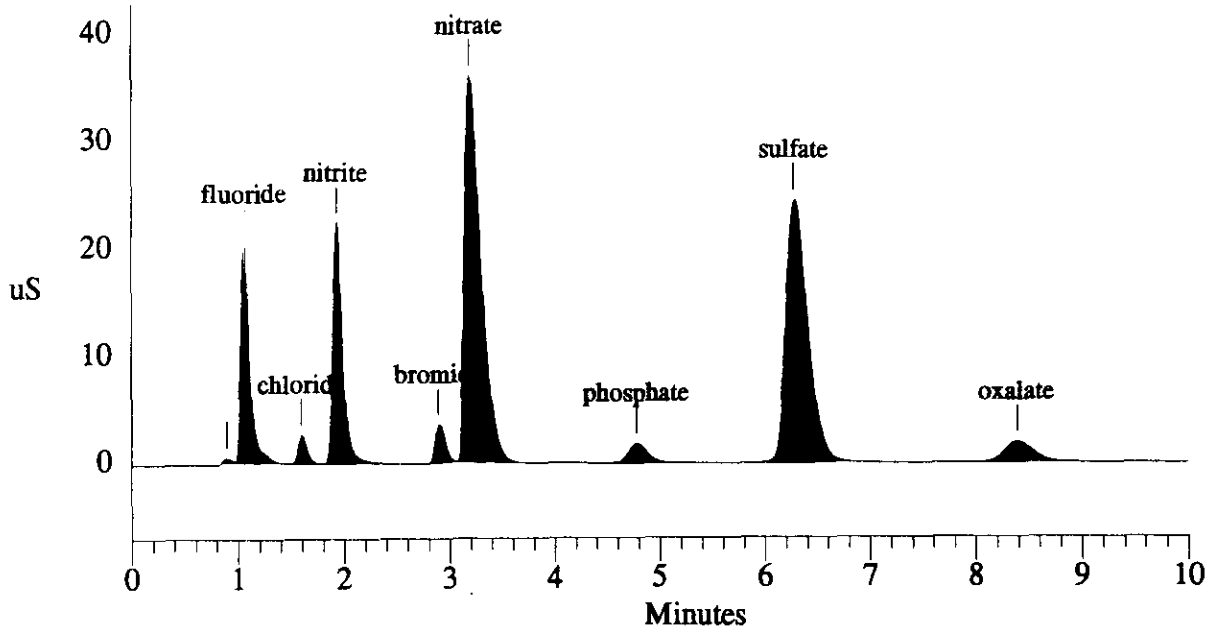
```
==========================================================================
| Sample Name: S95T002566 SPIKE                Date: 10/30/1995 06:42:20  |
| Data File  : C:\DX\DATA\95103061.D16                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 16                  Detector:CDM-1  |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS        |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1		21	3000 5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	359	1695	2	
2	1.06	fluoride	141.080	20258	109160	2	2.91
[illegible]	1.60	chloride	31.062	2655	14446	1	1.27
[illegible]	1.93	nitrite	412.151	22426	136597	1	0.52
[illegible]	2.90	bromide	107.269	3559	22565	1	3.20
6	3.19	nitrate	1169.242	36015	384177	1	1.27
[illegible]	4.78	phosphate	156.330	1822	21545	1	-0.21
8	6.28	sulfate	831.595	24535	348082	1	-1.26
[illegible]	8.39	oxalate	145.174	1892	34892	1	0.36
		Totals	2993.903	113521	1073159		

File: 95103061.D16 Sample: S95T002566 SPIKE



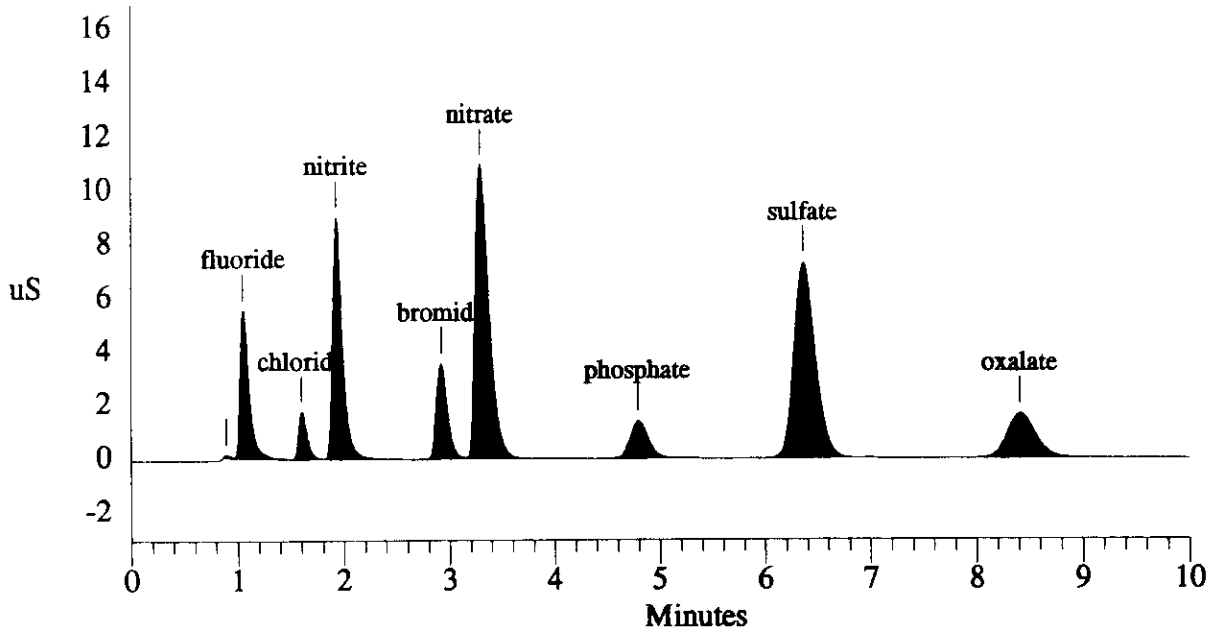
```
==========================================================================
| Sample Name: S95T002566 SPIKE                Date: 10/30/1995 06:29:49  |
| Data File  : C:\DX\DATA\95103061.D15                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 15                Detector:CDM-1    |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS        |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	112	500	2	
[illegible]	1.05	fluoride	211.199	5496	30698	2	1.94
3	1.60	chloride	95.697	1725	9152	1	1.27
4	1.93	nitrite	818.645	9014	54840	1	0.52
5	2.92	bromide	556.090	3549	24436	1	3.91
[illegible]	3.29	nitrate	1606.308	10932	96874	1	4.44
7	4.79	phosphate	575.909	1381	16291	1	0.00
[illegible]	6.36	sulfate	1271.972	7301	99925	1	0.00
9	8.41	oxalate	597.760	1629	29672	1	0.60
		Totals	5733.581	41138	362388		

File: 95103061.D15 Sample: S95T002566 SPIKE



WHC-SD-WM-DP-145, REV. 1

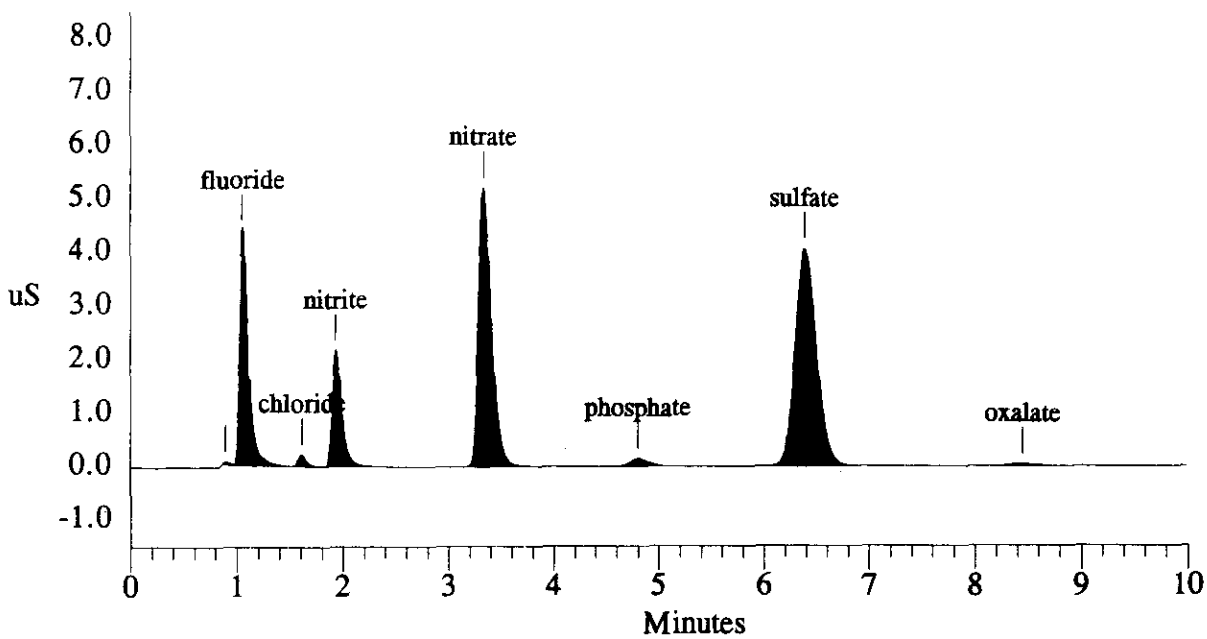
```
==============================================================================
| Sample Name: S95T002568                        Date: 10/30/1995 05:55:49    |
| Data File  : C:\DX\DATA\95103061.D12                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 12                   Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS            |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	48	212	2	
2	1.05	fluoride	168.129	4365	24194	2	1.94
3	1.61	chloride	12.569	218	1114	1	1.90
4	1.93	nitrite	217.101	2157	13342	1	0.52
5	3.33	nitrate	757.933	5197	43847	1	5.71
6	4.80	phosphate	74.319	142	1620	1	0.21
7	6.39	sulfate	735.456	4056	56060	1	0.47
8	8.45	oxalate	28.944	33	487	1	1.08
		Totals	1994.451	16215	140876		

File: 95103061.D12 Sample: S95T002568



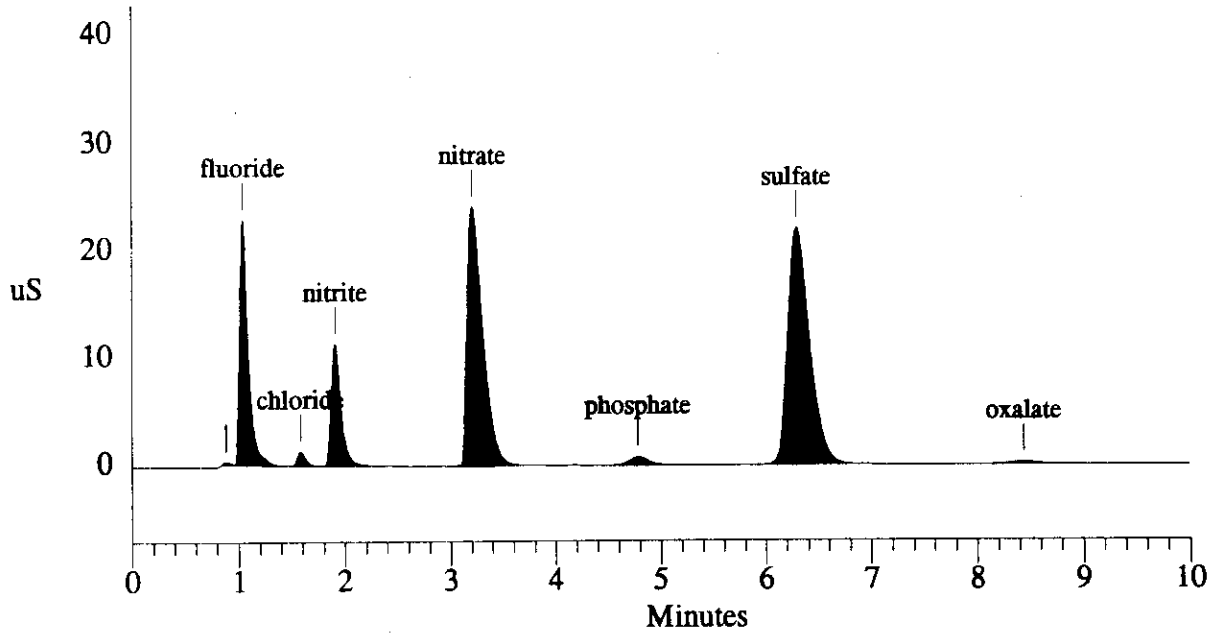
```
==============================================================================
| Sample Name: S95T002568                      Date: 10/30/1995 04:11:13      |
| Data File  : C:\DX\DATA\95103061.D09                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 9                    Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS            |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	21	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	273	1291	2	
2	1.04	fluoride	152.432	22947	119541	2	0.97
3	1.58	chloride	15.220	1305	6958	1	0.00
4	1.91	nitrite	212.617	11337	69026	1	-0.52
5	3.21	nitrate	784.054	24216	242941	1	1.90
6	4.78	phosphate	65.324	730	8580	1	-0.21
7	6.29	sulfate	753.183	22171	310731	1	-1.10
8	8.44	oxalate	17.978	192	3410	1	0.96
		Totals	2000.808	83170	762477		

File: 95103061.D09 Sample: S95T002568



WHC-SD-WM-DP-145, REV. 1

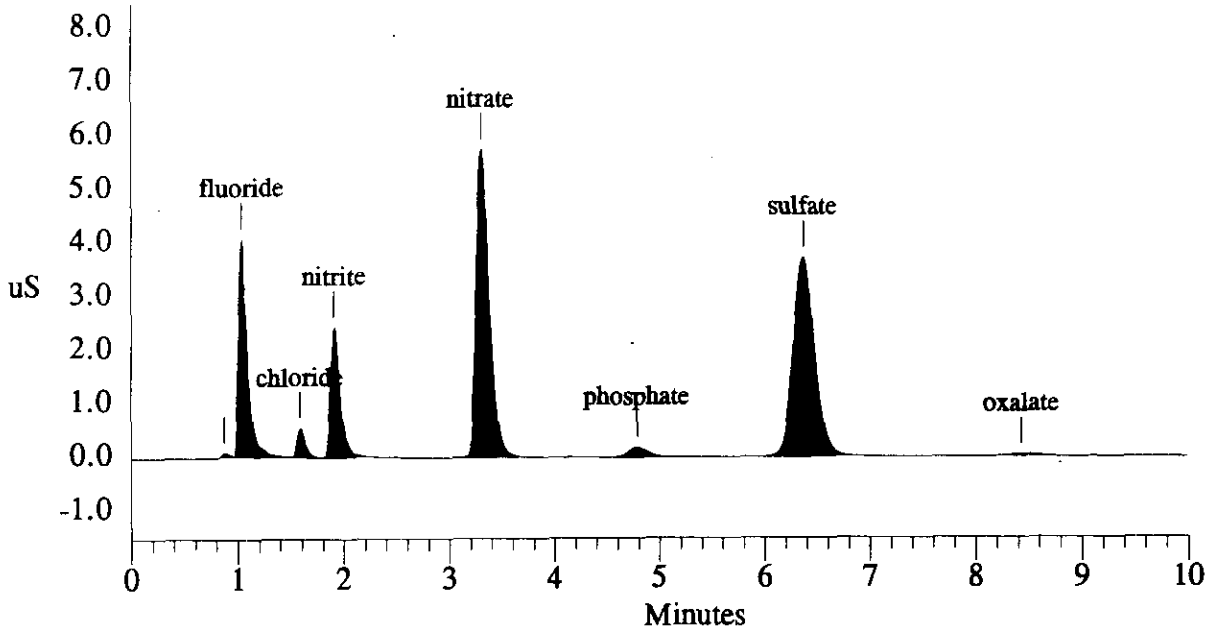
```
==============================================================================
| Sample Name: S95T002568  DUP                Date: 10/30/1995 06:06:46      |
| Data File  : C:\DX\DATA\95103061.D13                                       |
| Method     : C:\DX\METHOD\KIT.MET                                          |
| ACI Address: 1  System: 1  Inject#: 13                  Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS            |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	62	289	2	
2	1.04	fluoride	155.382	4064	22288	2	0.97
3	1.59	chloride	29.923	542	2777	1	0.63
4	1.91	nitrite	237.233	2422	14723	1	-0.52
5	3.30	nitrate	834.112	5740	48525	1	4.76
6	4.79	phosphate	87.051	172	1987	1	0.00
7	6.37	sulfate	680.274	3727	51623	1	0.16
8	8.44	oxalate	29.521	33	516	1	0.96
		Totals	2053.497	16763	142727		

File: 95103061.D13 Sample: S95T002568 DUP



WHC-SD-WM-DP-145, REV. 1

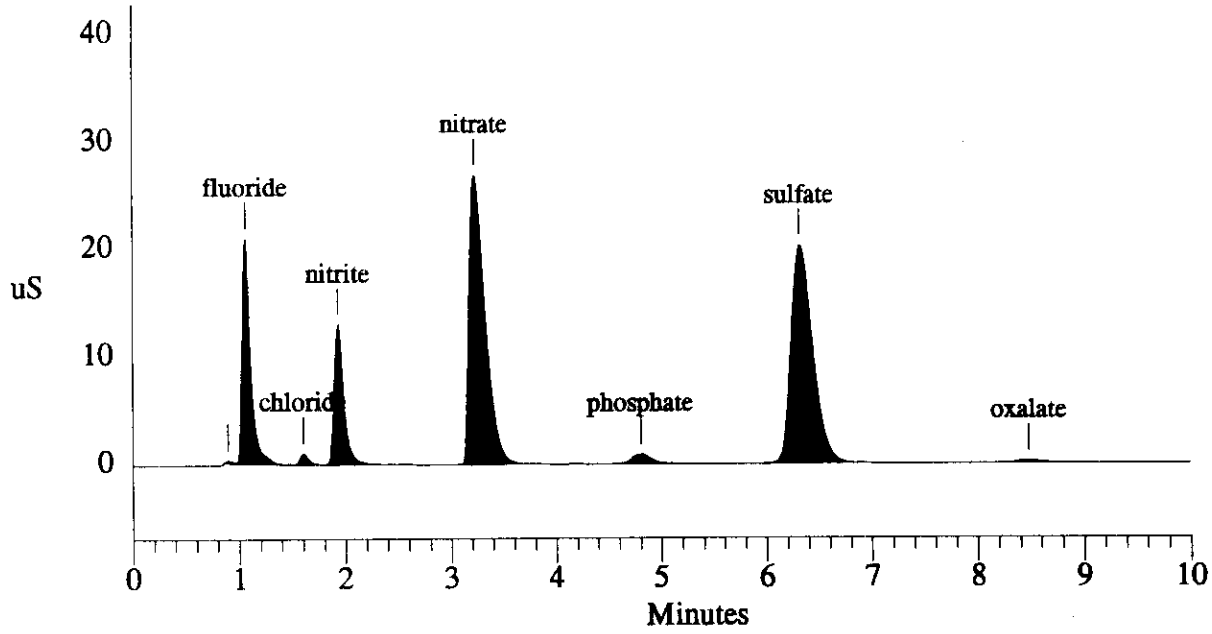
```
==========================================================================
| Sample Name: S95T002568   DUP                Date: 10/30/1995 04:21:57  |
| Data File  : C:\DX\DATA\95103061.D10                                   |
| Method     : C:\DX\METHOD\KIT.MET                                      |
| ACI Address: 1  System: 1  Inject#: 10                Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1		21	3000 5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	254	1180	2	
2	1.06	fluoride	140.494	20897	108633	2	2.91
3	1.60	chloride	11.771	991	5350	1	1.27
4	1.93	nitrite	239.053	12959	77900	1	0.52
5	3.22	nitrate	877.873	26913	275735	1	2.22
6	4.80	phosphate	77.245	871	10259	1	0.21
7	6.31	sulfate	695.416	20256	283936	1	-0.79
8	8.48	oxalate	17.631	183	3325	1	1.44
		Totals	2059.483	83325	766316		

File: 95103061.D10 Sample: S95T002568 DUP



WHC-SD-WM-DP-145, REV. 1

LABCORE Completed Worklist Report for Worklist# 2994

Analyst: kgh **Instrument:** IC01 **Book#** 109N9C

Method: LA533/05 **Rev/Mod** D-1 95000118

Worklist Comment: BY-108 IC, water digests. JMF

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
1	CCB			0	IC-QC	F-QC	QC	1		<.017		ug/mL
1	CCB			0	IC-QC	CL-QC	QC	1		<.013		ug/mL
1	CCB			0	IC-QC	NO2-QC	QC	1		<.107		ug/mL
1	CCB			0	IC-QC	BR-QC	QC	1		<.126		ug/mL
1	CCB			0	IC-QC	NO3-QC	QC	1		<.140		ug/mL
1	CCB			0	IC-QC	PO4-QC	QC	1		<.296		ug/mL
1	CCB			0	IC-QC	SO4-QC	QC	1		<.136		ug/mL
1	CCB			0	IC-QC	OXALATQC	QC	1		<.105		ug/mL
2	CCV			0	IC-QC	F-QC	QC	59		63.84	108.200	% Recovery
2	CCV			0	IC-QC	CL-QC	QC	79		86.53	109.530	% Recovery
2	CCV			0	IC-QC	NO2-QC	QC	536		579.3	108.080	% Recovery
2	CCV			0	IC-QC	BR-QC	QC	575		628.4	109.300	% Recovery
2	CCV			0	IC-QC	NO3-QC	QC	614		661.0	107.650	% Recovery
2	CCV			0	IC-QC	PO4-QC	QC	546		584.1	106.980	% Recovery
2	CCV			0	IC-QC	SO4-QC	QC	631		679.2	107.640	% Recovery
2	CCV			0	IC-QC	OXALATQC	QC	552		639.0	115.780	% Recovery
3	BLNK-PREP			0	IC-01	F-02	SOLID	1		<.013		ug/g
3	BLNK-PREP			0	IC-01	CL-02	SOLID	1		5.60e-2		ug/g
3	BLNK-PREP			0	IC-01	NO2-02	SOLID	1		<.107		ug/g
3	BLNK-PREP			0	IC-01	BR-02	SOLID	1		<.126		ug/g
3	BLNK-PREP			0	IC-01	NO3-02	SOLID	1		3.87e-1		ug/g
3	BLNK-PREP			0	IC-01	PO4-02	SOLID	1		9.38e-1		ug/g
3	BLNK-PREP			0	IC-01	SO4-02	SOLID	1		3.05e-1		ug/g
3	BLNK-PREP			0	IC-01	OXALATE2	SOLID	1		<.105		ug/g
4	SAMPLE	S95T002571	W	0	IC-01	F-02	SOLID	N/A	<	8.66e1	23.800	ug/g
4	SAMPLE	S95T002571	W	0	IC-01	CL-02	SOLID	N/A		1.71e3	31.100	ug/g
4	SAMPLE	S95T002571	W	0	IC-01	NO2-02	SOLID	N/A		4.65e4	196.000	ug/g
4	SAMPLE	S95T002571	W	0	IC-01	BR-02	SOLID	N/A	<	2.31e2	231.000	ug/g
4	SAMPLE	S95T002571	W	0	IC-01	NO3-02	SOLID	N/A		9.12e4	256.000	ug/g
4	SAMPLE	S95T002571	W	0	IC-01	PO4-02	SOLID	N/A		2.83e4	542.000	ug/g
4	SAMPLE	S95T002571	W	0	IC-01	SO4-02	SOLID	N/A		2.96e3	249.000	ug/g
4	SAMPLE	S95T002571	W	0	IC-01	OXALATE2	SOLID	N/A		1.17e3	192.000	ug/g
5	DUP	S95T002571	W	0	IC-01	F-02	SOLID	8.66e1		9.64e1	10.710	RPD
5	DUP	S95T002571	W	0	IC-01	CL-02	SOLID	1.71e3		1.72e3	0.200	RPD
5	DUP	S95T002571	W	0	IC-01	NO2-02	SOLID	4.65e4		4.65e4	0.000	RPD
5	DUP	S95T002571	W	0	IC-01	BR-02	SOLID	<2.31e2		<2.31e2		RPD
5	DUP	S95T002571	W	0	IC-01	NO3-02	SOLID	9.12e4		1.11e5	19.580	RPD
5	DUP	S95T002571	W	0	IC-01	PO4-02	SOLID	2.83e4		2.79e4	1.420	RPD
5	DUP	S95T002571	W	0	IC-01	SO4-02	SOLID	2.96e3		2.60e3	13.620	RPD
5	DUP	S95T002571	W	0	IC-01	OXALATE2	SOLID	1.17e3		1.91e3	48.050	RPD
6	SPK	S95T002571	W	0	IC-01	F-02	SOLID	100		109.3	109.300	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 2994

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T002571	0	W	IC-01	CL-02	SOLID	100	138.0	138.000	% Recovery
6	SPK	S95T002571	0	W	IC-01	NO2-02	SOLID	100	59.0	59.000	% Recovery
6	SPK	S95T002571	0	W	IC-01	BR-02	SOLID	100	96.7	96.700	% Recovery
6	SPK	S95T002571	0	W	IC-01	NO3-02	SOLID	100	47.1	47.100	% Recovery
6	SPK	S95T002571	0	W	IC-01	PO4-02	SOLID	100	90.1	90.100	% Recovery
6	SPK	S95T002571	0	W	IC-01	SO4-02	SOLID	100	97.6	97.600	% Recovery
6	SPK	S95T002571	0	W	IC-01	OXALATE2	SOLID	100	107.9	107.900	% Recovery

Final page for worklist# 2994

Analyst Signature Date

Analyst Signature Date

Reviewer Signature Date 11/2/95

LABCORE Data Entry Template for Worklist# 2994

Analyst: kgh **Instrument:** IC01 IC01 **Book #** 109N9C

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC, water digests. JMF

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
		1 CCB			@IC-QC	F-QC	QC		<.013	N/A	ug/mL
		1 CCB			@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1 CCB			@IC-QC	NO2-QC	QC		<.107	N/A	ug/mL
		1 CCB			@IC-QC	BR-QC	QC		<.126	N/A	ug/mL
		1 CCB			@IC-QC	NO3-QC	QC		<.140	N/A	ug/mL
		1 CCB			@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1 CCB			@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1 CCB			@IC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2 CCV			@IC-QC	F-QC	QC		63.8	N/A	ug/mL
		2 CCV			@IC-QC	CL-QC	QC		86.5	N/A	ug/mL
		2 CCV			@IC-QC	NO2-QC	QC		579.2	N/A	ug/mL
		2 CCV			@IC-QC	BR-QC	QC		628.4	N/A	ug/mL
		2 CCV			@IC-QC	NO3-QC	QC		660.9	N/A	ug/mL
		2 CCV			@IC-QC	PO4-QC	QC		584.1	N/A	ug/mL
		2 CCV			@IC-QC	SO4-QC	QC		679.2	N/A	ug/mL
		2 CCV			@IC-QC	OXALATQC	QC		639.0	N/A	ug/mL
		3 BLNK-PREP			@IC-01	F-02	SOLID		<.013	N/A	ug/g
		3 BLNK-PREP			@IC-01	CL-02	SOLID		5.60e-2	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2994

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				IC-01	NO2-02	SOLID		<.107	N/A	ug/g
		3	BLNK-PREP				IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				IC-01	NO3-02	SOLID		3.87e-1	N/A	ug/g
		3	BLNK-PREP				IC-01	PO4-02	SOLID		9.38e-1	N/A	ug/g
		3	BLNK-PREP				IC-01	SO4-02	SOLID		3.05e-1	N/A	ug/g
		3	BLNK-PREP				IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	F-02	SOLID	N/A	8.66e1	2.38e1	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	CL-02	SOLID	N/A	1.71e3	3.11e1	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	NO2-02	SOLID	N/A	4.65e4	1.96e2	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	BR-02	SOLID	N/A	<2.31e2	2.31e2	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	NO3-02	SOLID	N/A	9.12e4	2.56e2	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	PO4-02	SOLID	N/A	2.83e4	5.42e2	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	SO4-02	SOLID	N/A	2.96e3	2.49e2	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002571	0	W	IC-01	OXALATE2	SOLID	N/A	1.17e3	1.92e2	ug/g
95000118	BY-108 (R)	5	DUP	S95T002571	0	W	IC-01	F-02	SOLID	8.66e1	9.64e1	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002571	0	W	IC-01	CL-02	SOLID	1.71e3	1.72e3	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002571	0	W	IC-01	NO2-02	SOLID	4.65e4	4.65e4	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002571	0	W	IC-01	BR-02	SOLID	<2.31e2	<2.31e2	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002571	0	W	IC-01	NO3-02	SOLID	9.12e4	1.11e5	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002571	0	W	IC-01	PO4-02	SOLID	2.83e4	2.79e4	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002571	0	W	IC-01	SO4-02	SOLID	2.96e3	2.59e3	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2994

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	aIC-01	OXALATE2	SOLID	1.17e3	1.91e3	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	F-02	SOLID	100	109.3	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	CL-02	SOLID		138.0	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	NO2-02	SOLID		59.0	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	BR-02	SOLID		96.7	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	NO3-02	SOLID		47.1	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	PO4-02	SOLID		90.1	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	SO4-02	SOLID		97.6	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	aIC-01	OXALATE2	SOLID		107.9	N/A	ug/g

Final page for worklist # 2994

See attached for original signature

Analyst Signature **Date**

J. M. Fuge 11/1/95

Reprint done to correct data entry error

Verified 11/2/95 John M. Fuge

Analyst Signature **Date**

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2994

Analyst: KGH **Instrument:** IC01 IC01 **Book #** 109NQ-C

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC, water digests. JMF

See attached report. Wrong values voided JMF 11/1/95

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC	1	<6.20 E-02	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<8.30 E-02	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<5.47 E-1	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		<1.50 E-1	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		<6.99 E-1	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<5.96 E-1	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<6.78 E-1	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.496	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC	59	63.84	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC	79	86.53	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC	536	579.2	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC	575	~~660.96~~ 628.46 ek	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC	614	660.96	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC	546	584.12	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC	631	679.23	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC	552	639.08	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID	1	<.620 E-2	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID	1	<.083	N/A	ug/g

Data Entry Comments:

	SAM	DUP
S95T002571	6.0070 g/L	6.2260 g/L

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2994

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
		3 BLNK-PREP				@IC-01	NO2-02	SOLID	1	<.547	N/A	ug/g
		3 BLNK-PREP				@IC-01	BR-02	SOLID		<.150	N/A	ug/g
		3 BLNK-PREP				@IC-01	NO3-02	SOLID		<.699	N/A	ug/g
		3 BLNK-PREP				@IC-01	PO4-02	SOLID		<.596	N/A	ug/g
		3 BLNK-PREP				@IC-01	SO4-02	SOLID		<.678	N/A	ug/g
		3 BLNK-PREP				@IC-01	OXALATE2	SOLID		<.496	N/A	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	F-02	SOLID	N/A	8.66^{E1}	1.14^{E2}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	CL-02	SOLID	N/A	1.73^{E3}	1.52^{E2}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	NO2-02	SOLID	N/A	4.65^{E4}	1.00^{E3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	BR-02	SOLID	N/A	<274.7	2.75^{E2}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	NO3-02	SOLID	N/A	9.12^{E4}	1.28^{E3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	PO4-02	SOLID	N/A	2.83^{E4}	1.09^{E3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	SO4-02	SOLID	N/A	2.98^{E3}	1.24^{E3}	ug/g
95000118	BY-108 (R)	4 SAMPLE	S95T002571	0	W	@IC-01	OXALATE2	SOLID	N/A	1.17^{E3}	9.08^{E2}	ug/g
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	F-02	SOLID	8.66^{E1}	9.64^{E1}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	CL-02	SOLID	1.73^{E3}	1.73^{E3}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	NO2-02	SOLID	4.65^{E4}	465^{E4}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	BR-02	SOLID	<274.7	<265.02	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	NO3-02	SOLID	9.12^{E4}	1.11^{E5}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	PO4-02	SOLID	2.83^{E4}	2.79^{E4}	N/A	ug/g
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	SO4-02	SOLID	2.98^{E3}	2.60^{E3}	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2994

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5 DUP	S95T002571	0	W	@IC-01	OXALATE2	SOLID	1.17 E3	1.91 E3	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	F-02	SOLID	100	109.4	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	CL-02	SOLID		137.1	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	NO2-02	SOLID		58.8	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	BR-02	SOLID		96.7	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	NO3-02	SOLID		47.1	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	PO4-02	SOLID		90.2	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	SO4-02	SOLID		97.6	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002571	0	W	@IC-01	OXALATE2	SOLID		107.9	N/A	ug/g

Final page for worklist # 2994

[signature] 10-30-95
Analyst Signature Date

[signature] 10/30/95
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002571		
TEST CODE:	@IC-01	ANALYST:	K.G. HIGBEE
INSTRUMENT:	IC01	ANALYSIS DATE:	10/29/95
WORK LIST #:	2994	SAMPLE POINT:	BY-108
BATCH ID:		SAMPLE PREP:	WATER DIGEST

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9C	108.1%	109.5%	106.1%	107.6%	107.0%	107.6%	109.3%	115.8%
S95T002571	8.66E+01	1.71E+03	4.65E+04	9.12E+04	2.83E+04	2.96E+03	<230.73	1.17E+03
S95T002571DUP	9.64E+01	1.72E+03	4.65E+04	1.11E+05	2.79E+04	2.59E+03	<222.61	1.91E+03
Duplicate 1 RPD	10.7%	0.2%	0.1%	19.6%	1.5%	13.6%	N/A	47.6%
	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
S95T002571SPK	109.3%	138.0%	59.0%	47.1%	90.1%	97.6%	96.7%	107.9%

NARRATIVE: Analyst Comments:

Chemist Comments:

Form Completed By:	[signature]	Date:	AMF 11/1/95
Chemist Approval:	[signature]	Date:	11/1/95

LAB LEADER INFO	
Method:	LA-533-105 D-1
Matrix:	SOLID
Test Code:	IC-01
Work List #:	2994
Batch #:	
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109n9C
Spike Sample #:	1
Prepared By:	JANN FRYE
Prepared Date:	11/01/95
Chemist:	JANN FRYE
Analyst:	K.G. HIGBEE
Analysis Date:	10/29/95
Time Complete:	
Instrument Code:	IC01
Rerun:	0
Sample Prep:	WATER DIGEST
Sample Point:	SY-106
Sample Type	
STANDARD	109N9C
SAMPLE 1	S95T002571
DUPLICATE 1	S95T002571DUP
SAMPLE 2	
DUPLICATE 2	
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T002571SPK
SPIKE DUPLICATE	

PRINT

TECH INFO	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	5.00E-02	<.107	3.87E-01	9.30E-01	3.00E-01	<.126	<.106
Standard Data (µg/mL)	63.8	96.5	579.2	969.9	894.1	579.2	638.4	638
Sample 1 Data (µg/mL)	5.38E-01	1.83E+01	2.79E+02	5.46E+02	1.70E+02	1.76E+01	<.126	7.00E+00
Sample 1 Dilution Factor	11	11	11	11	11	11	11	11
Sample 1 Prep DF g/L	6.007	6.007	6.007	6.007	6.007	6.007	6.007	6.007
Duplicate 1 Data (µg/mL)	5.00E-01	1.07E+01	2.90E+02	5.91E+02	1.73E+02	1.81E+01	<.126	1.18E+01
Duplicate 1 Dilution Factor	11	11	11	11	11	11	11	11
Duplicate 1 Prep DF g/L	6.226	6.226	6.226	6.226	6.226	6.226	6.226	6.226
Sample 2 Data (µg/mL)								
Sample 2 Dilution Factor								
Sample 2 Prep DF								
Duplicate 2 Data (µg/mL)								
Duplicate 2 Dilution Factor								
Duplicate 2 Prep DF								
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	6.97E+00	2.12E+01	3.11E+02	5.77E+02	2.19E+02	7.94E+01	5.56E+01	5.56E+01
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Std. Conc. (µg/mL)	59	79	536	614	546	631	575	552
Detection Limit	0.013	0.017	0.107	0.140	0.296	0.136	0.126	0.106
Matrix Detection Limit 1	2.39E+01	3.11E+01	1.96E+02	2.66E+02	5.42E+02	2.49E+02	2.31E+02	1.92E+02
Matrix Detection Limit 2	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]*100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	108.1%	108.9%	106.1%	107.6%	107.6%	107.6%	100.3%	116.9%
Sample 1 in µg/g	8.96E+01	1.71E+03	4.65E+04	9.12E+04	2.83E+04	2.93E+03	<209.73	1.17E+03
Duplicate 1 in µg/g	8.34E+01	1.78E+03	4.83E+04	1.11E+05	2.79E+04	2.89E+03	<222.61	1.91E+03
Duplicate 1 RPD	10.7%	0.2%	0.1%	19.6%	1.5%	13.6%	N/A	47.6%
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Spike % Recovery	109.3%	136.0%	89.0%	47.1%	90.1%	97.5%	98.7%	107.9%

Data Entry by: Jann Frye Date: 11/01/95
Approved by: Jann Frye Date: 11/1/95
Form DIONEX.WB1 Rev. 1.3

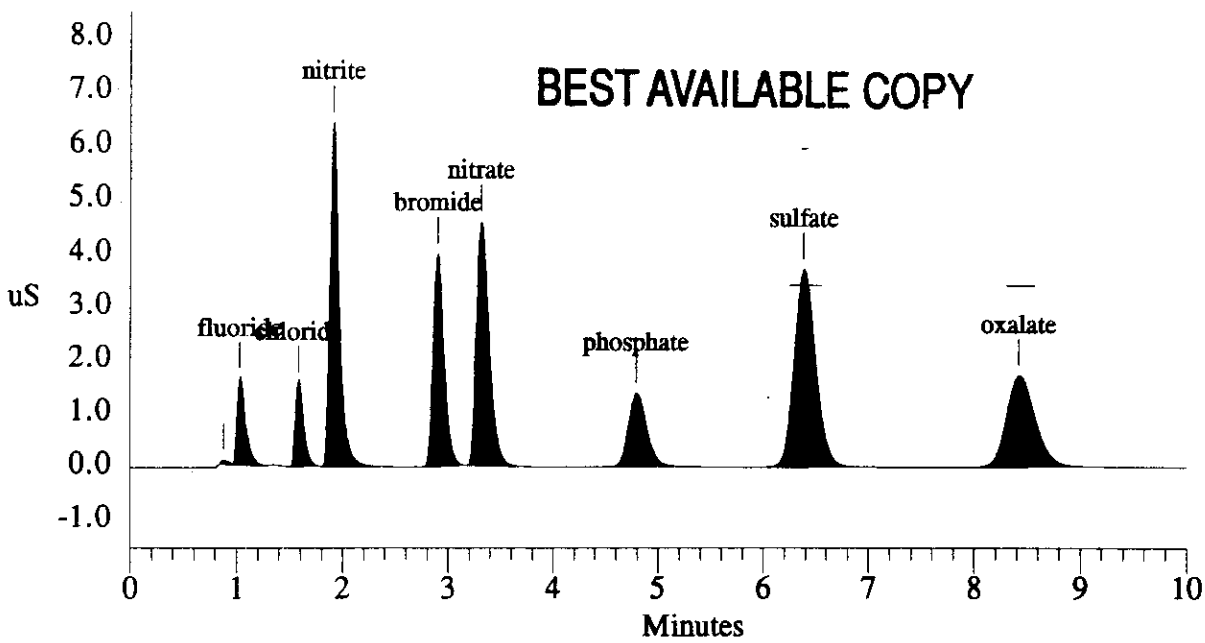
Sample Name: STANDARD-109N9-C Date: 10/29/1995 01:43:19
Data File : C:\DX\DATA\95102361.D04
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 4 Detector:CDM-1
Analyst : [illegible] Column: AG4A/AS4A anion column/SRS
10-29-95

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	77	369	2	
2	1.03	fluoride	63.838	1608	8842	2	0.00
3	1.58	chloride	86.534	1565	8257	1	0.00
4	1.91	nitrite	579.257	6419	38265	1	-0.52
5	2.90	bromide	628.464	3997	27817	1	3.20
6	3.31	nitrate	660.957	4578	37915	1	5.08
7	4.79	phosphate	584.117	1383	16535	1	0.00
8	6.38	sulfate	679.233	3717	51540	1	0.31
9	8.42	oxalate	639.079	1723	31816	1	0.72
		Totals	3921.480	25066	221356		

File: 95102361.D04 Sample: STANDARD-109N9-C



WHO-CD-WM-DP-145, REV. 1

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 415 TO 420.

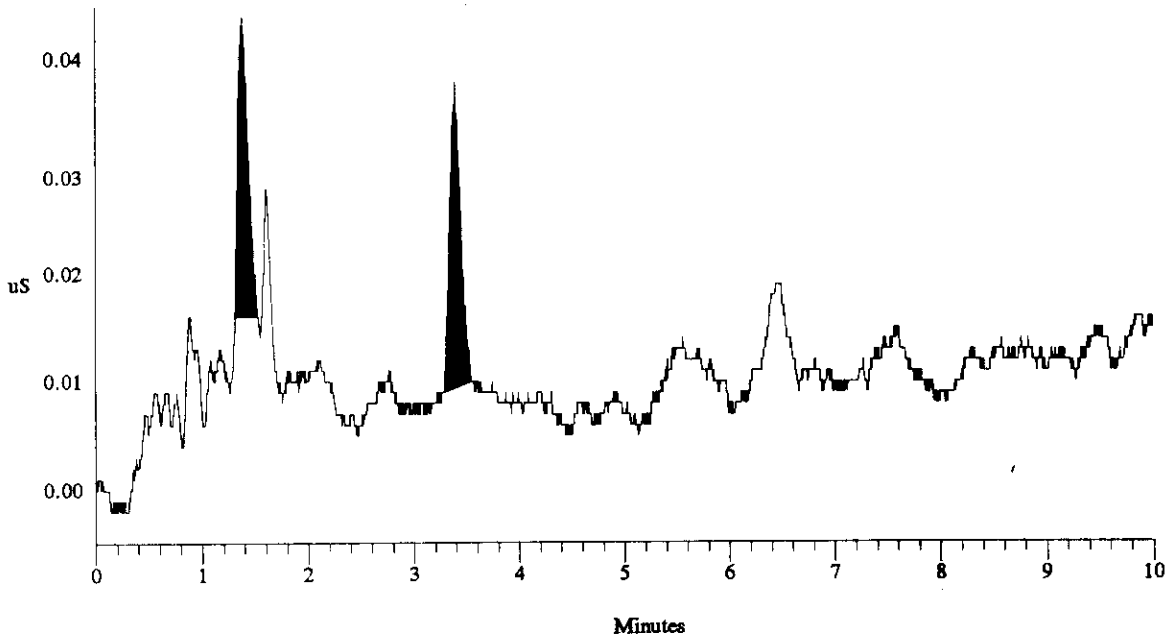
```
==============================================================================
| Sample Name: BLANK                          Date: 10/29/1995 01:29:37       |
| Data File  : C:\DX\DATA\95102361.D03                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-1      |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS            |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95102361.D03 Sample: BLANK



WHO-SD-WM-DP-145, REV.1

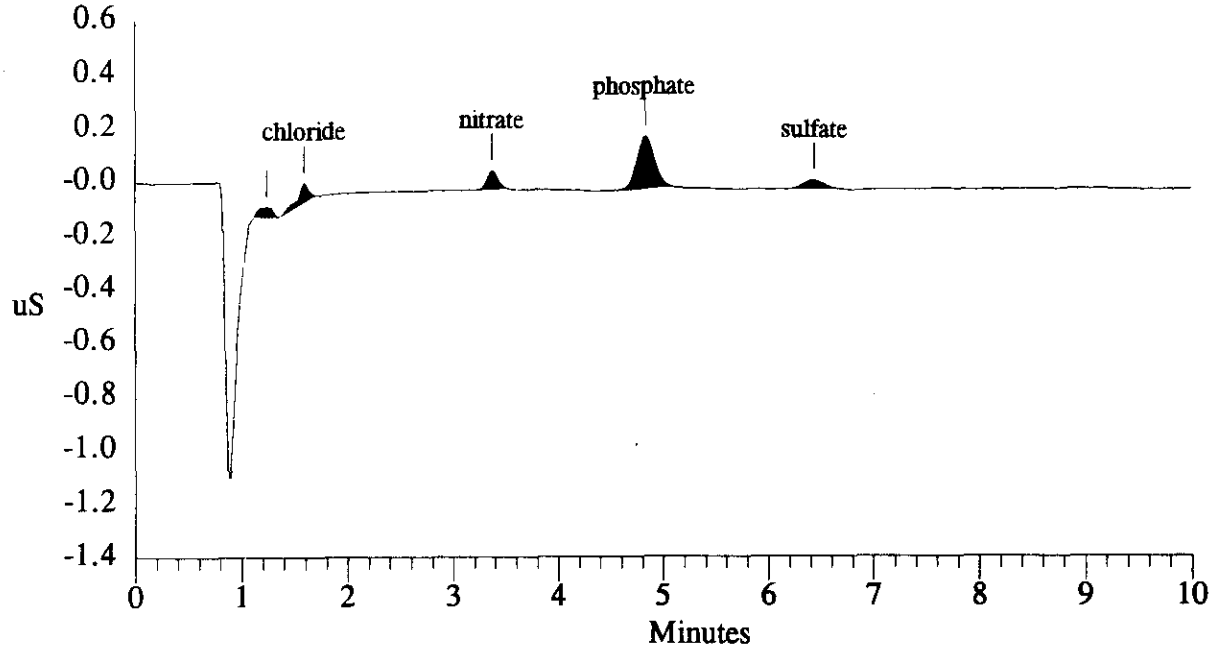
```
==================================================================================
| Sample Name: BLANK-PREP                        Date: 10/29/1995 02:04:02        |
| Data File  : C:\DX\DATA\95102361.D05                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 5                      Detector:CDM-1       |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS                |
==================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.24		0.000	35	316	1	
2	1.59	chloride	0.056	68	457	1	0.63
3	3.37	nitrate	0.387	68	466	1	6.98
4	4.83	phosphate	0.938	192	2208	1	0.84
5	6.44	sulfate	0.305	30	372	1	1.26
		Totals	1.686	393	3818		

File: 95102361.D05 Sample: BLANK-PREP



WHO-SD-WM-DP-145, REV. 1

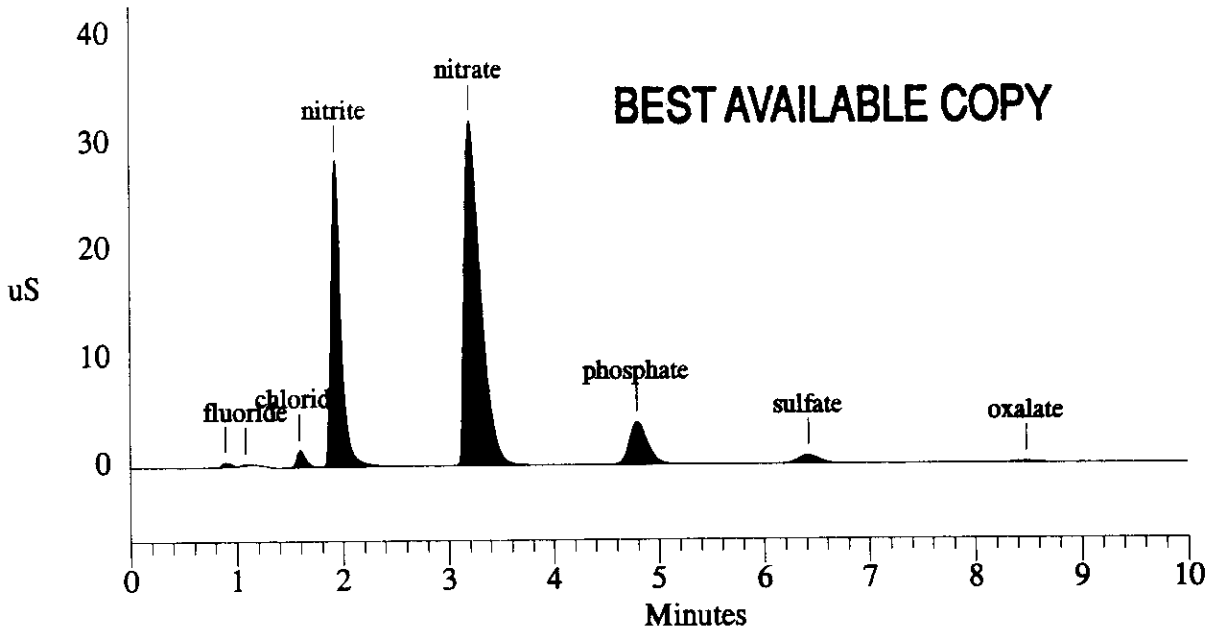
Sample Name: S95T002571SAM	Date: 10/29/1995 04:53:46
Data File : C:\DX\DATA\95102361.D09	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 9	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	11	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	363	2083	1	
2	1.08	fluoride	0.520	115	381	1	4.85
3	1.59	chloride	10.389	1549	9122	1	0.63
4	1.93	nitrite	279.196	28404	178208	1	0.52
5	3.20	nitrate	547.616	32124	336776	1	1.59
6	4.79	phosphate	169.819	3964	46439	1	0.00
7	6.42	sulfate	17.883	757	10757	1	0.94
8	8.48	oxalate	7.056	134	2307	1	1.44
		Totals	1032.479	67410	586073		

File: 95102361.D09 Sample: S95T002571SAM



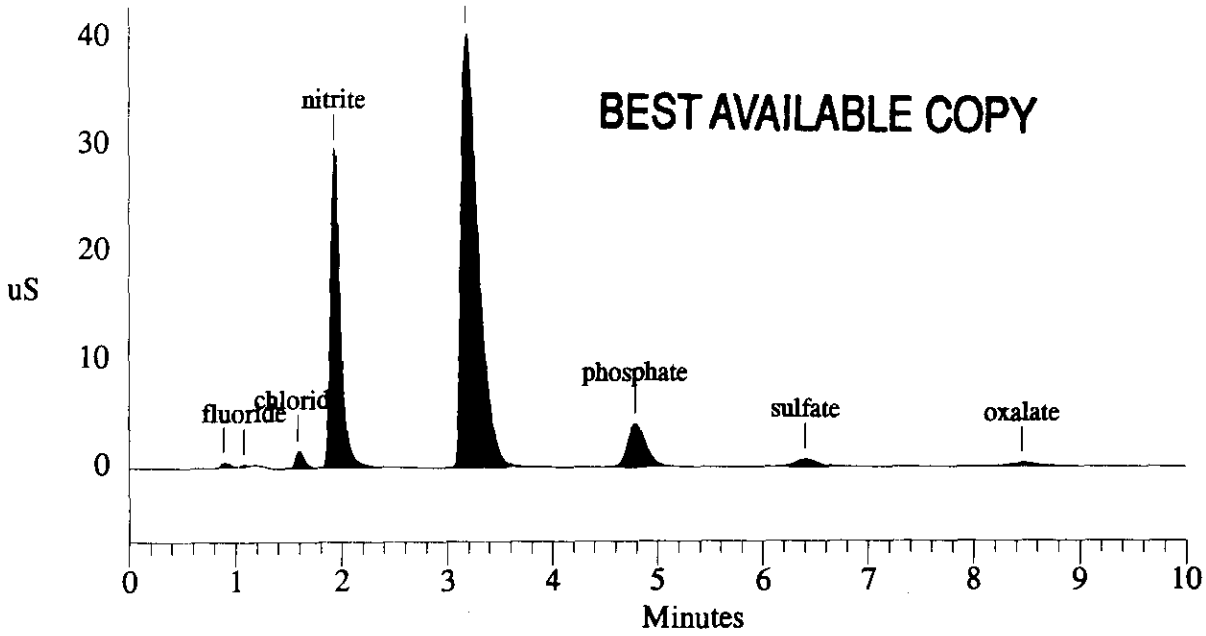
```
==============================================================================
| Sample Name: S95T002571DUP                    Date: 10/29/1995 07:41:03     |
| Data File  : C:\DX\DATA\95102361.D12                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 12                   Detector:CDM-1     |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS             |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	11	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	398	2272	1	
2	1.08	fluoride	0.600	136	485	1	4.85
3	1.59	chloride	10.796	1589	9487	1	0.63
4	1.93	nitrite	289.501	29482	185032	1	0.52
5	3.18	nitrate	691.090	40396	444739	1	0.95
6	4.79	phosphate	173.466	4045	47501	1	0.00
7	6.41	sulfate	16.159	672	9521	1	0.79
8	8.46	oxalate	11.888	262	4564	1	1.20
		Totals	1193.500	76978	703602		

File: 95102361.D12 Sample: S95T002571DUP



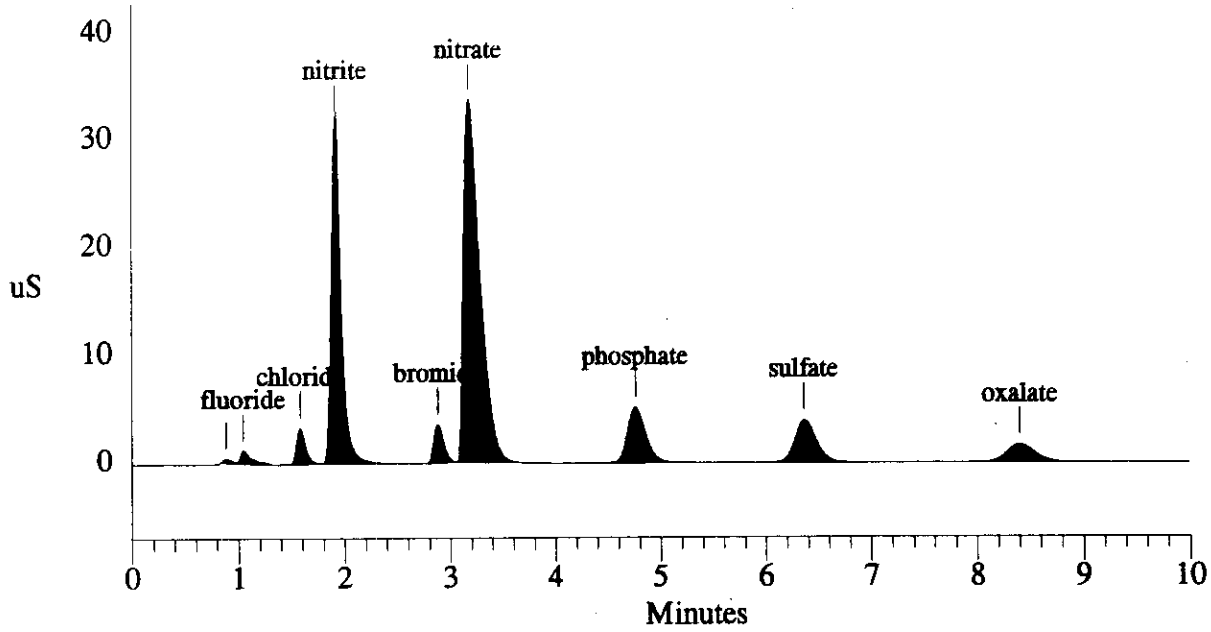
```
==========================================================================
| Sample Name: S95T002571SPK                  Date: 10/29/1995 08:00:25   |
| Data File  : C:\DX\DATA\95102361.D13                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 13                 Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS          |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	11	3000	5Hz	0.00	10.00	200	

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	380	2113	2	
2	1.04	fluoride	6.976	1149	8873	2	0.97
3	1.58	chloride	21.219	3372	18991	1	0.00
4	1.91	nitrite	310.717	31836	199127	1	-0.52
5	2.88	bromide	55.614	3567	22320	1	2.49
6	3.17	nitrate	576.517	33673	357642	1	0.63
7	4.76	phosphate	219.085	5171	61008	1	-0.63
8	6.36	sulfate	79.468	3975	55594	1	0.00
9	8.40	oxalate	66.642	1656	30405	1	0.48
		Totals	1336.239	84780	756073		

File: 95102361.D13 Sample: S95T002571SPK



WHC-SD-WM-DP-145, REV. 1

LABCORE Completed Worklist Report for Worklist# 3182

Analyst: pjm **Instrument:** IC01 **Book#** 109N9D

95000104

Method: LA-533-105 Rev/Mod D-1 LAD 11-17-95

Worklist Comment: BY108 IC

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
1	CCB			0	@IC-QC	F	QC	1		<.013		ug/mL
1	CCB			0	@IC-QC	CL	QC	1		<.017		ug/mL
1	CCB			0	@IC-QC	NO2	QC	1		<.107		ug/mL
1	CCB			0	@IC-QC	BR	QC	1		<.126		ug/mL
1	CCB			0	@IC-QC	NO3	QC	1		0.378		ug/mL
1	CCB			0	@IC-QC	PO4	QC	1		<.296		ug/mL
1	CCB			0	@IC-QC	SO4	QC	1		<.136		ug/mL
1	CCB			0	@IC-QC	OXALATE2	QC	1		<.105		ug/mL
2	CCV			0	@IC-QC	F	QC	59		58.6	99.320	% Recovery
2	CCV			0	@IC-QC	CL	QC	79		77.8	98.480	% Recovery
2	CCV			0	@IC-QC	NO2	QC	541		507.5	93.800	% Recovery
2	CCV			0	@IC-QC	BR	QC	575		567.3	98.660	% Recovery
2	CCV			0	@IC-QC	NO3	QC	614		607	98.860	% Recovery
2	CCV			0	@IC-QC	PO4	QC	546		519.6	95.160	% Recovery
2	CCV			0	@IC-QC	SO4	QC	531		514	97.310	% Recovery
2	CCV			0	@IC-QC	OXALATE2	QC	533		566.4	106.300	% Recovery
3	BLNK-PREP			0	@IC-01	F-02	SOLID	1		<.013		ug/g
3	BLNK-PREP			0	@IC-01	CL-02	SOLID	1		<.017		ug/g
3	BLNK-PREP			0	@IC-01	NO2-02	SOLID	1		<.107		ug/g
3	BLNK-PREP			0	@IC-01	BR-02	SOLID	1		<.126		ug/g
3	BLNK-PREP			0	@IC-01	NO3-02	SOLID	1		0.359		ug/g
3	BLNK-PREP			0	@IC-01	PO4-02	SOLID	1		<.296		ug/g
3	BLNK-PREP			0	@IC-01	SO4-02	SOLID	1		<.136		ug/g
3	BLNK-PREP			0	@IC-01	OXALATE2	SOLID	1		<.105		ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	F-02	SOLID	N/A		9.73e3	111.000	ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	CL-02	SOLID	N/A		1.50e3	146.000	ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	NO2-02	SOLID	N/A		2.52e4	917.000	ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	BR-02	SOLID	N/A	<	1.08e3	1.080e+003	ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	NO3-02	SOLID	N/A		1.29e5	1.200e+003	ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	PO4-02	SOLID	N/A		6.23e3	2.450e+003	ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	SO4-02	SOLID	N/A		4.30e4	1.170e+003	ug/g
4	SAMPLE	S95T002493	0	W	@IC-01	OXALATE2	SOLID	N/A		9.93e3	900.000	ug/g
5	DUP	S95T002493	0	W	@IC-01	F-02	SOLID	9.73e3		1.19e4	20.060	RPD
5	DUP	S95T002493	0	W	@IC-01	CL-02	SOLID	1.50e3		1.75e3	15.380	RPD
5	DUP	S95T002493	0	W	@IC-01	NO2-02	SOLID	2.52e4		2.99e4	17.060	RPD
5	DUP	S95T002493	0	W	@IC-01	BR-02	SOLID	<1.08e3		<9.73e2		RPD
5	DUP	S95T002493	0	W	@IC-01	NO3-02	SOLID	1.29e5		1.52e5	16.370	RPD
5	DUP	S95T002493	0	W	@IC-01	PO4-02	SOLID	6.23e3		1.09e4	54.520	RPD
5	DUP	S95T002493	0	W	@IC-01	SO4-02	SOLID	4.30e4		5.07e4	16.440	RPD
5	DUP	S95T002493	0	W	@IC-01	OXALATE2	SOLID	9.93e3		1.06e4	6.530	RPD
6	SPK	S95T002493	0	W	@IC-01	F-02	SOLID	100		95.5	95.500	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 3182

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T002493	0	W	@IC-01	CL-02	SOLID	100	95.4	95.400	% Recovery
6	SPK	S95T002493	0	W	@IC-01	NO2-02	SOLID	100	92.9	92.900	% Recovery
6	SPK	S95T002493	0	W	@IC-01	BR-02	SOLID	100	94.8	94.800	% Recovery
6	SPK	S95T002493	0	W	@IC-01	NO3-02	SOLID	100	97.7	97.700	% Recovery
6	SPK	S95T002493	0	W	@IC-01	PO4-02	SOLID	100	93.4	93.400	% Recovery
6	SPK	S95T002493	0	W	@IC-01	SO4-02	SOLID	100	94.8	94.800	% Recovery
6	SPK	S95T002493	0	W	@IC-01	OXALATE2	SOLID	100	104.9	104.900	% Recovery
7	SAMPLE	S95T002494	0	W	@IC-01	F-02	SOLID	N/A	1.31e4	47.500	ug/g
7	SAMPLE	S95T002494	0	W	@IC-01	CL-02	SOLID	N/A	1.32e3	62.200	ug/g
7	SAMPLE	S95T002494	0	W	@IC-01	NO2-02	SOLID	N/A	2.37e4	391.000	ug/g
7	SAMPLE	S95T002494	0	W	@IC-01	BR-02	SOLID	N/A <	4.61e2	461.000	ug/g
7	SAMPLE	S95T002494	0	W	@IC-01	NO3-02	SOLID	N/A	1.02e5	512.000	ug/g
7	SAMPLE	S95T002494	0	W	@IC-01	PO4-02	SOLID	N/A	2.05e4	1.080e+003	ug/g
7	SAMPLE	S95T002494	0	W	@IC-01	SO4-02	SOLID	N/A	5.67e4	497.000	ug/g
7	SAMPLE	S95T002494	0	W	@IC-01	OXALATE2	SOLID	N/A	6.90e3	384.000	ug/g
8	DUP	S95T002494	0	W	@IC-01	F-02	SOLID	1.31e4	1.28e4	2.320	RPD
8	DUP	S95T002494	0	W	@IC-01	CL-02	SOLID	1.32e3	1.87e3	34.480	RPD
8	DUP	S95T002494	0	W	@IC-01	NO2-02	SOLID	2.37e4	3.47e4	37.670	RPD
8	DUP	S95T002494	0	W	@IC-01	BR-02	SOLID	<4.61e2	<4.68e2		RPD
8	DUP	S95T002494	0	W	@IC-01	NO3-02	SOLID	1.02e5	1.48e5	36.800	RPD
8	DUP	S95T002494	0	W	@IC-01	PO4-02	SOLID	2.05e4	9.74e3	71.160	RPD
8	DUP	S95T002494	0	W	@IC-01	SO4-02	SOLID	5.67e4	6.27e4	10.050	RPD
8	DUP	S95T002494	0	W	@IC-01	OXALATE2	SOLID	6.90e3	7.70e3	10.960	RPD

Comments Section:

Comments for sample# S95T002494 **and test** @IC-01 .

Poor RPD's are evident on some analytes. PC will be consulte
d as to doing reprep and rerun. JMF

Final page for worklist# 3182

Analyst Signature **Date**

Analyst Signature **Date**

11/15/95

Reviewer Signature **Date**

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 3182

Analyst: RJ McCown **Instrument:** IC01 _____ **Book #** 109N9D

Method: LA-533-105 Rev/Mod D1

Worklist Comment: BY108 IC Water Digests

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC	1	<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<.107	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		<.126	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		~~<.140~~ 0.378 gmF 11/15/95	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC	59	58.6	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC	79	77.8	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC	gmF 11/15/95 ~~534~~ 541	507.5	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC	575	~~607~~ 567.3 RK	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC	614	~~519.6~~ 607 RK	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC	546	519.6	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC	631	614.	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC	gmF 11/15/95 ~~526~~ 533	566.4	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID	1	<.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID	1	<.017	N/A	ug/g

Data Entry Comments:

Sample	Dup
5.9510	6.6060
13.9450	13.7290

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3182

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				@IC-01	NO2-02	SOLID	1	<.107	N/A	ug/g
		3	BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				@IC-01	NO3-02	SOLID		~~<.140~~ 0.369 MF 11/15/95	N/A	ug/g
		3	BLNK-PREP				@IC-01	PO4-02	SOLID		<.296	N/A	ug/g
		3	BLNK-PREP				@IC-01	SO4-02	SOLID		<.136	N/A	ug/g
		3	BLNK-PREP				@IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	F-02	SOLID	N/A	9.73^{e3}	1.11^{e2}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	CL-02	SOLID	N/A	1.50^{e3}	1.46^{e2}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	NO2-02	SOLID	N/A	2.52^{e4}	9.17^{e2}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	BR-02	SOLID	N/A	$<1.08^{e3}$	1.08^{e3}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	NO3-02	SOLID	N/A	1.29^{e5}	1.20^{e3}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	PO4-02	SOLID	N/A	6.23^{e3}	2.45^{e3}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	SO4-02	SOLID	N/A	4.30^{e4}	1.17^{e3}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002493	0	W	@IC-01	OXALATE2	SOLID	N/A	9.93^{e3}	9.00^{e2}	ug/g
95000104	BY-108 (R)	5	DUP	S95T002493	0	W	@IC-01	F-02	SOLID	9.73^{e3}	1.19^{e4}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002493	0	W	@IC-01	CL-02	SOLID	1.50^{e3}	1.75^{e3}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002493	0	W	@IC-01	NO2-02	SOLID	2.52^{e4}	2.99^{e4}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002493	0	W	@IC-01	BR-02	SOLID	$<1.08^{e3}$	$<9.73^{e2}$	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002493	0	W	@IC-01	NO3-02	SOLID	1.29^{e5}	1.52^{e5}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002493	0	W	@IC-01	PO4-02	SOLID	6.23^{e3}	1.09^{e4}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002493	0	W	@IC-01	SO4-02	SOLID	4.30^{e4}	5.07^{e4}	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3182

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	5 DUP	S95T002493	0	W	@IC-01	OXALATE2	SOLID	9.93e3	1.06e4	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	F-02	SOLID	100	95.5	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	CL-02	SOLID		95.4	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	NO2-02	SOLID		92.9 ~~94.1~~ gmF 11/15/95	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	BR-02	SOLID		94.8	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	NO3-02	SOLID		97.7	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	PO4-02	SOLID		93.4	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	SO4-02	SOLID		94.8	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002493	0	W	@IC-01	OXALATE2	SOLID		109.9 ~~106.3~~ gmF 11/15/95	N/A	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	F-02	SOLID	N/A	1.31e4	4.75e1	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	CL-02	SOLID	N/A	1.32e3	6.22e1	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	NO2-02	SOLID	N/A	2.37e4	3.91e2	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	BR-02	SOLID	N/A	<4.61e2	~~5.12e2~~ 4.61e2 RK	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	NO3-02	SOLID	N/A	1.02e5	~~1.08e3~~ 5.12e2 RK	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	PO4-02	SOLID	N/A	2.05e4	1.08e3	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	SO4-02	SOLID	N/A	5.67e4	4.97e2	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002494	0	W	@IC-01	OXALATE2	SOLID	N/A	6.90e3	3.84e2	ug/g
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	F-02	SOLID	1.31e4	1.28e4	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	CL-02	SOLID	1.32e3	1.87e3	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	NO2-02	SOLID	2.37e4	3.47e4	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	BR-02	SOLID	<4.61e2	<4.68e2	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	NO3-02	SOLID	1.02e5	1.48e5	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3182

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	PO4-02	SOLID	2.05e4	9.74e3	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	SO4-02	SOLID	5.67e4	6.27e4	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002494	0	W	@IC-01	OXALATE2	SOLID	6.90e3	7.70e3	N/A	ug/g

Final page for worklist # 3182

RJ McCown 11/7/95
Analyst Signature Date

Steletz 11/9/95
Analyst Signature Date

Verified 11/15/95 J M Fuge

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002493 & S95T002494		
TEST CODE:	@IC01	ANALYST:	P. MCOWN
INSTRUMENT:	ICO1	ANALYSIS DATE:	11/07/95
WORK LIST #:	3182	SAMPLE POINT:	BY-108
BATCH ID:	N/A	SAMPLE PREP:	H20-DIG

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9D	99.3%	98.4%	93.8%	98.9%	95.2%	97.4%	98.7%	106.3%
S95T002493	9.73E+03	1.50E+03	2.52E+04	1.29E+05	6.23E+03	4.30E+04	<1079.82	9.93E+03
S95T002493/DUP	1.19E+04	1.75E+03	2.99E+04	1.52E+05	1.09E+04	5.07E+04	<972.75	1.06E+04
Duplicate 1 RPD	20.0%	15.2%	17.1%	16.3%	54.6%	16.4%	N/A	6.3%
S95T002494	1.31E+04	1.32E+03	2.37E+04	1.02E+05	2.05E+04	5.67E+04	<460.81	6.90E+03
S95T002494/DUP	1.28E+04	1.67E+03	3.47E+04	1.48E+05	9.74E+03	6.27E+04	<468.06	7.70E+03
Duplicate 2 RPD	2.4%	34.6%	37.7%	36.7%	71.0%	9.9%	N/A	11.0%
S95T002493/SPK	95.5%	95.4%	92.9%	97.7%	93.4%	94.8%	94.8%	104.9%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Re printed Acc to correct, incorrect std values used for NO_2 + oxalate. JMF

Form Completed By:	Jane M. Fryer	Date:	11/15/95
Chemist Approval:	Jane M. Fryer	Date:	11/15/95

LAB LEADER INFO	
Method:	LA-533-105
Matrix:	SOLID
Test Code:	@IC01
Work List #:	3182
Batch #:	N/A
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9D
Spike Sample #:	1
Prepared By:	RT STEELE
Prepared Date:	11/09/95
Chemist:	J. FRYE
Analyst:	P. MCOWN
Analysis Date:	11/07/95
Time Complete:	05:07 AM
Instrument Code:	IC01
Rerun:	0
Sample Prep:	H20-DIG
Sample Point:	SY-108
Sample Type	
STANDARD	109N9D
SAMPLE 1	S95T002493
DUPLICATE 1	S95T002493/DUP
SAMPLE 2	S95T002494
DUPLICATE 2	S95T002494/DUP
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T002493/SPK
SPIKE DUPLICATE	

PRINT

TECH INFO	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	<.017	<.107	3.69E-01	<.296	<.136	<.126	<.106
Standard Data (µg/mL)	98.898	77.762	507.531	607.032	910.636	914.667	607.300	506.421
Sample 1 Data (µg/mL)	5.70E+01	8.93E+00	1.38E+02	7.66E+02	3.71E+01	2.88E+02	<.126	5.91E+01
Sample 1 Dilution Factor	51	51	51	51	51	51	51	51
Sample 1 Prep DF	5.961	5.961	5.961	5.961	5.961	5.961	5.961	5.961
Duplicate 1 Data (µg/mL)	7.88E+01	1.15E+01	1.97E+02	1.00E+03	7.20E+01	3.38E+02	<.126	6.88E+01
Duplicate 1 Dilution Factor	51	51	51	51	51	51	51	51
Duplicate 1 Prep DF	6.606	6.606	6.606	6.606	6.606	6.606	6.606	6.606
Sample 2 Data (µg/mL)	1.83E+02	1.84E+01	3.30E+02	1.43E+03	2.08E+02	7.91E+02	<.126	9.83E+01
Sample 2 Dilution Factor	51	51	51	51	51	51	51	51
Sample 2 Prep DF	13.945	13.945	13.945	13.945	13.945	13.945	13.945	13.945
Duplicate 2 Data (µg/mL)	1.76E+02	2.57E+01	4.76E+02	2.03E+03	1.34E+02	8.60E+02	<.126	1.06E+02
Duplicate 2 Dilution Factor	51	51	51	51	51	51	51	51
Duplicate 2 Prep DF	13.729	13.729	13.729	13.729	13.729	13.729	13.729	13.729
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	8.61E+01	4.66E+01	4.91E+02	1.07E+03	2.92E+02	5.55E+02	2.73E+02	3.38E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20
Std. Conc. (µg/mL)	80	79	641	614	646	631	676	533
Detection Limit	0.013	0.017	0.107	0.140	0.296	0.136	0.126	0.106
Matrix Detection Limit 1	1.11E+02	1.46E+02	9.17E+02	1.20E+03	2.54E+03	1.17E+03	1.08E+03	9.00E+02
Matrix Detection Limit 2	4.75E+01	6.22E+01	3.91E+02	6.12E+02	1.08E+03	4.97E+02	4.61E+02	3.84E+02
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]* 100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	98.3%	98.4%	93.8%	98.9%	98.2%	97.4%	98.7%	100.3%
Sample 1 in µg/g	9.73E+03	1.50E+03	2.62E+04	1.29E+05	6.23E+03	4.30E+04	<1075.82	9.93E+03
Duplicate 1 in µg/g	1.19E+04	1.75E+03	2.99E+04	1.52E+05	1.09E+04	5.07E+04	<972.75	1.04E+04
Duplicate 1 RPD	20.0%	16.2%	17.1%	16.3%	54.6%	16.4%	N/A	5.3%
Sample 2 in µg/g	1.31E+04	1.32E+03	2.37E+04	1.02E+05	2.08E+04	5.67E+04	<460.81	6.90E+03
Duplicate 2 in µg/g	1.28E+04	1.87E+03	3.47E+04	1.48E+05	9.74E+03	6.27E+04	<468.06	7.70E+03
Duplicate 2 RPD	2.4%	34.6%	37.7%	36.7%	71.0%	9.9%	N/A	11.6%
Spike % Recovery	96.8%	98.4%	92.9%	97.7%	93.4%	94.8%	94.8%	104.9%

Data Entry by: Jan Frye — Date: 11/15/95
Approved by: Jan Frye — Date: 11/15/95

Form DIONEX.WB1 Rev. 1.3

```
==============================================================================
| Sample Name: CCB ELUENT BLANK                Date: 11/07/1995 05:07:27      |
| Data File  : C:\DX\DATA\95110701.D10                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-1      |
| Analyst    :                Column: AG4A/AS4A anion column/SRS              |
==============================================================================
```

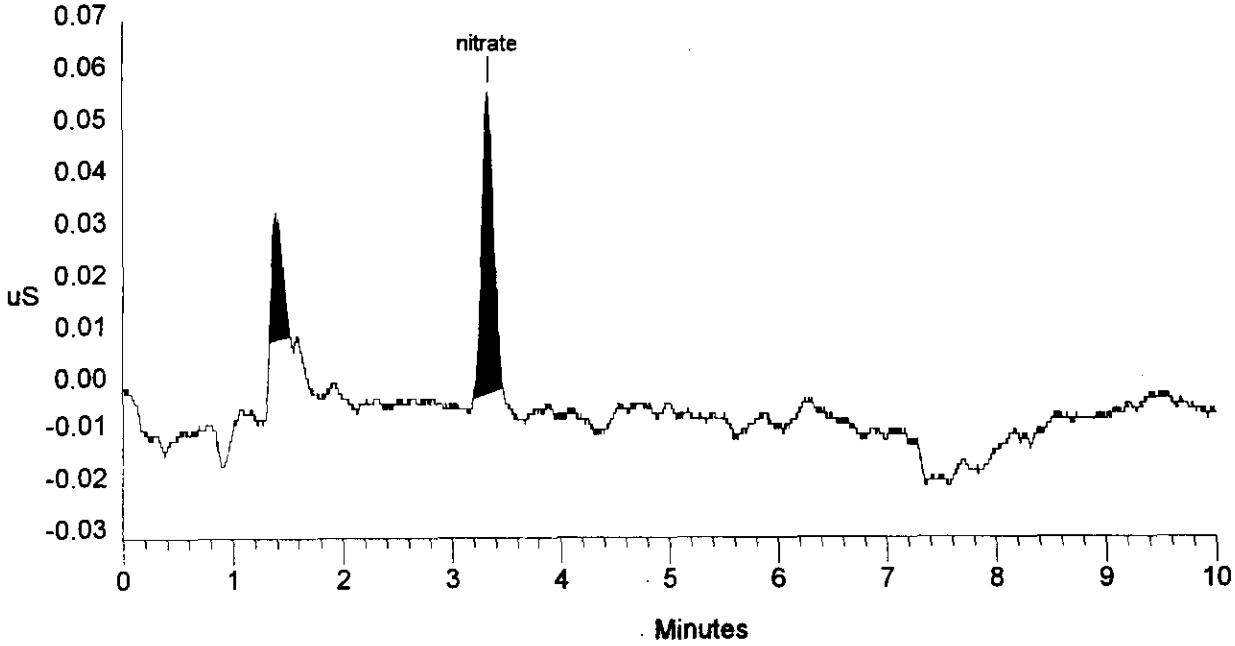
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	3.33	nitrate	0.378	58	411	1	5.71
		Totals	0.378	58	411		

DIRECT RJ McCown 11/7/95

File: 95110701.D10 Sample: CCB ELUENT BLANK



WHC-SD-WM-DP-145, REV. 1

```
==============================================================================
| Sample Name: CCV 109N9D STD                    Date: 11/07/1995 05:18:27    |
| Data File  : C:\DX\DATA\95110701.D11                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 11                   Detector:CDM-1     |
| Analyst    :                  Column: AG4A/AS4A anion column/SRS           |
==============================================================================
```

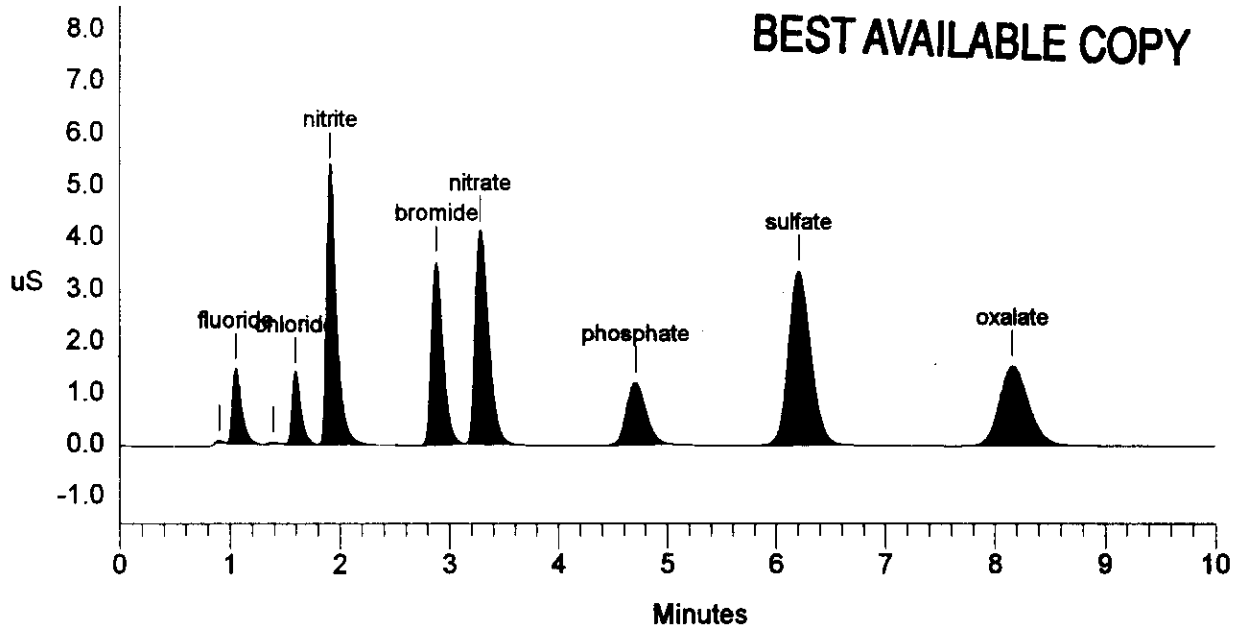
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	48	212	2	
2	1.05	fluoride	58.568	1447	8081	2	1.94
3	1.39		0.000	38	232	1	
4	1.59	chloride	77.752	1375	7401	1	0.63
5	1.91	nitrite	507.531	5330	33315	1	-0.52
6	2.88	bromide	567.308	3539	24959	1	2.49
7	3.28	nitrate	607.032	4111	34628	1	4.13
8	4.71	phosphate	519.626	1215	14622	1	-1.67
9	6.21	sulfate	614.657	3374	46364	1	-2.36
10	8.16	oxalate	566.421	1543	28047	1	-2.39
		Totals	3518.895	22021	197861		

•100ml - 10ml RJ McCoart 11/7/95

File: 95110701.D11 Sample: CCV 109N9D STD



WHC-SD-WM-DP-145, REV. 1

```
==========================================================================
| Sample Name: PREP BLANK                    Date: 11/07/1995 05:33:38    |
| Data File  : C:\DX\DATA\95110701.D12                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 12                Detector:CDM-1    |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

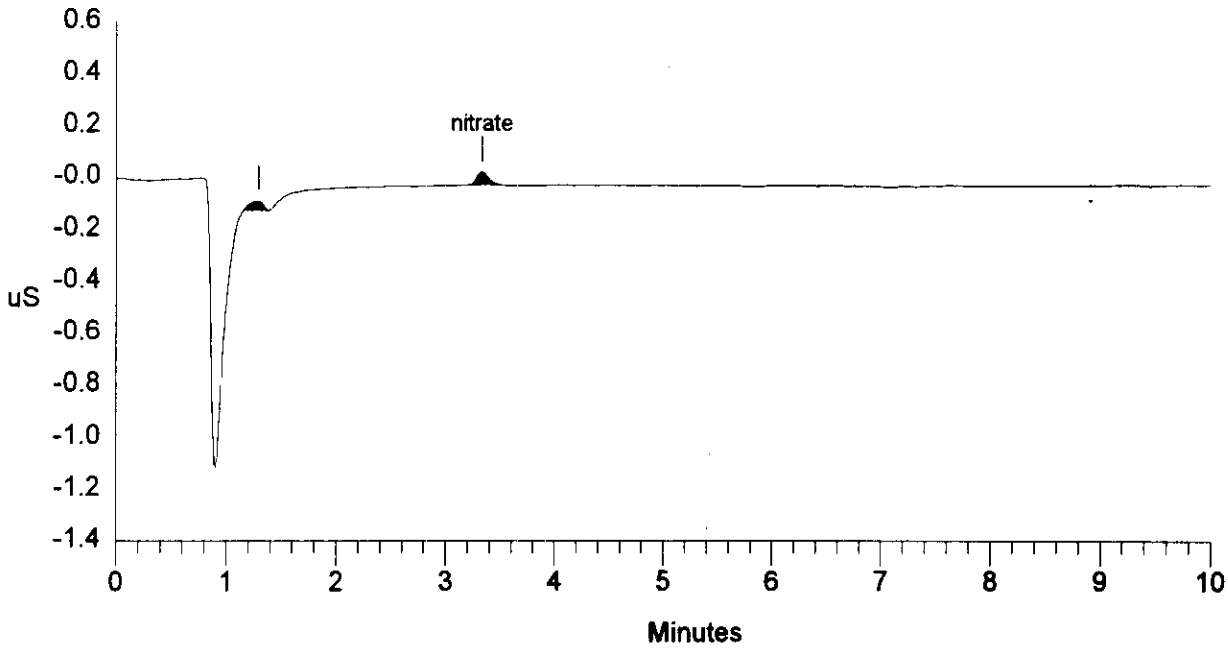
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.29		0.000	35	289	1	
2	3.33	nitrate	0.369	49	355	1	5.71
		Totals	0.369	84	645		

DIRECT RJ McCown 11/7/95

File: 95110701.D12 Sample: PREP BLANK



WHC-SD-WM-DP-145, REV. 1

```
==============================================================================
| Sample Name: S95T002493 SAMPLE              Date: 11/07/1995 05:44:51      |
| Data File  : C:\DX\DATA\95110701.D13                                       |
| Method     : C:\DX\METHOD\KIT.MET                                          |
| ACI Address: 1  System: 1  Inject#: 13                  Detector:CDM-1     |
| Analyst    :                Column: AG4A/AS4A anion column/SRS             |
==============================================================================
```

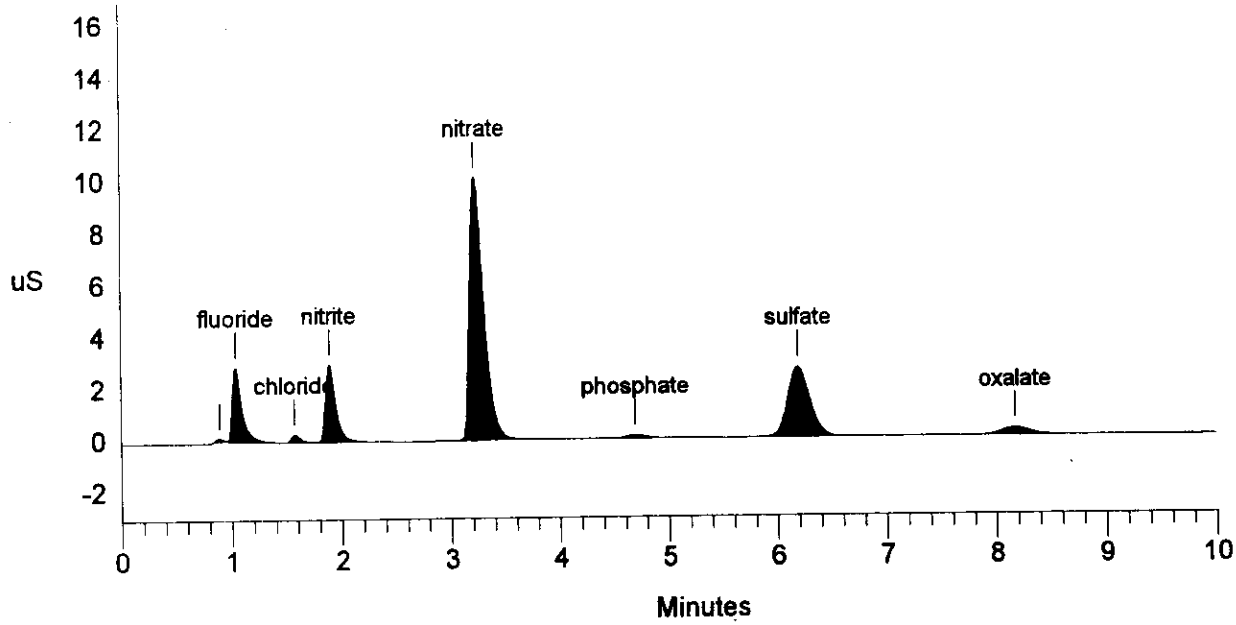
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	90	406	2	
2	1.04	fluoride	57.910	2857	16259	2	0.97
3	1.57	chloride	8.925	298	1603	1	-0.63
4	1.89	nitrite	149.760	2978	18797	1	-1.56
5	3.22	nitrate	766.178	10132	91213	1	2.22
6	4.69	phosphate	37.053	136	1593	1	-2.09
7	6.19	sulfate	255.931	2725	37764	1	-2.67
8	8.17	oxalate	59.091	283	4965	1	-2.27
		Totals	1334.847	19499	172599		

.200mL - 10mL [illegible] McCoan 11/7/95

File: 95110701.D13 Sample: S95T002493 SAMPLE



```
==================================================================================
| Sample Name: S95T002493 DUPLICATE          Date: 11/07/1995 05:59:55            |
| Data File  : C:\DX\DATA\95110701.D14                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 14                    Detector:CDM-1        |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS                 |
==================================================================================
```

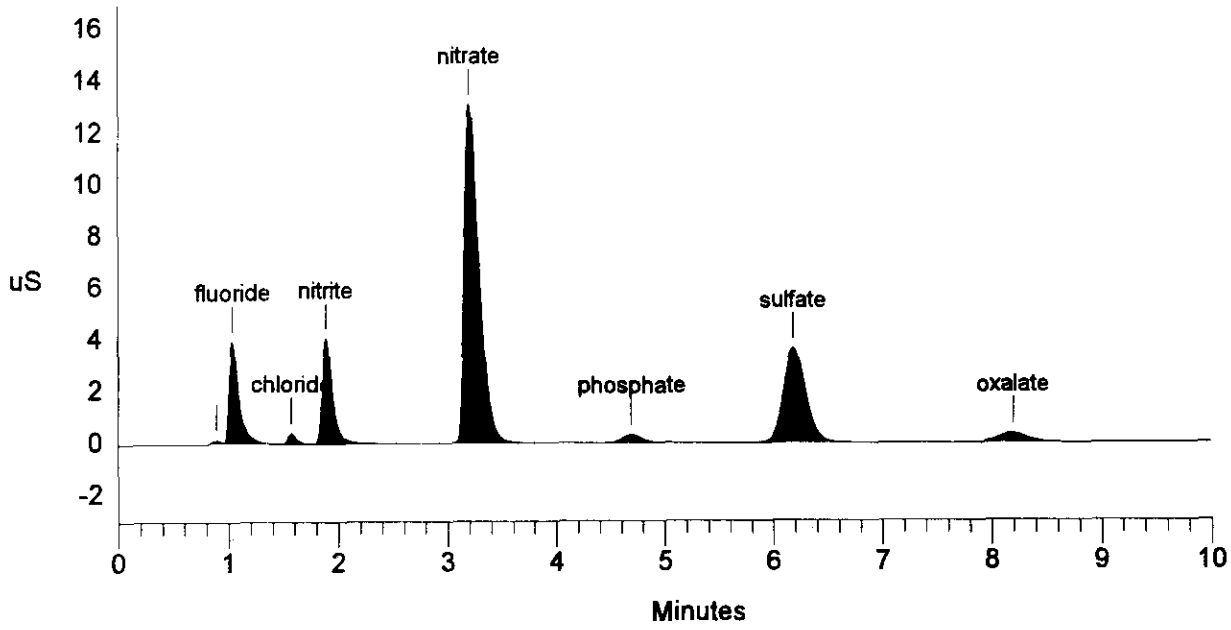
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	96	442	2	
2	1.04	fluoride	78.576	3910	22322	2	0.97
3	1.57	chloride	11.532	392	2097	1	-0.63
4	1.89	nitrite	197.310	4047	25270	1	-1.56
5	3.20	nitrate	1000.985	13080	121069	1	1.59
6	4.69	phosphate	72.008	302	3591	1	-2.09
7	6.18	sulfate	334.857	3631	50249	1	-2.83
8	8.19	oxalate	69.865	341	6052	1	-2.03
		Totals	1765.134	25799	231092		

-200mL-10mL RJ McCown 11/7/95

File: 95110701.D14 Sample: S95T002493 DUPLICATE



PNC-SD-WM-DP-145, REV. 1

```
==========================================================================
| Sample Name: S95T002494 SAMPLE              Date: 11/07/1995 06:23:41   |
| Data File  : C:\DX\DATA\95110701.D16                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 16                Detector:CDM-1    |
| Analyst    :                Column: AG4A/AS4A anion column/SRS          |
==========================================================================
```

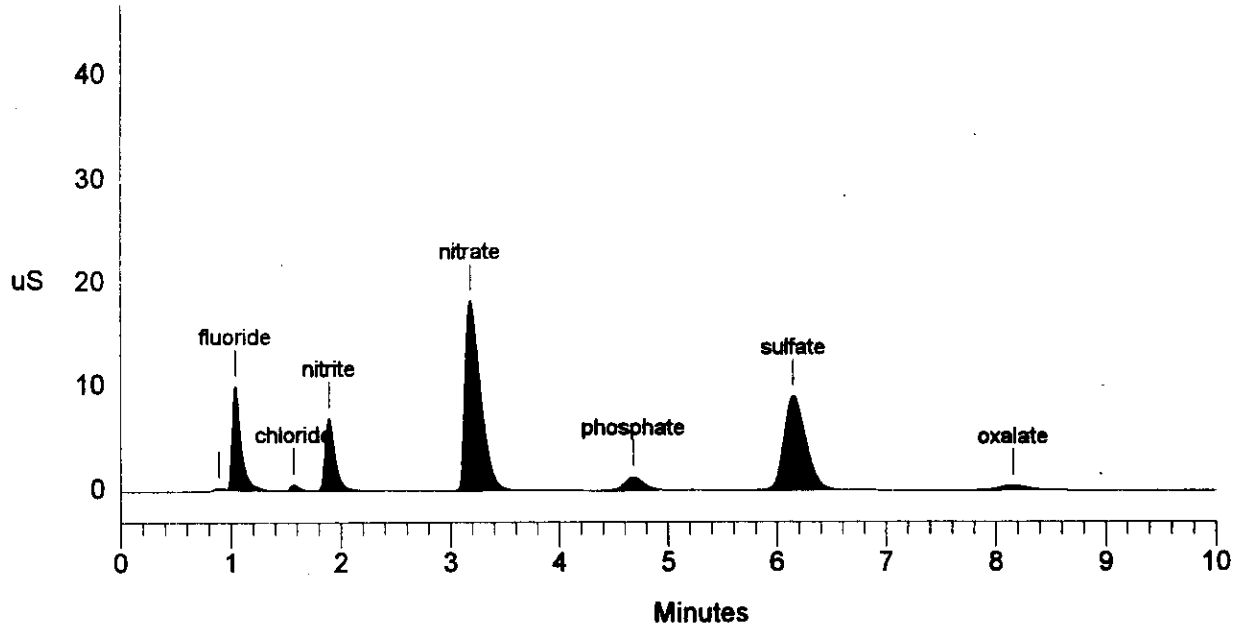
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	156	698	2	
2	1.04	fluoride	182.745	10027	54296	2	0.97
3	1.57	chloride	18.374	633	3398	1	-0.63
4	1.89	nitrite	330.484	7015	43465	1	-1.56
5	3.18	nitrate	1425.853	18437	176913	1	0.95
6	4.68	phosphate	285.589	1314	15984	1	-2.30
7	6.15	sulfate	791.175	9107	124621	1	-3.30
8	8.16	oxalate	96.162	488	8709	1	-2.39
		Totals	3130.382	47176	428085		

.200mL - 10mL BJ McCown 11/7/95

File: 95110701.D16 Sample: S95T002494 SAMPLE



WHC-SD-WM-DP-145, REV. 1

```
==================================================================================
| Sample Name: S95T002494 DUPLICATE          Date: 11/07/1995 06:39:02            |
| Data File  : C:\DX\DATA\95110701.D17                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 17                    Detector:CDM-1        |
| Analyst    :                Column: AG4A/AS4A anion column/SRS                  |
==================================================================================
```

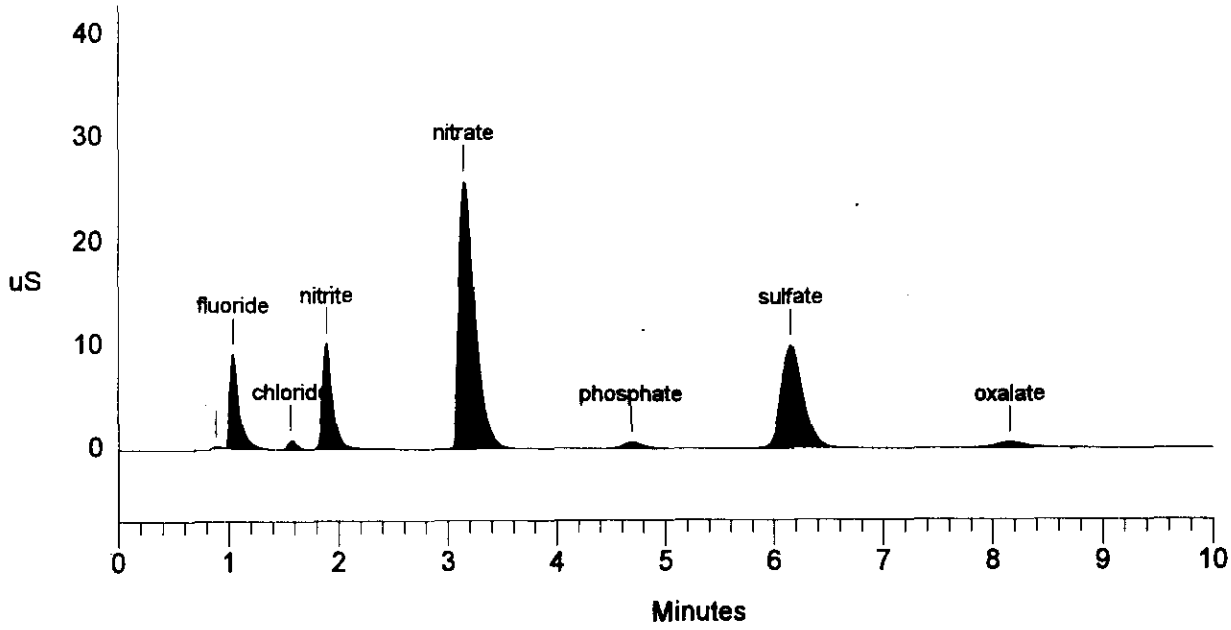
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	203	908	2	
2	1.04	fluoride	175.688	9185	52049	2	0.97
3	1.57	chloride	25.663	885	4790	1	-0.63
4	1.89	nitrite	476.286	10271	63499	1	-1.56
5	3.15	nitrate	2034.584	25811	261603	1	0.00
6	4.69	phosphate	133.776	592	7143	1	-2.09
7	6.15	sulfate	860.193	9959	136218	1	-3.30
8	8.16	oxalate	105.675	546	9672	1	-2.39
		Totals	3811.866	57452	535882		

.200mL - 10mL RL McCown 11/7/95

File: 95110701.D17 Sample: S95T002494 DUPLICATE



```
==========================================================================
| Sample Name: S95T002493 SPIKE                Date: 11/07/1995 06:11:58  |
| Data File  : C:\DX\DATA\95110701.D15                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 15                Detector:CDM-1    |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS        |
==========================================================================
```

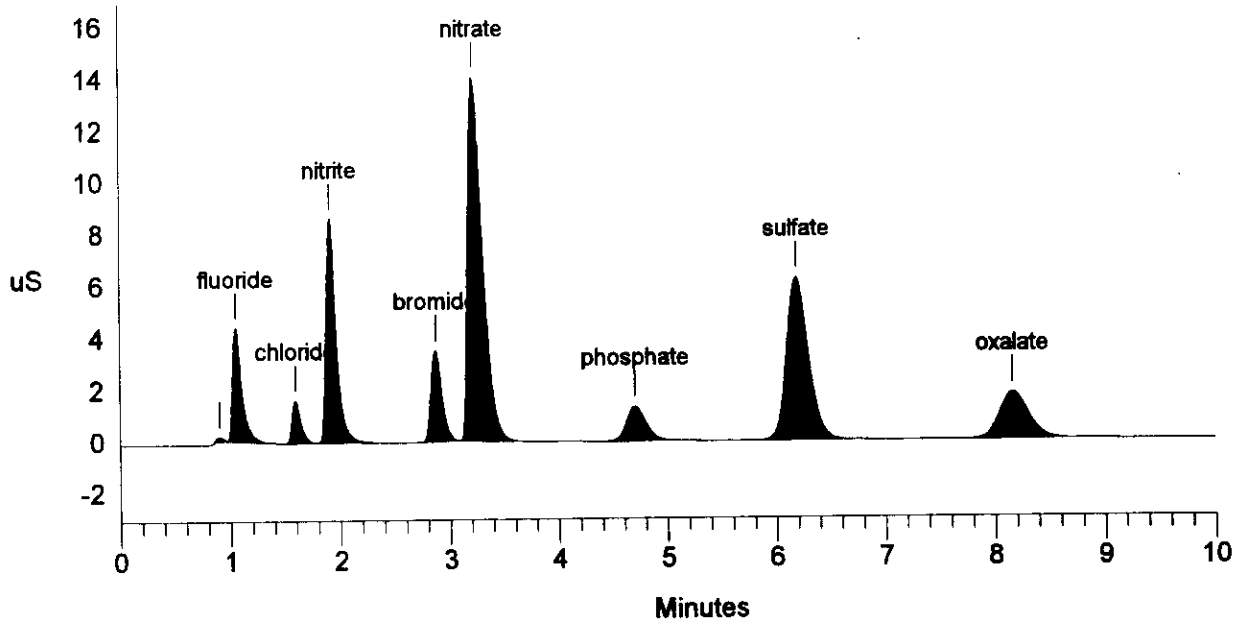
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	141	620	2	
2	1.05	fluoride	86.074	4339	24543	2	1.94
3	1.59	chloride	46.604	1651	8819	1	0.63
4	1.91	nitrite	401.114	8629	53155	1	-0.52
5	2.87	bromide	272.547	3524	23675	1	2.14
6	3.22	nitrate	1066.149	14008	129477	1	2.22
7	4.70	phosphate	291.982	1352	16360	1	-1.88
8	6.19	sulfate	555.084	6275	85660	1	-2.67
9	8.16	oxalate	338.700	1824	33463	1	-2.39
		Totals	3058.254	41743	375773		

.200mL < 9.9mL ELUENT
.100mL STD # 109N9D AS SPIKE RJ McCown 11/7/95

File: 95110701.D15 Sample: S95T002493 SPIKE



WHC-SD-WM-DP-145, REV. 1

LABCORE Completed Worklist Report for Worklist# 3184

Analyst: pjm **Instrument:** IC01 **Book#** 109NIC

95000104

Method: LA-533-105 **Rev/Mod** D-1

Worklist Comment: BY108 IC. JMF

Seq	Type	Sample#	R	A	Test	Matrix	Actual		Found	DL or Yield	Unit
1	CCB			0	IC-QC	F	QC	1		<.013	ug/mL
1	CCB			0	IC-QC	CL	QC	1		<.017	ug/mL
1	CCB			0	IC-QC	NO2	QC	1		<.107	ug/mL
1	CCB			0	IC-QC	BR	QC	1		<.126	ug/mL
1	CCB			0	IC-QC	NO3	QC	1		0.401	ug/mL
1	CCB			0	IC-QC	PO4	QC	1		<.296	ug/mL
1	CCB			0	IC-QC	SO4	QC	1		<.136	ug/mL
1	CCB			0	IC-QC	OXALATE2	QC	1		<.105	ug/mL
2	CCV			0	IC-QC	F	QC	59		59.9	101.530 % Recovery
2	CCV			0	IC-QC	CL	QC	79		79.5	100.630 % Recovery
2	CCV			0	IC-QC	NO2	QC	536		522.8	97.540 % Recovery
2	CCV			0	IC-QC	BR	QC	575		556.9	96.850 % Recovery
2	CCV			0	IC-QC	NO3	QC	614		601.4	97.950 % Recovery
2	CCV			0	IC-QC	PO4	QC	546		500.6	91.680 % Recovery
2	CCV			0	IC-QC	SO4	QC	631		609.6	96.610 % Recovery
2	CCV			0	IC-QC	OXALATE2	QC	552		590.9	107.050 % Recovery
3	BLNK-PREP			0	IC-01	F-02	SOLID	1		<.013	ug/g
3	BLNK-PREP			0	IC-01	CL-02	SOLID	1		<.017	ug/g
3	BLNK-PREP			0	IC-01	NO2-02	SOLID	1		<.107	ug/g
3	BLNK-PREP			0	IC-01	BR-02	SOLID	1		<.126	ug/g
3	BLNK-PREP			0	IC-01	NO3-02	SOLID	1		0.382	ug/g
3	BLNK-PREP			0	IC-01	PO4-02	SOLID	1		<.296	ug/g
3	BLNK-PREP			0	IC-01	SO4-02	SOLID	1		<.136	ug/g
3	BLNK-PREP			0	IC-01	OXALATE2	SOLID	1		<.105	ug/g
4	SAMPLE	S95T002497	0	W	IC-01	F-02	SOLID	N/A		3.75e2	60.200 ug/g
4	SAMPLE	S95T002497	0	W	IC-01	CL-02	SOLID	N/A		9.10e2	78.700 ug/g
4	SAMPLE	S95T002497	0	W	IC-01	NO2-02	SOLID	N/A		2.61e4	787.000 ug/g
4	SAMPLE	S95T002497	0	W	IC-01	BR-02	SOLID	N/A	<	5.83e2	583.000 ug/g
4	SAMPLE	S95T002497	0	W	IC-01	NO3-02	SOLID	N/A		3.77e4	648.000 ug/g
4	SAMPLE	S95T002497	0	W	IC-01	PO4-02	SOLID	N/A		8.12e3	1.370e+003 ug/g
4	SAMPLE	S95T002497	0	W	IC-01	SO4-02	SOLID	N/A		1.50e5	630.000 ug/g
4	SAMPLE	S95T002497	0	W	IC-01	OXALATE2	SOLID	N/A		2.79e4	486.000 ug/g
5	DUP	S95T002497	0	W	IC-01	F-02	SOLID	3.75e2		3.67e3	162.920 RPD
5	DUP	S95T002497	0	W	IC-01	CL-02	SOLID	9.10e2		1.30e3	35.290 RPD
5	DUP	S95T002497	0	W	IC-01	NO2-02	SOLID	2.61e4		3.64e4	32.960 RPD
5	DUP	S95T002497	0	W	IC-01	BR-02	SOLID	<5.83e2		<5.53e2	RPD
5	DUP	S95T002497	0	W	IC-01	NO3-02	SOLID	3.77e4		5.28e4	33.370 RPD
5	DUP	S95T002497	0	W	IC-01	PO4-02	SOLID	8.12e3		3.96e4	131.940 RPD
5	DUP	S95T002497	0	W	IC-01	SO4-02	SOLID	1.50e5		1.24e4	169.460 RPD
5	DUP	S95T002497	0	W	IC-01	OXALATE2	SOLID	2.79e4		3.61e3	154.170 RPD
6	SPK	S95T002497	0	W	IC-01	F-02	SOLID	100		110.0	110.000 % Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 3184

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T002497	0	W	@IC-01	CL-02	SOLID	100	98.6	98.600	% Recovery
6	SPK	S95T002497	0	W	@IC-01	NO2-02	SOLID	100	99.6	99.600	% Recovery
6	SPK	S95T002497	0	W	@IC-01	BR-02	SOLID	100	96.7	96.700	% Recovery
6	SPK	S95T002497	0	W	@IC-01	NO3-02	SOLID	100	97.4	97.400	% Recovery
6	SPK	S95T002497	0	W	@IC-01	PO4-02	SOLID	100	90.9	90.900	% Recovery
6	SPK	S95T002497	0	W	@IC-01	SO4-02	SOLID	100	85.5	85.500	% Recovery
6	SPK	S95T002497	0	W	@IC-01	OXALATE2	SOLID	100	105.2	105.200	% Recovery
7	SAMPLE	S95T002498	0	W	@IC-01	F-02	SOLID	N/A <	1.36e2	136.000	ug/g
7	SAMPLE	S95T002498	0	W	@IC-01	CL-02	SOLID	N/A	2.03e3	178.800	ug/g
7	SAMPLE	S95T002498	0	W	@IC-01	NO2-02	SOLID	N/A	4.84e4	1.780e+003	ug/g
7	SAMPLE	S95T002498	0	W	@IC-01	BR-02	SOLID	N/A <	1.32e3	1.320e+003	ug/g
7	SAMPLE	S95T002498	0	W	@IC-01	NO3-02	SOLID	N/A	6.31e4	1.470e+003	ug/g
7	SAMPLE	S95T002498	0	W	@IC-01	PO4-02	SOLID	N/A	3.46e4	3.100e+003	ug/g
7	SAMPLE	S95T002498	0	W	@IC-01	SO4-02	SOLID	N/A	6.38e3	1.430e+003	ug/g
7	SAMPLE	S95T002498	0	W	@IC-01	OXALATE2	SOLID	N/A	2.51e3	1.100e+003	ug/g
8	DUP	S95T002498	0	W	@IC-01	F-02	SOLID	<1.36e2	<1.32e2		RPD
8	DUP	S95T002498	0	W	@IC-01	CL-02	SOLID	2.03e3	1.69e3	18.280	RPD
8	DUP	S95T002498	0	W	@IC-01	NO2-02	SOLID	4.84e4	4.86e4	0.410	RPD
8	DUP	S95T002498	0	W	@IC-01	BR-02	SOLID	<1.32e3	<1.28e3		RPD
8	DUP	S95T002498	0	W	@IC-01	NO3-02	SOLID	6.31e4	6.25e4	0.960	RPD
8	DUP	S95T002498	0	W	@IC-01	PO4-02	SOLID	3.46e4	4.08e4	10.850	RPD
8	DUP	S95T002498	0	W	@IC-01	SO4-02	SOLID	6.38e3	7.06e3	10.120	RPD
8	DUP	S95T002498	0	W	@IC-01	OXALATE2	SOLID	2.51e3	2.52e3	0.400	RPD

Comments Section:

Comments for sample# S95T002497 **and test** @IC-01 .

S95T002497 sample and dup were each run twice. The sample runs have good RPD's, the Dup runs have good RPD's, but the RPD between sample and dup are awful. They don't even look like the same sample. Reprep and rerun are needed. JMF

Final page for worklist# 3184

Analyst Signature **Date** **Analyst Signature** **Date**

11/14/95

Reviewer Signature **Date**

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 3184

Analyst: B McCown **Instrument:** IC01 IC01 **Book #** 109 N9 C

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY108 IC. JMF Water Digests

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC	1	<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<.107	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		<.126	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		0.401 ~~<.140~~	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC	59	59.9	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC	79	79.5	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC	536	522.8	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC	575	556.9	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC	614	601.4	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC	546	500.6	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC	631	609.6	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC	552	590.9	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID	1	<.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID	1	<.017	N/A	ug/g

Data Entry Comments:

Sample	dup
11.0140	11.6240
4.8620	5.0360

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3184

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				@IC-01	NO2-02	SOLID		<.107	N/A	ug/g
		3	BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				@IC-01	NO3-02	SOLID		~~<.140~~ 0.382 gmF 11/14/95	N/A	ug/g
		3	BLNK-PREP				@IC-01	PO4-02	SOLID		<.296	N/A	ug/g
		3	BLNK-PREP				@IC-01	SO4-02	SOLID		<.136	N/A	ug/g
		3	BLNK-PREP				@IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	F-02	SOLID	N/A	3.75^{e2}	6.02^{e1}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	CL-02	SOLID	N/A	9.10^{e2}	7.87^{e1}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	NO2-02	SOLID	N/A	2.61^{e4}	7.87^{e2}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	BR-02	SOLID	N/A	$<5.83^{e2}$	5.83^{e2}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	NO3-02	SOLID	N/A	3.77^{e4}	6.48^{e2}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	PO4-02	SOLID	N/A	8.12^{e3}	1.37^{e3}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	SO4-02	SOLID	N/A	1.50^{e5}	6.30^{e2}	ug/g
95000104	BY-108 (R)	4	SAMPLE	S95T002497	0	W	@IC-01	OXALATE2	SOLID	N/A	2.79^{e4}	4.86^{e2}	ug/g
95000104	BY-108 (R)	5	DUP	S95T002497	0	W	@IC-01	F-02	SOLID	3.75^{e2}	3.67^{e3}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002497	0	W	@IC-01	CL-02	SOLID	9.10^{e2}	1.30^{e3}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002497	0	W	@IC-01	NO2-02	SOLID	2.61^{e4}	3.64^{e4}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002497	0	W	@IC-01	BR-02	SOLID	$<5.83^{e2}$	$<5.53^{e2}$	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002497	0	W	@IC-01	NO3-02	SOLID	3.77^{e4}	5.28^{e4}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002497	0	W	@IC-01	PO4-02	SOLID	8.12^{e3}	3.96^{e4}	N/A	ug/g
95000104	BY-108 (R)	5	DUP	S95T002497	0	W	@IC-01	SO4-02	SOLID	1.50^{e5}	1.24^{e4}	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3184

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	5 DUP	S95T002497	0	W	@IC-01	OXALATE2	SOLID	2.79e4	3.61e3	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	F-02	SOLID	100	110.0	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	CL-02	SOLID		98.6	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	NO2-02	SOLID		99.6	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	BR-02	SOLID		96.7	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	NO3-02	SOLID		97.4	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	PO4-02	SOLID		90.9	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	SO4-02	SOLID		85.5	N/A	ug/g
95000104	BY-108 (R)	6 SPK	S95T002497	0	W	@IC-01	OXALATE2	SOLID		~~2.05~~ 105.2	N/A	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	F-02	SOLID	N/A	<1.36e2	1.36e2	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	CL-02	SOLID	N/A	2.03e3	1.78e2	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	NO2-02	SOLID	N/A	4.84e4	1.78e3	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	BR-02	SOLID	N/A	<1.32e3	1.32e3	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	NO3-02	SOLID	N/A	6.31e4	1.47e3	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	PO4-02	SOLID	N/A	3.66e4	3.10e3	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	SO4-02	SOLID	N/A	6.38e3	1.43e3	ug/g
95000104	BY-108 (R)	7 SAMPLE	S95T002498	0	W	@IC-01	OXALATE2	SOLID	N/A	2.51e3	1.10e3	ug/g
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	@IC-01	F-02	SOLID	<1.36e2	<1.32e2	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	@IC-01	CL-02	SOLID	2.03e3	1.69e3	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	@IC-01	NO2-02	SOLID	4.84e4	4.86e4	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	@IC-01	BR-02	SOLID	<1.32e3	<1.28e3	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	@IC-01	NO3-02	SOLID	6.31e4	6.25e4	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3184

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	IC-01	PO4-02	SOLID	3.66^{e4}	4.08^{e4}	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	IC-01	SO4-02	SOLID	6.38^{e3}	7.06^{e3}	N/A	ug/g
95000104	BY-108 (R)	8 DUP	S95T002498	0	W	IC-01	OXALATE2	SOLID	2.51^{e3}	2.52^{e3}	N/A	ug/g

Final page for worklist # 3184

RJ McCown 11/4/95
Analyst Signature Date

Analyst Signature Date

Verified 11/14/95 J. M Frye

S95T002497 was run twice for both sample and duplicate. The sample runs agreed, and the duplicate runs agreed with the dups, but the sample & dup had terrible RPD'S. A re prep is needed. These do not even look like the same sample. JM Frye 11/14/95

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002497 & S95T002498		
TEST CODE:	@IC01	ANALYST:	P. MCOWN
INSTRUMENT:	IC01	ANALYSIS DATE:	11/04/95
WORK LIST #:	3184	SAMPLE POINT:	BY-108
BATCH ID:	N/A	SAMPLE PREP:	H20-DIG

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9C	101.5%	100.6%	97.5%	97.9%	91.7%	96.6%	96.9%	107.0%
S95T002497	3.75E+02	9.10E+02	2.61E+04	3.77E+04	8.12E+03	1.50E+05	<583.44	2.79E+04
S95T002497/DUP	3.67E+03	1.30E+03	3.64E+04	5.28E+04	3.96E+04	1.24E+04	<552.82	3.61E+03
Duplicate 1 RPD	163.0%	35.1%	33.0%	33.5%	132.0%	169.5%	N/A	154.1%
S95T002498	<136.36	2.03E+03	4.84E+04	6.31E+04	3.66E+04	6.38E+03	<1321.68	2.51E+03
S95T002498/DUP	<131.65	1.69E+03	4.86E+04	6.25E+04	4.08E+04	7.06E+03	<1276.01	2.52E+03
Duplicate 2 RPD	N/A	18.4%	0.5%	1.1%	11.0%	10.2%	N/A	0.3%
	110.0%	98.6%	99.6%	97.4%	90.9%	85.5%	96.7%	105.2%
S95T002497/SPK								

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Form Completed By:	R. Stark	Date:	11-07-95
Chemist Approval:	[illegible]	Date:	11/14/95

WHC-SD-WM-DP- 145, REV. 1

LAB LEADER INFO	
Method:	LA-533-105
Matrix:	SOLID
Test Code:	@IC01
Work List #:	3184
Batch #:	N/A
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9C
Spike Sample #:	1
Prepared By:	RT STEELE
Prepared Date:	11/07/95
Chemist:	J. FRYE
Analyst:	P. MCOWN
Analysis Date:	11/04/95
Time Complete:	01:47 AM
Instrument Code:	IC01
Rerun:	0
Sample Prep:	H20-DIG
Sample Point:	BY-108
Sample Type	
STANDARD	109N9C
SAMPLE 1	S95T002497
DUPLICATE 1	S95T002497/DUP
SAMPLE 2	S95T002498
DUPLICATE 2	S95T002498/DUP
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	
SPIKE DUPLICATE	S95T002497/SPK

PRINT

TECH INFO

	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	<.017	<.107	<.140 .382 gm = 11/14/95	<.296	<.136	<.126	<.106
Standard Data (µg/mL)	59.579	79.49	522.623	601.387	599.629	599.629	566.599	599.908
Sample 1 Data (µg/mL)	4.13E+00	1.00E+01	2.87E+02	4.16E+02	5.94E+01	1.66E+03	<.126	3.97E+02
Sample 1 Dilution Factor	51	51	51	51	51	51	51	51
Sample 1 Prep DF	11.014	11.014	11.014	11.014	11.014	11.014	11.014	11.014
Duplicate 1 Data (µg/mL)	4.27E+01	1.51E+01	4.23E+02	6.14E+02	4.61E+02	1.44E+02	<.126	4.26E+01
Duplicate 1 Dilution Factor	51	51	51	51	51	51	51	51
Duplicate 1 Prep DF	11.624	11.624	11.624	11.624	11.624	11.624	11.624	11.624
Sample 2 Data (µg/mL)	<.013	9.98E+00	2.36E+02	3.67E+02	1.78E+02	3.10E+01	<.126	1.22E+01
Sample 2 Dilution Factor	51	51	51	51	51	51	51	51
Sample 2 Prep DF	4.862	4.862	4.862	4.862	4.862	4.862	4.862	4.862
Duplicate 2 Data (µg/mL)	<.013	8.51E+00	2.46E+02	3.15E+02	2.06E+02	3.66E+01	<.126	1.27E+01
Duplicate 2 Dilution Factor	51	51	51	51	51	51	51	51
Duplicate 2 Prep DF	5.036	5.036	5.036	5.036	5.036	5.036	5.036	5.036
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	3.66E+01	4.90E+01	5.64E+02	7.14E+02	3.38E+02	1.93E+03	2.78E+02	5.98E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20
Std. Conc. (µg/mL)	59	79	536	614	546	631	576	582
Detection Limit	0.013	0.017	0.170	0.140	0.296	0.136	0.126	0.106
Matrix Detection Limit 1	6.02E+01	7.87E+01	7.87E+02	6.48E+02	1.37E+03	6.30E+02	5.83E+02	4.86E+02
Matrix Detection Limit 2	1.36E+02	1.78E+02	1.78E+03	1.47E+03	3.10E+03	1.43E+03	1.32E+03	1.10E+03
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]*100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	101.5%	100.6%	97.8%	97.9%	91.7%	96.6%	96.9%	107.0%
Sample 1 in µg/g	3.75E+02	9.10E+02	2.61E+04	3.77E+04	5.39E+03	1.50E+05	<583.44	2.79E+04
Duplicate 1 in µg/g	3.87E+03	1.30E+03	3.84E+04	5.28E+04	3.98E+04	1.24E+04	<582.82	3.61E+03
Duplicate 1 RPD	163.0%	35.1%	33.0%	33.8%	132.0%	169.6%	N/A	154.1%
Sample 2 in µg/g	<136.38	2.03E+03	4.84E+04	6.31E+04	3.66E+04	6.38E+03	<1321.68	2.51E+03
Duplicate 2 in µg/g	<131.86	1.69E+03	4.86E+04	6.25E+04	4.08E+04	7.06E+03	<1276.01	2.62E+03
Duplicate 2 RPD	N/A	18.4%	0.5%	1.1%	11.8%	10.2%	N/A	0.3%
Spike % Recovery	110.0%	96.6%	99.6%	97.4%	90.9%	65.5%	96.7%	106.2%

Data Entry by: RTSteele Date: 11/07/95
Approved by: James Frye Date: 11/14/95
Form DIONEX.WB1 Rev. 1.3

444

11/4/ mF 11/4/95

Sample Name: CCB ELUENT BLANK	Date: ~~03/12~~/1995 01:47:24
Data File : C:\DX\DATA\95110421.D01	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 1	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

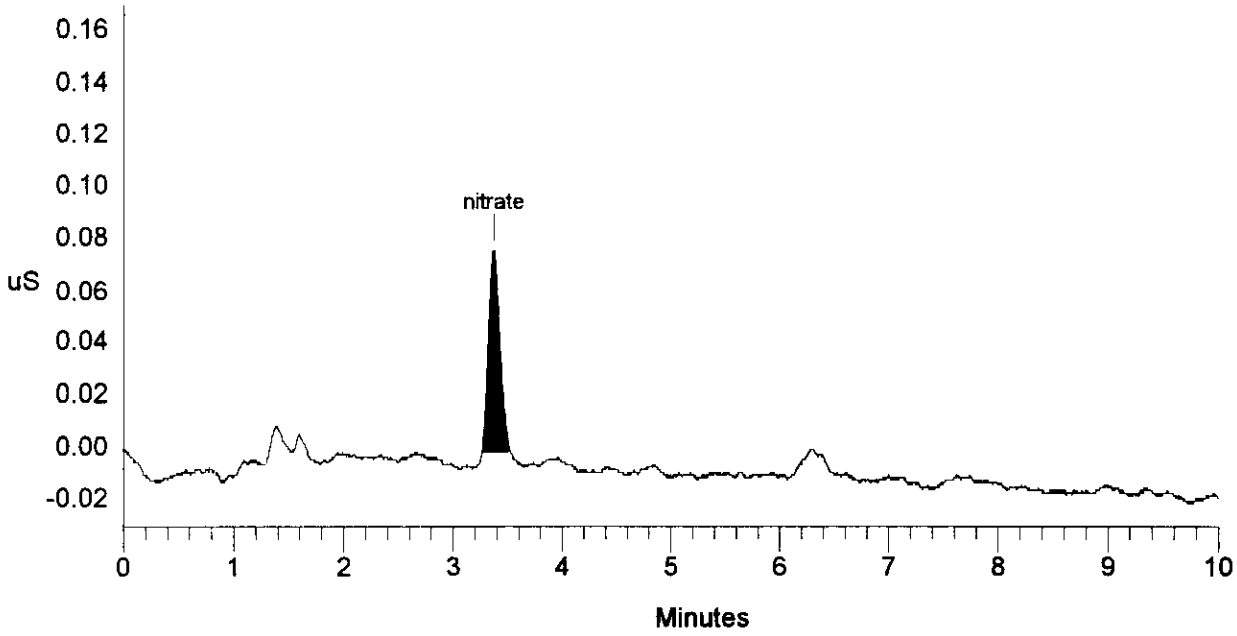
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	3.37	nitrate	0.401	77	552	1	6.98
		Totals	0.401	77	552		

DIRECT RJ McCown 11/4/95

File: 95110421.D01 Sample: CCB ELUENT BLANK



WHC-SD-WM-DP-145, REV. 1

Sample Name: CCV 109N9C
Date: ~~03/12/~~ 11/4/ 1995 04:05:55
Data File : C:\DX\DATA\95110421.D06
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 6 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

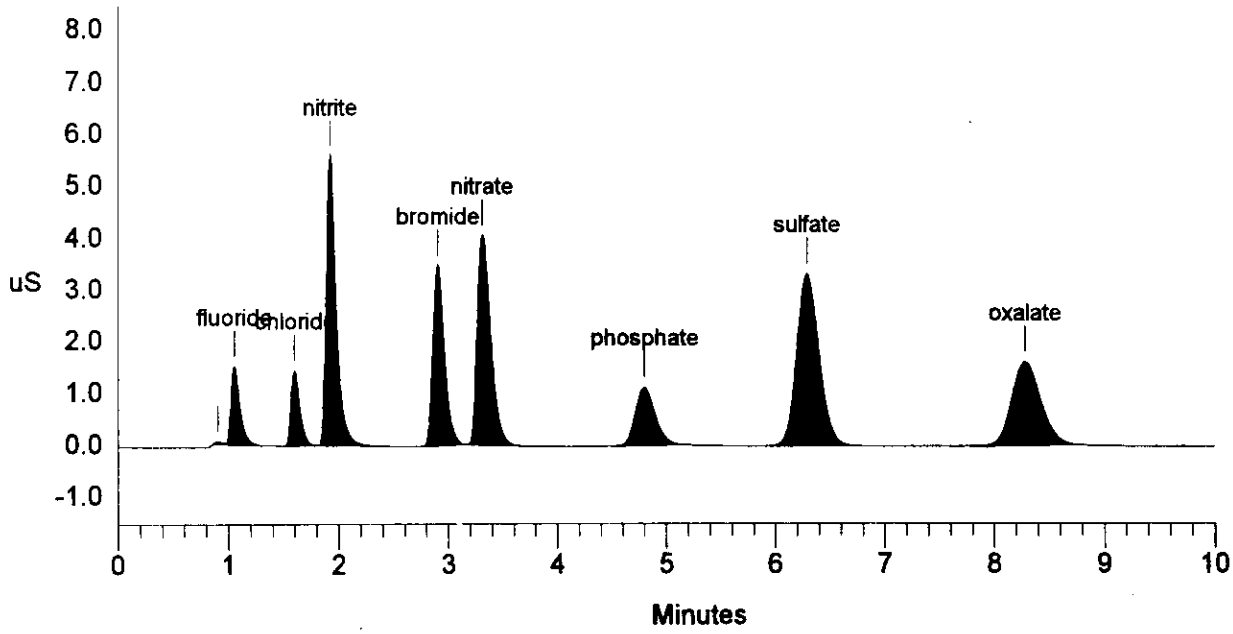
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	58	273	2	
2	1.05	fluoride	59.878	1502	8270	2	1.94
3	1.60	chloride	79.480	1444	7569	1	1.27
4	1.92	nitrite	522.832	5578	34370	1	0.00
5	2.90	bromide	556.899	3481	24474	1	3.20
6	3.31	nitrate	601.397	4049	34285	1	5.08
7	4.80	phosphate	500.628	1126	14061	1	0.21
8	6.29	sulfate	609.629	3331	45962	1	-1.10
9	8.28	oxalate	590.908	1610	29316	1	-0.96
		Totals	3521.651	22179	198580		

•100mL - 10mL [illegible] 11/4/95

File: 95110421.D06 Sample: CCV 109N9C



Sample Name: PREP BLANK	Date: ~~03/12~~ 11/4/1995 04:30:14
Data File : C:\DX\DATA\95110421.D07	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 7	Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS	

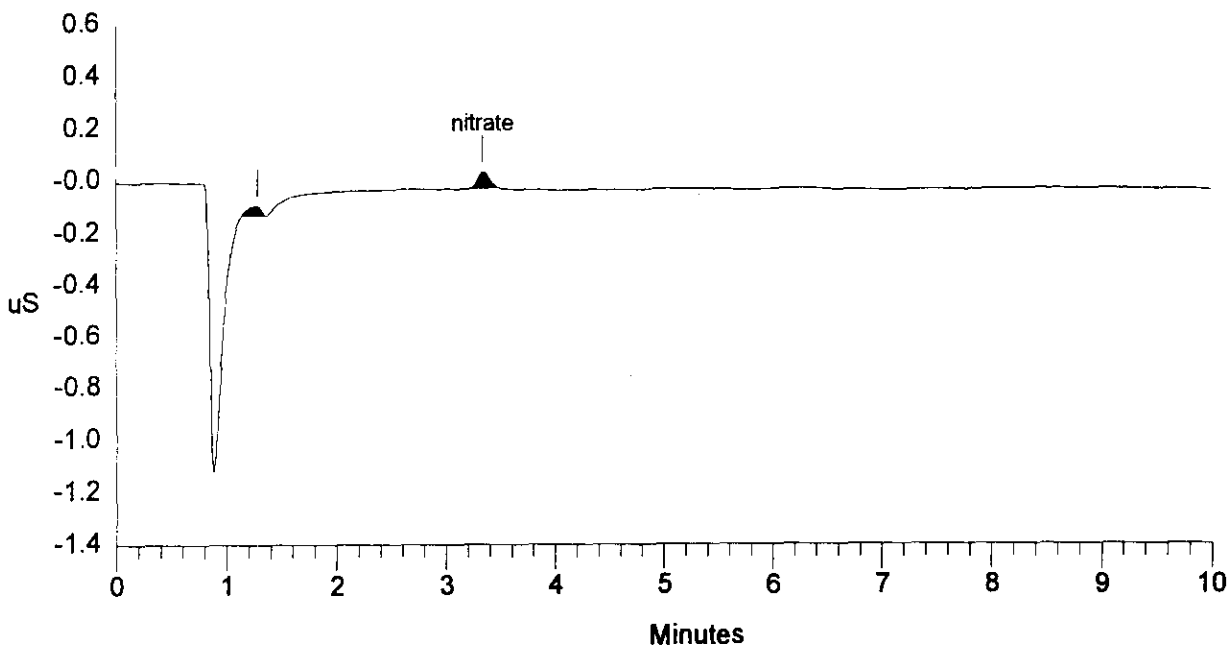
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.28		0.000	36	296	1	
2	3.34	nitrate	0.382	62	437	1	6.03
		Totals	0.382	98	733		

DIRECT 11/4/95

File: 95110421.D07 Sample: PREP BLANK



Sample Name: S95T002497 SAMPLE Date: ~~03/12~~/1995 04:54:41
Data File : C:\DX\DATA\95110421.D08
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

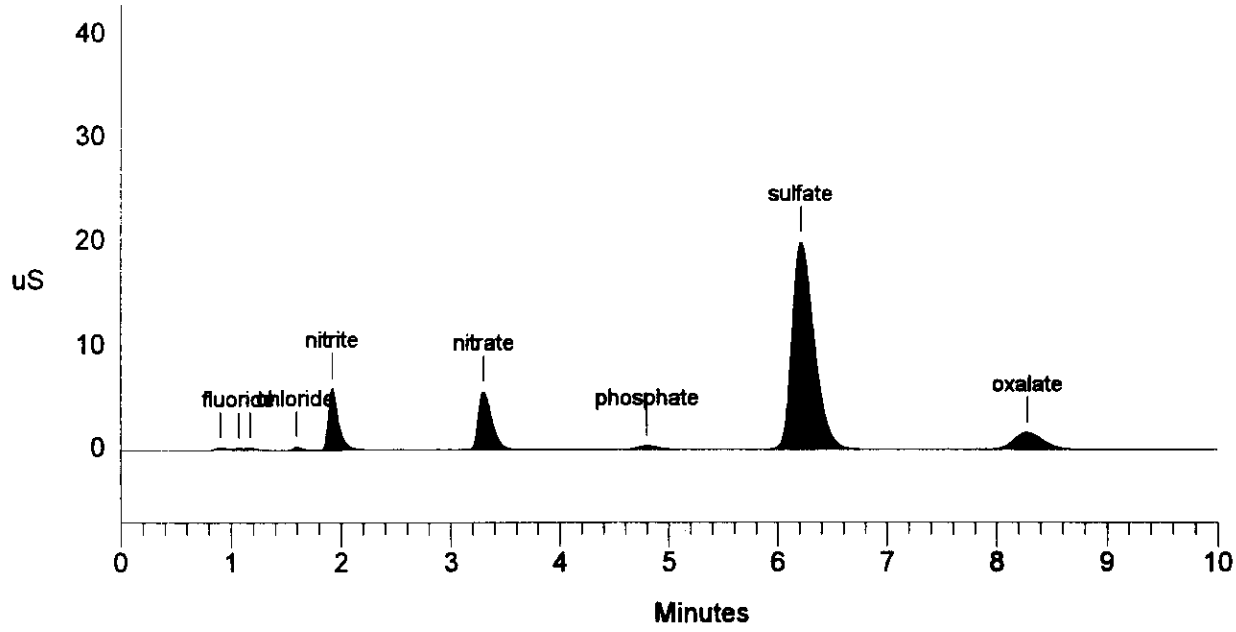
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	186	1044	2	
2	1.07	fluoride	4.125	163	863	2	3.88
3	1.17		0.000	227	1440	2	
4	1.59	chloride	10.018	327	1810	1	0.63
5	1.92	nitrite	287.429	6004	37572	1	0.00
6	3.30	nitrate	414.962	5680	47767	1	4.76
7	4.80	phosphate	89.437	368	4591	1	0.21
8	6.21	sulfate	1656.639	19989	277862	1	-2.36
9	8.28	oxalate	307.111	1653	30213	1	-0.96
		Totals	2769.722	34597	403162		

.200mL -10mL BMcCown 11/4/95

File: 95110421.D08 Sample: S95T002497 SAMPLE



11/4/ amf 11/6/95

Sample Name: S95T002497 SAMPLE	Date: ~~03/12~~/1995 05:29:40
Data File : C:\DX\DATA\95110421.D10	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 10	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

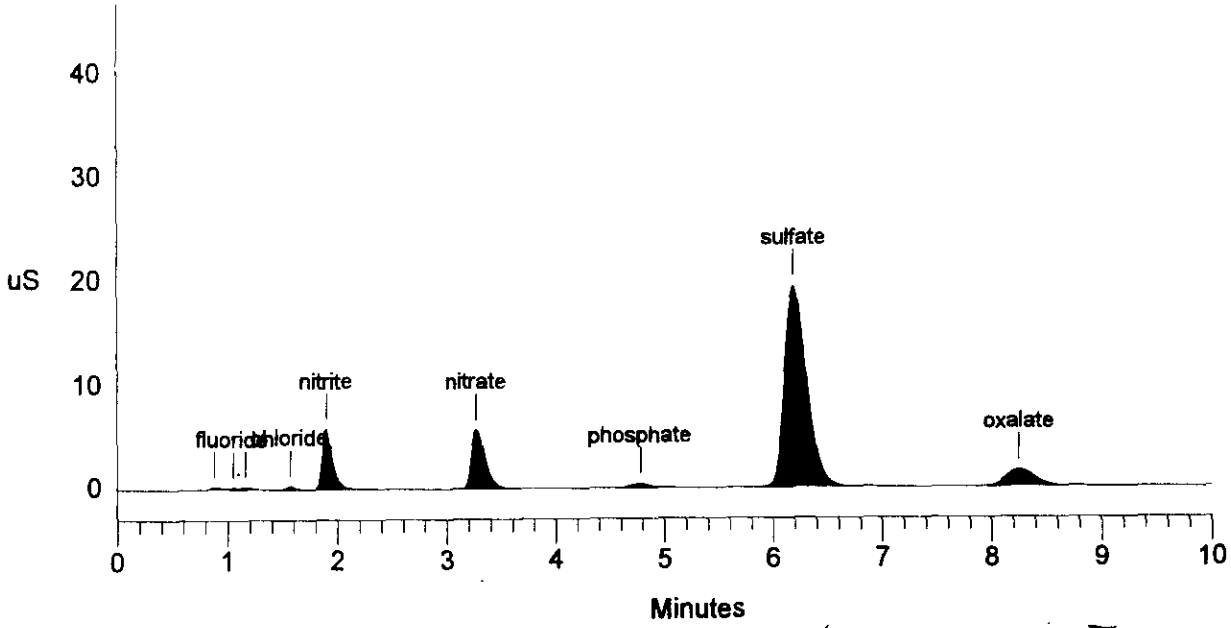
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	174	971	2	
2	1.05	fluoride	3.906	141	801	2	1.94
3	1.16		0.000	220	1336	2	
4	1.57	chloride	9.779	319	1764	1	-0.63
5	1.90	nitrite	278.429	5834	36342	1	-1.04
6	3.27	nitrate	417.659	5688	48095	1	3.81
7	4.78	phosphate	87.474	361	4478	1	-0.21
8	6.19	sulfate	1614.625	19442	269989	1	-2.67
9	8.25	oxalate	299.723	1611	29454	1	-1.32
		Totals	2711.595	33788	393231		

.200mL - 10mL BJ McCown 11/4/95

File: 95110421.D10 Sample: S95T002497 SAMPLE



Ran twice due to difference between sample and duplicate

#141 gmf 11/4/95

Sample Name: S95T002497 DUPLICATE Date: ~~03/12~~/1995 05:11:21
Data File : C:\DX\DATA\95110421.D09
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 9 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

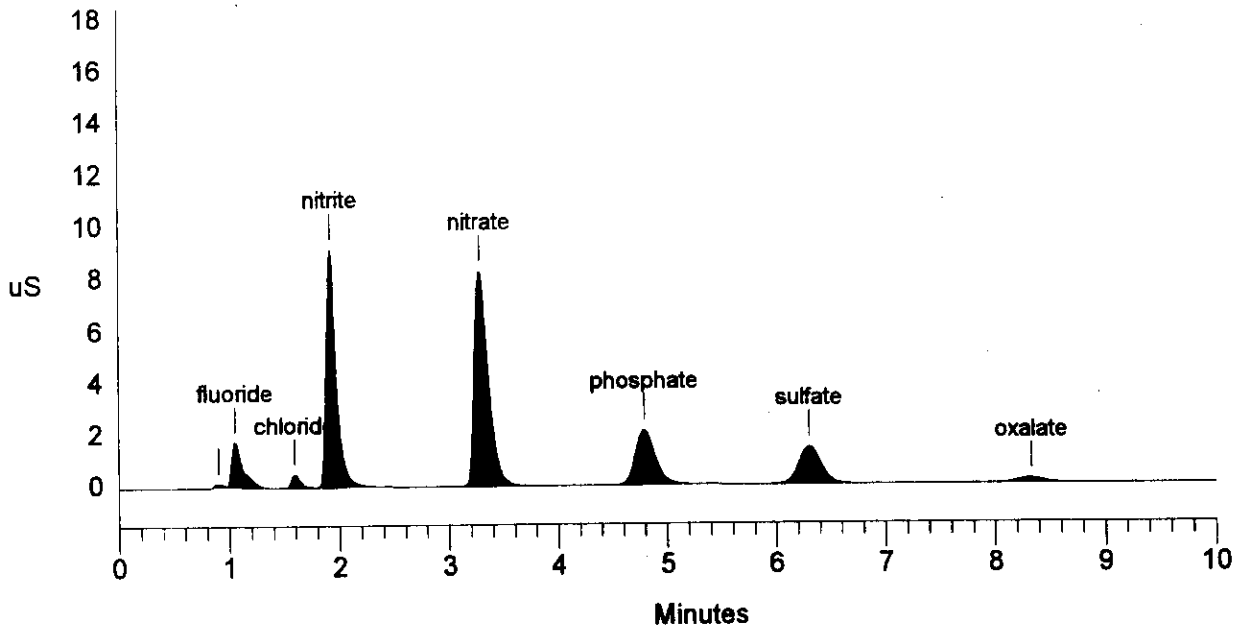
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	104	519	2	
2	1.05	fluoride	42.657	1729	11838	2	1.94
3	1.59	chloride	15.076	501	2770	1	0.63
4	1.92	nitrite	423.168	9162	56187	1	0.00
5	3.28	nitrate	613.873	8287	72201	1	4.13
6	4.79	phosphate	460.858	2130	26398	1	0.00
7	6.30	sulfate	144.141	1453	20259	1	-0.94
8	8.33	oxalate	42.010	184	3243	1	-0.36
		Totals	1741.782	23552	193415		

.200mL - 10mL BJ McCown 11/4/95

File: 95110421.D09 Sample: S95T002497 DUPLICATE



12/4/ JMF 11/4/95

Sample Name: S95T002497 DUPLICATE	Date: ~~03/12~~/1995 05:40:29
Data File : C:\DX\DATA\95110421.D11	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 11	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

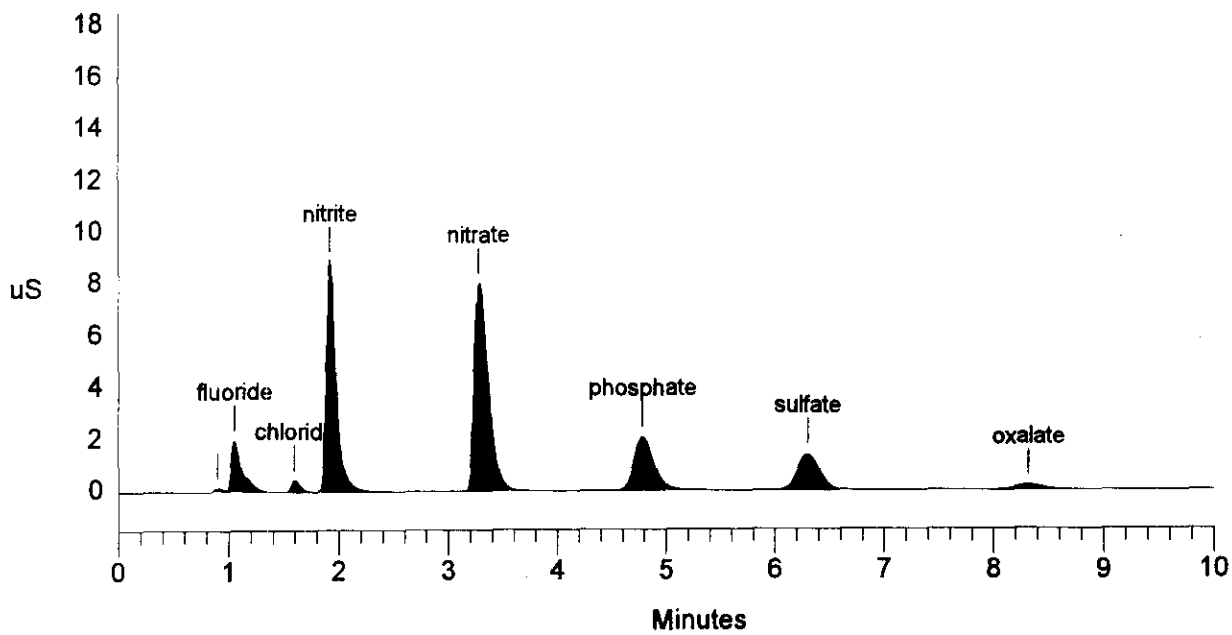
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	91	440	2	
2	1.05	fluoride	45.595	1930	12686	2	1.94
3	1.60	chloride	13.546	460	2480	1	1.27
4	1.92	nitrite	410.574	8848	54455	1	0.00
5	3.28	nitrate	606.651	8022	71306	1	4.13
6	4.78	phosphate	453.242	2080	25941	1	-0.21
7	6.30	sulfate	141.012	1418	19772	1	-0.94
8	8.32	oxalate	41.676	186	3210	1	-0.48
		Totals	1712.296	23035	190288		

.200mL – 10mL [illegible] McCown 11/4/95

File: 95110421.D11 Sample: S95T002497 DUPLICATE



Ran twice due to large difference between sample and duplicate

 11/4/95 11/6/95

Sample Name: S95T002497 SPIKE	Date: ~~03/12~~/1995 05:52:11
Data File : C:\DX\DATA\95110421.D12	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 12	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

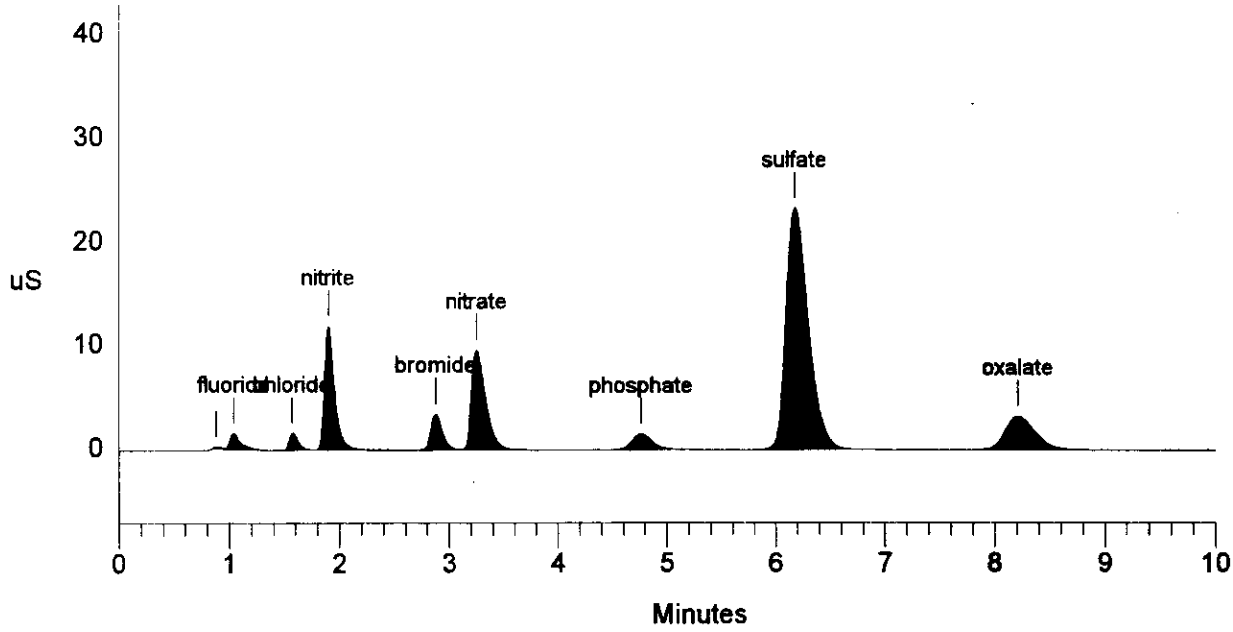
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	193	928	2	
2	1.04	fluoride	36.567	1556	10085	2	0.97
3	1.57	chloride	48.958	1632	9275	1	-0.63
4	1.90	nitrite	554.286	11937	74266	1	-1.04
5	2.88	bromide	277.895	3486	24168	1	2.49
6	3.25	nitrate	713.956	9612	84664	1	3.17
7	4.76	phosphate	337.630	1538	19053	1	-0.63
8	6.17	sulfate	1926.271	23394	329632	1	-2.99
9	8.21	oxalate	597.509	3256	60391	1	-1.79
		Totals	4493.071	56604	612461		

.200mL — 9.9mL Eluent, .100mL STD # 109N9C as spike RJ McCown 11/4/95

File: 95110421.D12 Sample: S95T002497 SPIKE



11/4/ GMF 11/6/95

Sample Name: S95T002498 SAMPLE Date: ~~03/12~~/1995 06:03:27
Data File : C:\DX\DATA\95110421.D13
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 13 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

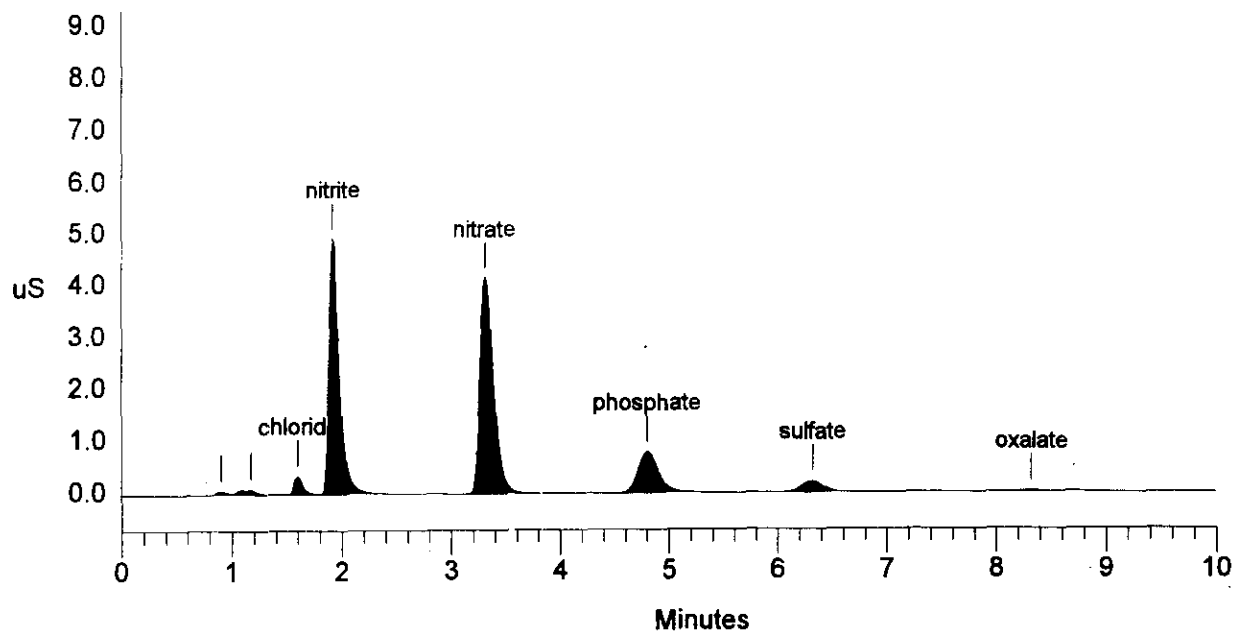
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	43	239	2	
2	1.17		0.000	92	915	2	
3	1.60	chloride	9.887	336	1785	1	1.27
4	1.92	nitrite	235.081	4921	30421	1	0.00
5	3.31	nitrate	307.025	4154	34689	1	5.08
6	4.80	phosphate	177.807	772	9691	1	0.21
7	6.32	sulfate	31.006	204	2748	1	-0.63
8	8.32	oxalate	12.218	20	246	1	-0.48
		Totals	773.023	10541	80733		

·200 mL – 10 mL RJ McCown 11/4/95

File: 95110421.D13 Sample: S95T002498 SAMPLE



11/4/ JMF 11/4/95

Sample Name: S95T002498 DUPLICATE Date: ~~03/12~~/1995 06:17:54
Data File : C:\DX\DATA\95110421.D14
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 14 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

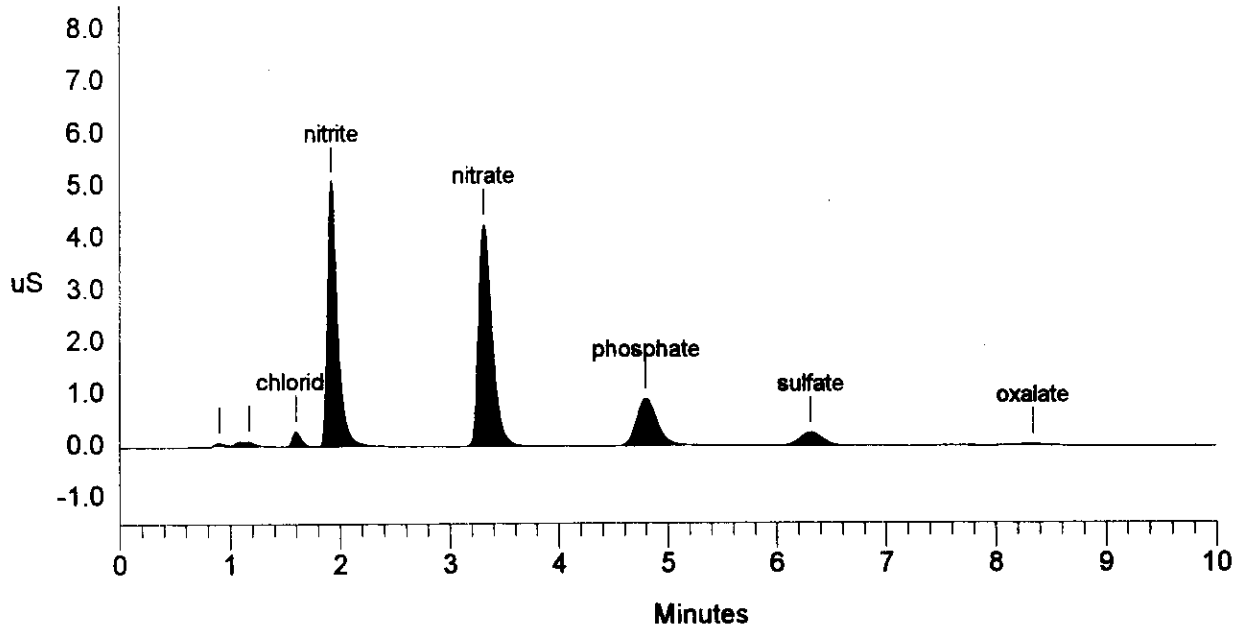
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	50	272	2	
2	1.17		0.000	88	884	2	
3	1.60	chloride	8.513	289	1524	1	1.27
4	1.92	nitrite	244.646	5071	31726	1	0.00
5	3.31	nitrate	314.649	4273	35608	1	5.08
6	4.80	phosphate	205.705	910	11312	1	0.21
7	6.31	sulfate	35.578	251	3452	1	-0.79
8	8.34	oxalate	12.689	23	293	1	-0.24
		Totals	821.780	10956	85072		

-200mL -10mL RJMcCown 11/4/95

File: 95110421.D14 Sample: S95T002498 DUPLICATE



LABCORE Completed Worklist Report for Worklist# 3185

Analyst: eal **Instrument:** IC01 **Book#** 109N9C

95000118

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC JMF

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
1	CCB			0	@IC-QC	F-QC	QC	1		<.013		ug/mL
1	CCB			0	@IC-QC	CL-QC	QC	1		<.017		ug/mL
1	CCB			0	@IC-QC	NO2-QC	QC	1		<.107		ug/mL
1	CCB			0	@IC-QC	BR-QC	QC	1		<.126		ug/mL
1	CCB			0	@IC-QC	NO3-QC	QC	1		<.140		ug/mL
1	CCB			0	@IC-QC	PO4-QC	QC	1		<.296		ug/mL
1	CCB			0	@IC-QC	SO4-QC	QC	1		<.136		ug/mL
1	CCB			0	@IC-QC	OXALATQC	QC	1		<.150		ug/mL
2	CCV			0	@IC-QC	F-QC	QC	59		57	96.610	% Recovery
2	CCV			0	@IC-QC	CL-QC	QC	79		76	96.200	% Recovery
2	CCV			0	@IC-QC	NO2-QC	QC	536		514	95.900	% Recovery
2	CCV			0	@IC-QC	BR-QC	QC	575		554	96.350	% Recovery
2	CCV			0	@IC-QC	NO3-QC	QC	614		575	93.650	% Recovery
2	CCV			0	@IC-QC	PO4-QC	QC	546		499	91.390	% Recovery
2	CCV			0	@IC-QC	SO4-QC	QC	631		593	93.980	% Recovery
2	CCV			0	@IC-QC	OXALATQC	QC	552		557	100.910	% Recovery
3	BLNK-PREP			0	@IC-01	F-02	SOLID	1		<.013		ug/g
3	BLNK-PREP			0	@IC-01	CL-02	SOLID	1		<.017		ug/g
3	BLNK-PREP			0	@IC-01	NO2-02	SOLID	1		<.107		ug/g
3	BLNK-PREP			0	@IC-01	BR-02	SOLID	1		<.126		ug/g
3	BLNK-PREP			0	@IC-01	NO3-02	SOLID	1		<.140		ug/g
3	BLNK-PREP			0	@IC-01	PO4-02	SOLID	1		<.296		ug/g
3	BLNK-PREP			0	@IC-01	SO4-02	SOLID	1		<.136		ug/g
3	BLNK-PREP			0	@IC-01	OXALATE2	SOLID	1		<.150		ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	F-02	SOLID	N/A		5.75e3	160.000	ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	CL-02	SOLID	N/A	<	2.10e2	210.000	ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	NO2-02	SOLID	N/A	<	1.32e3	1.320e+003	ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	BR-02	SOLID	N/A	<	1.55e3	1.550e+003	ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	NO3-02	SOLID	N/A		5.65e5	1.730e+003	ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	PO4-02	SOLID	N/A		5.08e4	3.650e+003	ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	SO4-02	SOLID	N/A	<	1.68e3	1.680e+003	ug/g
4	SAMPLE	S95T002536	0	W	@IC-01	OXALATE2	SOLID	N/A		5.84e3	1.290e+003	ug/g
5	DUP	S95T002536	0	W	@IC-01	F-02	SOLID	5.75e3		1.10e4	62.690	RPD
5	DUP	S95T002536	0	W	@IC-01	CL-02	SOLID	<2.10e2		<2.10e2		RPD
5	DUP	S95T002536	0	W	@IC-01	NO2-02	SOLID	<1.32e3		3.74e3		RPD
5	DUP	S95T002536	0	W	@IC-01	BR-02	SOLID	<1.55e3		<1.55e3		RPD
5	DUP	S95T002536	0	W	@IC-01	NO3-02	SOLID	5.65e5		3.78e5	39.660	RPD
5	DUP	S95T002536	0	W	@IC-01	PO4-02	SOLID	5.08e4		9.88e4	64.170	RPD
5	DUP	S95T002536	0	W	@IC-01	SO4-02	SOLID	<1.68e3		5.84e3		RPD
5	DUP	S95T002536	0	W	@IC-01	OXALATE2	SOLID	5.84e3		8.18e3	33.380	RPD
6	SPK	S95T002536	0	W	@IC-01	F-02	SOLID	100		69.8	69.800	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 3185

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T002536	0	W	@IC-01	CL-02	SOLID	100	73.2	73.200	% Recovery
6	SPK	S95T002536	0	W	@IC-01	NO2-02	SOLID	100	70.9	70.900	% Recovery
6	SPK	S95T002536	0	W	@IC-01	BR-02	SOLID	100	65.4	65.400	% Recovery
6	SPK	S95T002536	0	W	@IC-01	NO3-02	SOLID	100	61.0	61.000	% Recovery
6	SPK	S95T002536	0	W	@IC-01	PO4-02	SOLID	100	70.2	70.200	% Recovery
6	SPK	S95T002536	0	W	@IC-01	SO4-02	SOLID	100	65.4	65.400	% Recovery
6	SPK	S95T002536	0	W	@IC-01	OXALATE2	SOLID	100	73.7	73.700	% Recovery

Comments Section:

Comments for sample# S95T002536 **and test** @IC-01 .
There may be a homogenetity probl4em with this sample,
causing poor RPD'S and spike problems. j.m. frye rts

Final page for worklist# 3185

Analyst Signature **Date** **Analyst Signature** **Date**

Jim Frye 11/8/95
Reviewer Signature **Date**

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 3185

Analyst: EAL **Instrument:** IC01 **Book #** 109N9-C

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY-108 IC JMF Water Digests

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC	1	<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<.107	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		<.126	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		<.140	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.150	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC	59	57	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC.	79	76	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC	536	514	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC	575	554.	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC	614	575	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC	546	499	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC	631	593	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC	552	557	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID	1	<.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID	1	<.017	N/A	ug/g

Data Entry Comments:

Sample 8.1930 There may be a homogeneity problem
dup 8.9340 with this sample, causing poor RPD's
and spike problems. JMFuge

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3185

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				@IC-01	NO2-02	SOLID	1	<.107	N/A	ug/g
		3	BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				@IC-01	NO3-02	SOLID		<.140	N/A	ug/g
		3	BLNK-PREP				@IC-01	PO4-02	SOLID		<.296	N/A	ug/g
		3	BLNK-PREP				@IC-01	SO4-02	SOLID		<.136	N/A	ug/g
		3	BLNK-PREP				@IC-01	OXALATE2	SOLID		<.150	N/A	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	F-02	SOLID	N/A	5.75^{E3}	1.60^{E2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	CL-02	SOLID	N/A	$<2.16^{E2}$	2.10^{E2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	NO2-02	SOLID	N/A	$<1.32^{E3}$	1.32^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	BR-02	SOLID	N/A	$<1.55^{E3}$	1.55^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	NO3-02	SOLID	N/A	5.65^{E5}	1.73^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	PO4-02	SOLID	N/A	5.08^{E4}	3.65^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	SO4-02	SOLID	N/A	$<1.68^{E3}$	1.68^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002536	0	W	@IC-01	OXALATE2	SOLID	N/A	5.84^{E3}	1.29^{E3}	ug/g
95000118	BY-108 (R)	5	DUP	S95T002536	0	W	@IC-01	F-02	SOLID	5.75^{E3}	1.10^{E4}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002536	0	W	@IC-01	CL-02	SOLID	$<2.10^{E2}$	~~1.92^{E2}~~ <2.10 e2	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002536	0	W	@IC-01	NO2-02	SOLID	$<1.32^{E3}$	3.74^{E3}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002536	0	W	@IC-01	BR-02	SOLID	$<1.55^{E3}$	~~$<1.42^{3}$~~ <1.55 e3	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002536	0	W	@IC-01	NO3-02	SOLID	5.65^{E5}	3.78^{E5}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002536	0	W	@IC-01	PO4-02	SOLID	5.08^{E4}	9.88^{E4}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002536	0	W	@IC-01	SO4-02	SOLID	$<1.68^{E3}$	5.84^{E3}	N/A	ug/g

GMF 11/8/95

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3185

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5 DUP	S95T002536	0	W	@IC-01	OXALATE2	SOLID	5.84E3	8.18E3	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	F-02	SOLID	100	69.8	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	CL-02	SOLID		73.2	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	NO2-02	SOLID		70.9	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	BR-02	SOLID		65.4	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	NO3-02	SOLID		61.0	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	PO4-02	SOLID		70.2	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	SO4-02	SOLID		65.4	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002536	0	W	@IC-01	OXALATE2	SOLID		73.7	N/A	ug/g

Final page for worklist # 3185

[signature] 11-06-95
Analyst Signature Date

Verified 11/8/95 J. M. Fuge

R H Stub 11-7-95
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002536		
TEST CODE:	@ICO1	ANALYST:	A. LAMBEL
INSTRUMENT:	ICO1	ANALYSIS DATE:	11/06/95
WORK LIST #:	3185	SAMPLE POINT:	BY-106
BATCH ID:	N/A	SAMPLE PREP:	H20-DIGEST

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9C	96.5%	95.6%	95.9%	93.7%	91.5%	94.0%	96.4%	100.9%
S95T002536	5.75E+03	<209.57	<1319.05	5.65E+05	5.08E+04	<1676.55	<1553.28	5.84E+03
S95T002536/DUP	1.10E+04	<192.19	3.74E+03	3.78E+05	9.88E+04	5.84E+03	<1424.45	8.18E+03
Duplicate 1 RPD	63.1%	N/A	N/A	39.6%	64.1%	N/A	N/A	33.4%
	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
S95T002536/SPK	69.8%	73.2%	70.9%	61.0%	70.2%	71.5%	65.4%	73.7%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Form Completed By:	R. Steele	Date:	11-6-95
Chemist Approval:	[illegible]	Date:	11/8/95

460

LAB LEADER INFO	
Method:	LA-533-105
Matrix:	SOLID
Test Code:	@ICO1
Work List #:	3186
Batch #:	N/A
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9C
Spike Sample #:	1
Prepared By:	KT STEELE
Prepared Date:	11/06/95
Chemist:	JANN FRYE
Analyst:	A. LAMBEL
Analysis Date:	11/06/95
Time Complete:	01:49 AM
Instrument Code:	ICO1
Rerun:	0
Sample Prep:	H20-DIGEST
Sample Point:	BY-108
Sample Type	
STANDARD	109N9C
SAMPLE 1	S95T002536
DUPLICATE 1	S95T002536/DUP
SAMPLE 2	
DUPLICATE 2	
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T002536/SPK
SPIKE DUPLICATE	

PRINT

TECH INFO	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	<.017	<.107	<.140	<.296	<.136	<.126	<.160
Standard Data (µg/mL)	56.949	75.543	514.2	575.499	499.329	593.03	554.301	557.198
Sample 1 Data (µg/mL)	4.71E+01	<.017	<.107	4.63E+03	4.10E+02	<.136	<.126	4.79E+01
Sample 1 Dilution Factor	101	101	101	101	101	101	101	101
Sample 1 Prep DF g/L	8.193	8.193	8.193	8.193	8.193	8.193	8.193	8.193
Duplicate 1 Data (µg/mL)	9.87E+01	<.017	3.34E+01	3.38E+03	8.83E+02	5.22E+01	<.126	7.31E+01
Duplicate 1 Dilution Factor	101	101	101	101	101	101	101	101
Duplicate 1 Prep DF g/L	8.934	8.934	8.934	8.934	8.934	8.934	8.934	8.934
Sample 2 Data (µg/mL)								
Sample 2 Dilution Factor								
Sample 2 Prep DF								
Duplicate 2 Data (µg/mL)								
Duplicate 2 Dilution Factor								
Duplicate 2 Prep DF								
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	8.83E+01	5.78E+01	3.80E+02	5.00E+03	8.00E+02	4.61E+02	3.76E+02	4.65E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
Std. Conc. (µg/mL)	59	79	536	614	546	631	576	582
Detection Limit	0.013	0.017	0.107	0.140	0.296	0.136	0.126	0.160
Matrix Detection Limit 1	1.60E+02	2.10E+02	1.32E+03	1.73E+03	3.86E+03	1.68E+03	1.55E+03	1.29E+03
Matrix Detection Limit 2	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]* 100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = [(Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	96.5%	96.6%	98.9%	93.7%	91.6%	94.0%	96.4%	100.9%
Sample 1 in µg/g	5.75E+03	<208.57	<1319.66	5.65E+05	5.00E+04	<1676.55	<1583.28	5.84E+03
Duplicate 1 in µg/g	1.10E+04	<192.19	3.74E+03	3.78E+05	9.88E+04	5.84E+03	<1424.46	8.18E+03
Duplicate 1 RPD	63.1%	N/A	N/A	39.6%	64.1%	N/A	N/A	33.4%
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Spike % Recovery	89.5%	73.2%	70.9%	81.0%	70.2%	71.5%	66.4%	73.7%

Data Entry by: R. Stel Date: 11/06/95
Approved by: Jann Frye Date: 11/8/95
Form DIONEX.WB1 Rev. 1.3

```
==========================================================================
| Sample Name: BLANK                          Date: 11/06/1995 01:36:39   |
| Data File  : C:\DX\DATA\95110541.D01                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 1                  Detector:CDM-1   |
| Analyst    : Ann Lambel  Column: AG4A/AS4A anion column/SRS             |
==========================================================================
```

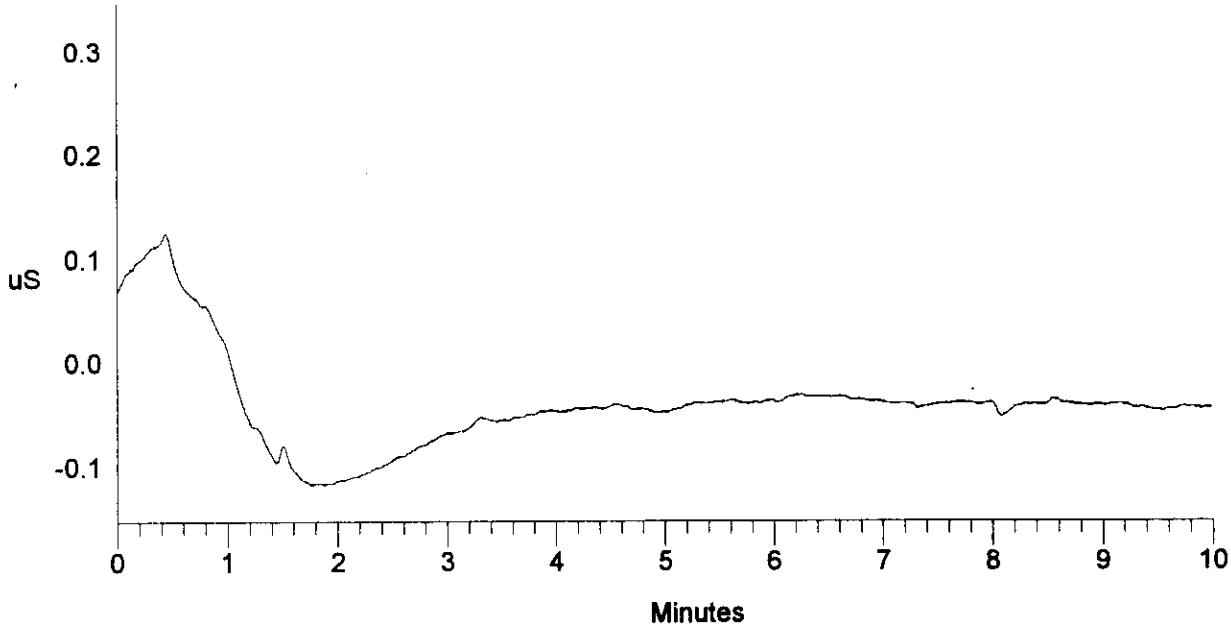
11-06-95

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95110541.D01 Sample: BLANK



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 462 TO 469.

Sample Name: 109N9-C Date: 11/06/1995 01:49:08
Data File : C:\DX\DATA\95110601.D02
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 2 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

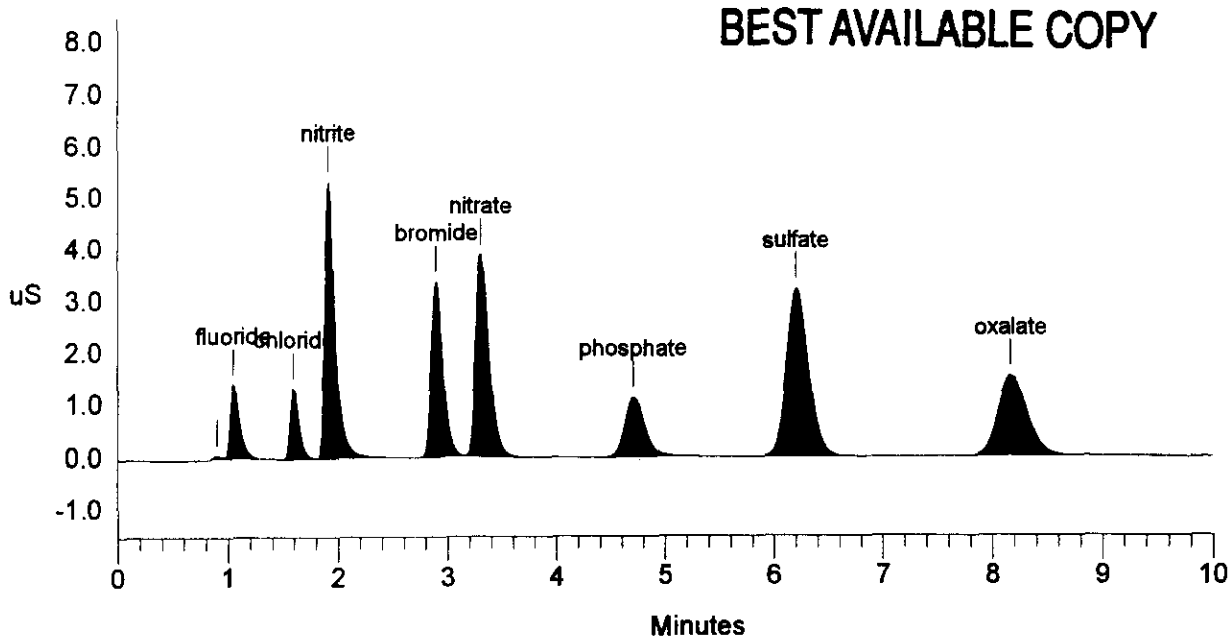
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.05	fluoride	56.949	1386	7847	2	1.94
3	1.60	chloride	75.543	1343	7186	1	1.27
4	1.92	nitrite	514.200	5333	33775	1	0.00
5	2.90	bromide	554.391	3377	24357	1	3.20
6	3.31	nitrate	575.499	3888	32709	1	5.08
7	4.71	phosphate	499.329	1136	14022	1	-1.67
8	6.21	sulfate	593.030	3233	44635	1	-2.36
9	8.17	oxalate	557.188	1527	27569	1	-2.27
		Totals	3426.127	21223	192099		

File: 95110601.D02 Sample: 109N9-C

BEST AVAILABLE COPY



WHC-SD-WM-DP-145, REV. 1

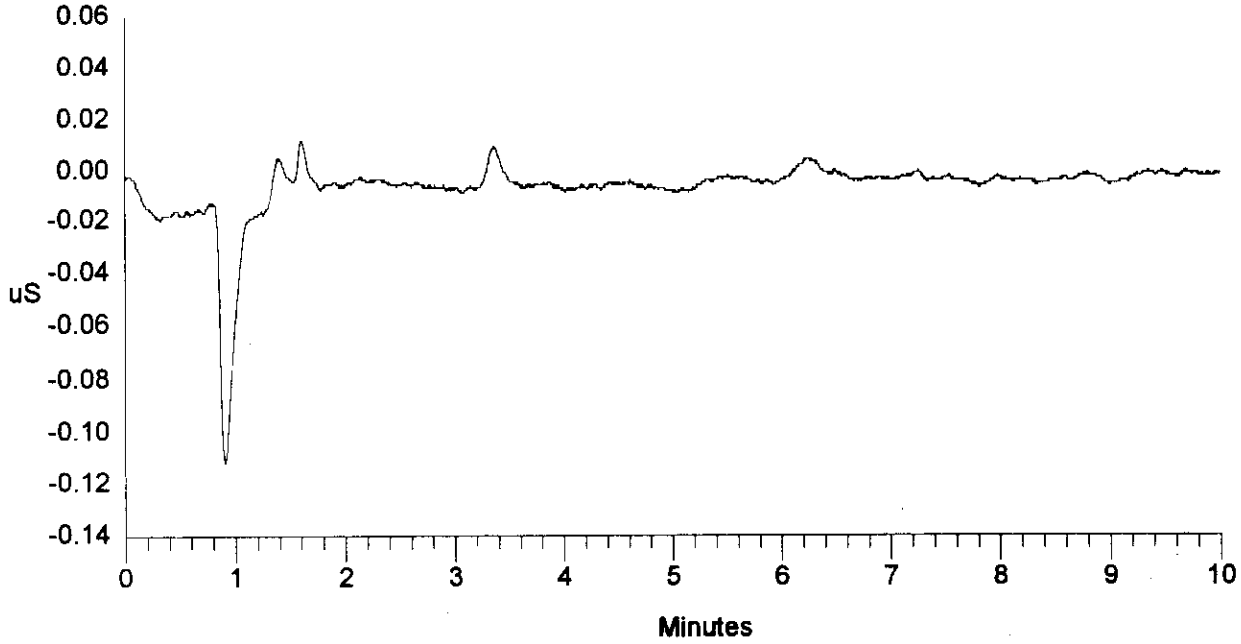
Sample Name: PREP. BLANK Date: 11/06/1995 02:26:31
Data File : C:\DX\DATA\95110601.D05
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 5 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	11	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95110601.D05 Sample: PREP. BLANK



WHC-SD-WM-DP-145, REV. 1

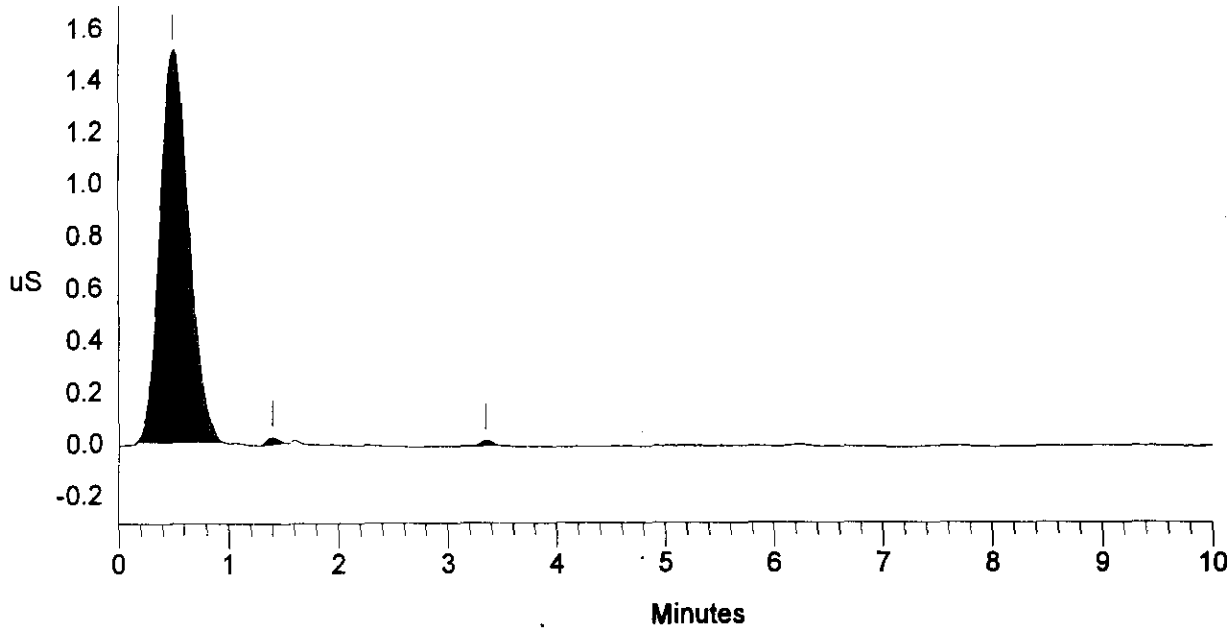
```
==========================================================================
| Sample Name: PREP. BLANK                    Date: 11/06/1995 02:14:57   |
| Data File  : C:\DX\DATA\95110601.D04                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 4                Detector:CDM-1     |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.49		0.000	1505	27298	1	
		Totals	0.000	1505	27298		

File: 95110601.D04 Sample: PREP. BLANK



WHC-SD-WM-DP-145, REV. 1

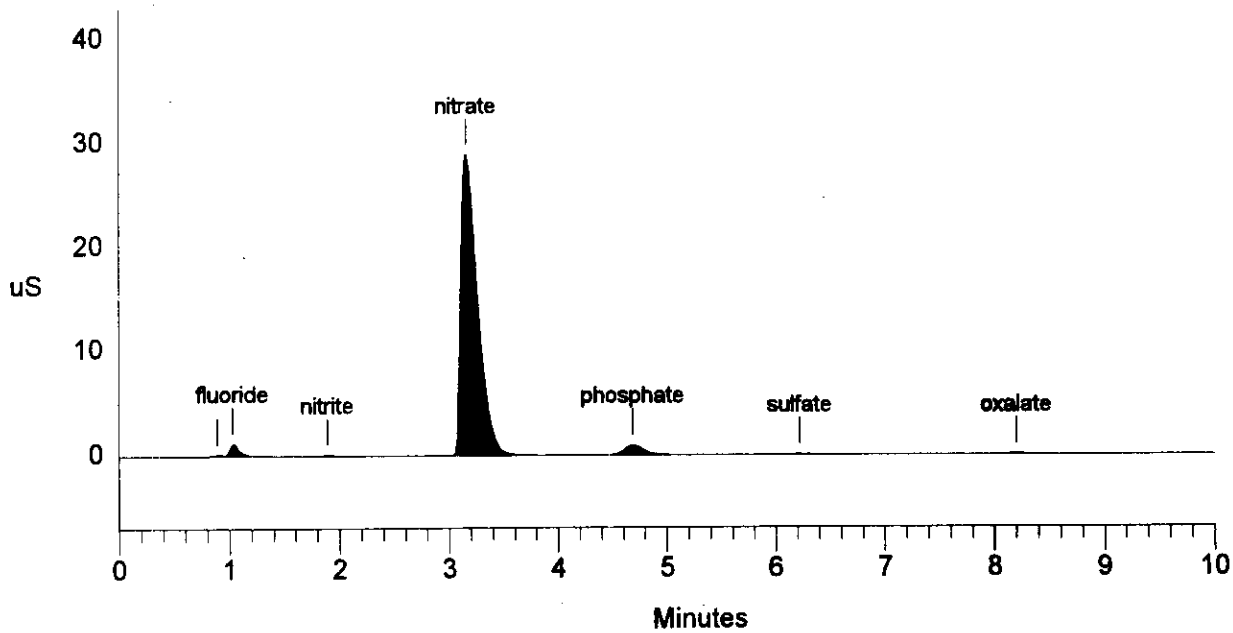
Sample Name: S95T002536 Date: 11/06/1995 02:38:11
Data File : C:\DX\DATA\95110601.D06
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 2 Inject#: 6 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	57	249	2	
2	1.03	fluoride	47.091	1115	6427	2	0.00
3	1.89	nitrite	29.992	90	537	1	-1.56
4	3.16	nitrate	4628.466	29006	306090	1	0.32
5	4.69	phosphate	416.492	948	11580	1	-2.09
6	6.22	sulfate	36.858	68	842	1	-2.20
7	8.20	oxalate	47.876	86	1448	1	-1.91
		Totals	5206.775	31372	327173		

File: 95110601.D06 Sample: S95T002536



WHC-SD-WM-DP-145, REV. 1

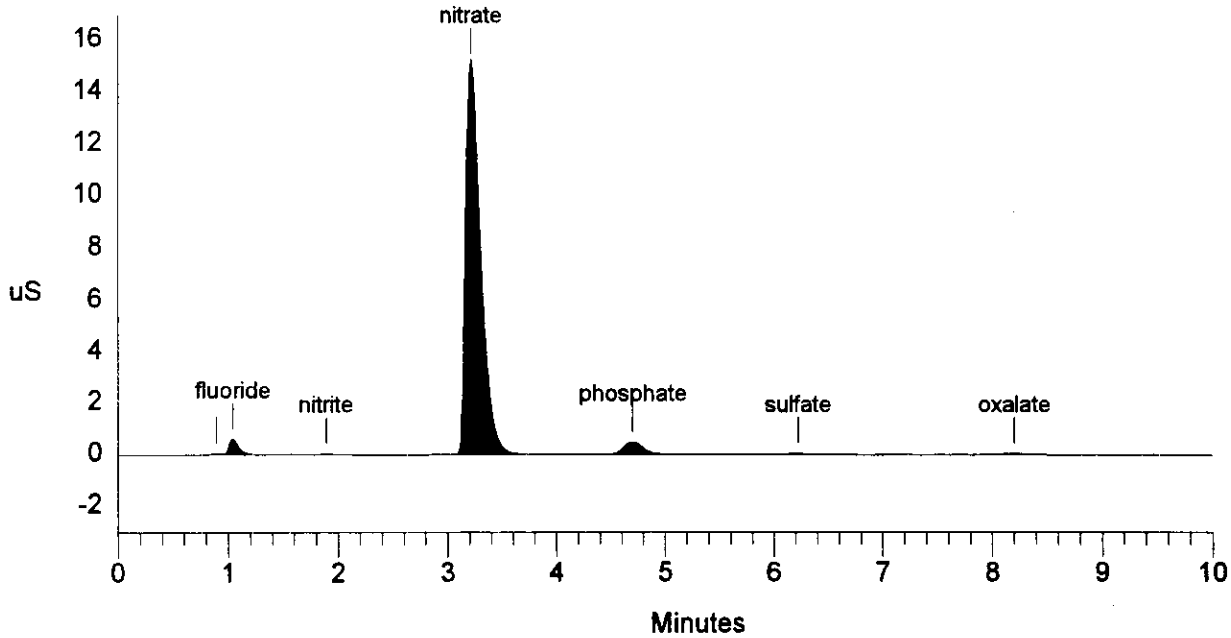
Sample Name: S95T002536 Date: 11/06/1995 02:56:09
Data File : C:\DX\DATA\95110601.D07
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 7 Inject#: 7 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	201	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.04	fluoride	50.327	586	3301	2	0.97
3	1.89	nitrite	51.699	47	263	1	-1.56
4	3.21	nitrate	4659.694	15081	144603	1	1.90
5	4.70	phosphate	437.318	473	5828	1	-1.88
6	6.22	sulfate	64.077	39	481	1	-2.20
7	8.20	oxalate	62.544	39	613	1	-1.91
		Totals	5325.659	16265	155089		

File: 95110601.D07 Sample: S95T002536



WHC-SD-WM-DP-145, REV. 1

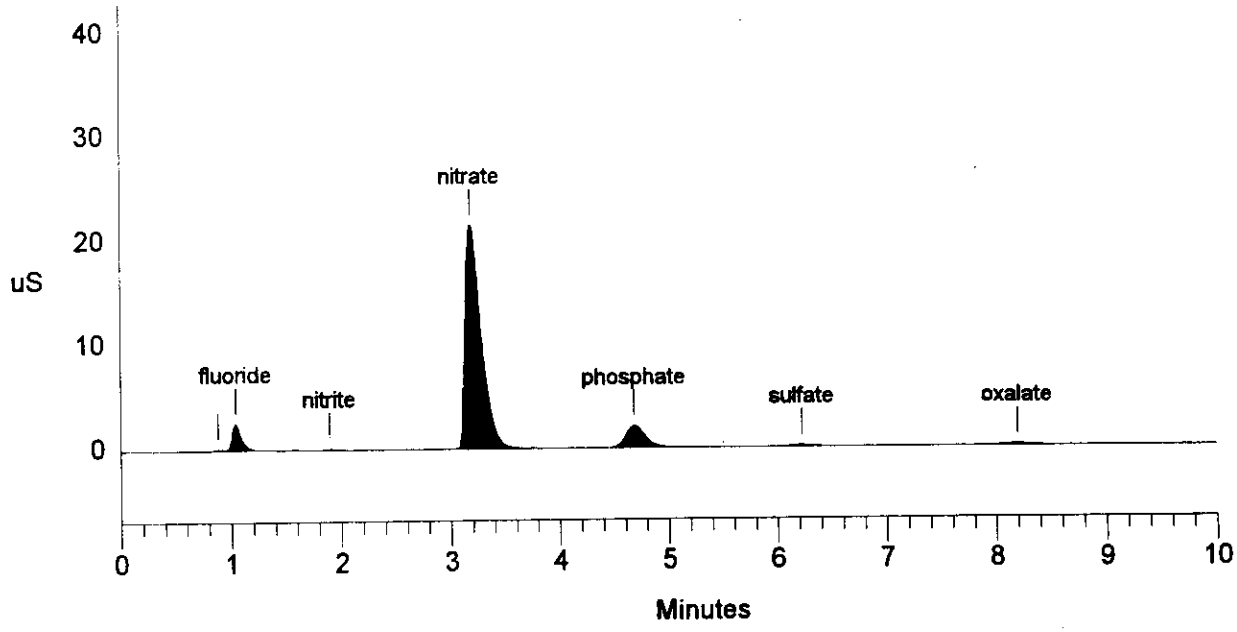
Sample Name: S95T002536 DUP Date: 11/06/1995 03:09:53
Data File : C:\DX\DATA\95110601.D08
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	61	290	2	
2	1.04	fluoride	98.692	2539	13912	2	0.97
3	1.89	nitrite	33.409	123	770	1	-1.56
4	3.18	nitrate	3379.356	21528	215206	1	0.95
5	4.68	phosphate	882.883	2092	25495	1	-2.30
6	6.22	sulfate	52.160	151	2030	1	-2.20
7	8.19	oxalate	73.124	156	2731	1	-2.03
		Totals	4519.625	26650	260436		

File: 95110601.D08 Sample: S95T002536 DUP



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| Sample Name: S95T002536 SPIKE                Date: 11/06/1995 03:27:43  |
| Data File  : C:\DX\DATA\95110601.D09                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 9                Detector:CDM-1     |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
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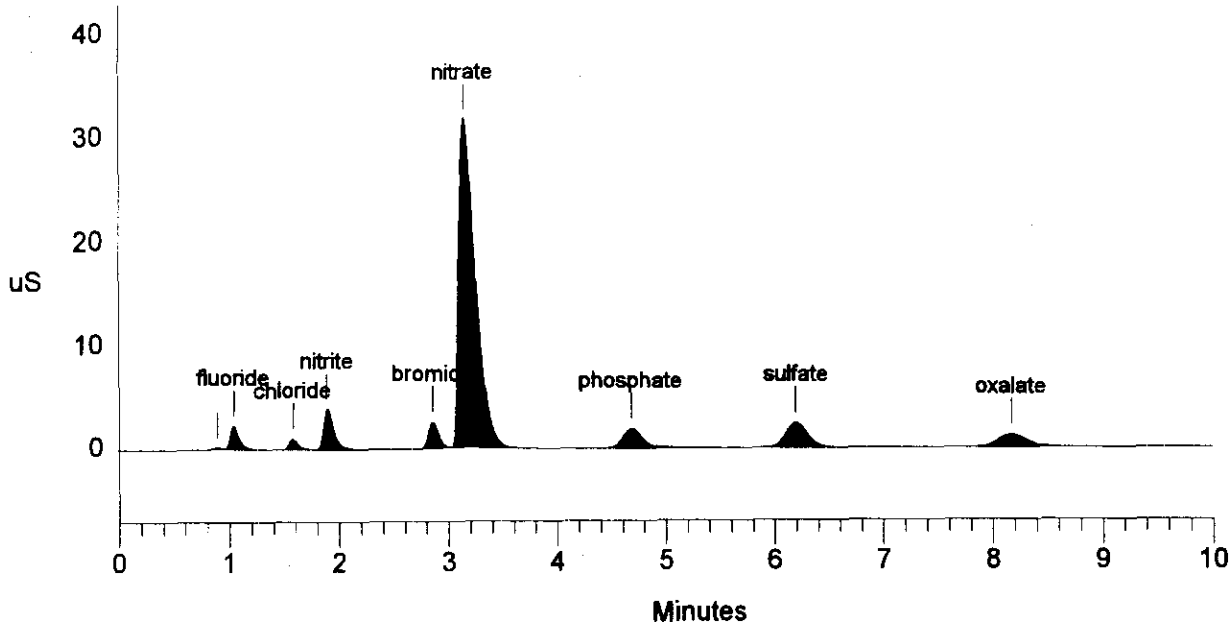
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	114	528	2	
2	1.04	fluoride	88.270	2274	12390	2	0.97
3	1.58	chloride	57.827	1035	5467	1	0.00
4	1.89	nitrite	380.262	3897	24548	1	-1.56
5	2.86	bromide	376.066	2562	16088	1	1.78
6	3.14	nitrate	5002.827	31622	334810	1	-0.32
7	4.68	phosphate	799.893	1888	22989	1	-2.30
8	6.20	sulfate	451.049	2416	33333	1	-2.52
9	8.17	oxalate	454.886	1224	22282	1	-2.27
		Totals	7611.081	47032	472434		

File: 95110601.D09 Sample: S95T002536 SPIKE



WHC-SD-WM-DP-145, REV. 1

LABCORE Completed Worklist Report for Worklist# 3188

Analyst: eal **Instrument:** IC01 **Book#** 109N96

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY108 IC. JMF

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
1	CCB			0	@IC-QC	F	QC	1		<.013		ug/mL
1	CCB			0	@IC-QC	CL	QC	1		<.017		ug/mL
1	CCB			0	@IC-QC	NO2	QC	1		<.170		ug/mL
1	CCB			0	@IC-QC	BR	QC	1		<.126		ug/mL
1	CCB			0	@IC-QC	NO3	QC	1		<.140		ug/mL
1	CCB			0	@IC-QC	PO4	QC	1		<.296		ug/mL
1	CCB			0	@IC-QC	SO4	QC	1		<.136		ug/mL
1	CCB			0	@IC-QC	OXALATE2	QC	1		<.105		ug/mL
2	CCV			0	@IC-QC	F	QC	59		59.4	100.680	% Recovery
2	CCV			0	@IC-QC	CL	QC	79		80.1	101.390	% Recovery
2	CCV			0	@IC-QC	NO2	QC	536		532.2	99.290	% Recovery
2	CCV			0	@IC-QC	BR	QC	575		568.9	98.940	% Recovery
2	CCV			0	@IC-QC	NO3	QC	614		607.3	98.910	% Recovery
2	CCV			0	@IC-QC	PO4	QC	546		533.0	97.620	% Recovery
2	CCV			0	@IC-QC	SO4	QC	631		619.7	98.210	% Recovery
2	CCV			0	@IC-QC	OXALATE2	QC	552		593	107.430	% Recovery
3	BLNK-PREP			0	@IC-01	F-02	SOLID	1		<.013		ug/g
3	BLNK-PREP			0	@IC-01	CL-02	SOLID	1		<.017		ug/g
3	BLNK-PREP			0	@IC-01	NO2-02	SOLID	1		<.107		ug/g
3	BLNK-PREP			0	@IC-01	BR-02	SOLID	1		<.126		ug/g
3	BLNK-PREP			0	@IC-01	NO3-02	SOLID	1		<.140		ug/g
3	BLNK-PREP			0	@IC-01	PO4-02	SOLID	1		<.296		ug/g
3	BLNK-PREP			0	@IC-01	SO4-02	SOLID	1		<.136		ug/g
3	BLNK-PREP			0	@IC-01	OXALATE2	SOLID	1		<.105		ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	F-02	SOLID	N/A		4.28e3	344.000	ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	CL-02	SOLID	N/A		1.62e3	450.000	ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	NO2-02	SOLID	N/A		1.20e4	4.500e+003	ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	BR-02	SOLID	N/A	<	3.33e3	3.330e+003	ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	NO3-02	SOLID	N/A		3.75e5	3.700e+003	ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	PO4-02	SOLID	N/A	<	7.83e3	7.830e+003	ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	SO4-02	SOLID	N/A		1.51e4	3.600e+003	ug/g
4	SAMPLE	S95T002558		0 W	@IC-01	OXALATE2	SOLID	N/A		1.03e4	2.780e+003	ug/g
5	DUP	S95T002558		0 W	@IC-01	F-02	SOLID	4.28e3		3.17e3	29.800	RPD
5	DUP	S95T002558		0 W	@IC-01	CL-02	SOLID	1.62e3		4.74e2	109.460	RPD
5	DUP	S95T002558		0 W	@IC-01	NO2-02	SOLID	1.20e4		7.24e3	49.480	RPD
5	DUP	S95T002558		0 W	@IC-01	BR-02	SOLID	<3.33e3		<1.42e3		RPD
5	DUP	S95T002558		0 W	@IC-01	NO3-02	SOLID	3.75e5		5.15e5	31.450	RPD
5	DUP	S95T002558		0 W	@IC-01	PO4-02	SOLID	<7.83e3		<3.33e3		RPD
5	DUP	S95T002558		0 W	@IC-01	SO4-02	SOLID	1.51e4		1.01e4	39.680	RPD
5	DUP	S95T002558		0 W	@IC-01	OXALATE2	SOLID	1.03e4		7.21e3	35.290	RPD
6	SPK	S95T002558		0 W	@IC-01	F-02	SOLID	100		95.5	95.500	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 3188

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T002558	0	W	IC-01	CL-02	SOLID	100	95.0	95.000	% Recovery
6	SPK	S95T002558	0	W	IC-01	NO2-02	SOLID	100	93.7	93.700	% Recovery
6	SPK	S95T002558	0	W	IC-01	BR-02	SOLID	100	95.7	95.700	% Recovery
6	SPK	S95T002558	0	W	IC-01	NO3-02	SOLID	100	101.1	101.100	% Recovery
6	SPK	S95T002558	0	W	IC-01	PO4-02	SOLID	100	98.6	98.600	% Recovery
6	SPK	S95T002558	0	W	IC-01	SO4-02	SOLID	100	91.8	91.800	% Recovery
6	SPK	S95T002558	0	W	IC-01	OXALATE2	SOLID	100	101.8	101.800	% Recovery
7	SAMPLE	S95T002559	0	W	IC-01	F-02	SOLID	N/A	7.29e3	252.000	ug/g
7	SAMPLE	S95T002559	0	W	IC-01	CL-02	SOLID	N/A	1.12e3	329.000	ug/g
7	SAMPLE	S95T002559	0	W	IC-01	NO2-02	SOLID	N/A	1.76e4	329.000	ug/g
7	SAMPLE	S95T002559	0	W	IC-01	BR-02	SOLID	N/A <	2.44e3	2.440e+003	ug/g
7	SAMPLE	S95T002559	0	W	IC-01	NO3-02	SOLID	N/A	1.63e5	2.710e+003	ug/g
7	SAMPLE	S95T002559	0	W	IC-01	PO4-02	SOLID	N/A	2.31e4	5.730e+003	ug/g
7	SAMPLE	S95T002559	0	W	IC-01	SO4-02	SOLID	N/A	1.98e4	2.630e+003	ug/g
7	SAMPLE	S95T002559	0	W	IC-01	OXALATE2	SOLID	N/A	1.52e4	2.030e+003	ug/g
8	DUP	S95T002559	0	W	IC-01	F-02	SOLID	7.29e3	5.92e3	20.740	RPD
8	DUP	S95T002559	0	W	IC-01	CL-02	SOLID	1.12e3	1.40e3	22.220	RPD
8	DUP	S95T002559	0	W	IC-01	NO2-02	SOLID	1.76e4	1.77e4	0.100	RPD
8	DUP	S95T002559	0	W	IC-01	BR-02	SOLID	<2.44e3	<2.11e3		RPD
8	DUP	S95T002559	0	W	IC-01	NO3-02	SOLID	1.63e5	1.75e5	6.900	RPD
8	DUP	S95T002559	0	W	IC-01	PO4-02	SOLID	2.31e4	9.01e3	87.760	RPD
8	DUP	S95T002559	0	W	IC-01	SO4-02	SOLID	1.98e4	1.98e4	0.000	RPD
8	DUP	S95T002559	0	W	IC-01	OXALATE2	SOLID	1.52e4	1.47e4	3.340	RPD

Final page for worklist# 3188

Analyst Signature Date

Analyst Signature Date

Reviewer Signature Date

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 3188

Analyst: EAL **Instrument:** IC01 IC01 **Book #** 109N9-C

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY108 IC. JMF Water Digests

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC	1	<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<.170	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		<.186	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		<.140	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC	59	59.4	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC	79	80.1	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC	536	532.2	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC	575	568.9	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC	614	607.31	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC	546	533.0	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC	631	619.7	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC	552	592.835	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID	1	<.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID	1	<.017	N/A	ug/g

Data Entry Comments:

Sample	duplicate
3.8170	8.9780
5.2140	6.0230

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3188

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				AIC-01	NO2-02	SOLID	1	<.107	N/A	ug/g
		3	BLNK-PREP				AIC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				AIC-01	NO3-02	SOLID		<~~.296~~ .140	N/A	ug/g
		3	BLNK-PREP				AIC-01	PO4-02	SOLID		<.296	N/A	ug/g
		3	BLNK-PREP				AIC-01	SO4-02	SOLID		<.136	N/A	ug/g
		3	BLNK-PREP				AIC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	F-02	SOLID	N/A	4.28^{E3}	3.44^{E2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	CL-02	SOLID	N/A	1.62^{E3}	4.50^{E2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	NO2-02	SOLID	N/A	1.20^{E4}	4.50^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	BR-02	SOLID	N/A	$<3.33^{E3}$	3.73^{E3} ~~3.39~~	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	NO3-02	SOLID	N/A	3.75^{E5}	3.70^{E3} ~~7.83~~	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	PO4-02	SOLID	N/A	$<7.83^{E3}$	7.83^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	SO4-02	SOLID	N/A	1.51^{E4}	3.60^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002558	0	W	AIC-01	OXALATE2	SOLID	N/A	1.03^{E4}	2.78^{E3}	ug/g
95000118	BY-108 (R)	5	DUP	S95T002558	0	W	AIC-01	F-02	SOLID	4.28^{E3}	3.17^{E3}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002558	0	W	AIC-01	CL-02	SOLID	1.62^{E3}	4.74^{E2}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002558	0	W	AIC-01	NO2-02	SOLID	1.20^{E4}	7.24^{E3}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002558	0	W	AIC-01	BR-02	SOLID	$<3.33^{E3}$	$<1.42^{E3}$	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002558	0	W	AIC-01	NO3-02	SOLID	3.75^{E5}	5.15^{E5}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002558	0	W	AIC-01	PO4-02	SOLID	$<7.83^{E3}$	$<3.33^{E3}$	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002558	0	W	AIC-01	SO4-02	SOLID	1.51^{E4}	1.01^{E4}	N/A	ug/g

Data Entry Comments:
Jann — 2558 Dup: can't go to dilution 41 due to high NO2 lel

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3188

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5 DUP	S95T002558	0	W	@IC-01	OXALATE2	SOLID	1.03e4	7.21e3	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	F-02	SOLID	100	95.5	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	CL-02	SOLID		95.0	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	NO2-02	SOLID		93.7	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	BR-02	SOLID		~~101.1~~ 95.7	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	NO3-02	SOLID		~~98.6~~ 101.1	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	PO4-02	SOLID		98.6	N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	SO4-02	SOLID		91.8	gmf 11/13/95 N/A	ug/g
95000118	BY-108 (R)	6 SPK	S95T002558	0	W	@IC-01	OXALATE2	SOLID		101.8	N/A	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	F-02	SOLID	N/A	7.29e3	2.57e2	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	CL-02	SOLID	N/A	1.12e3	3.29e2	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	NO2-02	SOLID	N/A	1.76e4	3.29e2	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	BR-02	SOLID	N/A	~~1.63e5~~ <2.44e3	2.44e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	NO3-02	SOLID	N/A	1.63e5	2.71e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	PO4-02	SOLID	N/A	2.31e4	5.73e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	SO4-02	SOLID	N/A	1.98e4	2.63e3	ug/g
95000118	BY-108 (R)	7 SAMPLE	S95T002559	0	W	@IC-01	OXALATE2	SOLID	gmf 11/13/95 N/A	~~1.49e4~~ 1.52e4	2.03e3	ug/g
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	F-02	SOLID	7.29e3	5.92e3	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	CL-02	SOLID	1.12e3	1.40e3	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	NO2-02	SOLID	~~1.44e5~~ 1.76e4	~~1.77e4~~ 1.77e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	BR-02	SOLID	~~1.63e5~~ <2.44E3	~~1.75e5~~ <2.44e3	<2.11e3 N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	NO3-02	SOLID	gmf 11/13/95 ~~2.51e4~~ 1.63e5	1.75e5	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3188

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	PO4-02	SOLID	2.31e4	9.01e3	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	SO4-02	SOLID	1.98e4	1.98e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002559	0	W	@IC-01	OXALATE2	SOLID	1.52e4	1.47e4	N/A	ug/g

Final page for worklist # 3188

Ann Lambel 11-06-95
Analyst Signature Date

R Elbert
Analyst Signature Date

Verified 11/13/95 J. M. Fuge

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002558 & S95T002559		
TEST CODE:	@IC01	ANALYST:	A. LAMBEL
INSTRUMENT:	IC01	ANALYSIS DATE:	11/06/95
WORK LIST #:	3188	SAMPLE POINT:	BY-108
BATCH ID:	N/A	SAMPLE PREP:	H20-DIG

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9C	100.8%	101.4%	99.3%	98.9%	97.6%	98.2%	98.9%	107.4%
S95T002558	4.28E+03	1.62E+03	1.20E+04	3.75E+05	<7832.33	1.51E+04	<3334.03	1.03E+04
S95T002558/DUP	3.17E+03	4.74E+02	7.24E+03	5.15E+05	<3329.92	1.01E+04	<1417.46	7.21E+03
Duplicate 1 RPD	29.6%	109.6%	49.6%	31.4%	N/A	39.4%	N/A	35.5%
S95T002559	7.29E+03	1.12E+03	1.76E+04	1.63E+05	2.31E+04	1.98E+04	<2440.74	1.52E+04
S95T002559/DUP	5.92E+03	1.40E+03	1.77E+04	1.75E+05	9.01E+03	1.98E+04	<2112.90	1.47E+04
Duplicate 2 RPD	20.7%	22.7%	0.1%	6.9%	87.9%	0.2%	N/A	3.8%
S95T002558/SPK	95.5%	95.0%	93.7%	101.1%	98.6%	91.8%	95.7%	101.8%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Form Completed By:	[illegible]	Date:	11-07-95
Chemist Approval:	[illegible]	Date:	11/13/95

476

LAB LEADER INFO	
Method:	LA-533-105
Matrix:	SOLID
Test Code:	@IC01
Work List #:	3188
Batch #:	N/A
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9C
Spike Sample #:	1
Prepared By:	RT STEELE
Prepared Date:	11/07/95
Chemist:	J. FRYE
Analyst:	A. LAMBEL
Analysis Date:	11/06/95
Time Complete:	03:38 AM
Instrument Code:	IC01
Rerun:	0
Sample Prep:	H20-DIG
Sample Point:	BY-108
Sample Type	
STANDARD	109N9C
SAMPLE 1	S95T002558
DUPLICATE 1	S95T002558/DUP
SAMPLE 2	S95T002559
DUPLICATE 2	S95T002559/DUP
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T002558/SPK
SPIKE DUPLICATE	

PRINT

TECH INFO

	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	<.017	<.107	<.140	<.296	<.136	<.126	<.105
Standard Data (µg/mL)	99.466	99.669	532.24	607.31	533.033	619.853	568.573	562.636
Sample 1 Data (µg/mL)	1.53E+01	6.30E+00	4.58E+01	1.43E+03	<.296	5.75E+01	<.126	3.94E+01
Sample 1 Dilution Factor	101	101	101	101	101	101	101	101
Sample 1 Prep DF g/L	3.817	3.817	3.817	3.817	3.817	3.817	3.817	3.817
Duplicate 1 Data (µg/mL)	2.08E+01	4.25E+00	6.58E+01	4.63E+03	<.296	9.87E+01	<.126	6.47E+01
Duplicate 1 Dilution Factor	101	101	101	101	101	101	101	101
Duplicate 1 Prep DF g/L	8.978	8.978	8.978	8.978	8.978	8.978	8.978	8.978
Sample 2 Data (µg/mL)	3.80E+01	5.81E+00	9.38E+01	8.52E+02	1.21E+02	1.83E+02	<.126	7.98E+01
Sample 2 Dilution Factor	101	101	101	101	101	101	101	101
Sample 2 Prep DF g/L	5.214	5.214	5.214	5.214	5.214	5.214	5.214	5.214
Duplicate 2 Data (µg/mL)	3.57E+01	8.44E+00	1.06E+02	1.06E+03	5.42E+01	1.19E+02	<.126	8.83E+01
Duplicate 2 Dilution Factor	101	101	101	101	101	101	101	101
Duplicate 2 Prep DF g/L	6.023	6.023	6.023	6.023	6.023	6.023	6.023	6.023
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	7.26E+01	8.12E+01	5.48E+02	2.06E+03	5.38E+02	6.37E+02	5.50E+02	6.01E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
Std. Conc. (µg/mL)	89	79	536	614	546	631	576	562
Detection Limit	0.013	0.017	0.170	0.140	0.296	0.136	0.126	0.105
Matrix Detection Limit 1	3.44E+02	4.60E+02	4.50E+03	3.70E+03	7.83E+03	3.60E+03	3.33E+03	2.78E+03
Matrix Detection Limit 2	2.52E+02	3.29E+02	3.29E+03	2.71E+03	5.73E+03	2.63E+03	2.44E+03	2.03E+03
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]*100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	100.8%	101.4%	98.5%	98.9%	97.8%	98.2%	98.9%	107.4%
Sample 1 in µg/g	4.28E+03	1.82E+03	1.28E+04	3.76E+05	<7832.33	1.51E+04	<3334.03	1.03E+04
Duplicate 1 in µg/g	5.17E+03	4.74E+02	7.34E+03	5.15E+05	<3329.92	1.01E+04	<1417.46	7.21E+03
Duplicate 1 RPD	29.6%	109.6%	49.6%	31.4%	N/A	39.4%	N/A	35.5%
Sample 2 in µg/g	7.29E+03	1.12E+03	1.76E+04	1.63E+05	2.31E+04	1.98E+04	<2440.74	1.52E+04
Duplicate 2 in µg/g	5.92E+03	1.40E+03	1.77E+04	1.75E+05	9.01E+03	1.98E+04	<2112.90	1.47E+04
Duplicate 2 RPD	20.7%	22.7%	0.1%	6.9%	87.9%	0.2%	N/A	3.8%
Spike % Recovery	96.8%	98.0%	93.7%	101.1%	98.6%	91.8%	98.7%	101.8%

Data Entry by: RTSteele Date: 11/07/95
Approved by: Jean Frye Date: 11/13/95
Form DIONEX.WB1 Rev. 1.3

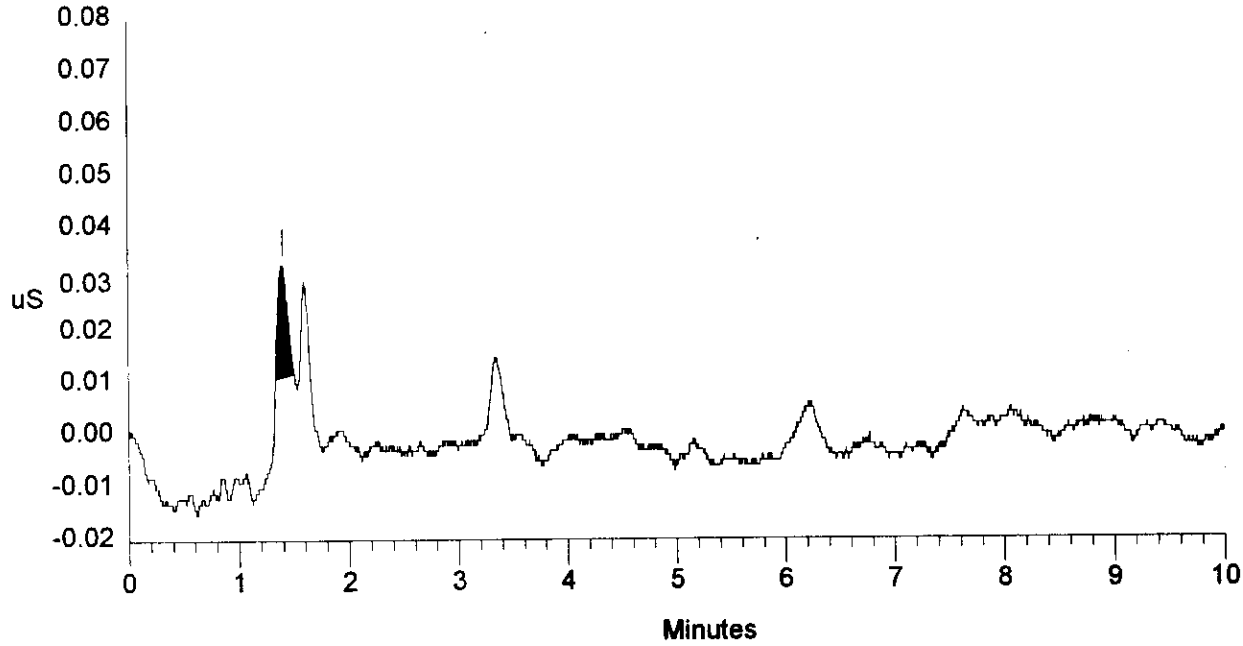
Sample Name: BLANK	Date: 11/06/1995 03:38:40
Data File : C:\DX\DATA\95110601.D10	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 10	Detector:CDM-1
Analyst : Glenn Lambert 11-06-95	Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95110601.D10 Sample: BLANK



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 478 TO 487.

WHC-SD-WM-DP-145, REV. 1

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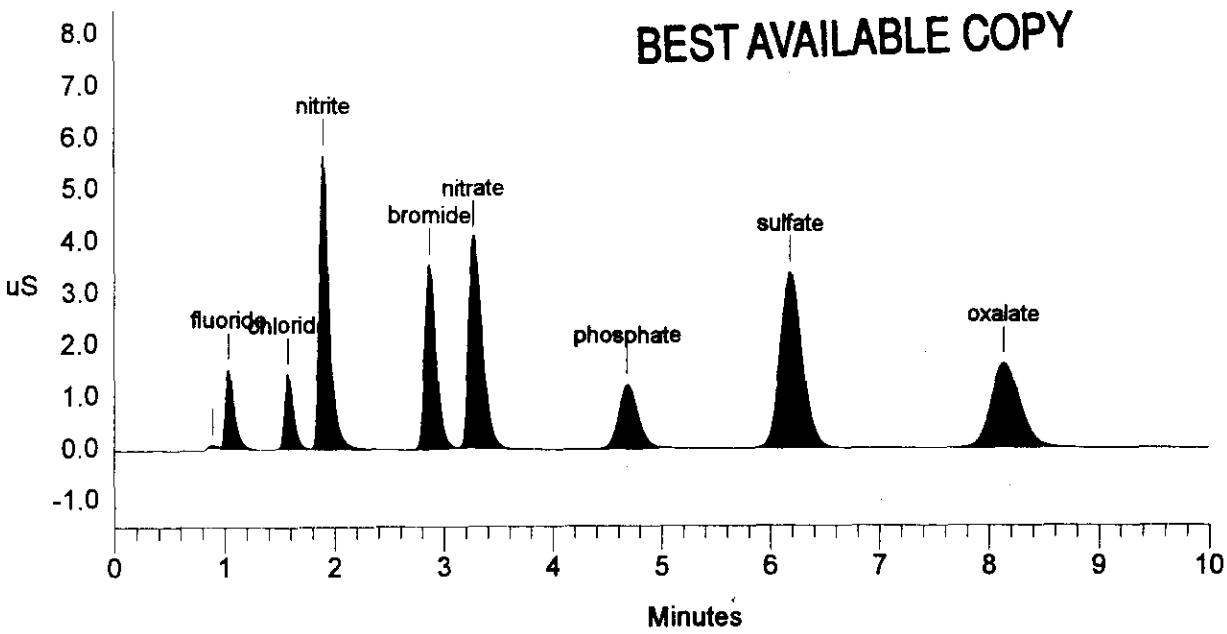
==================================================================================
| Sample Name: 109N9-C STD.                    Date: 11/06/1995 04:51:00          |
| Data File  : C:\DX\DATA\95110601.D12                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 12                    Detector:CDM-1        |
| Analyst    : [signature]  Column: AG4A/AS4A anion column/SRS                    |
==================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	49	217	2	
2	1.04	fluoride	59.456	1521	8209	2	0.97
3	1.58	chloride	80.088	1446	7628	1	0.00
4	1.90	nitrite	532.240	5677	35019	1	-1.04
5	2.87	bromide	568.873	3577	25032	1	2.14
6	3.27	nitrate	607.310	4080	34645	1	3.81
7	4.69	phosphate	533.033	1243	15019	1	-2.09
8	6.19	sulfate	619.653	3408	46764	1	-2.67
9	8.14	oxalate	592.835	1633	29416	1	-2.63
		Totals	3593.487	22636	201950		

File: 95110601.D12 Sample: 109N9-C STD.



WHC-SD-WM-DP-145, REV. 1

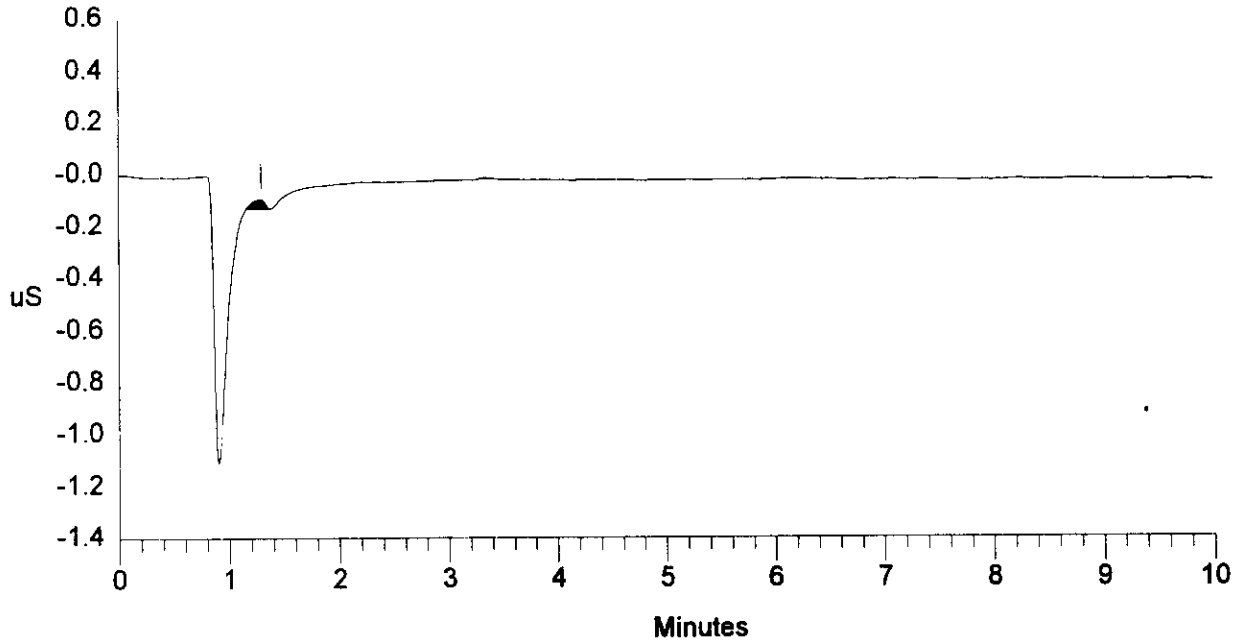
```
==========================================================================
| Sample Name: PREP. BLANK                    Date: 11/06/1995 05:07:44   |
| Data File  : C:\DX\DATA\95110601.D13                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 13                Detector:CDM-1    |
| Analyst    : Ellen Kemble  Column: AG4A/AS4A anion column/SRS           |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.29		0.000	36	288	1	
		Totals	0.000	36	288		

File: 95110601.D13 Sample: PREP. BLANK



WHC-SD-WM-DP-145, REV. 1

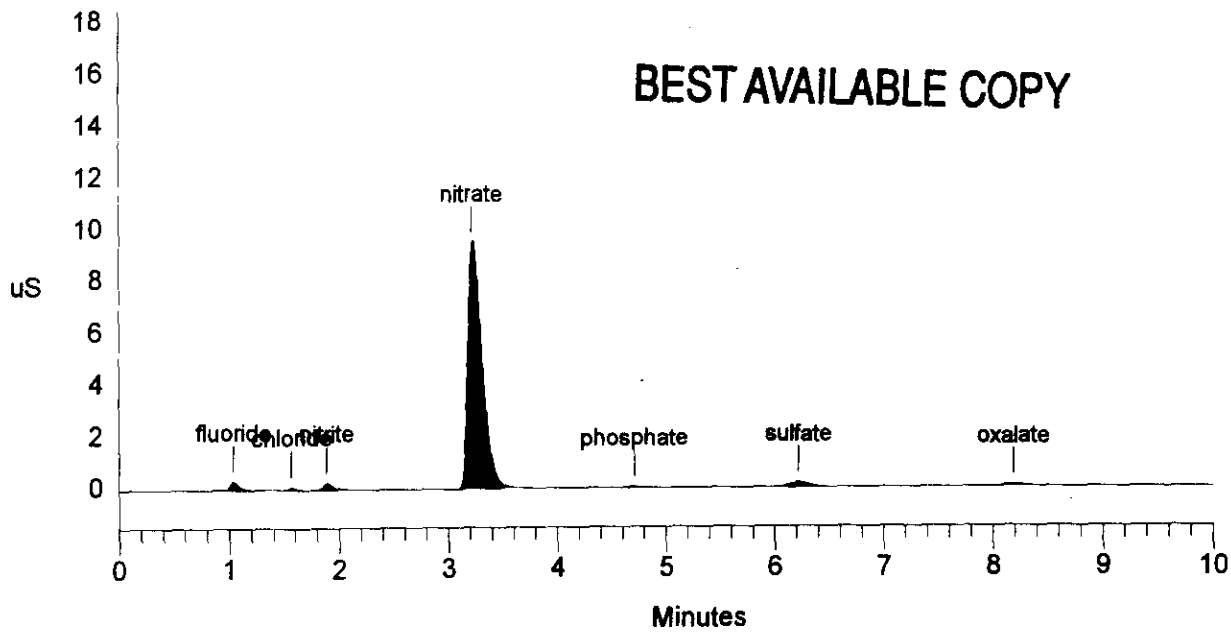
```
==========================================================================
| Sample Name: S95T002558                    Date: 11/06/1995 05:19:04    |
| Data File  : C:\DX\DATA\95110601.D14                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 14              Detector:CDM-1      |
| Analyst    : Elan Lanka  Column: AG4A/AS4A anion column/SRS             |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.04	fluoride	16.330	330	2024	1	0.97
2	1.57	chloride	6.198	97	506	1	-0.63
3	1.89	nitrite	45.850	263	1620	1	-1.56
4	3.22	nitrate	1433.119	9499	85878	1	2.22
5	4.71	phosphate	30.663	33	363	1	-1.67
6	6.22	sulfate	57.479	181	2444	1	-2.20
7	8.19	oxalate	39.394	65	1017	1	-2.03
		Totals	1629.032	10467	93851		

File: 95110601.D14 Sample: S95T002558



WHC-SD-WM-DP-145, REV. 1

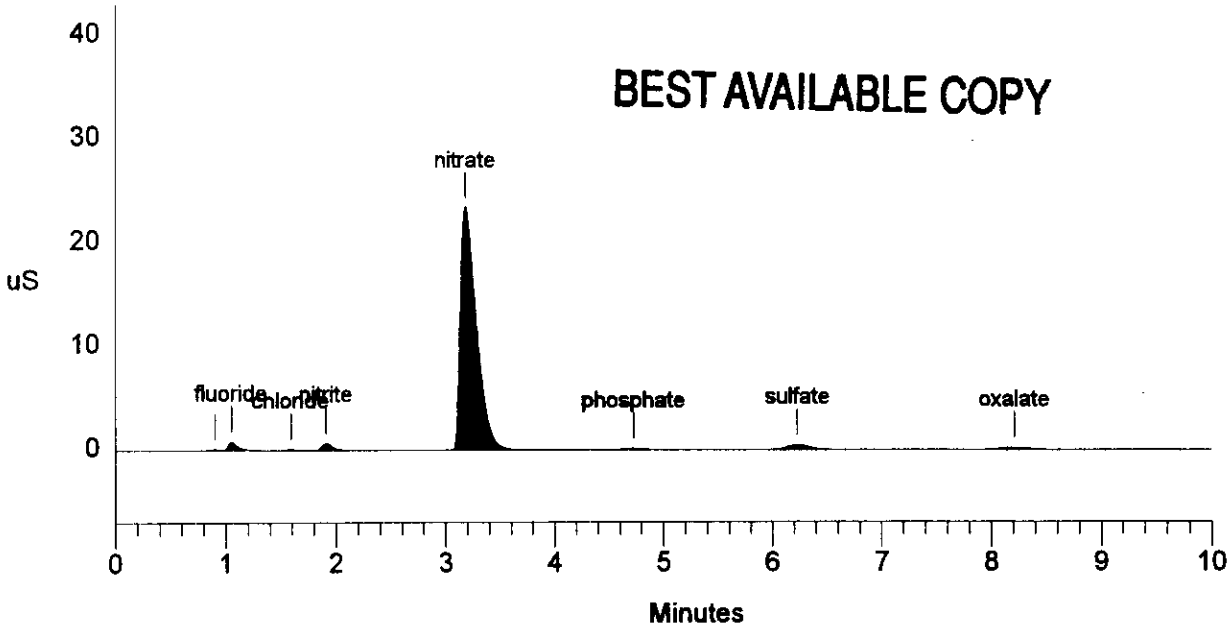
Sample Name: S95T002558 Date: 11/06/1995 05:30:08
Data File : C:\DX\DATA\95110601.D15
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 15 Detector:CDM-1
Analyst : Ellen Lambel Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	41	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	49	223	2	
2	1.05	fluoride	13.646	784	4492	2	1.94
3	1.59	chloride	2.440	94	488	1	0.63
4	1.91	nitrite	33.616	663	4147	1	-0.52
5	3.18	nitrate	1478.363	23288	233725	1	0.95
6	4.73	phosphate	21.435	88	1000	1	-1.25
7	6.23	sulfate	41.277	426	5881	1	-2.04
8	8.21	oxalate	31.694	174	2983	1	-1.79
		Totals	1622.472	25567	252940		

File: 95110601.D15 Sample: S95T002558



WHC-SD-WM-DP-145, REV. 1

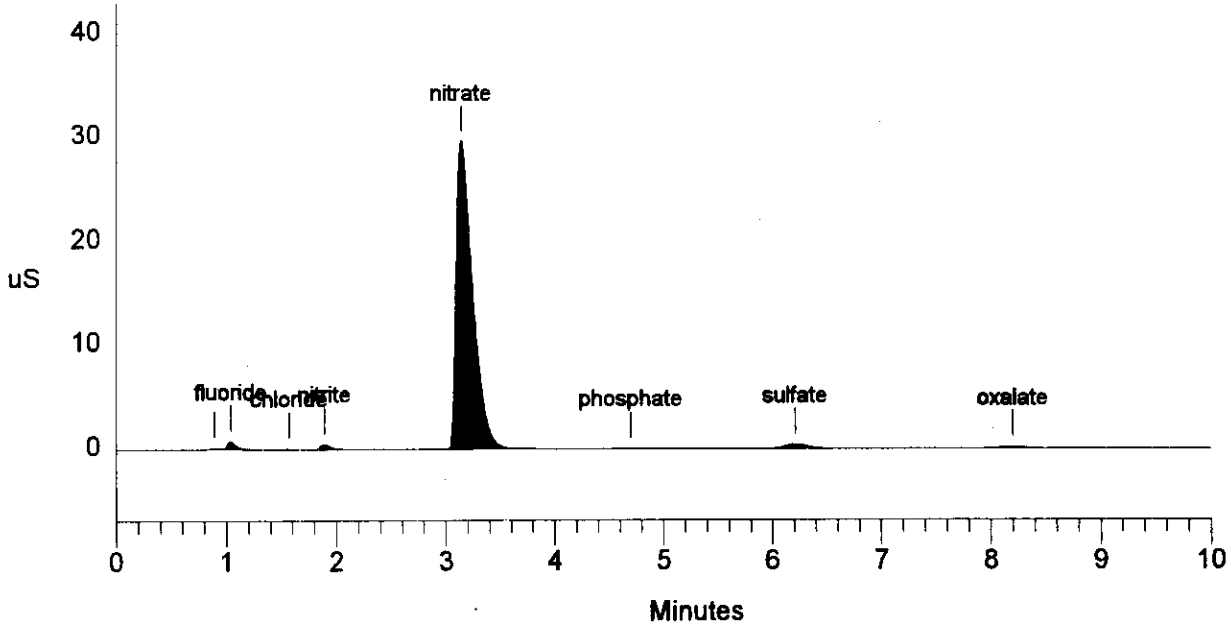
```
==========================================================================
| Sample Name: S95T002558   DUP                Date: 11/06/1995 05:41:10  |
| Data File  : C:\DX\DATA\95110601.D16                                   |
| Method     : C:\DX\METHOD\KIT.MET                                      |
| ACI Address: 1  System: 1  Inject#: 16                Detector:CDM-1   |
| Analyst    : Ellen Lambert Column: AG4A/AS4A anion column/SRS          |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	69	324	2	
2	1.04	fluoride	28.500	689	3760	2	0.97
3	1.57	chloride	4.255	62	320	1	-0.63
4	1.89	nitrite	64.978	472	2928	1	-1.56
5	3.14	nitrate	4625.237	29602	305846	1	-0.32
6	4.70	phosphate	29.758	31	337	1	-1.88
7	6.21	sulfate	90.714	367	5028	1	-2.36
8	8.20	oxalate	64.709	134	2303	1	-1.91
		Totals	4908.151	31426	320847		

File: 95110601.D16 Sample: S95T002558 DUP



WHC-SD-WM-DP-145, REV. 1

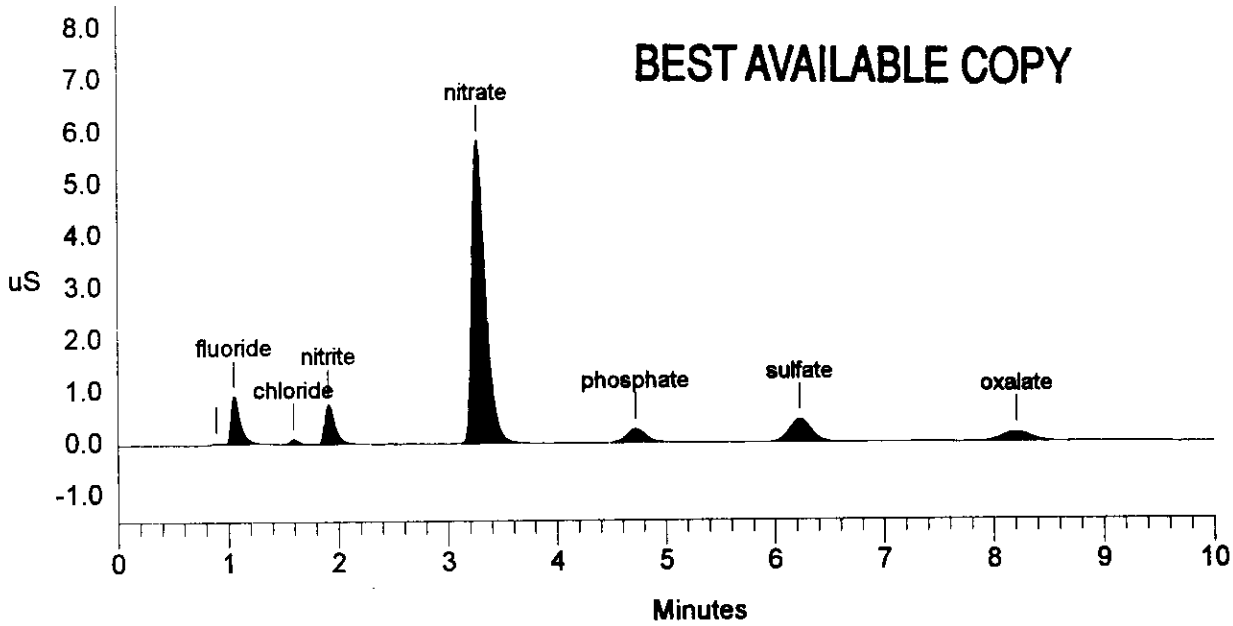
Sample Name: S95T002559 Date: 11/06/1995 06:06:09
Data File : C:\DX\DATA\95110601.D18
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 18 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	1.05	fluoride	38.024	907	5124	2	1.94
3	1.59	chloride	5.814	91	469	1	0.63
4	1.91	nitrite	91.962	752	4773	1	-0.52
5	3.27	nitrate	852.182	5836	49637	1	3.81
6	4.72	phosphate	120.565	252	2954	1	-1.46
7	6.23	sulfate	103.018	433	5985	1	-2.04
8	8.21	oxalate	79.472	174	3054	1	-1.79
		Totals	1291.038	8445	71997		

File: 95110601.D18 Sample: S95T002559



WHC-SD-WM-DP-145, REV. 1

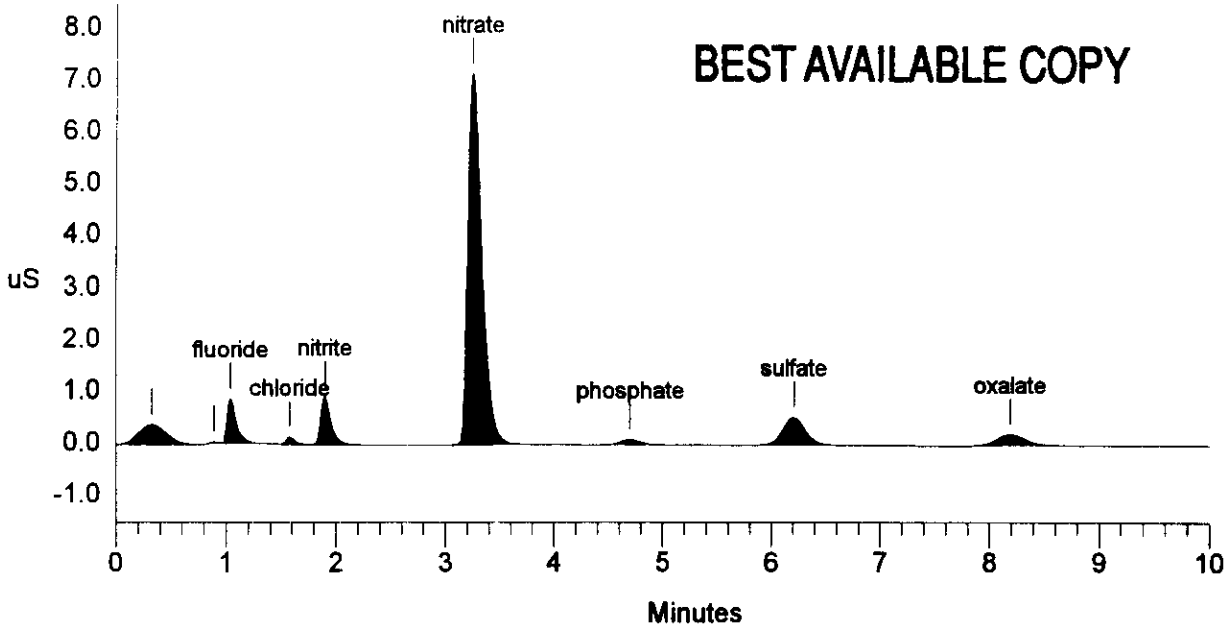
Sample Name: S95T002559 DUP Date: 11/06/1995 06:25:51
Data File : C:\DX\DATA\95110601.D20
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 20 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.33		0.000	384	6698	1	
3	1.04	fluoride	35.676	856	4788	2	0.97
4	1.58	chloride	8.436	138	719	1	0.00
5	1.90	nitrite	106.315	922	5755	1	-1.04
6	3.25	nitrate	1055.086	7149	62185	1	3.17
7	4.70	phosphate	54.246	93	1042	1	-1.88
8	6.21	sulfate	119.219	528	7247	1	-2.36
9	8.19	oxalate	88.344	204	3505	1	-2.03
		Totals	1467.322	10273	91939		

File: 95110601.D20 Sample: S95T002559 DUP



BEST AVAILABLE COPY

WHC-SD-WM-DP-145, REV. 1

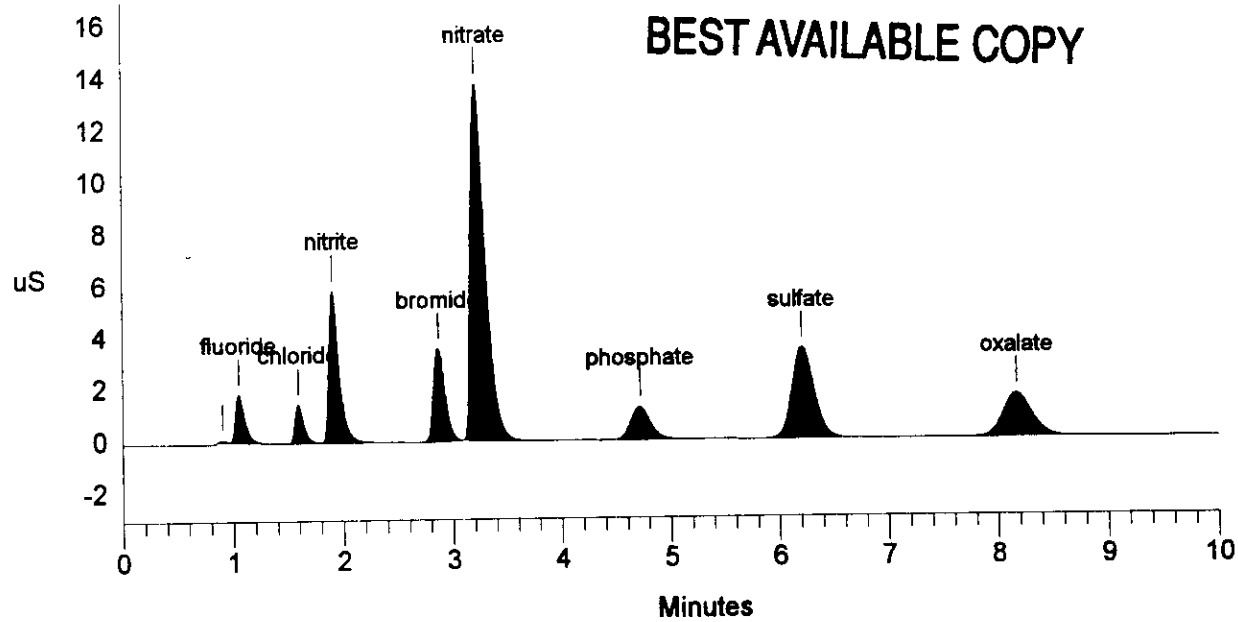
Sample Name: S95T002558 SPIKE Date: 11/06/1995 05:54:49
Data File : C:\DX\DATA\95110601.D17
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 17 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	68	297	2	
2	1.05	fluoride	72.646	1808	10118	2	1.94
3	1.59	chloride	81.246	1464	7741	1	0.63
4	1.91	nitrite	547.972	5861	36105	1	-0.52
5	2.87	bromide	550.059	3568	24155	1	2.14
6	3.22	nitrate	2053.796	13731	125718	1	2.22
7	4.72	phosphate	538.387	1250	15178	1	-1.46
8	6.21	sulfate	636.920	3508	48146	1	-2.36
9	8.17	oxalate	601.479	1658	29865	1	-2.27
		Totals	5082.504	32917	297323		

File: 95110601.D17 Sample: S95T002558 SPIKE



WHC-SD-WM-DP-145, REV. 1

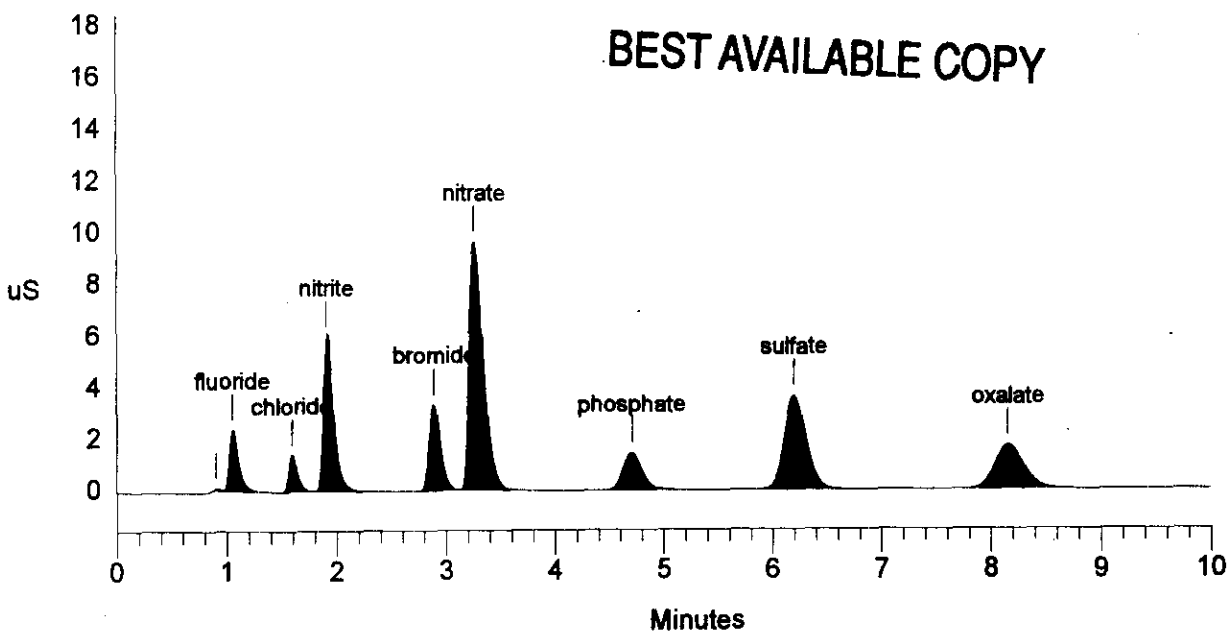
```
==========================================================================
| Sample Name: S95T002559 SPIKE                Date: 11/06/1995 06:36:51 |
| Data File  : C:\DX\DATA\95110601.D21                                   |
| Method     : C:\DX\METHOD\KIT.MET                                      |
| ACI Address: 1  System: 1  Inject#: 21                Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS        |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	74	331	2	
2	1.05	fluoride	96.151	2361	13541	2	1.94
3	1.59	chloride	81.283	1402	7745	1	0.63
4	1.91	nitrite	586.458	5978	38763	1	-0.52
5	2.89	bromide	536.998	3355	23547	1	2.85
6	3.26	nitrate	1426.398	9626	85453	1	3.49
7	4.71	phosphate	623.314	1444	17701	1	-1.67
8	6.20	sulfate	664.953	3653	50394	1	-2.52
9	8.16	oxalate	617.467	1708	30694	1	-2.39
		Totals	4633.022	29601	268166		

File: 95110601.D21 Sample: S95T002559 SPIKE



WHC-SD-WM-DP-145, REV. 1

LABCORE Completed Worklist Report for Worklist# 3189

Analyst: kgh **Instrument:** IC01 **Book#** 109MC

Method: LA-533-105 Rev/Mod D-1 95000118

Worklist Comment: BY108 IC. JMF

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
1	CCB			0	IC-QC	F-QC	QC	1	<.013		ug/mL
1	CCB			0	IC-QC	CL-QC	QC	1	<.017		ug/mL
1	CCB			0	IC-QC	NO2-QC	QC	1	<.170		ug/mL
1	CCB			0	IC-QC	BR-QC	QC	1	<.126		ug/mL
1	CCB			0	IC-QC	NO3-QC	QC	1	<.140		ug/mL
1	CCB			0	IC-QC	PO4-QC	QC	1	<.296		ug/mL
1	CCB			0	IC-QC	SO4-QC	QC	1	<.136		ug/mL
1	CCB			0	IC-QC	OXALATQC	QC	1	<.105		ug/mL
2	CCV			0	IC-QC	F-QC	QC	59	59.5	100.850	% Recovery
2	CCV			0	IC-QC	CL-QC	QC	79	79	100.000	% Recovery
2	CCV			0	IC-QC	NO2-QC	QC	536	534.5	99.720	% Recovery
2	CCV			0	IC-QC	BR-QC	QC	575	570.5	99.220	% Recovery
2	CCV			0	IC-QC	NO3-QC	QC	614	616.0	100.330	% Recovery
2	CCV			0	IC-QC	PO4-QC	QC	546	506.0	92.670	% Recovery
2	CCV			0	IC-QC	SO4-QC	QC	631	620.6	98.350	% Recovery
2	CCV			0	IC-QC	OXALATQC	QC	552	601.3	108.930	% Recovery
3	BLNK-PREP			0	IC-01	F-02	SOLID	1	<.013		ug/g
3	BLNK-PREP			0	IC-01	CL-02	SOLID	1	<.017		ug/g
3	BLNK-PREP			0	IC-01	NO2-02	SOLID	1	<.107		ug/g
3	BLNK-PREP			0	IC-01	BR-02	SOLID	1	<.126		ug/g
3	BLNK-PREP			0	IC-01	NO3-02	SOLID	1	<.140		ug/g
3	BLNK-PREP			0	IC-01	PO4-02	SOLID	1	<.296		ug/g
3	BLNK-PREP			0	IC-01	SO4-02	SOLID	1	<.136		ug/g
3	BLNK-PREP			0	IC-01	OXALATE2	SOLID	1	<.105		ug/g
4	SAMPLE	S95T002560	0	W	IC-01	F-02	SOLID	N/A	6.70e3	182.000	ug/g
4	SAMPLE	S95T002560	0	W	IC-01	CL-02	SOLID	N/A	1.52e3	238.000	ug/g
4	SAMPLE	S95T002560	0	W	IC-01	NO2-02	SOLID	N/A	2.09e4	1.500e+003	ug/g
4	SAMPLE	S95T002560	0	W	IC-01	BR-02	SOLID	N/A <	1.76e3	1.760e+003	ug/g
4	SAMPLE	S95T002560	0	W	IC-01	NO3-02	SOLID	N/A	1.85e5	1.960e+003	ug/g
4	SAMPLE	S95T002560	0	W	IC-01	PO4-02	SOLID	N/A	8.63e3	4.140e+003	ug/g
4	SAMPLE	S95T002560	0	W	IC-01	SO4-02	SOLID	N/A	1.80e4	1.900e+003	ug/g
4	SAMPLE	S95T002560	0	W	IC-01	OXALATE2	SOLID	N/A	1.09e4	1.470e+003	ug/g
5	DUP	S95T002560	0	W	IC-01	F-02	SOLID	6.70e3	5.93e3	12.190	RPD
5	DUP	S95T002560	0	W	IC-01	CL-02	SOLID	1.52e3	1.40e3 1		RPD
5	DUP	S95T002560	0	W	IC-01	NO2-02	SOLID	2.09e4	1.95e4	6.930	RPD
5	DUP	S95T002560	0	W	IC-01	BR-02	SOLID	<1.76e3	<1.76e3		RPD
5	DUP	S95T002560	0	W	IC-01	NO3-02	SOLID	1.85e5	2.15e5	15.000	RPD
5	DUP	S95T002560	0	W	IC-01	PO4-02	SOLID	8.63e3	5.65e3	41.740	RPD
5	DUP	S95T002560	0	W	IC-01	SO4-02	SOLID	1.80e4	1.64e4	9.300	RPD
5	DUP	S95T002560	0	W	IC-01	OXALATE2	SOLID	1.09e4	1.06e4	2.790	RPD
6	SPK	S95T002560	0	W	IC-01	F-02	SOLID	100	96.2	96.200	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 3189

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
6	SPK	S95T002560	0	W	IC-01	CL-02	SOLID	100		97.9	97.900	% Recovery
6	SPK	S95T002560	0	W	IC-01	NO2-02	SOLID	100		96.0	96.000	% Recovery
6	SPK	S95T002560	0	W	IC-01	BR-02	SOLID	100		97.0	97.000	% Recovery
6	SPK	S95T002560	0	W	IC-01	NO3-02	SOLID	100		97.9	97.900	% Recovery
6	SPK	S95T002560	0	W	IC-01	PO4-02	SOLID	100		93.1	93.100	% Recovery
6	SPK	S95T002560	0	W	IC-01	SO4-02	SOLID	100		94.3	94.300	% Recovery
6	SPK	S95T002560	0	W	IC-01	OXALATE2	SOLID	100		108.8	108.800	% Recovery
7	SAMPLE	S95T002561	0	W	IC-01	F-02	SOLID	N/A		5.17e3	152.000	ug/g
7	SAMPLE	S95T002561	0	W	IC-01	CL-02	SOLID	N/A		1.82e3	198.000	ug/g
7	SAMPLE	S95T002561	0	W	IC-01	NO2-02	SOLID	N/A		2.25e4	1.250e+003	ug/g
7	SAMPLE	S95T002561	0	W	IC-01	BR-02	SOLID	N/A	<	1.47e3	1.470e+003	ug/g
7	SAMPLE	S95T002561	0	W	IC-01	NO3-02	SOLID	N/A		2.24e5	1.630e+003	ug/g
7	SAMPLE	S95T002561	0	W	IC-01	PO4-02	SOLID	N/A		9.70e3	3.450e+003	ug/g
7	SAMPLE	S95T002561	0	W	IC-01	SO4-02	SOLID	N/A		1.13e4	1.590e+003	ug/g
7	SAMPLE	S95T002561	0	W	IC-01	OXALATE2	SOLID	N/A		8.07e3	1.220e+003	ug/g
8	DUP	S95T002561	0	W	IC-01	F-02	SOLID	5.17e3		5.38e3	3.980	RPD
8	DUP	S95T002561	0	W	IC-01	CL-02	SOLID	1.82e3		1.67e3	8.600	RPD
8	DUP	S95T002561	0	W	IC-01	NO2-02	SOLID	2.25e4		2.27e4	0.880	RPD
8	DUP	S95T002561	0	W	IC-01	BR-02	SOLID	<1.47e3		<1.47e3		RPD
8	DUP	S95T002561	0	W	IC-01	NO3-02	SOLID	2.24e5		1.99e5	11.900	RPD
8	DUP	S95T002561	0	W	IC-01	PO4-02	SOLID	9.70e3		9.97e3	2.700	RPD
8	DUP	S95T002561	0	W	IC-01	SO4-02	SOLID	1.13e4		1.20e4	6.010	RPD
8	DUP	S95T002561	0	W	IC-01	OXALATE2	SOLID	8.07e3		8.41e3	4.130	RPD

Final page for worklist# 3189

Analyst Signature Date

Analyst Signature Date

Reviewer Signature 11/8/95 Date

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 3189

Analyst: KGH **Instrument:** IC01 _____ **Book #** 109NQ-C

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY108 IC. JMF Water Digests

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC	1	<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<.170	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		<.126	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		<.140	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC	59	5.95 E1	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC	79	79	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC	536	534.5	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC	575	~~616.0~~ 570.5 gmF 11/8/95	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC	614	616.0	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC	546	506.0	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC	631	620.6	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC	552	601.3	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID	1	<.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID		<.017	N/A	ug/g

Data Entry Comments:

	595NQ560		595T002561
Sample	7.2220	S →	~~7.5080~~ 8.6610
Duplicate	7.5080	D →	8.9060

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3189

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				@IC-01	NO2-02	SOLID		<.107	N/A	ug/g
		3	BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				@IC-01	NO3-02	SOLID		<.140	N/A	ug/g
		3	BLNK-PREP				@IC-01	PO4-02	SOLID		<.296	N/A	ug/g
		3	BLNK-PREP				@IC-01	SO4-02	SOLID		<.136	N/A	ug/g
		3	BLNK-PREP				@IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	F-02	SOLID	N/A	6.70^{E3}	1.82^{E2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	CL-02	SOLID	N/A	1.52^{E3}	2.38^{E2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	NO2-02	SOLID	N/A	2.09^{E4}	1.50^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	BR-02	SOLID	N/A	$<1.76^{E3}$	1.76^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	NO3-02	SOLID	N/A	1.85^{E5}	1.96^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	PO4-02	SOLID	N/A	8.63^{E3}	4.14^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	SO4-02	SOLID	N/A	1.80^{E4}	1.90^{E3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002560	0	W	@IC-01	OXALATE2	SOLID	N/A	1.09^{E4}	1.47^{E3}	ug/g
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	@IC-01	F-02	SOLID	6.70^{E3}	5.93^{E3}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	@IC-01	CL-02	SOLID	1.52^{E3}	1.40^{E3}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	@IC-01	NO2-02	SOLID	2.09^{E4}	1.95^{E4}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	@IC-01	BR-02	SOLID	$<1.76^{E3}$	~~$<1.69^{E3}$~~ $<1.76^{E3}$ GMF 11/3/95	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	@IC-01	NO3-02	SOLID	1.85^{E5}	2.15^{E5}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	@IC-01	PO4-02	SOLID	8.63^{E3}	5.65^{E3}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	@IC-01	SO4-02	SOLID	1.80^{E4}	1.69^{E4}	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3189

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5	DUP	S95T002560	0	W	aIC-01	OXALATE2	SOLID	109E4	1.06E4	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	F-02	SOLID	100	~~96~~ 96.2	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	CL-02	SOLID		97.9	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	NO2-02	SOLID		96.0	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	BR-02	SOLID		97.0	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	NO3-02	SOLID		97.9	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	PO4-02	SOLID		93.1	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	SO4-02	SOLID		94.3	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002560	0	W	aIC-01	OXALATE2	SOLID		108.8	N/A	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	F-02	SOLID	N/A	5.17E3	1.52E2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	CL-02	SOLID	N/A	1.82E3	1.98E2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	NO2-02	SOLID	N/A	2.25E4	1.25E3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	BR-02	SOLID	gmF 11/8/95 N/A	<1.43E3	1.47E3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	NO3-02	SOLID	gmF 11/8/95 N/A	2.24e5 ~~<1.63E3~~	1.63E3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	PO4-02	SOLID	gmF 11/8/95 N/A	9.70e3 ~~1.01E4~~	3.45E3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	SO4-02	SOLID	N/A	1.13E4	1.59E3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002561	0	W	aIC-01	OXALATE2	SOLID	N/A	8.07E3	1.22E3	ug/g
95000118	BY-108 (R)	8	DUP	S95T002561	0	W	aIC-01	F-02	SOLID	5.17E3	5.38E3	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002561	0	W	aIC-01	CL-02	SOLID	1.82E3	1.67E3	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002561	0	W	aIC-01	NO2-02	SOLID	2.25E4	2.27E4	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002561	0	W	aIC-01	BR-02	SOLID	<1.43E3	<1.47e3 ~~<1.47~~ gmF 11/8/95	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002561	0	W	aIC-01	NO3-02	SOLID	gmF 11/8/95 2.24e5 ~~<1.63E3~~	1.99E5	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3189

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	8 DUP	S95T002561	0	W	aIC-01	PO4-02	SOLID	9.70e3 ~~10.E4~~	9.97E3	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002561	0	W	aIC-01	SO4-02	SOLID	1.13E4	1.20E4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002561	0	W	aIC-01	OXALATE2	SOLID	8.07E3	8.41E3	N/A	ug/g

gmf 11/8/95

Final page for worklist # 3189

Analyst Signature Date 11-5-95

Analyst Signature Date 11/6/95

Verified 11/8/95 J.M. Fuge

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LAB LEADER INFO	
Method:	In-533-105
Matrix:	solid
Test Code:	IC-01
Work List #:	3189
Batch #:	N/A
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9C
Spike Sample #:	1
Prepared By:	RT STEELE
Prepared Date:	11/06/95
Chemist:	JANN. FRYE
Analyst:	K. HIGBEE
Analysis Date:	11/06/95
Time Complete:	
Instrument Code:	ICO1
Rerun:	0
Sample Prep:	WATER DIGEST
Sample Point:	BY-106
Sample Type	
STANDARD	109N9C
SAMPLE 1	S95T002560
DUPLICATE 1	S95T002560/DUP
SAMPLE 2	S95T002561
DUPLICATE 2	S95T002561/DUP
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T002560/SPK
SPIKE DUPLICATE	

PRINT

TECH INFO	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	<.017	<.107	<.140	<.296	<.136	<.126	<.106
Standard Data (µg/mL)	89.539	79.016	534.503	616.848	586.02	630.636	570.541	591.317
Sample 1 Data (µg/mL)	4.84E+01	1.10E+01	1.51E+02	1.34E+03	6.23E+01	1.30E+02	<.126	7.57E+01
Sample 1 Dilution Factor	101	101	101	101	101	101	101	101
Sample 1 Prep DF	7.222	7.222	7.222	7.222	7.222	7.222	7.222	7.222
Duplicate 1 Data (µg/mL)	4.46E+01	1.06E+01	1.46E+02	1.61E+03	4.34E+01	1.23E+02	<.126	7.98E+01
Duplicate 1 Dilution Factor	101	101	101	101	101	101	101	101
Duplicate 1 Prep DF	7.508	7.508	7.508	7.508	7.508	7.508	7.508	7.508
Sample 2 Data (µg/mL)	4.48E+01	1.58E+01	1.96E+02	1.94E+03	8.41E+01	9.78E+01	<.126	8.98E+01
Sample 2 Dilution Factor	101	101	101	101	101	101	101	101
Sample 2 Prep DF	8.661	8.661	8.661	8.661	8.661	8.661	8.661	8.661
Duplicate 2 Data (µg/mL)	4.79E+01	1.49E+01	2.02E+02	1.77E+03	8.88E+01	1.07E+02	<.126	7.49E+01
Duplicate 2 Dilution Factor	101	101	101	101	101	101	101	101
Duplicate 2 Prep DF	8.906	8.906	8.906	8.906	8.906	8.906	8.906	8.906
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	1.06E+02	8.83E+01	6.66E+02	1.94E+03	5.71E+02	7.25E+02	5.58E+02	6.79E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
Std. Conc. (µg/mL)	89	79	536	614	586	631	576	552
Detection Limit	0.013	0.017	0.107	0.140	0.296	0.136	0.126	0.106
Matrix Detection Limit 1	1.32E+02	2.38E+02	1.60E+03	1.96E+03	4.14E+03	1.90E+03	1.76E+03	1.47E+03
Matrix Detection Limit 2	1.32E+02	1.98E+02	1.25E+03	1.63E+03	3.45E+03	1.59E+03	1.47E+03	1.22E+03
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]* 100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	100.9%	100.0%	99.7%	100.3%	92.7%	98.4%	98.2%	100.9%
Sample 1 in µg/g	6.70E+03	1.52E+03	2.09E+04	1.85E+05	8.63E+03	1.80E+04	<1752.12	1.05E+04
Duplicate 1 in µg/g	6.93E+03	1.40E+03	1.95E+04	2.15E+05	5.65E+03	1.64E+04	<1694.99	1.06E+04
Duplicate 1 RPD	12.2%	8.6%	7.2%	14.9%	41.7%	9.2%	N/A	2.4%
Sample 2 in µg/g	6.17E+03	1.82E+03	2.26E+04	2.24E+05	9.70E+03	1.13E+04	<1489.36	8.67E+03
Duplicate 2 in µg/g	6.36E+03	1.67E+03	2.27E+04	1.99E+05	9.97E+03	1.20E+04	<1428.92	8.41E+03
Duplicate 2 RPD	3.9%	8.8%	0.8%	11.9%	2.7%	6.4%	N/A	4.0%
Spike % Recovery	98.2%	97.9%	96.0%	97.9%	93.1%	94.3%	97.0%	108.8%

Data Entry by: Jann Frye — Date: 11/08/95
Approved by: Jann Frye — Date: 11/8/95

Form DIONEX.WB1 Rev. 1.3

494

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002560 & S95T002561		
TEST CODE:	IC-01	ANALYST:	K. HIGBEE
INSTRUMENT:	ICO1	ANALYSIS DATE:	11/05/95
WORK LIST #:	3189	SAMPLE POINT:	BY-108
BATCH ID:	N/A	SAMPLE PREP:	WATER DIGEST

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9C	100.9%	100.0%	99.7%	100.3%	92.7%	98.4%	99.2%	108.9%
S95T002560	6.70E+03	1.52E+03	2.09E+04	1.85E+05	8.63E+03	1.80E+04	<1762.12	1.09E+04
S95T002560/DUP	5.93E+03	1.40E+03	1.95E+04	2.15E+05	5.65E+03	1.64E+04	<1694.99	1.06E+04
Duplicate 1 RPD	12.2%	8.8%	7.2%	14.9%	41.7%	9.2%	N/A	2.4%
S95T002561	5.17E+03	1.82E+03	2.25E+04	2.24E+05	9.70E+03	1.13E+04	<1469.35	8.07E+03
S95T002561/DUP	5.38E+03	1.67E+03	2.27E+04	1.99E+05	9.97E+03	1.20E+04	<1428.92	8.41E+03
Duplicate 2 RPD	3.9%	8.5%	0.8%	11.9%	2.7%	6.4%	N/A	4.0%
S95T002560/SPK	96.2%	97.9%	96.0%	97.9%	93.1%	94.3%	97.0%	108.8%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Form Completed By:	Jann Fuge	Date:	11/2/95
Chemist Approval:	Jann Fuge	Date:	11/8/95

11/5 9mF11/6/95

Sample Name: STANDARD109N9-C Date: ~~03/13~~/1995 17:19:44
Data File : C:\DX\DATA\95110531.D02
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 2 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

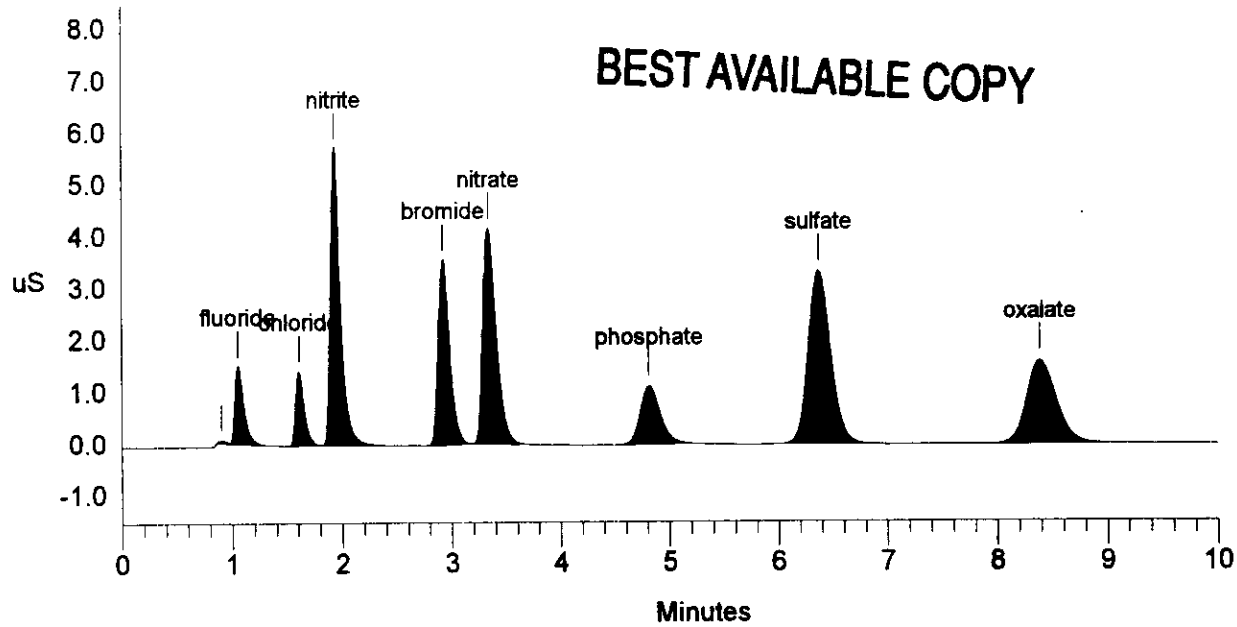
11-5-95

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	60	278	2	
2	1.05	fluoride	59.539	1478	8221	2	1.94
3	1.61	chloride	79.016	1419	7524	1	1.90
4	1.93	nitrite	534.503	5706	35175	1	0.52
5	2.92	bromide	570.541	3555	25110	1	3.91
6	3.34	nitrate	616.048	4157	35177	1	6.03
7	4.81	phosphate	506.020	1127	14220	1	0.42
8	6.37	sulfate	620.635	3350	46843	1	0.16
9	8.39	oxalate	601.317	1616	29856	1	0.36
		Totals	3587.619	22469	202404		

File: 95110531.D02 Sample: STANDARD109N9-C



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 496 TO 503.

WHC-SD-WM-DP-145, REV. 1

11/15 JMF 11/6/95

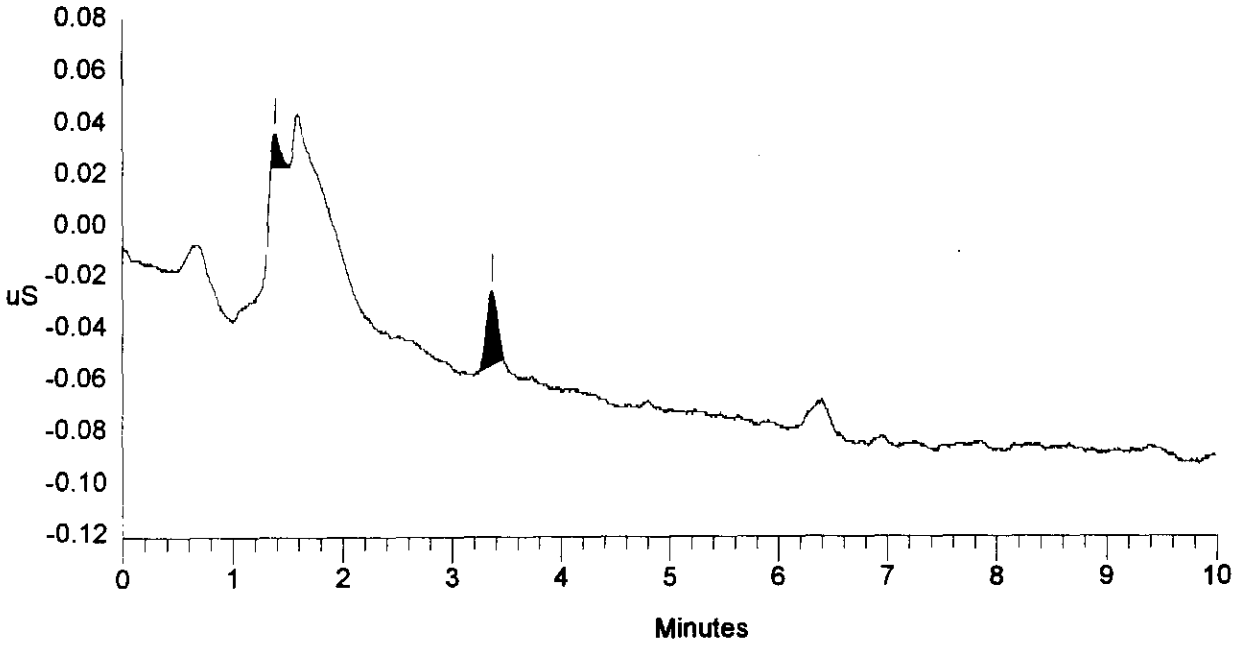
Sample Name: BLANK Date: ~~03/13~~/1995 16:57:05
Data File : C:\DX\DATA\95110531.D01
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 1 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95110531.D01 Sample: BLANK



WHC-SD-WM-DP-145, REV. 1

U/61 9MF 4/6/95

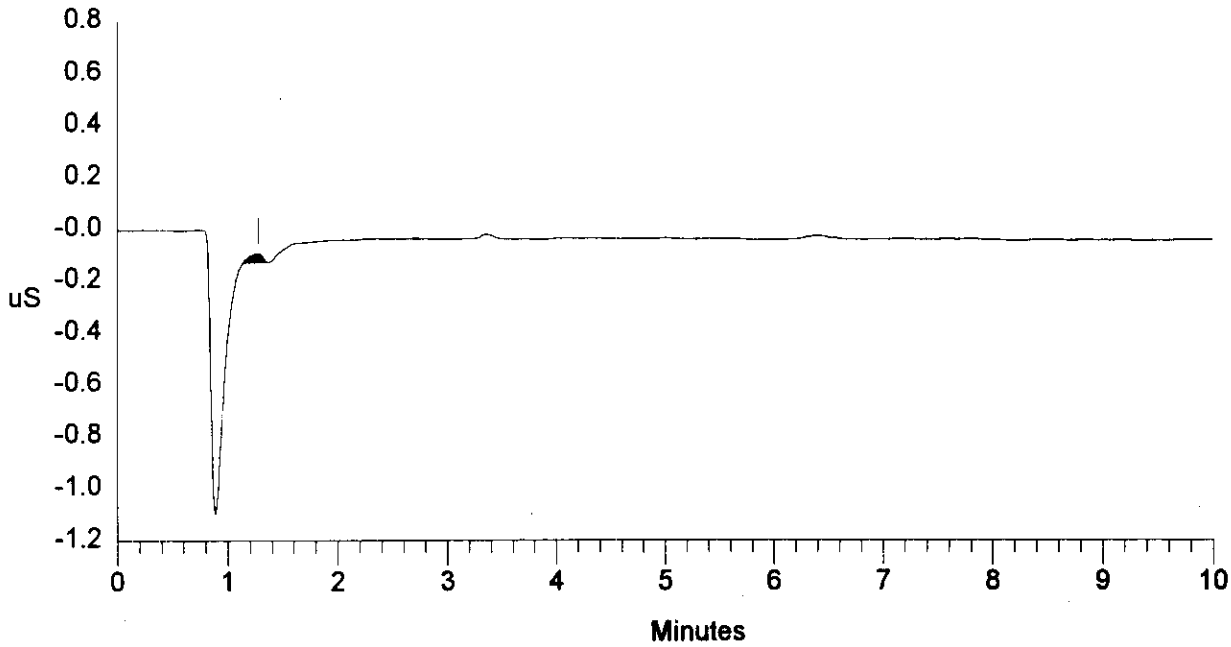
Sample Name: PREP-BLANK Date: ~~03/13~~/1995 17:50:32
Data File : C:\DX\DATA\95110531.D03
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 3 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.28		0.000	35	293	1	
		Totals	0.000	35	293		

File: 95110531.D03 Sample: PREP-BLANK



WHC-SD-WM-DP-145, REV. 1

11/6/ JMF 11/4/95

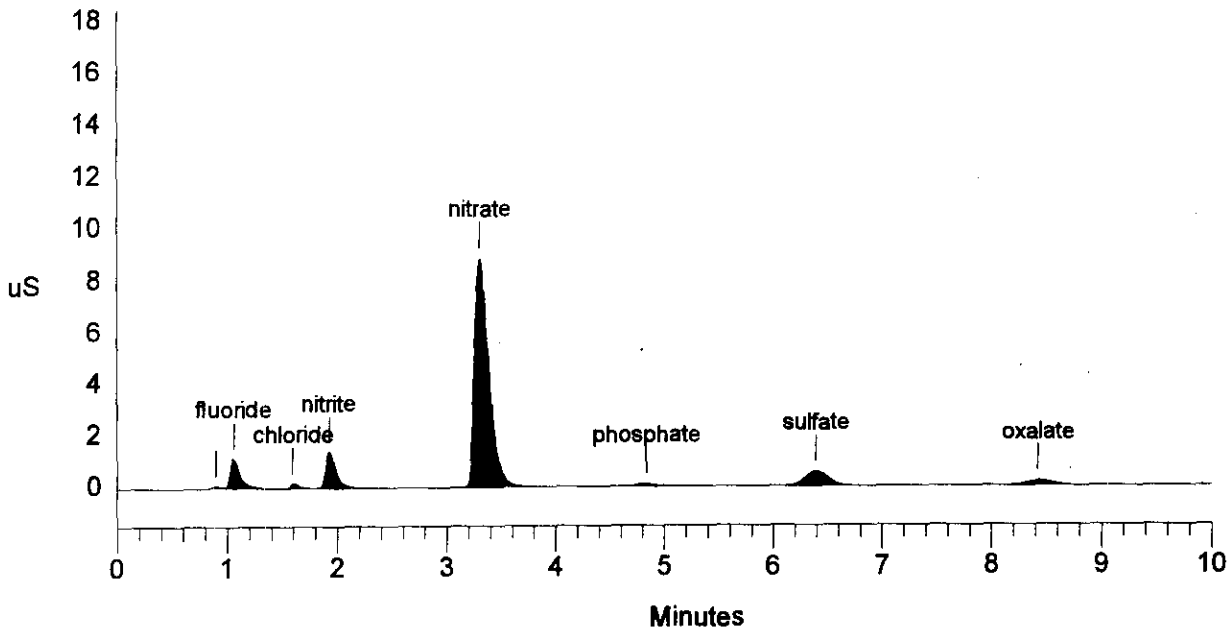
Sample Name: S95T002560 SAM Date: ~~03/13~~/1995 19:02:16
Data File : C:\DX\DATA\95110531.D04
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 4 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	53	252	2	
2	1.06	fluoride	48.407	1133	6616	2	2.91
3	1.60	chloride	11.010	176	965	1	1.27
4	1.93	nitrite	151.294	1386	8833	1	0.52
5	3.31	nitrate	1337.546	8871	79848	1	5.08
6	4.84	phosphate	62.336	108	1275	1	1.04
7	6.40	sulfate	129.869	572	8078	1	0.63
8	8.43	oxalate	78.676	174	3014	1	0.84
		Totals	1819.136	12472	108880		

File: 95110531.D04 Sample: S95T002560 SAM



WHC-SD-WM-DP-145, REV. 1

4/5/ JME 4/4/95

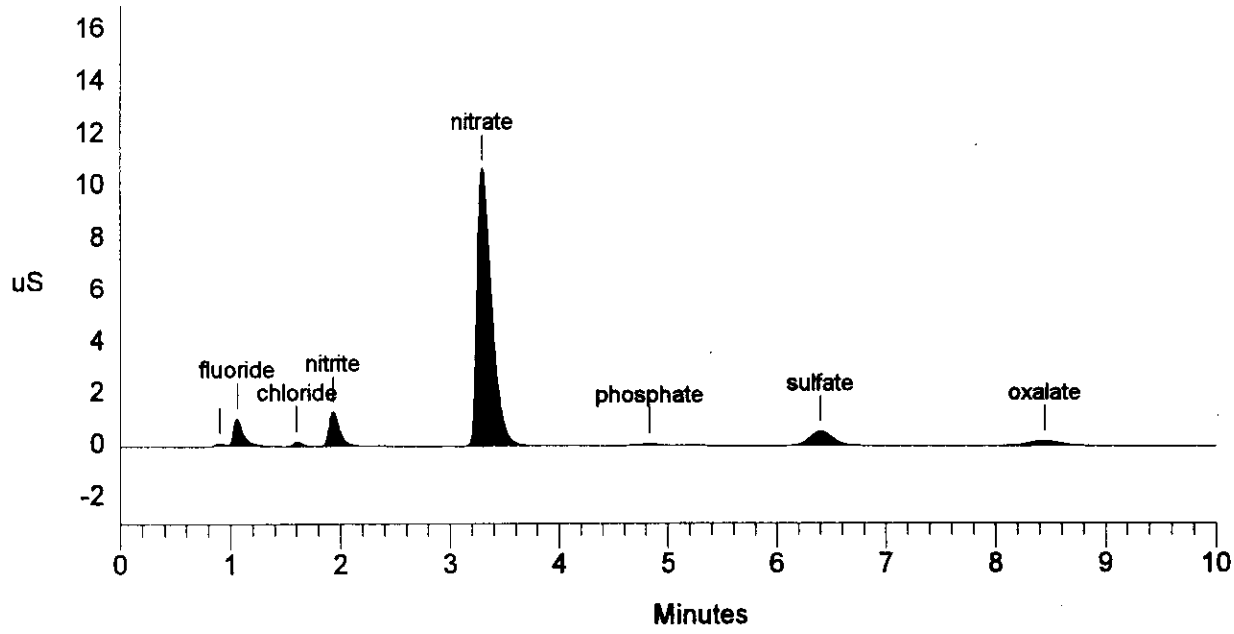
Sample Name: S95T002560 DUP Date: 03/13/1995 19:21:43
Data File : C:\DX\DATA\95110531.D05
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 5 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	55	255	2	
2	1.06	fluoride ✓	44.528	1028	6058	2	2.91
3	1.60	chloride ✓	10.478	164	914	1	1.27
4	1.93	nitrite ✓	146.325	1312	8493	1	0.52
5	3.29	nitrate ✓	1613.661	10625	97342	1	4.44
6	4.83	phosphate ✓	42.439	62	702	1	0.84
7	6.40	sulfate ✓	123.081	539	7548	1	0.63
8	8.45	oxalate ✓	79.883	170	3075	1	1.08
		Totals	2060.395	13956	124388		

File: 95110531.D05 Sample: S95T002560 DUP



WHC-SD-WM-DP-145, REV. 1

LL5 | JMF 11/6/95

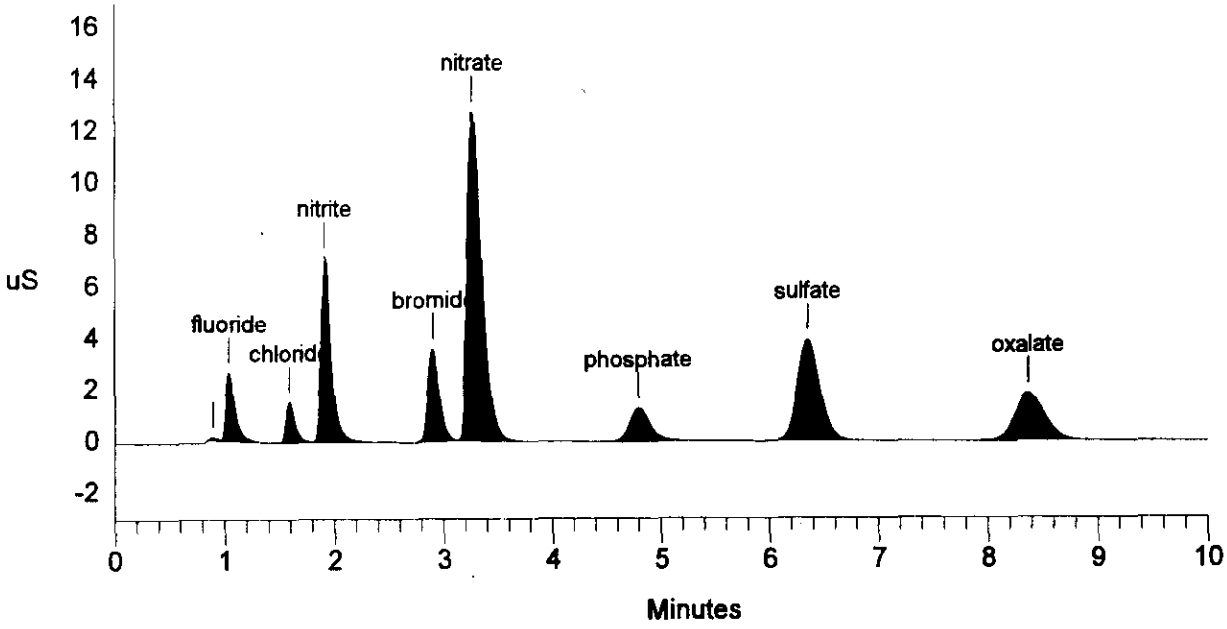
Sample Name: S95T002560 SPK Date: 03/13/1995 19:53:14
Data File : C:\DX\DATA\95110531.D06
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 6 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	110	525	2	
2	1.04	fluoride	105.166	2649	14861	2	0.97
3	1.59	chloride	88.327	1576	8432	1	0.63
4	1.91	nitrite	665.927	7126	44257	1	-0.52
5	2.90	bromide	557.852	3592	24518	1	3.20
6	3.26	nitrate	1938.769	12712	118242	1	3.49
7	4.79	phosphate	570.797	1281	16139	1	0.00
8	6.35	sulfate	724.825	3934	55205	1	-0.16
9	8.37	oxalate	679.394	1832	33912	1	0.12
		Totals	5331.056	34811	316090		

File: 95110531.D06 Sample: S95T002560 SPK



WHC-SD-WM-DP-145, REV. 1

11/5/ 9mF 11/6/95

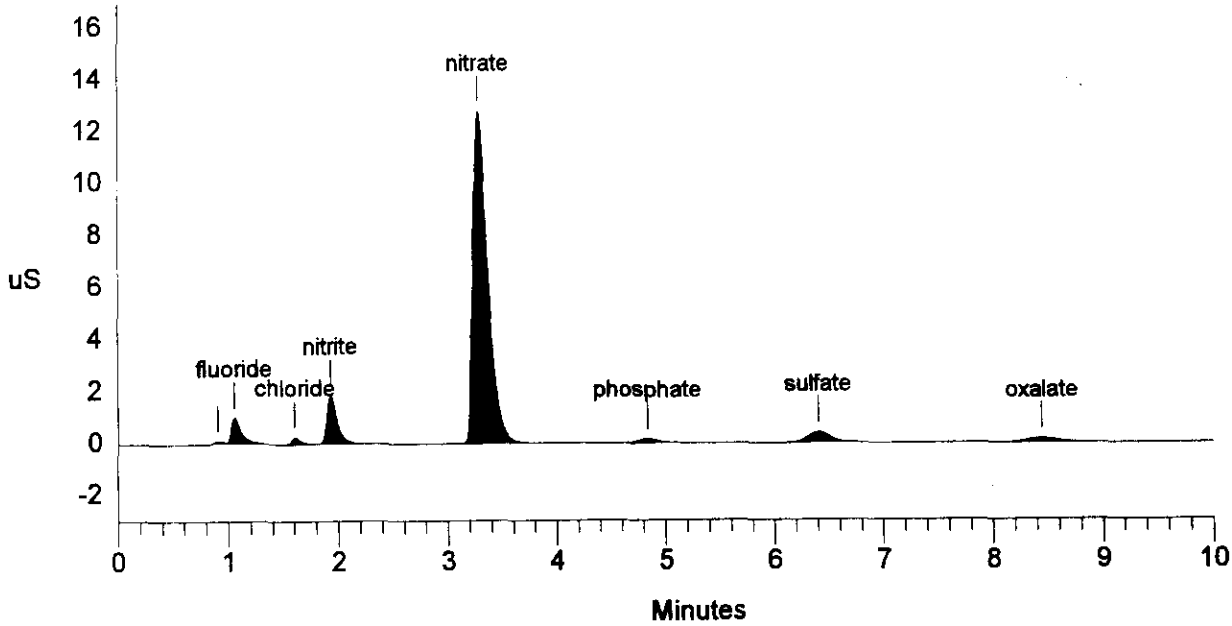
Sample Name: S95T002561 SAM	Date: 03/13/1995 20:11:04
Data File : C:\DX\DATA\95110531.D07	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 7	Detector:CDM-1
Analyst :	Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	69	338	2	
2	1.05	fluoride	44.782	976	6095	2	1.94
3	1.60	chloride	15.772	260	1420	1	1.27
4	1.93	nitrite	194.998	1865	11827	1	0.52
5	3.28	nitrate	1941.651	12787	118429	1	4.13
6	4.83	phosphate	84.054	157	1900	1	0.84
7	6.40	sulfate	97.556	400	5560	1	0.63
8	8.44	oxalate	69.932	146	2569	1	0.96
		Totals	2448.745	16661	148139		

File: 95110531.D07 Sample: S95T002561 SAM



4/5/ 9MF 4/6/95

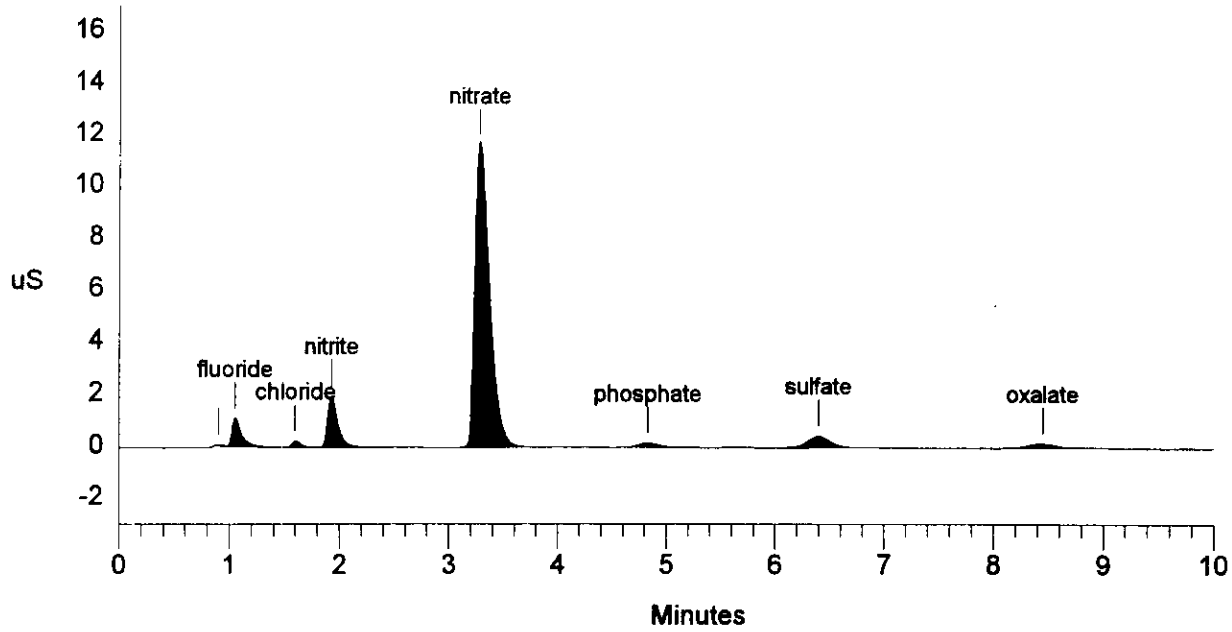
Sample Name: S95T002561 DUP Date: ~~03/13~~/1995 20:27:31
Data File : C:\DX\DATA\95110531.D08
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	66	307	2	
2	1.05	fluoride	47.888	1058	6541	2	1.94
3	1.60	chloride	14.901	244	1337	1	1.27
4	1.93	nitrite	202.045	1958	12310	1	0.52
5	3.28	nitrate	1771.976	11664	107478	1	4.13
6	4.83	phosphate	88.799	168	2037	1	0.84
7	6.40	sulfate	106.966	446	6293	1	0.63
8	8.45	oxalate	74.882	158	2821	1	1.08
		Totals	2307.457	15763	139125		

File: 95110531.D08 Sample: S95T002561 DUP



LABCORE Completed Worklist Report for Worklist# 3191

Analyst: pjm **Instrument:** IC01 **Book#** 109N9D

Method: LA533105 Rev/Mod D-1 95000118

Worklist Comment: BY108 IC.JMF

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
1	CCB			0	@IC-QC	F	QC	1		<.013		ug/mL
1	CCB			0	@IC-QC	CL	QC	1		<.017		ug/mL
1	CCB			0	@IC-QC	NO2	QC	1		<.170		ug/mL
1	CCB			0	@IC-QC	BR	QC	1		<.126		ug/mL
1	CCB			0	@IC-QC	NO3	QC	1		<.140		ug/mL
1	CCB			0	@IC-QC	PO4	QC	1		<.296		ug/mL
1	CCB			0	@IC-QC	SO4	QC	1		<.136		ug/mL
1	CCB			0	@IC-QC	OXALATE2	QC	1		<.105		ug/mL
2	CCV			0	@IC-QC	F	QC	59		59.8	101.360	% Recovery
2	CCV			0	@IC-QC	CL	QC	79		78.6	99.490	% Recovery
2	CCV			0	@IC-QC	NO2	QC	541		510.6	94.400	% Recovery
2	CCV			0	@IC-QC	BR	QC	575		572.7	99.600	% Recovery
2	CCV			0	@IC-QC	NO3	QC	614		599.4	97.620	% Recovery
2	CCV			0	@IC-QC	PO4	QC	546		522.1	95.620	% Recovery
2	CCV			0	@IC-QC	SO4	QC	631		613	97.150	% Recovery
2	CCV			0	@IC-QC	OXALATE2	QC	533		556.4	104.400	% Recovery
3	BLNK-PREP			0	@IC-01	F-02	SOLID	1		<.013		ug/g
3	BLNK-PREP			0	@IC-01	CL-02	SOLID	1		<.017		ug/g
3	BLNK-PREP			0	@IC-01	NO2-02	SOLID	1		<.107		ug/g
3	BLNK-PREP			0	@IC-01	BR-02	SOLID	1		<.126		ug/g
3	BLNK-PREP			0	@IC-01	NO3-02	SOLID	1		<.140		ug/g
3	BLNK-PREP			0	@IC-01	PO4-02	SOLID	1		<.296		ug/g
3	BLNK-PREP			0	@IC-01	SO4-02	SOLID	1		<.136		ug/g
3	BLNK-PREP			0	@IC-01	OXALATE2	SOLID	1		<.105		ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	F-02	SOLID	N/A		3.38e3	97.200	ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	CL-02	SOLID	N/A		1.48e3	95.000	ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	NO2-02	SOLID	N/A		2.14e4	800.000	ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	BR-02	SOLID	N/A	<	9.43e2	943.000	ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	NO3-02	SOLID	N/A		1.50e5	1.050e+003	ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	PO4-02	SOLID	N/A		8.11e3	2.210e+003	ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	SO4-02	SOLID	N/A		8.99e3	1.020e+003	ug/g
4	SAMPLE	S95T002562	0	W	@IC-01	OXALATE2	SOLID	N/A		4.87e3	785.000	ug/g
5	DUP	S95T002562	0	W	@IC-01	F-02	SOLID	3.38e3		8.72e3	88.260	RPD
5	DUP	S95T002562	0	W	@IC-01	CL-02	SOLID	1.48e3		9.70e2	41.630	RPD
5	DUP	S95T002562	0	W	@IC-01	NO2-02	SOLID	2.14e4		1.48e4	36.460	RPD
5	DUP	S95T002562	0	W	@IC-01	BR-02	SOLID	<9.43e2		<8.62e2		RPD
5	DUP	S95T002562	0	W	@IC-01	NO3-02	SOLID	1.50e5		9.49e4	45.000	RPD
5	DUP	S95T002562	0	W	@IC-01	PO4-02	SOLID	8.11e3		6.72e4	156.920	RPD
5	DUP	S95T002562	0	W	@IC-01	SO4-02	SOLID	8.99e3		5.88e3	41.830	RPD
5	DUP	S95T002562	0	W	@IC-01	OXALATE2	SOLID	4.87e3		3.31e3	38.140	RPD
6	SPK	S95T002562	0	W	@IC-01	F-02	SOLID	100		88.9	88.900	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 3191

Seq	Type	Sample#	R	A	Test		Matrix	Actual		Found	DL or Yield	Unit
6	SPK	S95T002562	0	W	@IC-01	CL-02	SOLID	100		94.5	94.500	% Recovery
6	SPK	S95T002562	0	W	@IC-01	NO2-02	SOLID	100		91.4	91.400	% Recovery
6	SPK	S95T002562	0	W	@IC-01	BR-02	SOLID	100		95.4	95.400	% Recovery
6	SPK	S95T002562	0	W	@IC-01	NO3-02	SOLID	100		103.3	103.300	% Recovery
6	SPK	S95T002562	0	W	@IC-01	PO4-02	SOLID	100		95.2	95.200	% Recovery
6	SPK	S95T002562	0	W	@IC-01	SO4-02	SOLID	100		93.6	93.600	% Recovery
6	SPK	S95T002562	0	W	@IC-01	OXALATE2	SOLID	100		103.0	104.400	% Recovery
7	SAMPLE	S95T002563	0	W	@IC-01	F-02	SOLID	N/A		8.20e3	115.000	ug/g
7	SAMPLE	S95T002563	0	W	@IC-01	CL-02	SOLID	N/A		1.44e3	113.000	ug/g
7	SAMPLE	S95T002563	0	W	@IC-01	NO2-02	SOLID	N/A		2.10e4	949.000	ug/g
7	SAMPLE	S95T002563	0	W	@IC-01	BR-02	SOLID	N/A	<	1.12e3	1.120e+003	ug/g
7	SAMPLE	S95T002563	0	W	@IC-01	NO3-02	SOLID	N/A		2.41e5	1.240e+003	ug/g
7	SAMPLE	S95T002563	0	W	@IC-01	PO4-02	SOLID	N/A		1.02e4	2.630e+003	ug/g
7	SAMPLE	S95T002563	0	W	@IC-01	SO4-02	SOLID	N/A		2.79e4	1.210e+003	ug/g
7	SAMPLE	S95T002563	0	W	@IC-01	OXALATE2	SOLID	N/A		1.11e4	932.000	ug/g
8	DUP	S95T002563	0	W	@IC-01	F-02	SOLID	8.20e3		8.28e3	0.970	RPD
8	DUP	S95T002563	0	W	@IC-01	CL-02	SOLID	1.44e3		1.52e3	5.410	RPD
8	DUP	S95T002563	0	W	@IC-01	NO2-02	SOLID	2.10e4		2.23e4	6.000	RPD
8	DUP	S95T002563	0	W	@IC-01	BR-02	SOLID	<1.12e3		<1.10e3		RPD
8	DUP	S95T002563	0	W	@IC-01	NO3-02	SOLID	2.41e5		2.22e5	8.210	RPD
8	DUP	S95T002563	0	W	@IC-01	PO4-02	SOLID	1.02e4		8.18e3	21.980	RPD
8	DUP	S95T002563	0	W	@IC-01	SO4-02	SOLID	2.79e4		2.90e4	3.870	RPD
8	DUP	S95T002563	0	W	@IC-01	OXALATE2	SOLID	1.11e4		1.11e4	0.000	RPD

Final page for worklist# 3191

Analyst Signature Date

Analyst Signature Date

Reviewer Signature Date 11/14/95

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Data Entry Template for Worklist# 3191

Analyst: RS McCown **Instrument:** IC01 _____ **Book #** 10909D

Method: LA-533-105 Rev/Mod D-1

Worklist Comment: BY108 IC.JMF Water Digests

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
		1	CCB				@IC-QC	F-QC	QC	1	<.013	N/A	ug/mL
		1	CCB				@IC-QC	CL-QC	QC		<.017	N/A	ug/mL
		1	CCB				@IC-QC	NO2-QC	QC		<.170	N/A	ug/mL
		1	CCB				@IC-QC	BR-QC	QC		<.126	N/A	ug/mL
		1	CCB				@IC-QC	NO3-QC	QC		<.140	N/A	ug/mL
		1	CCB				@IC-QC	PO4-QC	QC		<.296	N/A	ug/mL
		1	CCB				@IC-QC	SO4-QC	QC		<.136	N/A	ug/mL
		1	CCB				@IC-QC	OXALATQC	QC		<.105	N/A	ug/mL
		2	CCV				@IC-QC	F-QC	QC	59	59.8	N/A	ug/mL
		2	CCV				@IC-QC	CL-QC	QC	79	78.6	N/A	ug/mL
		2	CCV				@IC-QC	NO2-QC	QC	JMF 11/14/95 ~~534~~ 541	510.6	N/A	ug/mL
		2	CCV				@IC-QC	BR-QC	QC	575	572.7	N/A	ug/mL
		2	CCV				@IC-QC	NO3-QC	QC	614	599.4	N/A	ug/mL
		2	CCV				@IC-QC	PO4-QC	QC	546	522.1	N/A	ug/mL
		2	CCV				@IC-QC	SO4-QC	QC	631	613.	N/A	ug/mL
		2	CCV				@IC-QC	OXALATQC	QC	JMF 11/14/95 ~~526~~ 533	556.4	N/A	ug/mL
		3	BLNK-PREP				@IC-01	F-02	SOLID	1	<.013	N/A	ug/g
		3	BLNK-PREP				@IC-01	CL-02	SOLID	1	<.017	N/A	ug/g

Data Entry Comments:

Samples	dups
6.8180	7.4590
5.7480	5.8160

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3191

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
		3	BLNK-PREP				@IC-01	NO2-02	SOLID		<.107	N/A	ug/g
		3	BLNK-PREP				@IC-01	BR-02	SOLID		<.126	N/A	ug/g
		3	BLNK-PREP				@IC-01	NO3-02	SOLID		<.140	N/A	ug/g
		3	BLNK-PREP				@IC-01	PO4-02	SOLID		<.296	N/A	ug/g
		3	BLNK-PREP				@IC-01	SO4-02	SOLID		<.136	N/A	ug/g
		3	BLNK-PREP				@IC-01	OXALATE2	SOLID		<.105	N/A	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	F-02	SOLID	N/A	3.38^{e3}	9.72^{e1}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	CL-02	SOLID	N/A	1.48^{e3}	9.50^{e1}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	NO2-02	SOLID	N/A	2.14^{e4}	8.00^{e2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	BR-02	SOLID	N/A	$<9.42^{e2}$	9.43^{e2}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	NO3-02	SOLID	N/A	1.50^{e5}	1.05^{e3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	PO4-02	SOLID	N/A	8.11^{e3}	2.21^{e3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	SO4-02	SOLID	N/A	8.99^{e3}	1.02^{e3}	ug/g
95000118	BY-108 (R)	4	SAMPLE	S95T002562	0	W	@IC-01	OXALATE2	SOLID	N/A	4.87^{e3}	7.85^{e2}	ug/g
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	F-02	SOLID	3.38^{e3}	8.72^{e3}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	CL-02	SOLID	1.48^{e3}	9.70^{e2}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	NO2-02	SOLID	2.14^{e4}	1.48^{e4}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	BR-02	SOLID	$<9.42^{e2}$	$<8.62^{e2}$	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	NO3-02	SOLID	1.50^{e5}	9.49^{e4}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	PO4-02	SOLID	8.11^{e3}	6.72^{e4}	N/A	ug/g
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	SO4-02	SOLID	8.99^{e3}	5.88^{e3}	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3191

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	5	DUP	S95T002562	0	W	@IC-01	OXALATE2	SOLID	4.87e3	3.31e3	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	F-02	SOLID	100	88.9	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	CL-02	SOLID		94.5	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	NO2-02	SOLID		91.4 ~~92.6~~ gmF 11/14/95	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	BR-02	SOLID		95.4	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	NO3-02	SOLID		103.3	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	PO4-02	SOLID		95.2	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	SO4-02	SOLID		93.6	N/A	ug/g
95000118	BY-108 (R)	6	SPK	S95T002562	0	W	@IC-01	OXALATE2	SOLID		103.0 ~~104.4~~ gmF 11/14/95	N/A	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	F-02	SOLID	N/A	8.20e3	1.15e2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	CL-02	SOLID	N/A	1.44e3	1.13e2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	NO2-02	SOLID	N/A	2.10e4	9.49e2	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	BR-02	SOLID	N/A	<1.12e3	1.12e3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	NO3-02	SOLID	N/A	2.41e5	1.24e3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	PO4-02	SOLID	N/A	1.02e4	2.63e3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	SO4-02	SOLID	N/A	2.79e4	1.21e3	ug/g
95000118	BY-108 (R)	7	SAMPLE	S95T002563	0	W	@IC-01	OXALATE2	SOLID	N/A	1.11e4	9.32e2	ug/g
95000118	BY-108 (R)	8	DUP	S95T002563	0	W	@IC-01	F-02	SOLID	8.20e3	8.28e3	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002563	0	W	@IC-01	CL-02	SOLID	1.44e3	1.52e3	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002563	0	W	@IC-01	NO2-02	SOLID	2.10e4	2.23e4	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002563	0	W	@IC-01	BR-02	SOLID	<1.12e3	<1.10e3	N/A	ug/g
95000118	BY-108 (R)	8	DUP	S95T002563	0	W	@IC-01	NO3-02	SOLID	2.41e5	2.22e5	N/A	ug/g

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 3191

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------		MATRIX	ACTUAL	FOUND	DL	UNIT
95000118	BY-108 (R)	8 DUP	S95T002563	0	W	aIC-01	PO4-02	SOLID	1.02e4	8.18e3	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002563	0	W	aIC-01	SO4-02	SOLID	2.79e4	2.90e4	N/A	ug/g
95000118	BY-108 (R)	8 DUP	S95T002563	0	W	aIC-01	OXALATE2	SOLID	1.11e4	1.11e4	N/A	ug/g

Final page for worklist # 3191

RJ McCown 11/7/95
Analyst Signature Date

11/9/95
Analyst Signature Date

Verified 11/14/95. JM Fuge

Severe RPD problems on S95T002562 indicate need for reprep/re homogenize and re run if RL desired. JM Fuge

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WESTINGHOUSE HANFORD COMPANY
222-S LABORATORY
INORGANIC ANALYTICAL BATCH AND SUMMARY SHEET

ANION ANALYSIS ON DIONEX

SAMPLE #:	S95T002562 & S95T002563		
TEST CODE:	@IC-01	ANALYST:	P. McCOWN
INSTRUMENT:	IC01	ANALYSIS DATE:	11/07/95
WORK LIST #:	3191	SAMPLE POINT:	BY-108
BATCH ID:	N/A	SAMPLE PREP:	H20-DIGEST

Result Units µg/g	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
109N9D	101.4%	99.5%	94.4%	97.6%	95.6%	97.1%	99.6%	104.4%
S95T002562	3.38E+03	1.48E+03	2.14E+04	1.50E+05	8.11E+03	8.99E+03	<942.51	4.87E+03
S95T002563/DUP	8.72E+03	9.70E+02	1.48E+04	9.49E+04	6.72E+04	5.88E+03	<861.51	3.31E+03
Duplicate 1 RPD	88.2%	41.3%	36.7%	45.2%	156.9%	41.8%	N/A	38.2%
S95T002563	8.20E+03	1.44E+03	2.10E+04	2.41E+05	1.02E+04	2.79E+04	<1117.95	1.11E+04
S95T002563/DUP	8.28E+03	1.52E+03	2.23E+04	2.22E+05	8.18E+03	2.90E+04	<1104.88	1.11E+04
Duplicate 2 RPD	0.9%	5.3%	6.1%	8.0%	22.3%	3.7%	N/A	0.4%
S95T002563/SPK	88.9%	94.5%	91.4%	103.3%	95.2%	93.6%	95.4%	103.0%

NARRATIVE: **Analyst Comments:**

Chemist Comments:

Reprinted form & corrected labcore for data entry error on standard concentration. JM Frye

Form Completed By:	Jon Frye	Date:	11/14/95
Chemist Approval:	Jon Frye	Date:	11/14/95

510

LAB LEADER INFO	
Method:	LA-533-105
Matrix:	SOLID
Test Code:	IC-01
Work List #:	3191
Batch #:	N/A
Result Units	
(µg/g or µg/mL):	µg/g
Spike Book Number:	109N9D
Spike Sample #:	1
Prepared By:	RT STEELE
Prepared Date:	11/09/95
Chemist:	J. FRYE
Analyst:	P. McCOWN
Analysis Date:	11/07/95
Time Complete:	02:40 AM
Instrument Code:	IC01
Rerun:	0
Sample Prep:	H2O-DIGEST
Sample Point:	BY-106
Sample Type	
STANDARD	109N9D
SAMPLE 1	S95T002562
DUPLICATE 1	S95T002562/DUP
SAMPLE 2	S95T002563
DUPLICATE 2	S95T002563/DUP
SAMPLE 3	
DUPLICATE 3	
SAMPLE 4	
DUPLICATE 4	
SPIKE	S95T002563/SPK
SPIKE DUPLICATE	

PRINT

TECH INFO

	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Blank Data (µg/mL)	<.013	<.017	<.107	<.140	<.296	<.136	<.126	<.106
Standard Data (µg/mL)	80.836	78.6	518.622	600.366	522.076	612.964	572.88	586.452
Sample 1 Data (µg/mL)	2.31E+01	1.91E+01	1.49E+02	1.83E+03	5.53E+01	6.13E+01	<.126	3.32E+01
Sample 1 Dilution Factor	51	51	51	51	51	51	51	51
Sample 1 Prep DF g/L	6.818	6.818	6.818	6.818	6.818	6.818	6.818	6.818
Duplicate 1 Data (µg/mL)	6.81E+01	7.24E+00	1.10E+02	7.00E+02	6.01E+02	4.39E+01	<.126	2.47E+01
Duplicate 1 Dilution Factor	51	51	51	51	51	51	51	51
Duplicate 1 Prep DF g/L	7.459	7.459	7.459	7.459	7.459	7.459	7.459	7.459
Sample 2 Data (µg/mL)	4.72E+01	5.27E+00	1.21E+02	1.38E+03	5.88E+01	1.60E+02	<.126	6.36E+01
Sample 2 Dilution Factor	51	51	51	51	51	51	51	51
Sample 2 Prep DF g/L	5.748	5.748	5.748	5.748	5.748	5.748	5.748	5.748
Duplicate 2 Data (µg/mL)	4.82E+01	5.83E+00	1.30E+02	1.29E+03	4.75E+01	1.69E+02	<.126	6.46E+01
Duplicate 2 Dilution Factor	51	51	51	51	51	51	51	51
Duplicate 2 Prep DF g/L	5.816	5.816	5.816	5.816	5.816	5.816	5.816	5.816
Sample 3 Data (µg/mL)								
Sample 3 Dilution Factor								
Sample 3 Prep DF								
Duplicate 3 Data (µg/mL)								
Duplicate 3 Dilution Factor								
Duplicate 3 Prep DF								
Sample 4 Data (µg/mL)								
Sample 4 Dilution Factor								
Sample 4 Prep DF								
Duplicate 4 Data (µg/mL)								
Duplicate 4 Dilution Factor								
Duplicate 4 Prep DF								
Spike + Sample 1 (µg/mL)	4.93E+01	4.74E+01	3.93E+02	1.34E+03	3.16E+02	3.57E+02	2.74E+02	3.68E+02
Spike + Dup 1 (µg/mL)								
Spike Volume (mL)	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Total Volume (mL)	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20
Std. Conc. (µg/mL)	59	79	541	614	546	631	575	533
Detection Limit	0.013	0.013	0.107	0.140	0.296	0.136	0.126	0.106
Matrix Detection Limit 1	9.72E+01	9.50E+01	8.00E+02	1.06E+03	2.21E+03	1.02E+03	9.43E+02	7.95E+02
Matrix Detection Limit 2	1.15E+02	1.13E+02	9.49E+02	1.24E+03	2.63E+03	1.21E+03	1.12E+03	9.32E+02
Matrix Detection Limit 3	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Matrix Detection Limit 4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

Spike Recovery = [((Spike+Sample)-(Sample)*(Total Volume))/((Spike Vol.)*(Spike Std.)*(Sample DF))]*100%
Note: (For spike recovery when the sample conc. is less than detection limit you do NOT subtract sample conc.)
Duplicate Relative % Difference = ((Sample - Duplicate) / ((Sample + Duplicate) / 2) * 100%)
Less than Values are Calculated from the Detection Limit*Dilution Factor

v RESULTS v	Fluoride	Chloride	Nitrite	Nitrate	Phosphate	Sulfate	Bromide	Oxalate
Standard % Recovery	101.4%	98.5%	94.4%	97.8%	96.8%	97.1%	98.6%	104.4%
Sample 1 in µg/g	3.38E+03	1.48E+03	2.14E+04	1.80E+05	8.11E+03	8.98E+03	<942.51	4.87E+03
Duplicate 1 in µg/g	8.72E+03	9.70E+02	1.48E+04	9.49E+04	6.72E+04	5.89E+03	<861.51	3.31E+03
Duplicate 1 RPD	89.2%	41.3%	36.7%	45.2%	156.9%	41.9%	N/A	38.2%
Sample 2 in µg/g	8.20E+03	1.44E+03	2.10E+04	2.41E+05	1.02E+04	2.79E+04	<1117.88	1.11E+04
Duplicate 2 in µg/g	8.28E+03	1.52E+03	2.23E+04	2.22E+05	8.18E+03	2.90E+04	<1104.88	1.11E+04
Duplicate 2 RPD	0.9%	5.3%	6.1%	8.0%	22.3%	3.7%	N/A	0.4%
Spike % Recovery	98.9%	94.8%	91.4%	103.3%	96.2%	93.6%	96.4%	103.0%

Data Entry by: Jane Frye Date: 11/14/95
Approved by: Jane Frye Date: 11/14/95

Form DIONEX.WB1 Rev. 1.3

511

```
==========================================================================
| Sample Name: CCB ELUENT BLANK                Date: 11/07/1995 02:12:18  |
| Data File  : C:\DX\DATA\95110701.D02                                   |
| Method     : C:\DX\METHOD\KIT.MET                                      |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-1  |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS        |
==========================================================================
```

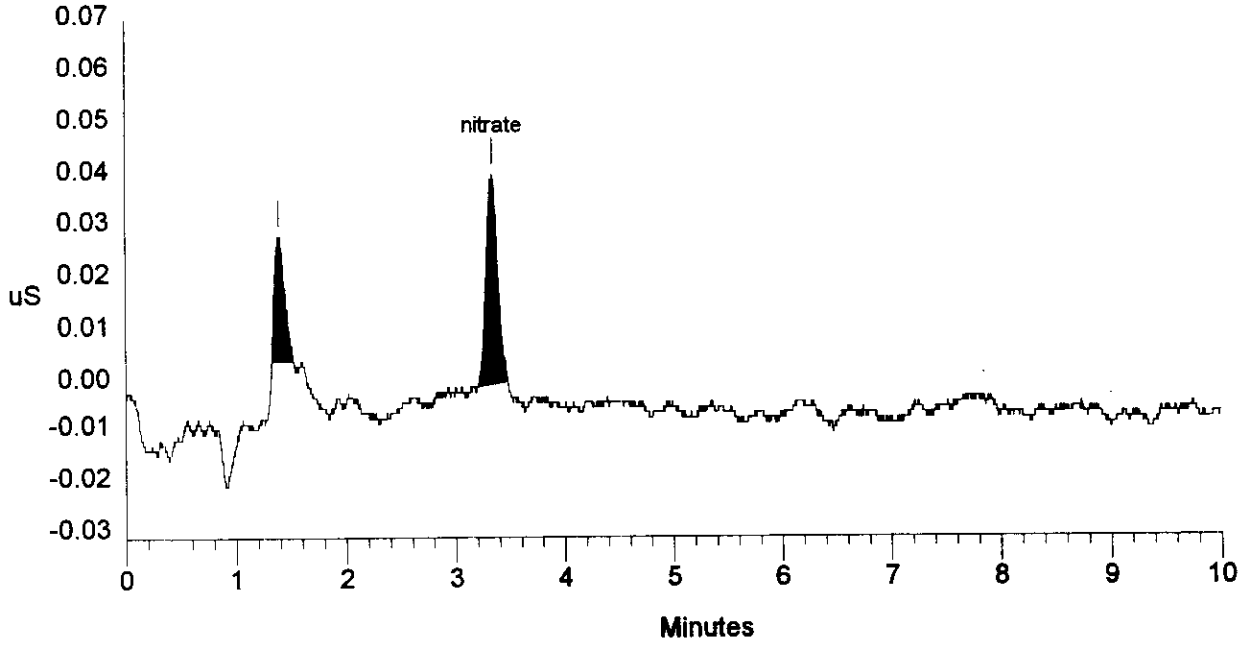
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	3.34	nitrate	0.357	41	286	1	6.03
		Totals	0.357	41	286		

DIRECT RJ McCown 11/7/95

File: 95110701.D02 Sample: CCB ELUENT BLANK



WHC-SD-WM-DP-145, REV. 1

```
==================================================================================
| Sample Name: CCV 109N9D                          Date: 11/07/1995 02:25:56      |
| Data File  : C:\DX\DATA\95110701.D03                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 3                        Detector:CDM-1     |
| Analyst    :                  Column: AG4A/AS4A anion column/SRS               |
==================================================================================
```

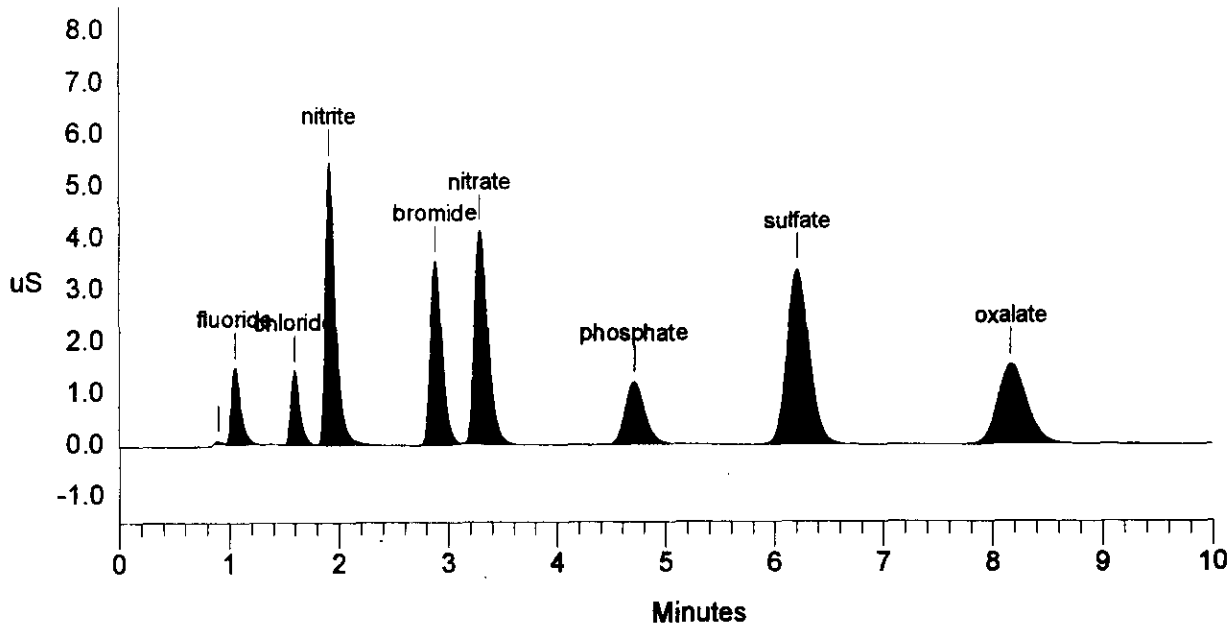
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	48	204	2	
2	1.05	fluoride	59.835	1472	8264	2	1.94
3	1.59	chloride	78.600	1411	7483	1	0.63
4	1.91	nitrite	510.622	5407	33528	1	-0.52
5	2.88	bromide	572.680	3535	25210	1	2.49
6	3.29	nitrate	599.366	4127	34161	1	4.44
7	4.71	phosphate	522.076	1204	14695	1	-1.67
8	6.21	sulfate	612.984	3373	46230	1	-2.36
9	8.17	oxalate	556.452	1533	27531	1	-2.27
		Totals	3512.615	22109	197306		

• 100mL - 10mL McCown 11/7/95

File: 95110701.D03 Sample: CCV 109N9D



WHC-SD-WM-DP-145, REV. 1

```
==================================================================================
| Sample Name: PREP BLANK                          Date: 11/07/1995 02:40:43      |
| Data File  : C:\DX\DATA\95110701.D04                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 4                        Detector:CDM-1     |
| Analyst    :                  Column: AG4A/AS4A anion column/SRS               |
==================================================================================
```

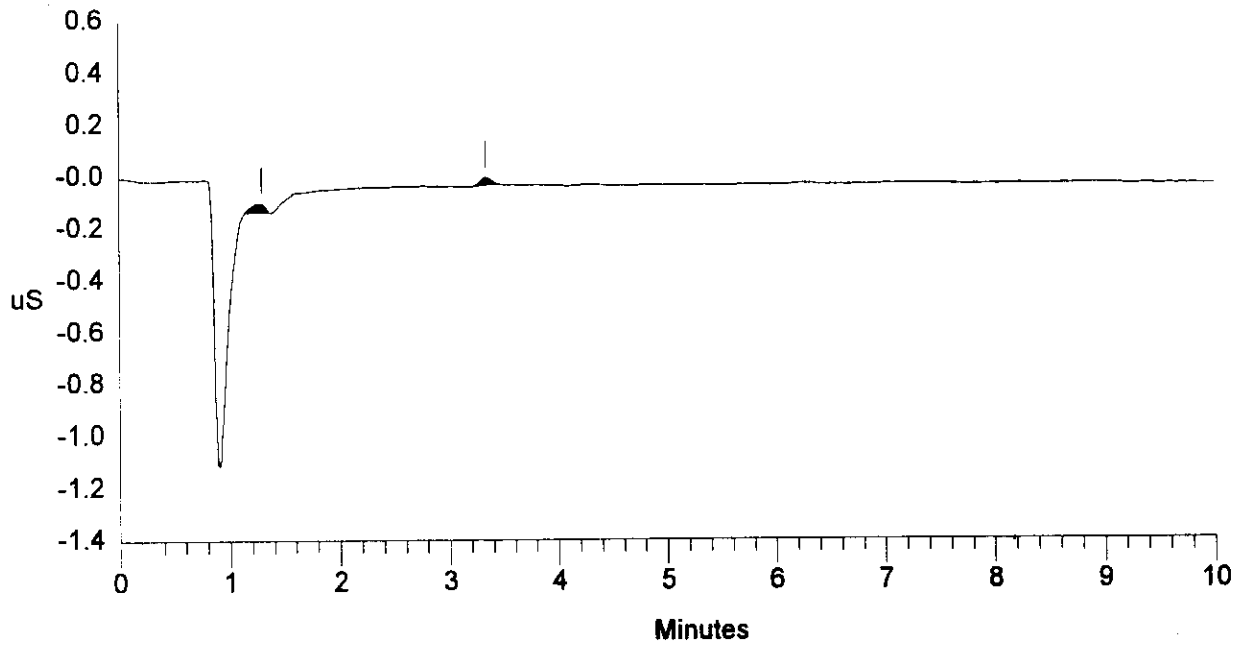
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.29		0.000	34	292	1	
		Totals	0.000	34	292		

DIRECT RJ McCown 11/7/95

File: 95110701.D04 Sample: PREP BLANK



WHC-SD-WM-DP-145, REV. 1

```
==========================================================================
| Sample Name: S95T002562 SAMPLE              Date: 11/07/1995 02:52:03   |
| Data File  : C:\DX\DATA\95110701.D05                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS          |
==========================================================================
```

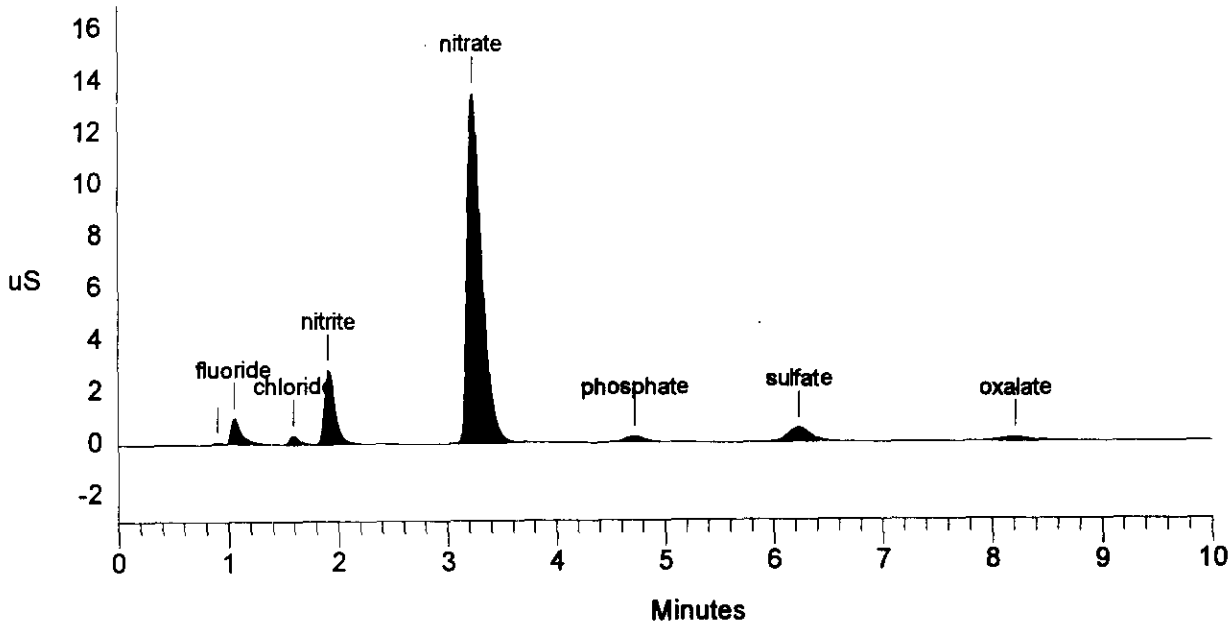
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	61	307	2	
2	1.05	fluoride	23.057	964	6221	2	1.94
3	1.59	chloride	10.057	335	1817	1	0.63
4	1.91	nitrite	145.868	2830	18267	1	-0.52
5	3.23	nitrate	1025.372	13538	124209	1	2.54
6	4.72	phosphate	55.324	222	2636	1	-1.46
7	6.23	sulfate	61.305	539	7418	1	-2.04
8	8.21	oxalate	33.186	138	2355	1	-1.79
		Totals	1354.168	18627	163231		

•200mL - 10mL RJ McCown 11/7/95

File: 95110701.D05 Sample: S95T002562 SAMPLE



WHC-SD-WM-DP-145, REV. 1

Sample Name: S95T002562 DUPLICATE Date: 11/07/1995 03:12:50
Data File : C:\DX\DATA\95110701.D06
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 6 Detector:CDM-1
Analyst : Column: AG4A/AS4A anion column/SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

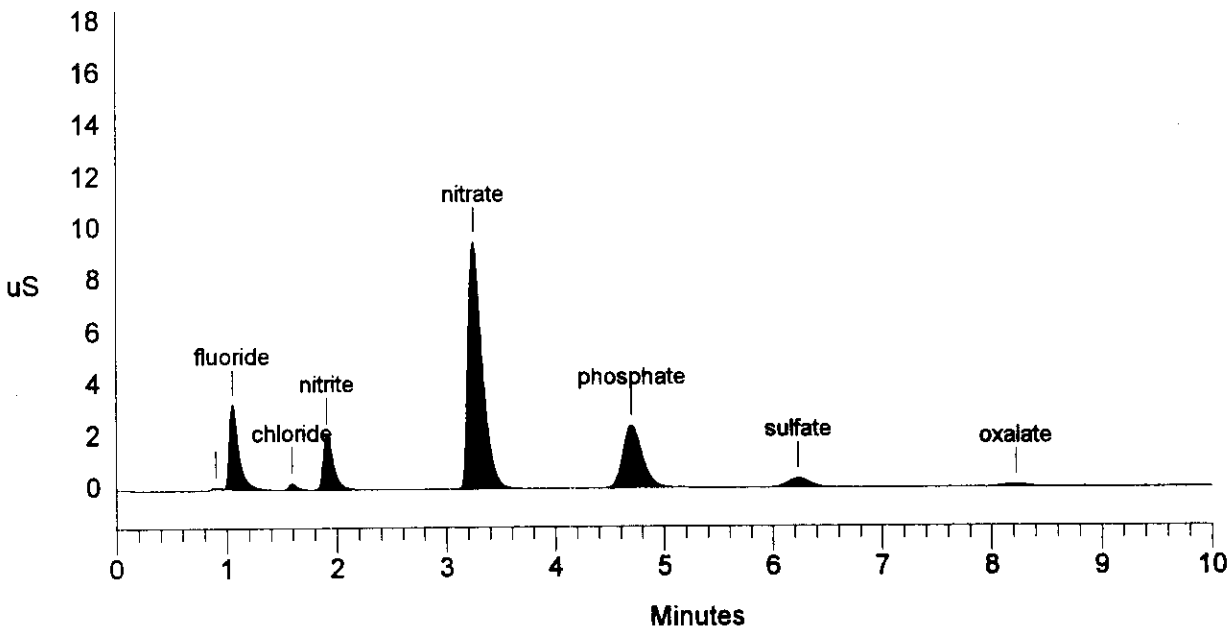
********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	63	285	2	
2	1.05	fluoride	65.051	3206	18344	2	1.94
3	1.59	chloride	7.238	242	1283	1	0.63
4	1.91	nitrite	110.077	2140	13404	1	-0.52
5	3.25	nitrate	707.831	9498	83898	1	3.17
6	4.70	phosphate	501.181	2393	28827	1	-1.88
7	6.23	sulfate	43.868	342	4729	1	-2.04
8	8.22	oxalate	24.672	89	1498	1	-1.67
		Totals	1459.918	17973	152268		

.200mL - 10mL

RHMcCown 11/7/95

File: 95110701.D06 Sample: S95T002562 DUPLICATE



WHC-SD-WM-DP-145, REV. 1

```
==============================================================================
| Sample Name: S95T002563 SAMPLE                Date: 11/07/1995 04:44:08     |
| Data File  : C:\DX\DATA\95110701.D08                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 8                   Detector:CDM-1      |
| Analyst    :                  Column: AG4A/AS4A anion column/SRS           |
==============================================================================
```

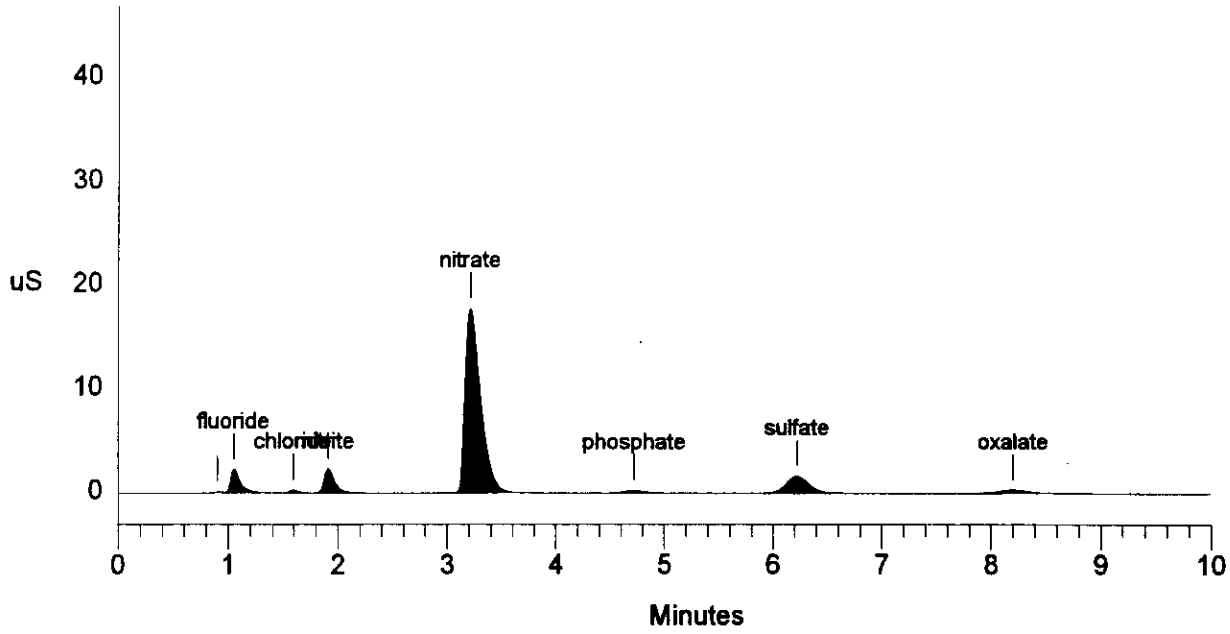
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	68	301	2	
2	1.05	fluoride	47.153	2192	13136	2	1.94
3	1.59	chloride	8.274	274	1479	1	0.63
4	1.91	nitrite	120.591	2319	14832	1	-0.52
5	3.21	nitrate	1384.808	17850	171409	1	1.90
6	4.72	phosphate	58.801	237	2835	1	-1.46
7	6.22	sulfate	160.486	1638	22805	1	-2.20
8	8.20	oxalate	63.560	314	5416	1	-1.91
		Totals	1843.673	24893	232214		

.200mL - 10mL RJ McCown 11/7/95

File: 95110701.D08 Sample: S95T002563 SAMPLE



WHC-SD-WM-DP-145, REV. 1

```
==========================================================================
| Sample Name: S95T002563 DUPLICATE          Date: 11/07/1995 04:54:57    |
| Data File  : C:\DX\DATA\95110701.D09                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-1   |
| Analyst    :                Column: AG4A/AS4A anion column/SRS         |
==========================================================================
```

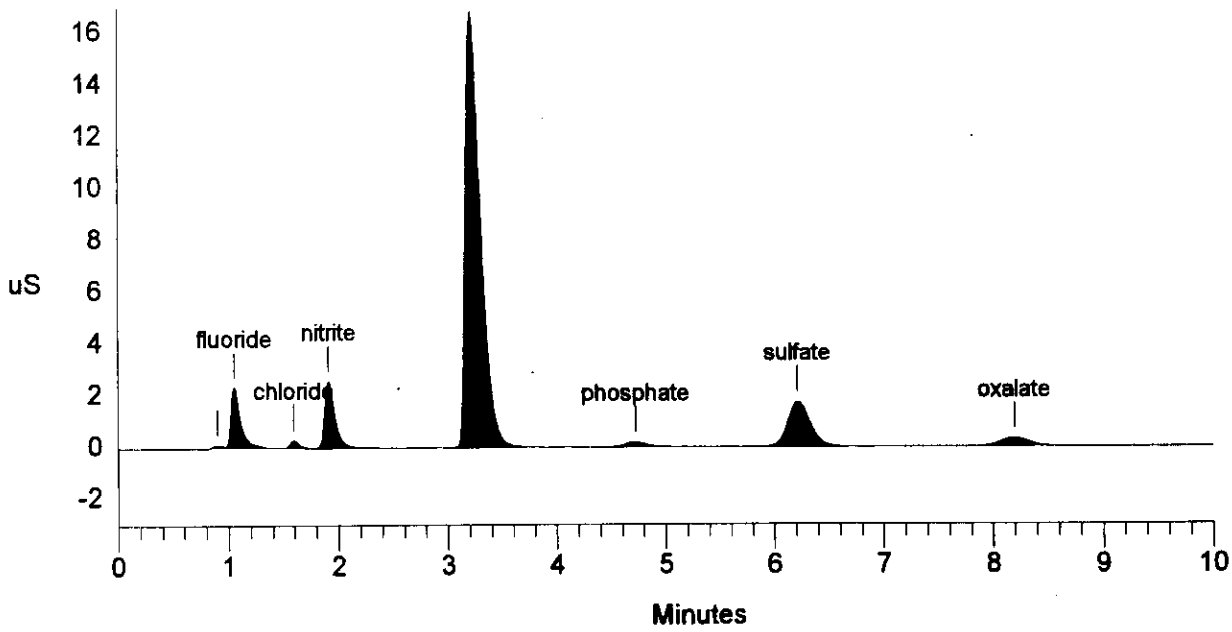
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	72	349	2	
2	1.05	fluoride	48.153	2298	13425	2	1.94
3	1.59	chloride	8.827	298	1584	1	0.63
4	1.91	nitrite	129.664	2571	16065	1	-0.52
5	3.21	nitrate	1293.513	16711	159253	1	1.90
6	4.72	phosphate	47.572	185	2193	1	-1.46
7	6.21	sulfate	168.557	1742	24064	1	-2.36
8	8.19	oxalate	64.601	314	5521	1	-2.03
		Totals	1760.886	24190	222454		

• 200mL - 10mL RJ McCown 11/7/95

File: 95110701.D09 Sample: S95T002563 DUPLICATE



WHC-SD-WM-DP-145, REV. 1

```
==============================================================================
| Sample Name: S95T002562 SPIKE                Date: 11/07/1995 03:25:42      |
| Data File  : C:\DX\DATA\95110701.D07                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 7                   Detector:CDM-1      |
| Analyst    :                 Column: AG4A/AS4A anion column/SRS             |
==============================================================================
```

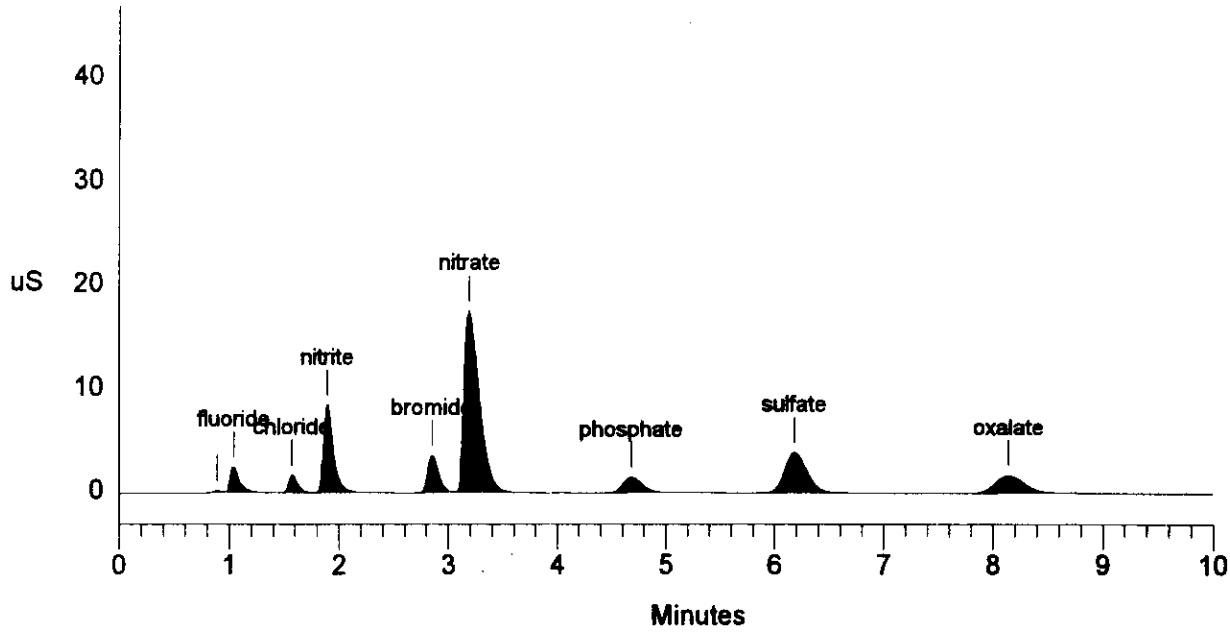
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	51	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	110	493	2	
2	1.04	fluoride	49.273	2417	13750	2	0.97
3	1.57	chloride	47.375	1664	8968	1	-0.63
4	1.89	nitrite	393.092	8426	52053	1	-1.56
5	2.85	bromide	274.180	3542	23825	1	1.42
6	3.19	nitrate	1342.580	17506	165772	1	1.27
7	4.68	phosphate	315.165	1458	17726	1	-2.30
8	6.18	sulfate	356.619	3907	53710	1	-2.83
9	8.14	oxalate	307.698	1681	30274	1	-2.63
		Totals	3085.982	40710	366571		

•200ml — 9.9ml ELUENT / .100ml STD # 109N9D AS SPIKE RJ McCown 11/7/95

File: 95110701.D07 Sample: S95T002562 SPIKE



WHC-SD-WM-DP-146, REV. 1

By108 R

WHC-SD-WM-DP-145, REV. 1

LABCORE Completed Worklist Report for Worklist# 4166

Analyst: eal **Instrument:** IC01 **Book#** 118N94

Method: LA-533-105 Rev/Mod D-1 95000104

Worklist Comment: By-108 IC. Rush this is the last one for this tank. JMF

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB			0	IC-QC	F	QC	1	<1.30e-2		ug/mL
1	CCB			0	IC-QC	CL	QC	1	<1.70e-2		ug/mL
1	CCB			0	IC-QC	NO2	QC	1	<1.07e-1		ug/mL
1	CCB			0	IC-QC	BR	QC	1	<1.26e-1		ug/mL
1	CCB			0	IC-QC	NO3	QC	1	<1.40e-1		ug/mL
1	CCB			0	IC-QC	PO4	QC	1	<1.19e-1		ug/mL
1	CCB			0	IC-QC	SO4	QC	1	<1.36e-1		ug/mL
1	CCB			0	IC-QC	OXALATE2	QC	1	<1.05e-1		ug/mL
2	CCV			0	IC-QC	F	QC	59	6.23e+01	105.590	% Recovery
2	CCV			0	IC-QC	CL	QC	79	8.42e+01	106.580	% Recovery
2	CCV			0	IC-QC	NO2	QC	534	5.60e+02	104.870	% Recovery
2	CCV			0	IC-QC	BR	QC	575	6.07e+02	105.570	% Recovery
2	CCV			0	IC-QC	NO3	QC	614	6.30e+02	102.610	% Recovery
2	CCV			0	IC-QC	PO4	QC	545	6.17e+02	113.210	% Recovery
2	CCV			0	IC-QC	SO4	QC	631	6.42e+02	101.740	% Recovery
2	CCV			0	IC-QC	OXALATE2	QC	525	5.35e+02	101.900	% Recovery
3	BLNK-PREP			0	IC-01	F-02	SOLID	1	<1.31e0		ug/g
3	BLNK-PREP			0	IC-01	CL-02	SOLID	1	<1.72e0		ug/g
3	BLNK-PREP			0	IC-01	NO2-02	SOLID	1	<1.08e1		ug/g
3	BLNK-PREP			0	IC-01	BR-02	SOLID	1	<1.27e1		ug/g
3	BLNK-PREP			0	IC-01	NO3-02	SOLID	1	<1.41e1		ug/g
3	BLNK-PREP			0	IC-01	PO4-02	SOLID	1	<1.20e1		ug/g
3	BLNK-PREP			0	IC-01	SO4-02	SOLID	1	<1.37e1		ug/g
3	BLNK-PREP			0	IC-01	OXALATE2	SOLID	1	<1.06e1		ug/g
4	SAMPLE	S95T003707	0	W	IC-01	F-02	SOLID	N/A	4.564e+02	53.760	ug/g
4	SAMPLE	S95T003707	0	W	IC-01	CL-02	SOLID	N/A	1.203e+03	70.300	ug/g
4	SAMPLE	S95T003707	0	W	IC-01	NO2-02	SOLID	N/A	4.288e+04	442.500	ug/g
4	SAMPLE	S95T003707	0	W	IC-01	BR-02	SOLID	N/A <	5.212e+02	521.000	ug/g
4	SAMPLE	S95T003707	0	W	IC-01	NO3-02	SOLID	N/A	5.049e+04	578.100	ug/g
4	SAMPLE	S95T003707	0	W	IC-01	PO4-02	SOLID	N/A	5.853e+04	492.100	ug/g
4	SAMPLE	S95T003707	0	W	IC-01	SO4-02	SOLID	N/A	4.479e+03	562.400	ug/g
4	SAMPLE	S95T003707	0	W	IC-01	OXALATE2	SOLID	N/A	9.831e+02	434.200	ug/g
5	DUP	S95T003707	0	W	IC-01	F-02	SOLID	4.56e+02	4.52e+02	0.880	RPD
5	DUP	S95T003707	0	W	IC-01	CL-02	SOLID	1.20e+03	1.27e+03	5.670	RPD
5	DUP	S95T003707	0	W	IC-01	NO2-02	SOLID	4.29e+04	4.43e+04	3.210	RPD
5	DUP	S95T003707	0	W	IC-01	BR-02	SOLID	<5.21e2	<5.51e2		RPD
5	DUP	S95T003707	0	W	IC-01	NO3-02	SOLID	5.05e+04	5.10e+04	0.990	RPD
5	DUP	S95T003707	0	W	IC-01	PO4-02	SOLID	5.85e+04	5.38e+04	8.370	RPD
5	DUP	S95T003707	0	W	IC-01	SO4-02	SOLID	4.48e+03	1.20e+04	91.260	RPD
5	DUP	S95T003707	0	W	IC-01	OXALATE2	SOLID	9.83e+02	5.62e+02	54.500	RPD
6	SPK	S95T003707	0	W	IC-01	F-02	SOLID	59	61.460	104.170	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

LABCORE Completed Worklist Report for Worklist# 4166

Seq	Type	Sample#	R	A	Test		Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S95T003707	0	W	@IC-01	CL-02	SOLID	79	83.010	105.080	% Recovery
6	SPK	S95T003707	0	W	@IC-01	NO2-02	SOLID	534	559.510	104.780	% Recovery
6	SPK	S95T003707	0	W	@IC-01	BR-02	SOLID	575	590.000	102.610	% Recovery
6	SPK	S95T003707	0	W	@IC-01	NO3-02	SOLID	614	646.970	105.370	% Recovery
6	SPK	S95T003707	0	W	@IC-01	PO4-02	SOLID	545	553.130	101.490	% Recovery
6	SPK	S95T003707	0	W	@IC-01	SO4-02	SOLID	631	628.860	99.660	% Recovery
6	SPK	S95T003707	0	W	@IC-01	OXALATE2	SOLID	525	536.850	102.260	% Recovery

Comments Section:

Comments for sample# S95T003707 and test @IC-01 .
RPD% for SO4 and oxalate is very high

Final page for worklist# 4166

Analyst Signature **Date**

Analyst Signature **Date**

12/11/95
Reviewer Signature **Date**

LABCORE Data Entry Template for Worklist# 4166

Analyst: [illegible] **Instrument:** IC01 IC01 **Book#** 118N9-A

Method: LA-533-105 **Rev/Mod** D-1

Worklist Comment: By-108 IC. Rush this is the last one for this tank. JMF

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC-QC	QC		
2	CCV				@IC-QC	QC		
3	BLNK-PREP				@IC-01	SOLID		
4	SAMPLE	S95T003707	0	W	@IC-01	SOLID	95000104	BY-108 (R)
		Analytes Requested:			BR-02, CL-02, F-02, NO2-02, NO3-02, OXALATE2, PO4-02, SO4-02			
5	DUP	S95T003707	0	W	@IC-01	SOLID		
6	SPK	S95T003707	0	W	@IC-01	SOLID		

Final page for worklist # 4166

[illegible] 12-11-95
Analyst Signature **Date**

Analyst Signature **Date**

Uploaded 12/11/95 J. M. [illegible]

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

A-0010-IC DATA FILE/WORKLIST RESOLUTION 11-Dec-95

Worklist#: 4166

	Seq	Type	Sample #
=>	1	CCB	
=>	2	CCV	
=>	3	BLNK-PREP	
=>	4	SAMPLE	S95T003707
=>	5	DUP	S95T003707
=>	6	SPK	S95T003707

Data File: 4166DEC.CSV

Seq#	Data File	Sample Name	Dilution
1	95121101.d01	BLANK	1.00
2	95121101.d03	118N9-A	101.00
3	95121101.d04	PREP. BLANK	101.00
	95121101.d05	S95T003707	101.00
	95121101.d06	S95T003707	21.00
4	95121101.d07	S95T003707	11.00
5	95121101.d08	S95T003707 DUP	11.00
6	95121101.d09	S95T003707 SPIKE	11.00

Save(F4) Abort(Shift-F3) ListFiles(Shift-F1) UploadFile(F8)

```
==================================================================================
| Sample Name: BLANK                                  Date: 12/11/1995 08:09:16   |
| Data File  : C:\DX\DATA\95121101.D01                                            |
| Method     : C:\DX\METHOD\KIT.MET                                               |
| ACI Address: 1  System: 1  Inject#: 1                     Detector:CDM-1        |
| Analyst    : A Lambel       Column:                                             |
==================================================================================
```

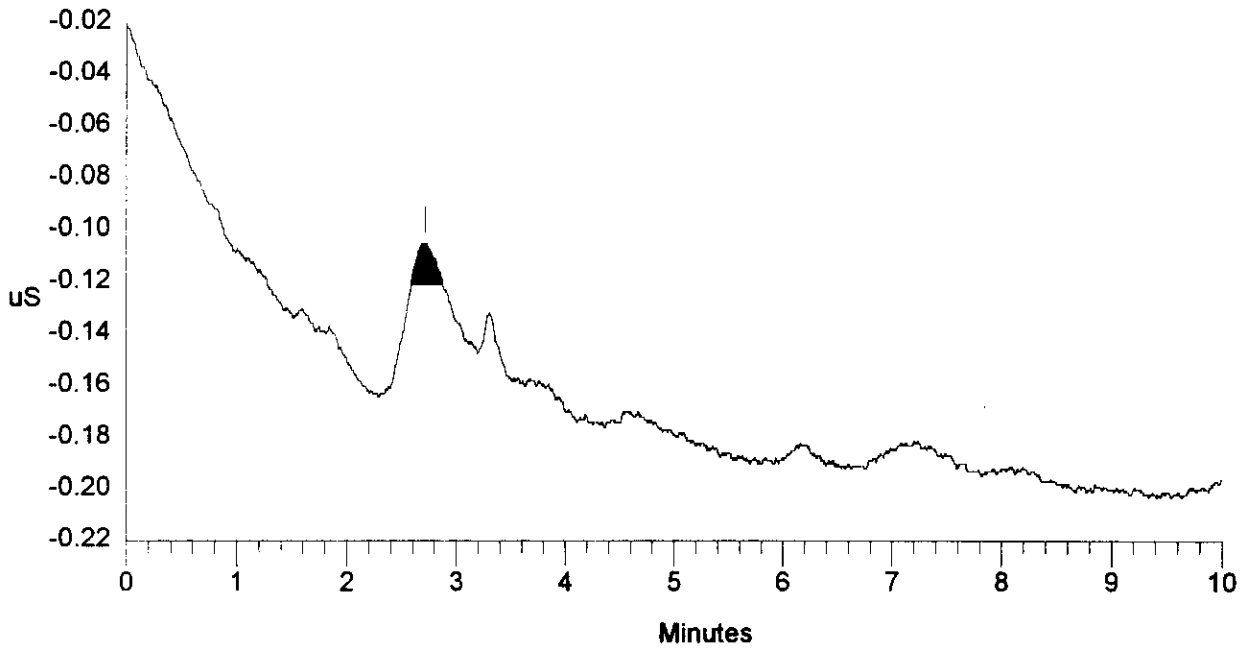
12/11/95

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95121101.D01 Sample: BLANK



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 524 TO 531.

WHC-SD-WM-DP-145, REV. 1

Data Reprocessed On 12/11/1995 08:43:58

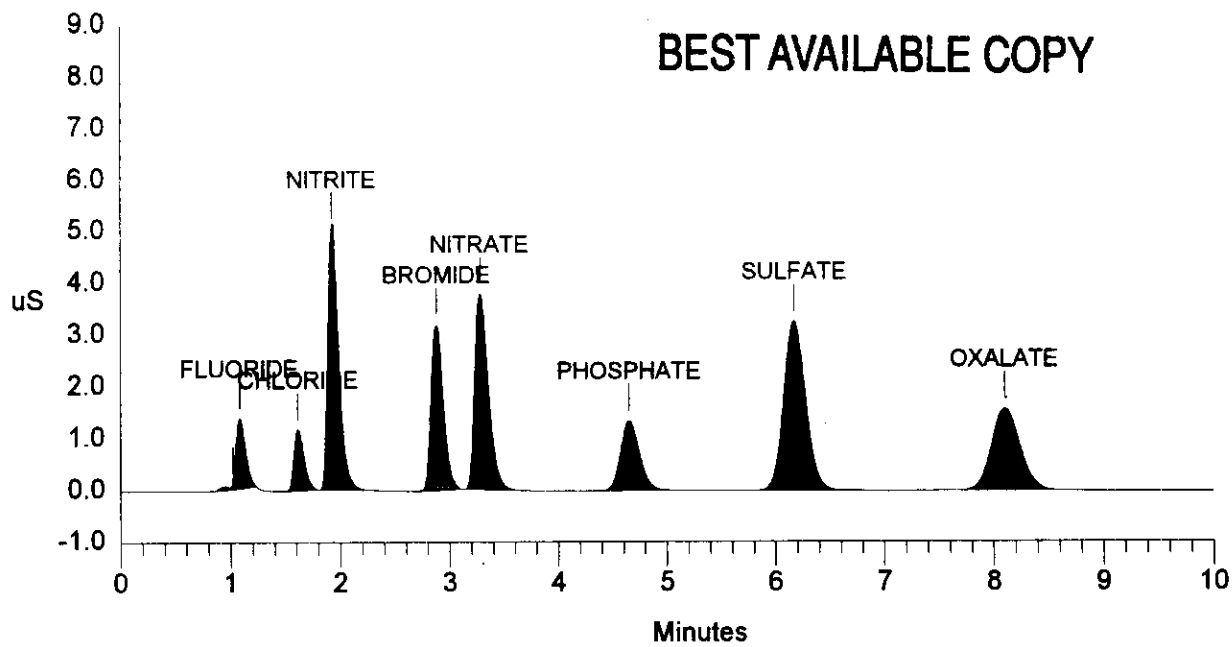
Sample Name: 118N9-A	Date: 12/11/1995 08:33:01
Data File : C:\DX\DATA\95121101.D03	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 3	Detector:CDM-1
Analyst : A. Lambel Column:	

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	101	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration		Height	Area	Bl. Code	%Delta
1	1.02		0.000		107	527	2	
2	1.08	FLUORIDE	62.257	1.05	1345	8005	2	0.93
3	1.61	CHLORIDE	84.189	1.06	1182	7269	1	1.26
4	1.92	NITRITE	560.355	1.04	5060	34323	1	1.59
5	2.88	BROMIDE	606.543	1.05	3197	23956	1	1.05
6	3.28	NITRATE	629.857		3777	32162	1	0.31
7	4.65	PHOSPHATE	617.111	1.03	1350	15806	1	0.22
8	6.17	SULFATE	642.352	1.01	3269	44548	1	1.48
9	8.10	OXALATE	535.166	1.01	1579	27935	1	1.25
		Totals	3737.830		20866	194530		

File: 95121101.D03 Sample: 118N9-A



WHC-SD-WM-DP-145, REV. 1

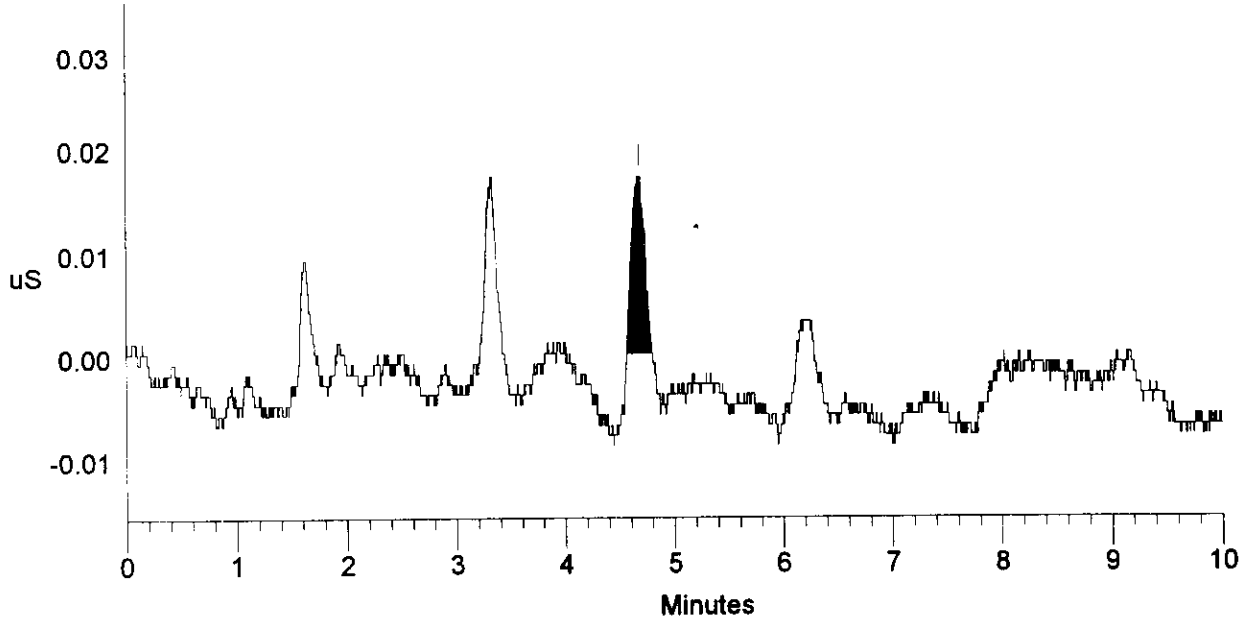
```
==============================================================================
| Sample Name: PREP. BLANK                    Date: 12/11/1995 08:58:23       |
| Data File  : C:\DX\DATA\95121101.D04                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 4                   Detector:CDM-1      |
| Analyst    :                Column:                                         |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00	200	

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
		Totals	0.000	0	0		

File: 95121101.D04 Sample: PREP. BLANK



WHC-SD-WM-DP-145, REV. 1

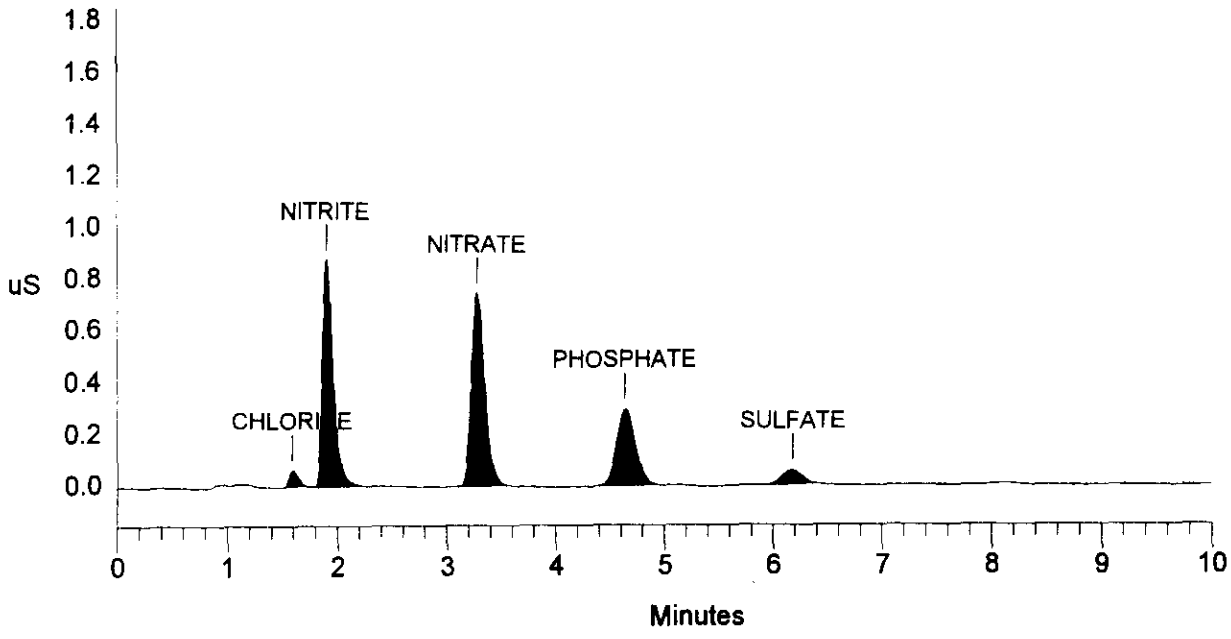
```
==========================================================================
| Sample Name: S95T003707                    Date: 12/11/1995 09:09:57    |
| Data File  : C:\DX\DATA\95121101.D05                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 5                Detector:CDM-1     |
| Analyst    :                Column:                                     |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.59	CHLORIDE	3.764	61	330	1	0.00
2	1.90	NITRITE	107.822	874	5910	1	0.53
3	3.28	NITRATE	134.144	745	6235	1	0.31
4	4.64	PHOSPHATE	142.690	294	3452	1	0.00
5	6.18	SULFATE	22.506	54	661	1	1.64
		Totals	410.927	2028	16588		

File: 95121101.D05 Sample: S95T003707



WHC-SD-WM-DP-145, REV. 1

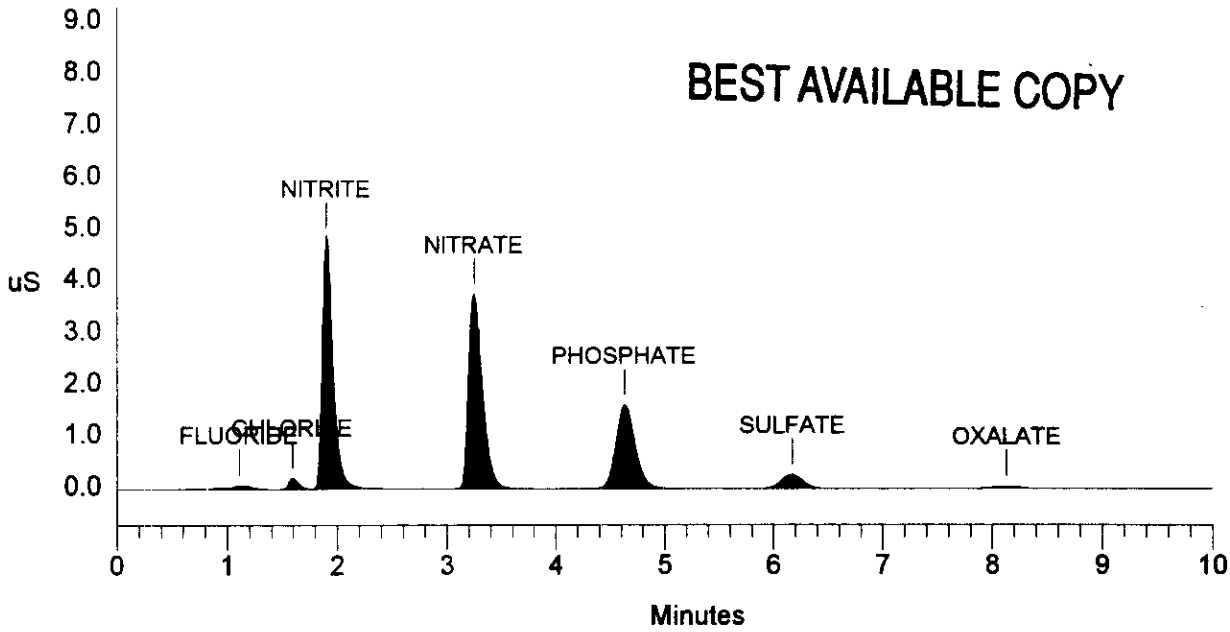
Sample Name: S95T003707	Date: 12/11/1995 09:25:51
Data File : C:\DX\DATA\95121101.D06	
Method : C:\DX\METHOD\KIT.MET	
ACI Address: 1 System: 1 Inject#: 6	Detector:CDM-1
Analyst : Column:	

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	21	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.11	FLUORIDE	1.870	71	1141	1	3.74
2	1.59	CHLORIDE	3.086	213	1279	1	0.00
3	1.90	NITRITE	109.952	4827	32331	1	0.53
4	3.25	NITRATE	131.997	3750	32425	1	-0.61
5	4.63	PHOSPHATE	152.994	1612	18950	1	-0.22
6	6.17	SULFATE	13.140	260	3501	1	1.48
7	8.13	OXALATE	2.620	34	486	1	1.63
		Totals	415.659	10766	90113		

File: 95121101.D06 Sample: S95T003707



WHC-SD-WM-DP-145, REV. 1

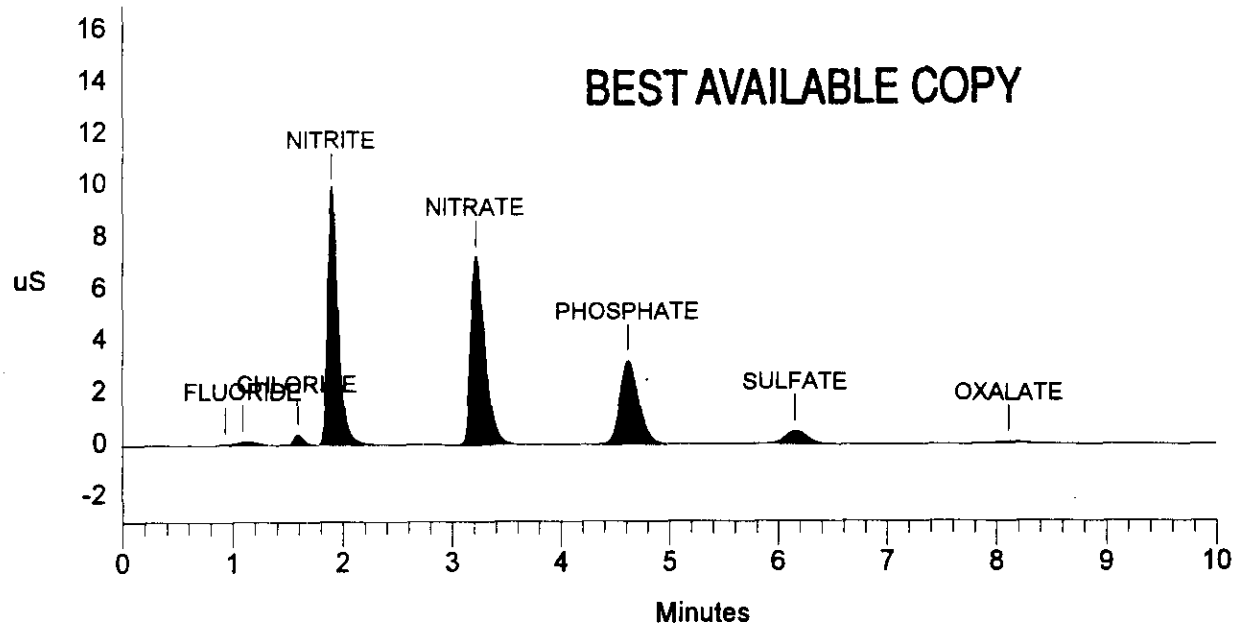
Sample Name: S95T003707 Date: 12/11/1995 09:42:23
Data File : C:\DX\DATA\95121101.D07
Method : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 7 Detector:CDM-1
Analyst : A. Ramsey Column:

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	11	3000	5Hz	0.00	10.00	200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.10	FLUORIDE	1.214	118	1416	2	2.80
3	1.59	CHLORIDE	3.199	417	2527	1	0.00
4	1.90	NITRITE	114.049	9854	65282	1	0.53
5	3.22	NITRATE	134.303	7257	64475	1	-1.53
6	4.62	PHOSPHATE	155.687	3219	37769	1	-0.43
7	6.16	SULFATE	11.914	496	6731	1	1.32
8	8.12	OXALATE	2.615	69	1081	1	1.50
		Totals	422.981	21430	179282		

File: 95121101.D07 Sample: S95T003707



WHC-SD-WM-DP-145, REV. 1

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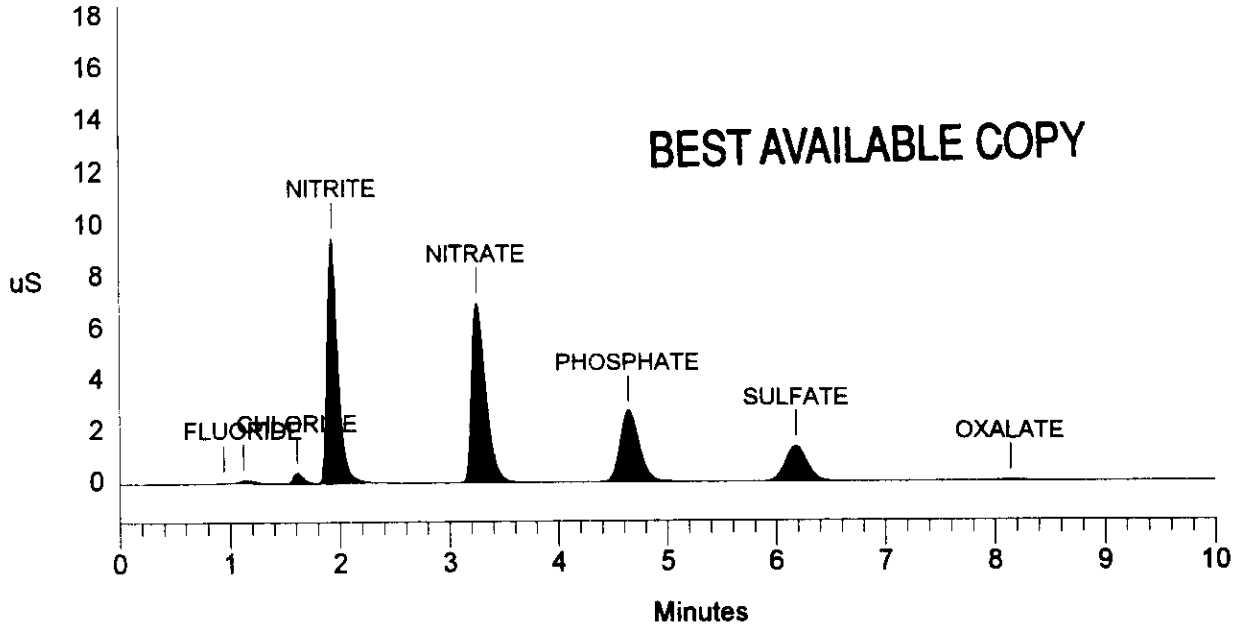
==============================================================================
| Sample Name: S95T003707 DUP                    Date: 12/11/1995 09:53:59    |
| Data File  : C:\DX\DATA\95121101.D08                                        |
| Method     : C:\DX\METHOD\KIT.MET                                           |
| ACI Address: 1  System: 1  Inject#: 8                   Detector:CDM-1      |
| Analyst    :                Column:                                         |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1		11	3000 5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.12	FLUORIDE	1.136	113	1324	2	4.67
3	1.61	CHLORIDE	3.193	399	2522	1	1.26
4	1.93	NITRITE	111.533	9504	63803	1	2.12
5	3.25	NITRATE	128.204	6986	61439	1	-0.61
6	4.64	PHOSPHATE	135.218	2740	32592	1	0.00
7	6.18	SULFATE	30.249	1353	18568	1	1.64
8	8.14	OXALATE	1.414	36	506	1	1.75
		Totals	410.946	21132	180754		

File: 95121101.D08 Sample: S95T003707 DUP



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WHC-SD-WM-DP-145, REV. 1

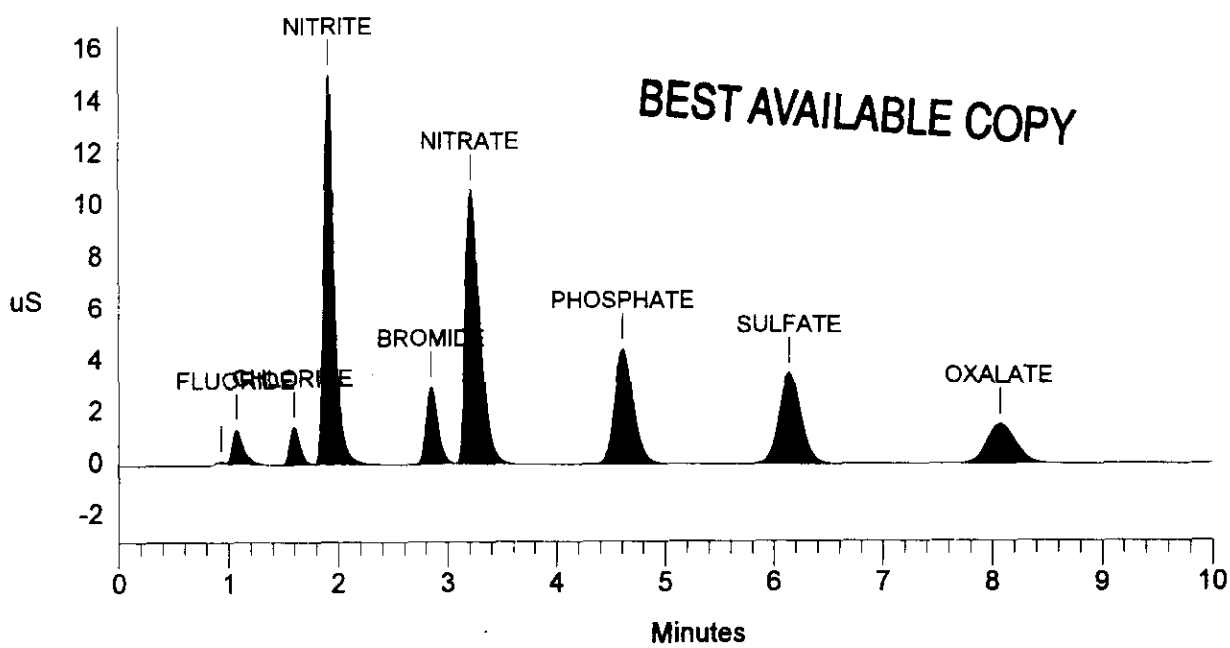
```
==========================================================================
| Sample Name: S95T003707 SPIKE                Date: 12/11/1995 10:07:15  |
| Data File  : C:\DX\DATA\95121101.D09                                    |
| Method     : C:\DX\METHOD\KIT.MET                                       |
| ACI Address: 1  System: 1  Inject#: 9                Detector:CDM-1     |
| Analyst    :                Column:                                     |
==========================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	11	3000	5Hz	0.00	10.00		200

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.07	FLUORIDE	7.364	1278	8703	2	0.00
3	1.59	CHLORIDE	11.465	1436	9107	1	0.00
4	1.91	NITRITE	170.061	15006	98450	1	1.06
5	2.85	BROMIDE	59.019	2978	21326	1	0.00
6	3.21	NITRATE	198.979	10573	97163	1	-1.83
7	4.61	PHOSPHATE	210.807	4469	52027	1	-0.65
8	6.14	SULFATE	74.786	3514	47739	1	0.99
9	8.07	OXALATE	56.344	1510	26993	1	0.88
		Totals	788.825	40764	361507		

File: 95121101.D09 Sample: S95T003707 SPIKE



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WHC-SD-WM-DP-145, REV. 1

LABCORE Data Entry Template for Worklist# 2059

Analyst: B. Goecke Instrument: ~~ICP01~~ ICP02 Book# 46B44A

Method: LA-505-~~151~~ 161 Rev/Mod A-1

Worklist Comment: ICP BY-108R DIRECT (Li only)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	ICSA				@ICP-QC	QC		
4	ICSAB				@ICP-QC	QC		
5	SAMPLE	S95T001427	0	D	@ICP-D03	LIQUID	95000104	BY-108 (R)
	Analytes Requested: LI-D-01							
6	DUP	S95T001427	0	D	@ICP-D03	LIQUID		
7	SPK	S95T001427	0	D	@ICP-D03	LIQUID		
8	SAMPLE	S95T001430	0	D	@ICP-D03	LIQUID	95000104	BY-108 (R)
	Analytes Requested: LI-D-01							
9	DUP	S95T001430	0	D	@ICP-D03	LIQUID		
10	SPK	S95T001430	0	D	@ICP-D03	LIQUID		
11	CCV				@ICP-QC	QC		
12	CCB				@ICP-QC	QC		
13	SAMPLE	S95T001373	0	D	@ICP-D03	LIQUID	95000104	BY-108 (R)
	Analytes Requested: LI-D-01							
14	DUP	S95T001373	0	D	@ICP-D03	LIQUID		
15	SPK	S95T001373	0	D	@ICP-D03	LIQUID		
16	ICSA				@ICP-QC	QC		
17	ICSAB				@ICP-QC	QC		

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2059

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
18	CCV				@ICP-QC	QC		
19	CCB				@ICP-QC	QC		

Final page for worklist # 2059

Analyst Signature: [signature] Date: 8-21-95

Reviewed + Validated by:
Analyst Signature: [signature] Date: 08/22/95

		D.F.
SS5T001427_C	.025mL - 10mL - 2mL - 8mL	2005
SS5T001427	.025mL - 10mL	401
SS5T001427_D	.025mL - 10mL	401
SS5T001427_A	.025mL - 2mL - 8mL	401
SS5T001430_C	.025mL - 10mL - 2mL - 8mL	2005
SS5T001430	.025mL - 10mL	401
SS5T001430_D	.025mL - 10mL	401
SS5T001430_A	.025mL - 2mL - 8mL	401
SS5T001373_C	.025mL - 10mL - 2mL - 8mL	2005
SS5T001373	.025mL - 10mL	401
SS5T001373_D	.025mL - 10mL	401
SS5T001373_A	.025mL - 2mL - 8mL	401

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	950821B	ICP2	08/21/95	13:49	BJG	Q	CONC
2	ICB	950821B	ICP2	08/21/95	13:53	BJG	Q	CONC
3	ICSA	950821B	ICP2	08/21/95	13:56	BJG	Q	CONC
4	ICSAB	950821B	ICP2	08/21/95	13:59	BJG	Q	CONC
5	S95T001427_L	950821B	ICP2	08/21/95	14:03	BJG	S	CONC
6	S95T001427_	950821B	ICP2	08/21/95	14:06	BJG	S	CONC
7	S95T001427_D	950821B	ICP2	08/21/95	14:10	BJG	S	CONC
8	S95T001427_A	950821B	ICP2	08/21/95	14:14	BJG	S	CONC
9	S95T001430_L	950821B	ICP2	08/21/95	14:19	BJG	S	CONC
10	S95T001430_	950821B	ICP2	08/21/95	14:23	BJG	S	CONC
11	S95T001430_D	950821B	ICP2	08/21/95	14:28	BJG	S	CONC
12	S95T001430_A	950821B	ICP2	08/21/95	14:31	BJG	S	CONC
13	CCV	950821B	ICP2	08/21/95	14:36	BJG	Q	CONC
14	CCB	950821B	ICP2	08/21/95	14:39	BJG	Q	CONC
15	S95T001373_L	950821B	ICP2	08/21/95	14:44	BJG	S	CONC
16	S95T001373_	950821B	ICP2	08/21/95	14:48	BJG	S	CONC
17	S95T001373_D	950821B	ICP2	08/21/95	14:51	BJG	S	CONC
18	S95T001373_A	950821B	ICP2	08/21/95	14:55	BJG	S	CONC
19	ICSA	950821B	ICP2	08/21/95	14:59	BJG	Q	CONC
20	ICSAB	950821B	ICP2	08/21/95	15:02	BJG	Q	CONC
21	CCV_1	950821B	ICP2	08/21/95	15:05	BJG	Q	CONC
22	CCB_1	950821B	ICP2	08/21/95	15:09	BJG	Q	CONC

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BJ 8-21-95 BJ-10Y S95T001427 1430 1373 1025-1026

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 534 TO 538.

WHC-SD-WM-DP-145, REV. 1

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	5.055	5.061	5.210	5.083	4.973	5.226
2	ICB	.0003	-.0059	-.0010	.0058	.0001	-.0001
3	ICSA	-.0001	247.9	-.0954	-.0005	.0018	-.0000
4	ICSAB	.9629	245.8	-.0632	-.0002	.4569	.4789
5	S95T001427_L	1.858	45790.	-47.03	18.96	.1692	-.1373
6	S95T001427_	1.035	44430.	-30.43	19.31	.1340	.2992
7	S95T001427_D	1.140	46420.	-28.37	18.95	.0844	.3117
8	S95T001427_A	361.0	44630.	388.7	405.5	369.4	405.2
9	S95T001430_L	.8352	45310.	-62.72	22.55	.3082	-.0711
10	S95T001430_	.5215	44790.	-36.25	18.57	.0976	.3394
11	S95T001430_D	.3611	43950.	-28.25	17.67	.0965	.3256
12	S95T001430_A	356.0	43660.	387.3	404.9	363.7	400.9
13	CCV	5.064	4.992	5.179	5.024	4.864	5.205
14	CCB	.0003	-.0056	-.0015	.0054	.0001	-.0001
15	S95T001373_L	.3285	43790.	-73.37	15.36	.1812	-.0009
16	S95T001373_	.9976	42500.	-13.38	19.49	.0911	.2987
17	S95T001373_D	1.352	41930.	-12.94	19.31	.1140	.2971
18	S95T001373_A	353.2	41580.	393.3	408.4	366.8	403.5
19	ICSA	.0007	242.7	-.0681	-.0009	.0017	-.0000
20	ICSAB	.9590	241.6	-.0629	.0046	.4436	.4740
21	CCV_1	5.045	4.950	5.120	4.987	4.806	5.171
22	CCB_1	.0004	-.0001	-.0164	.0054	.0001	-.0001

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.031	5.074	5.167	5.100	5.213	5.155
2	ICB	-.0111	.0021	-.0002	.0027	-.0008	.0006
3	ICSA	-.0015	237.0	.0006	.0097	-.0002	.0059
4	ICSAB	-.0119	241.7	.9590	.0111	.4731	.4823
5	S95T001427_L	-30.93	20.39	.2459	6.148	8.029	302.1
6	S95T001427_	-3.426	12.43	.0565	-.7292	8.581	289.3
7	S95T001427_D	-10.70	7.292	-.0241	2.552	9.341	305.0
8	S95T001427_A	387.3	406.4	397.3	384.2	407.8	688.8
9	S95T001430_L	13.21	70.31	-1.813	10.57	9.031	275.2
10	S95T001430_	8.043	14.33	-.2983	1.241	8.282	270.0
11	S95T001430_D	6.153	9.268	-.2103	.0465	8.475	268.9
12	S95T001430_A	388.1	416.9	396.6	384.9	407.5	664.4
13	CCV	5.056	5.202	5.212	5.018	5.244	5.200
14	CCB	-.0350	.0037	-.0007	.0042	.0003	.0006
15	S95T001373_L	-19.50	33.36	-1.190	5.626	10.40	311.9
16	S95T001373_	-7.522	17.35	.2584	1.590	9.229	303.3
17	S95T001373_D	-7.617	8.665	.4019	5.191	9.758	298.7
18	S95T001373_A	379.3	424.6	400.8	386.5	411.3	694.5
19	ICSA	-.0117	245.6	.0009	.0168	-.0001	.0066
20	ICSAB	-.0206	243.5	.9528	.0112	.4712	.4816
21	CCV_1	5.040	5.223	5.196	4.980	5.220	5.186
22	CCB_1	-.0138	.0045	-.0004	.0058	-.0005	.0007

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WHC-SD-WM-DP-145, REV. 1

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	5.118	.0091	5.139	5.056	5.074	5.089
2	ICB	-.0002	.0003	.0002	-.0088	-.0006	.0005
3	ICSA	-.0100	.0159	92.12	.1333	-.0040	.0032
4	ICSAB	.4749	.0109	92.68	.0473	-.0046	.9549
5	S95T001427_L	5.074	2.921	156.1	3647.	1.515	2.945
6	S95T001427	4.223	.5053	150.4	3283.	-.0559	1.067
7	S95T001427_D	4.450	.6153	157.8	3339.	-.0216	1.031
8	S95T001427_A	389.3	1.105	543.0	3658.	388.2	380.5
9	S95T001430_L	3.438	3.513	95.89	3641.	-.1799	3.313
10	S95T001430	2.780	.5981	92.76	3347.	-.1460	.5521
11	S95T001430_D	2.852	.5482	91.96	3270.	-.1528	.6258
12	S95T001430_A	382.1	1.502	481.2	3674.	385.2	371.8
13	CCV	5.019	.0094	5.160	4.816	5.005	4.885
14	CCB	-.0002	.0015	.0008	.0291	-.0001	.0012
15	S95T001373_L	3.832	3.096	158.8	3241.	-.3697	5.153
16	S95T001373	6.129	1.013	154.6	3266.	.2497	2.098
17	S95T001373_D	3.799	.8067	152.2	3225.	.5149	1.767
18	S95T001373_A	385.7	1.308	545.1	3527.	388.6	376.3
19	ICSA	-.0100	-.0056	93.31	.1338	-.0038	.0048
20	ICSAB	.4644	-.0002	92.22	.0613	-.0040	.9252
21	CCV_1	4.970	.0100	5.120	4.899	4.959	4.826
22	CCB_1	.0002	.0014	.0006	.0690	.0004	.0015

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.057	5.024	5.159	5.043	5.215	5.144
2	ICB	-.0061	.0001	.0021	.0030	.0005	-.0072
3	ICSA	250.5	-.0068	-.0076	189.2	.0047	-.0277
4	ICSAB	249.1	.4460	-.0114	188.8	.0006	.9109
5	S95T001427_L	-11.61	.0797	9.138	219700.	1.598	323.7
6	S95T001427	-2.940	-.1065	14.43	207900.	.7165	324.8
7	S95T001427_D	-1.322	-.1114	14.70	215600.	.1949	342.7
8	S95T001427_A	373.2	374.3	417.0	206300.	397.9	714.1
9	S95T001430_L	-10.18	.5513	10.15	208200.	1.182	235.4
10	S95T001430	-1.627	-.0345	13.66	199600.	-.0287	240.1
11	S95T001430_D	-.9906	-.0064	13.99	194900.	.1517	235.8
12	S95T001430_A	372.3	373.4	415.9	192400.	395.7	623.4
13	CCV	5.003	5.010	5.179	4.873	5.123	5.174
14	CCB	-.0108	.0004	.0008	.0154	.0006	-.0015
15	S95T001373_L	-25.08	.4118	17.62	222700.	-3.795	403.8
16	S95T001373	-2.103	.0522	15.16	209400.	.2751	391.7
17	S95T001373_D	-.0643	.0246	14.13	207400.	.0110	382.9
18	S95T001373_A	374.1	376.7	418.6	204000.	398.4	771.8
19	ICSA	248.0	-.0058	-.0114	180.2	.0036	-.0262
20	ICSAB	246.2	.4437	-.0075	183.7	.0012	.9130
21	CCV_1	4.964	4.991	5.167	4.826	5.078	5.188
22	CCB_1	-.0062	.0005	.0008	.0097	.0010	-.0028

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.284	5.185	5.235	4.900	5.129	4.858
2	ICB	.0094	.0083	.0011	.0013	.0008	.0080
3	ICSA	.0482	.0252	-.0179	-.0114	-.0244	.0039
4	ICSAB	.0666	.9919	-.0143	.0040	-.0188	.0038
5	S95T001427_L	574.9	98.51	807.1	-7.274	-736.6	82.49
6	S95T001427_	551.2	107.7	787.7	-5.050	-700.9	80.86
7	S95T001427_D	563.6	110.4	823.5	.3893	-713.9	80.53
8	S95T001427_A	931.1	499.1	1176.	378.8	-269.4	443.3
9	S95T001430_L	564.4	97.89	860.5	-3.541	-650.4	105.1
10	S95T001430_	535.6	108.5	869.9	-.6379	-662.8	89.33
11	S95T001430_D	538.0	103.6	849.3	-.0919	-627.6	91.62
12	S95T001430_A	924.4	499.7	1232.	373.5	-209.2	465.7
13	CCV	5.157	5.217	5.203	4.872	5.091	4.862
14	CCB	-.0027	-.0023	.0096	.0009	.0170	.0264
15	S95T001373_L	668.9	119.2	810.7	-3.698	-705.0	93.18
16	S95T001373_	600.7	148.3	760.0	-.6748	-703.8	78.93
17	S95T001373_D	559.2	127.1	750.3	1.206	-689.0	65.43
18	S95T001373_A	1060.	543.3	1138.	379.7	-250.0	460.1
19	ICSA	.0948	.0310	-.0250	-.0166	.0461	.0272
20	ICSAB	.0818	1.001	-.0258	-.0029	.0436	.0201
21	CCV_1	5.235	5.208	5.180	4.873	5.078	4.833
22	CCB_1	.0116	.0071	-.0009	-.0024	.0086	.0177

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.076	4.976	.0080	4.967	4.957	10.14
2	ICB	.0040	.0001	-.0023	.0000	.0134	.0127
3	ICSA	-.0023	.0019	-.0112	.0014	.0180	-.0048
4	ICSAB	.0056	.0019	-.0039	.0014	.0221	-.0313
5	S95T001427_L	27.89	.6840	-11.71	.8531	3.064	86.75
6	S95T001427_	4.035	.5357	-3.929	.3308	-1.750	27.15
7	S95T001427_D	5.094	.5501	-3.988	.3324	-3.740	40.47
8	S95T001427_A	389.6	380.9	-2.315	381.6	379.8	792.6
9	S95T001430_L	35.29	1.369	-11.55	.4579	-45.30	148.1
10	S95T001430_	5.407	.9962	-4.570	.2516	.7815	37.55
11	S95T001430_D	4.626	.9955	-3.918	.4129	-5.181	47.75
12	S95T001430_A	388.2	377.7	-2.624	378.7	371.8	803.3
13	CCV	4.989	4.911	.0133	4.945	5.023	9.956
14	CCB	.0153	.0002	-.0031	.0010	.0118	.0539
15	S95T001373_L	36.01	.8331	-11.34	.8651	13.37	135.4
16	S95T001373_	9.646	.5028	-4.590	.1766	.1317	48.78
17	S95T001373_D	7.808	.4713	-3.770	.3363	6.216	60.40
18	S95T001373_A	391.2	380.6	-2.984	382.1	386.6	810.4
19	ICSA	.0147	.0017	-.0021	.0018	.0072	-.0291
20	ICSAB	.0142	.0018	.0005	.0025	.0001	-.0120
21	CCV_1	4.935	4.865	.0096	4.912	5.020	9.833
22	CCB_1	.0181	.0002	-.0003	.0002	.0036	.0598

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#	Sample Name	V	Y	Zn	Zr
1	ICV	5.177	.0141	5.188	5.063
2	ICB	.0006	.0001	-.0007	.0010
3	ICSA	-.0013	.0079	-.0047	-.0020
4	ICSAB	.4714	.0084	.9859	-.0020
5	S95T001427_L	4.700	1.257	20.31	4.741
6	S95T001427	.5590	.1572	25.13	1.052
7	S95T001427_D	.7934	.2200	23.44	1.156
8	S95T001427_A	399.4	1.194	422.0	391.2
9	S95T001430_L	7.201	2.200	33.62	5.786
10	S95T001430	1.010	.2515	29.25	1.208
11	S95T001430_D	1.120	.2200	28.11	1.147
12	S95T001430_A	399.0	1.415	427.8	390.9
13	CCV	5.192	.0150	5.237	5.033
14	CCB	.0028	.0009	.0008	.0027
15	S95T001373_L	7.527	2.200	18.43	5.222
16	S95T001373	1.820	.5344	17.87	1.304
17	S95T001373_D	1.474	.4086	17.98	1.230
18	S95T001373_A	402.2	1.415	426.3	394.5
19	ICSA	.0036	.0092	-.0056	.0005
20	ICSAB	.4722	.0092	.9862	.0002
21	CCV_1	5.167	.0150	5.229	4.997
22	CCB_1	.0033	.0009	.0001	.0025

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WHC-SD-WM-DP-145, REV. 1

LABCORE Data Entry Template for Worklist# 2107

Analyst: JK Sato **Instrument:** ICP01 **Book#** 46848B

Method: LA-505-151 Rev/Mod D-3

Worklist Comment: ICP BY-108R DIRECT (Li only)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	ICSA				@ICP-QC	QC		
4	ICSAB				@ICP-QC	QC		
5	SAMPLE	S95T001365	0	D	@ICP-D03	LIQUID	95000101	BY-108 (R)
	Analytes Requested: LI-D-01							
6	DUP	S95T001365	0	D	@ICP-D03	LIQUID		
7	SPK	S95T001365	0	D	@ICP-D03	LIQUID		
8	CCV				@ICP-QC	QC		
9	CCB				@ICP-QC	QC		
10	SAMPLE	S95T001659	0	D	@ICP-D03	LIQUID	95000105	BY-108 (R)
	Analytes Requested: LI-D-01							
11	DUP	S95T001659	0	D	@ICP-D03	LIQUID		
12	SPK	S95T001659	0	D	@ICP-D03	LIQUID		
13	ICSA				@ICP-QC	QC		
14	ICSAB				@ICP-QC	QC		
15	CCV				@ICP-QC	QC		
16	CCB				@ICP-QC	QC		

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2107

S Type	Sample#	R	A	Test	Matrix	Group#	Project

Final page for worklist # 2107

JK Lato 09-08-95
Analyst Signature Date

[signature] 9/12/95
Analyst Signature Date
worklist reviewed.

595T001365_L, 4-4-2-8, DF 10
595T001365 4-4 2
595T001365_D 4-4 2
595T001365_Q 4-4 2

~~595T001659 Direct, DF 1~~ JK 9-8-95.
~~595T001659_D Direct, 1~~ JK 9-8-95 JK 9-8-95
~~595T001659_Q 8ml sample + 2ml SSTS, DF 1.25~~ JK 9-8-95

595T001659_L, 5-10-2-8, DF 105
595T001659 5-10 21
595T001659_D 5-10 21
595T001659_Q 5-10 21, .5ml ~~SST~~ sample + 8ml HNO_3 + 2ml SSTS
JK 9-8-95

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

File: 950908B

Identity 1: ICV Identity 2: Quality Control 12:07 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	4.925	4.943	4.951	4.675	4.948	4.997	5.074	5.024
S.D.	0.008	0.011	0.016	0.011	0.012	0.010	0.012	0.039
% R.S.D.	0.163	0.231	0.320	0.238	0.243	0.192	0.244	0.781

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.008	4.995	4.982	5.025	4.778	5.029	5.074	9.534
S.D.	0.006	0.002	0.005	0.017	0.007	0.009	0.014	0.009
% R.S.D.	0.113	0.049	0.108	0.331	0.152	0.187	0.286	0.090

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	4.988	4.992	4.967	5.148	5.004	4.906	5.073	4.957
S.D.	0.027	0.013	0.011	0.205	0.057	0.005	0.009	0.039
% R.S.D.	0.546	0.260	0.227	3.979	1.140	0.112	0.184	0.781

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.057	4.857	4.865	4.935	4.861	5.018	5.022	5.007
S.D.	0.018	0.032	0.005	0.044	0.008	0.006	0.007	0.030
% R.S.D.	0.352	0.656	0.094	0.895	0.174	0.115	0.147	0.606

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.003	4.754	4.969	5.165	4.743
S.D.	0.004	0.048	0.003	0.009	0.019
% R.S.D.	0.073	1.010	0.058	0.171	0.396

DK Lo
09-08-95
LMCS ✓
BY-108 R 595T001365 Direct
595T001659

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 541 TO 560.

Identity 1: ICB Identity 2: Quality Control 12:12 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.002	-0.000	-0.007	-0.001	-0.013	-0.000	-0.001	-0.000
S.D.	0.001	0.000	0.009	0.001	0.003	0.003	0.000	0.000
% R.S.D.	40.340	34.641	115.174	184.772	24.567	43637893.639	8.325	71.644

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.001	0.002	0.002	-0.000	-0.001	0.004	0.056
S.D.	0.001	0.002	0.003	0.002	0.000	0.001	0.003	0.030
% R.S.D.	53.455	246.924	186.289	98.972	1430.423	126.667	84.843	53.205

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.010	0.020	-0.000	-0.012	0.005	-0.000	0.002	-0.009
S.D.	0.002	0.004	0.000	0.012	0.005	0.000	0.003	0.003
% R.S.D.	15.660	20.164	29.344	100.292	102.270	173.204	164.285	37.113

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.010	-0.001	-0.005	0.001	-0.001	0.003	0.092
S.D.	0.000	0.008	0.000	0.007	0.000	0.001	0.000	0.011
% R.S.D.	37.118	88.504	58.279	146.052	12.226	81.074	8.122	12.424

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.001	-0.001	0.000	-0.051
S.D.	0.000	0.021	0.001	0.000	0.008
% R.S.D.	57.798	3607.049	81.554	158.490	15.776

Identity 1: ICSA Identity 2: Quality Control 12:15 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.011	0.001	-0.029	0.010	202.638	-0.002	0.003	-0.001
S.D.	0.001	0.000	0.008	0.001	0.375	0.003	0.000	0.000
% R.S.D.	5.291	0.000	27.690	10.124	0.185	144.604	10.009	24.945

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.020	0.007	0.004	97.674	101.827	-0.006	-0.012	0.079
S.D.	0.000	0.000	0.002	0.120	0.212	0.001	0.006	0.029
% R.S.D.	1.050	5.941	45.162	0.123	0.208	11.757	51.005	37.281

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.006	0.044	0.004	0.043	-0.006	101.385	-0.028	188.450
S.D.	0.007	0.004	0.000	0.007	0.007	0.106	0.002	0.942
% R.S.D.	117.142	9.874	2.464	15.978	117.077	0.104	7.249	0.500

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	-0.025	0.003	0.006	0.001	0.001	0.016	0.061
S.D.	0.001	0.009	0.000	0.016	0.000	0.000	0.000	0.020
% R.S.D.	39.668	34.664	2.330	240.897	16.093	41.299	2.033	32.761

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.007	0.064	0.000	0.002	-0.077
S.D.	0.001	0.029	0.001	0.000	0.017
% R.S.D.	9.522	44.425	257.309	4.988	22.362

Identity 1: ICSAB Identity 2: Quality Control 12:19 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00 WHC-SD-WM-DP-145, REV. 1
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.006	0.001	-0.044	0.007	200.418	0.486	0.503	0.947
S.D.	0.001	0.000	0.002	0.002	0.228	0.004	0.001	0.004
% R.S.D.	9.879	8.381	5.361	25.703	0.114	0.859	0.179	0.376

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.961	0.969	0.006	97.676	101.936	0.492	-0.015	0.083
S.D.	0.002	0.000	0.001	0.144	0.017	0.001	0.006	0.030
% R.S.D.	0.181	0.034	11.214	0.148	0.016	0.223	40.592	36.543

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.023	0.049	0.502	0.041	-0.011	99.359	-0.012	186.229
S.D.	0.007	0.007	0.000	0.007	0.019	0.139	0.006	0.608
% R.S.D.	29.064	14.529	0.085	17.038	182.466	0.140	49.967	0.327

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	0.006	0.995	0.978	0.001	0.986	0.016	0.021
S.D.	0.001	0.025	0.002	0.009	0.000	0.003	0.001	0.023
% R.S.D.	107.988	387.981	0.200	0.943	23.205	0.344	6.374	107.493

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.501	0.020	0.484	0.495	-0.031
S.D.	0.001	0.014	0.001	0.001	0.013
% R.S.D.	0.184	68.004	0.230	0.270	41.009

Identity 1: S95T001365_L Identity 2: 4-4-2-8 ml 12:25 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 10.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.033	0.002	-0.116	2.878	73.355	0.009	0.013	0.042
S.D.	0.004	0.000	0.070	0.015	0.064	0.016	0.003	0.002
% R.S.D.	11.912	14.434	59.965	0.514	0.087	171.972	23.589	3.773

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.029	0.032	0.008	0.085	0.030	7.494	0.086	0.980
S.D.	0.004	0.017	0.007	0.009	0.001	0.024	0.014	0.077
% R.S.D.	12.643	55.018	82.067	10.343	4.013	0.317	16.679	7.860

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.031	0.224	-0.001	4.958	1.316	0.051	-0.047	355.348
S.D.	0.036	0.033	0.001	0.406	0.088	0.001	0.007	1.645
% R.S.D.	114.998	14.519	147.661	8.185	6.662	1.804	13.972	0.463

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.083	0.006	0.002	0.202	0.011	0.012	0.412	12.841
S.D.	0.005	0.025	0.002	0.098	0.004	0.005	0.015	0.052
% R.S.D.	6.322	439.137	68.502	48.220	32.434	40.053	3.615	0.408

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.008	0.409	0.001	-0.001	-0.394
S.D.	0.003	0.037	0.005	0.001	0.047
% R.S.D.	38.606	9.054	480.957	95.470	11.867

Identity 1: S95I001365 Identity 2: 4-4 ml 12:30 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 2.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.004	0.002	-0.035	2.837	75.325	0.004	0.007	0.043
S.D.	0.000	0.000	0.024	0.017	0.025	0.003	0.000	0.000
% R.S.D.	12.171	4.839	68.835	0.591	0.033	85.331	6.233	0.965

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.003	0.006	0.002	0.044	0.020	7.739	-0.029	0.298
S.D.	0.000	0.002	0.001	0.005	0.000	0.021	0.007	0.005
% R.S.D.	14.261	37.513	79.374	11.095	1.059	0.268	25.876	1.585

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.044	0.023	-0.001	5.076	1.259	0.036	-0.019	350.177
S.D.	0.011	0.006	0.000	0.102	0.033	0.000	0.005	1.447
% R.S.D.	26.010	26.633	49.036	2.007	2.640	1.340	27.075	0.413

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.097	-0.137	-0.002	-0.010	0.000	0.001	0.415	12.691
S.D.	0.002	0.030	0.001	0.004	0.000	0.001	0.002	0.049
% R.S.D.	1.752	21.809	35.153	42.759	61.171	132.155	0.513	0.387

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.004	0.095	-0.000	0.001	-0.052
S.D.	0.000	0.061	0.001	0.000	0.015
% R.S.D.	0.008	63.989	646.109	47.488	28.592

Identity 1: S95T001365_D Identity 2: 4-4 ml 12:33 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 2.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.007	0.002	-0.008	2.770	74.772	-0.009	0.006	0.042
S.D.	0.002	0.000	0.014	0.002	0.093	0.003	0.001	0.000
% R.S.D.	29.045	9.547	176.175	0.068	0.125	34.849	8.995	0.870

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.009	0.010	0.005	0.039	-0.077	7.707	0.001	0.470
S.D.	0.000	0.004	0.004	0.005	0.000	0.018	0.011	0.084
% R.S.D.	5.418	45.995	83.281	13.463	0.386	0.231	1021.351	17.852

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.041	0.044	-0.000	4.634	1.173	0.014	-0.005	347.067
S.D.	0.022	0.020	0.000	0.450	0.058	0.000	0.004	0.695
% R.S.D.	53.573	44.499	66.682	9.708	4.948	1.312	83.023	0.200

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.105	-0.129	0.000	0.031	0.001	-0.002	0.410	12.524
S.D.	0.002	0.039	0.001	0.005	0.001	0.000	0.002	0.011
% R.S.D.	1.772	29.892	2260.232	17.740	67.127	13.308	0.590	0.088

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.003	-0.027	-0.002	0.000	-0.117
S.D.	0.000	0.036	0.001	0.000	0.059
% R.S.D.	8.950	131.719	33.233	86.626	50.335

Identity 1: S95T001365_A Identity 2: 4-4 ml 12:37 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 2.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	2.507	2.537	2.493	5.351	76.921	2.529	2.611	2.540
S.D.	0.002	0.005	0.041	0.006	0.065	0.000	0.003	0.012
% R.S.D.	0.096	0.181	1.656	0.117	0.084	0.000	0.125	0.489

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	2.505	2.537	2.535	2.572	2.315	10.106	2.580	5.462
S.D.	0.003	0.013	0.005	0.027	0.002	0.014	0.029	0.024
% R.S.D.	0.116	0.519	0.193	1.054	0.105	0.135	1.128	0.438

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	2.508	2.563	2.548	7.485	3.722	2.474	2.577	350.870
S.D.	0.008	0.001	0.004	0.153	0.038	0.003	0.019	1.662
% R.S.D.	0.307	0.054	0.170	2.049	1.030	0.133	0.724	0.474

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	2.654	2.377	1.904	2.518	2.482	2.529	2.911	14.852
S.D.	0.006	0.014	0.002	0.066	0.004	0.006	0.008	0.111
% R.S.D.	0.226	0.603	0.096	2.630	0.164	0.246	0.268	0.749

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	2.541	2.335	2.520	2.605	2.345
S.D.	0.003	0.093	0.003	0.003	0.023
% R.S.D.	0.112	4.000	0.117	0.111	0.985

Identity 1: CCV Identity 2: Quality Control 12:46 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	4.927	4.942	4.963	4.696	4.961	5.016	5.080	5.069
S.D.	0.013	0.011	0.016	0.009	0.008	0.006	0.007	0.017
% R.S.D.	0.263	0.223	0.319	0.182	0.167	0.114	0.128	0.339

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.039	5.005	4.982	5.051	4.775	5.045	5.082	9.481
S.D.	0.017	0.018	0.017	0.007	0.013	0.019	0.012	0.034
% R.S.D.	0.333	0.355	0.343	0.139	0.277	0.378	0.231	0.363

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	4.983	4.992	4.964	4.994	4.953	4.926	5.058	5.027
S.D.	0.017	0.008	0.011	0.133	0.063	0.014	0.015	0.022
% R.S.D.	0.336	0.163	0.218	2.670	1.281	0.278	0.296	0.444

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.063	4.841	4.897	4.933	4.863	5.033	5.049	5.121
S.D.	0.015	0.022	0.012	0.026	0.013	0.020	0.009	0.030
% R.S.D.	0.295	0.458	0.242	0.527	0.269	0.395	0.179	0.592

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.014	4.638	4.977	5.166	4.789
S.D.	0.013	0.026	0.015	0.011	0.006
% R.S.D.	0.267	0.570	0.295	0.211	0.117

Identity 1: CCB Identity 2: Quality Control 12:50 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.003	-0.000	0.001	0.004	-0.008	-0.005	-0.001	-0.001
S.D.	0.001	0.000	0.002	0.001	0.002	0.002	0.000	0.000
% R.S.D.	15.540	0.000	130.460	30.126	18.218	34.641	46.788	8.461

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	0.001	0.002	0.000	0.001	-0.004	0.000	0.099
S.D.	0.000	0.000	0.002	0.002	0.000	0.001	0.003	0.024
% R.S.D.	67.330	58.038	98.329	469.197	49.262	18.534	1035.392	23.961

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.016	0.022	-0.000	0.000	-0.005	-0.000	-0.006	0.001
S.D.	0.005	0.004	0.000	0.012	0.002	0.000	0.004	0.002
% R.S.D.	32.900	18.289	26.391	3548.499	37.799	28.867	59.183	299.516

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.000	-0.006	0.007	-0.008	0.001	0.000	0.001	-0.000
S.D.	0.001	0.007	0.000	0.003	0.000	0.000	0.000	0.010
% R.S.D.	252.303	123.806	2.510	35.568	20.724	458.246	12.999	319170.766

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	0.022	-0.002	-0.000	-0.051
S.D.	0.000	0.012	0.001	0.000	0.009
% R.S.D.	60.146	54.680	25.990	44.635	18.579

Identity 1: zzz Identity 2: zzz 12:55 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.000	0.038	0.002	0.883	-0.012	-0.000	0.004	-16.246
S.D.	0.000	0.000	0.001	0.002	0.006	0.003	0.001	0.000
% R.S.D.	352.761	0.222	43.176	0.228	49.121	59650.441	14.708	0.000

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.116	0.095	0.047	0.001	4.063	-0.004	0.008	-0.035
S.D.	0.010	0.002	0.002	0.002	0.016	0.001	0.002	0.034
% R.S.D.	8.303	1.824	5.162	188.267	0.400	22.303	29.154	97.228

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.093	0.023	0.125	0.018	2.396	0.488	0.001	9.713
S.D.	0.006	0.006	0.001	0.004	0.053	0.000	0.001	0.854
% R.S.D.	6.567	24.252	0.457	20.853	2.206	0.050	178.725	8.790

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.032	0.050	0.013	0.016	-0.000	0.031	0.016	21.160
S.D.	0.001	0.007	0.006	0.012	0.001	0.000	0.000	3.544
% R.S.D.	2.208	13.665	42.590	75.636	122.289	1.313	1.788	16.749

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.125	0.033	-0.001	-0.000	-0.037
S.D.	0.002	0.016	0.001	0.000	0.014
% R.S.D.	1.972	47.717	92.033	49.940	37.266

Identity 1: zzz Identity 2: zzz 1:00 PM September 8, 1995

Task name : OPTIMA

WHC-SD-WM-DP-145, REV. 1

Sample Weight : 1.0000 Solution Volume : 1.00

On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.003	0.000	0.001	0.015	-0.009	-0.000	0.000	18.200
S.D.	0.001	0.000	0.004	0.001	0.004	0.003	0.000	0.187
% R.S.D.	31.429	23.094	326.533	7.239	47.012	5371600.745	137.249	1.025

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.007	0.000	0.001	-0.000	0.051	0.000	-0.006	0.083
S.D.	0.001	0.002	0.002	0.002	0.000	0.001	0.004	0.024
% R.S.D.	9.867	673.769	195.038	821.507	0.231	431.423	60.532	29.184

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.010	0.001	0.001	0.011	0.043	0.006	-0.001	0.260
S.D.	0.008	0.005	0.000	0.014	0.003	0.000	0.002	0.006
% R.S.D.	75.412	660.000	15.213	126.917	6.458	1.604	413.875	2.364

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	0.003	-0.000	0.016	0.001	0.001	0.001	0.807
S.D.	0.000	0.007	0.001	0.007	0.001	0.000	0.000	0.027
% R.S.D.	6.931	226.424	291.091	42.884	52.598	26.663	52.139	3.370

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.002	0.011	-0.000	-0.000	-0.056
S.D.	0.000	0.035	0.000	0.000	0.014
% R.S.D.	8.441	306.220	800.197	67.649	25.418

Identity 1: S95T001659_L Identity 2: .5-10-2-8 ml 1:11 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 105.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.072	0.040	-1.035	1.275	-0.956	0.383	0.061	1781.870
S.D.	0.041	0.003	0.106	0.221	0.550	0.439	0.034	6.347
% R.S.D.	57.464	8.248	10.283	17.296	57.562	114.566	55.979	0.356

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.575	0.022	-0.081	-0.052	5.198	-0.048	1.001	2.626
S.D.	0.025	0.076	0.072	0.111	0.031	0.071	0.968	0.998
% R.S.D.	4.328	337.649	88.075	213.028	0.591	146.642	96.720	38.013

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.068	0.316	0.115	0.294	4.084	0.646	-1.207	14.914
S.D.	0.550	0.289	0.009	0.984	0.210	0.010	0.625	0.000
% R.S.D.	812.480	91.241	7.823	334.833	5.135	1.493	51.805	0.000

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.156	-2.356	0.074	0.933	0.001	-0.008	-0.028	35.639
S.D.	0.067	1.370	0.016	0.533	0.016	0.088	0.074	0.126
% R.S.D.	42.963	58.144	21.305	57.160	1636.770	1055.332	261.600	0.354

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.213	3.722	-0.041	0.033	0.616
S.D.	0.000	1.431	0.065	0.011	1.419
% R.S.D.	0.013	38.461	160.256	33.899	230.475

Identity 1: S95T001659 Identity 2: .5-10 ml 1:15 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 21.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.039	0.037	-0.044	0.856	-0.227	0.019	0.010	1682.563
S.D.	0.007	0.000	0.097	0.038	0.059	0.033	0.006	12.124
% R.S.D.	17.356	0.000	219.099	4.392	25.940	173.254	56.947	0.721

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.332	0.016	0.074	0.044	5.074	-0.040	-0.133	0.941
S.D.	0.003	0.013	0.025	0.046	0.011	0.020	0.006	0.519
% R.S.D.	0.761	76.681	33.412	106.064	0.227	50.133	4.423	55.182

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.000	0.269	0.121	-0.077	2.885	0.550	-0.044	8.052
S.D.	0.034	0.077	0.003	0.330	0.237	0.004	0.030	0.046
% R.S.D.	8520.102	28.745	2.109	429.365	8.215	0.701	68.162	0.575

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.007	-0.909	-0.012	0.311	0.007	0.063	0.025	11.952
S.D.	0.031	0.157	0.007	0.068	0.001	0.003	0.019	0.166
% R.S.D.	453.664	17.244	53.883	21.774	21.003	4.543	76.822	1.385

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.130	0.574	-0.011	-0.004	-0.971
S.D.	0.006	0.395	0.004	0.004	0.137
% R.S.D.	4.364	68.890	36.582	104.905	14.096

Identity 1: S95T001659_D Identity 2: .5-10 ml 1:19 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 21.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-CD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.087	0.034	0.085	0.977	-0.401	-0.019	-0.012	1669.951
S.D.	0.009	0.002	0.191	0.073	0.105	0.033	0.004	15.721
% R.S.D.	10.246	6.742	225.663	7.491	26.151	173.156	34.038	0.941

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.331	0.155	0.149	-0.010	4.336	-0.029	-0.171	3.075
S.D.	0.017	0.020	0.025	0.035	0.013	0.006	0.128	0.692
% R.S.D.	5.286	12.571	16.734	360.737	0.306	20.460	74.959	22.504

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.208	0.582	0.119	-0.281	3.064	0.554	0.055	7.878
S.D.	0.127	0.109	0.002	0.225	0.095	0.002	0.074	0.070
% R.S.D.	60.927	18.756	1.797	80.099	3.094	0.348	134.611	0.882

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.032	-0.345	-0.036	0.300	0.024	0.042	0.046	12.259
S.D.	0.012	0.225	0.013	0.234	0.008	0.012	0.033	0.197
% R.S.D.	36.739	65.270	34.938	77.865	33.474	27.724	70.967	1.609

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.140	0.999	-0.040	-0.007	-1.116
S.D.	0.003	0.684	0.013	0.000	0.431
% R.S.D.	2.330	68.429	32.858	1.194	38.619

Identity 1: S95T001659_A Identity 2: .5-10 ml 1:22 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 21.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	20.090	20.202	19.406	20.224	19.713	19.929	20.616	1708.738
S.D.	0.011	0.043	0.200	0.045	0.058	0.033	0.056	3.711
% R.S.D.	0.057	0.215	1.029	0.220	0.293	0.167	0.269	0.217

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	20.126	20.234	20.342	20.181	23.584	20.330	20.182	40.185
S.D.	0.016	0.050	0.049	0.196	0.056	0.042	0.222	0.806
% R.S.D.	0.078	0.248	0.241	0.973	0.236	0.205	1.098	2.005

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	19.729	20.594	20.273	19.934	22.554	20.083	19.938	27.200
S.D.	0.222	0.086	0.049	0.594	0.361	0.015	0.131	0.061
% R.S.D.	1.127	0.418	0.240	2.981	1.601	0.077	0.658	0.225

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	19.973	18.972	17.197	20.467	19.705	19.983	19.865	29.797
S.D.	0.070	0.370	0.028	0.235	0.042	0.054	0.102	0.547
% R.S.D.	0.348	1.950	0.162	1.150	0.212	0.268	0.515	1.835

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	20.262	17.365	20.005	20.499	17.763
S.D.	0.017	0.800	0.024	0.025	0.308
% R.S.D.	0.084	4.607	0.122	0.122	1.734

Identity 1: ICSA Identity 2: Quality Control 1:28 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00 WHC-SD-WM-DP-145, REV. 1
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.009	0.001	-0.026	0.007	200.218	0.006	0.003	0.001
S.D.	0.000	0.000	0.010	0.001	0.525	0.003	0.000	0.000
% R.S.D.	1.177	3.896	36.717	20.775	0.262	42.766	4.594	26.729

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.020	0.005	0.002	96.558	100.605	-0.002	-0.010	0.030
S.D.	0.001	0.002	0.001	0.154	0.296	0.000	0.008	0.024
% R.S.D.	2.719	33.372	55.238	0.160	0.294	19.482	81.856	80.994

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.001	0.030	0.004	0.027	-0.015	97.811	-0.002	188.870
S.D.	0.007	0.005	0.000	0.010	0.010	0.249	0.002	0.817
% R.S.D.	689.690	17.756	3.876	38.570	70.510	0.254	117.881	0.432

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.045	0.030	0.011	0.000	0.002	0.013	0.269
S.D.	0.000	0.014	0.002	0.003	0.000	0.001	0.002	0.014
% R.S.D.	42.854	32.383	6.959	26.615	11.987	37.065	14.821	5.148

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.006	0.023	-0.002	0.002	-0.021
S.D.	0.000	0.006	0.001	0.000	0.015
% R.S.D.	6.372	26.561	45.671	0.165	70.691

Identity 1: ICSAB Identity 2: Quality Control 1:31 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-145, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.006	0.001	-0.043	0.004	201.292	0.485	0.503	0.966
S.D.	0.001	0.000	0.011	0.003	0.398	0.000	0.001	0.001
% R.S.D.	11.627	2.474	24.630	76.116	0.198	0.001	0.277	0.152

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.967	0.971	0.003	97.301	101.383	0.492	-0.013	0.038
S.D.	0.002	0.008	0.001	0.126	0.212	0.003	0.009	0.005
% R.S.D.	0.229	0.832	36.578	0.130	0.209	0.523	68.671	14.588

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.001	0.036	0.500	0.005	0.018	99.648	-0.015	188.454
S.D.	0.003	0.003	0.001	0.026	0.015	0.157	0.006	0.275
% R.S.D.	352.356	9.052	0.178	535.104	81.090	0.158	38.158	0.146

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	0.013	1.001	0.974	0.000	0.987	0.015	0.282
S.D.	0.002	0.004	0.001	0.019	0.000	0.002	0.001	0.011
% R.S.D.	35.942	32.005	0.113	1.939	90.669	0.205	3.419	4.074

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.500	0.022	0.482	0.494	-0.048
S.D.	0.001	0.009	0.001	0.001	0.007
% R.S.D.	0.154	40.644	0.246	0.150	13.692

Identity 1: CCV Identity 2: Quality Control 1:38 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	4.956	4.993	4.974	4.684	4.972	4.991	5.130	5.125
S.D.	0.010	0.007	0.012	0.004	0.006	0.004	0.005	0.013
% R.S.D.	0.192	0.147	0.231	0.092	0.129	0.084	0.092	0.249

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	4.984	4.988	5.012	5.041	4.809	5.011	5.167	9.688
S.D.	0.006	0.010	0.006	0.021	0.007	0.014	0.007	0.034
% R.S.D.	0.111	0.196	0.124	0.408	0.136	0.286	0.130	0.348

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.012	5.068	5.023	4.986	4.930	4.899	5.063	5.089
S.D.	0.018	0.013	0.006	0.189	0.092	0.008	0.021	0.019
% R.S.D.	0.354	0.250	0.128	3.786	1.874	0.160	0.424	0.365

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.052	4.849	4.853	4.912	4.882	5.015	5.042	5.225
S.D.	0.015	0.017	0.004	0.016	0.007	0.007	0.011	0.022
% R.S.D.	0.294	0.354	0.089	0.328	0.144	0.138	0.222	0.430

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	4.993	4.700	4.975	5.189	4.731
S.D.	0.008	0.069	0.008	0.009	0.011
% R.S.D.	0.156	1.466	0.153	0.170	0.241

Identity 1: CCB Identity 2: Quality Control 1:42 PM September 8, 1995
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00 WHO-SD-KIM-DP-145, REV. 1
On-Peak Integrations : 3 Off-Peak Integrations : 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.001	-0.000	0.002	0.002	-0.001	-0.000	-0.000	0.000
S.D.	0.000	0.000	0.012	0.001	0.003	0.003	0.000	0.000
% R.S.D.	7.863	42.857	726.981	64.001	185.401	15937953.685	26.399	51.374

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	0.001	-0.001	0.001	0.000	-0.002	-0.000	0.069
S.D.	0.001	0.001	0.001	0.002	0.000	0.001	0.006	0.016
% R.S.D.	177.453	53.168	181.258	121.094	29.178	60.282	1395.398	23.725

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.014	0.014	-0.000	-0.027	0.004	-0.000	-0.007	0.042
S.D.	0.006	0.003	0.000	0.006	0.006	0.000	0.003	0.003
% R.S.D.	39.817	24.211	39.068	24.017	152.418	28791027.376	37.325	6.944

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.001	-0.001	0.006	0.010	0.001	-0.001	0.001	0.112
S.D.	0.002	0.003	0.001	0.008	0.000	0.001	0.001	0.004
% R.S.D.	160.577	271.271	14.593	76.749	14.740	60.232	64.602	3.227

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	0.053	-0.002	-0.000	-0.046
S.D.	0.001	0.017	0.000	0.000	0.008
% R.S.D.	194444.563	32.091	4.467	70.617	16.714

07-08-95

LABCORE Data Entry Template for Worklist# 2097

Analyst: JK Sato **Instrument:** ICP01 JK 8-28-95 **Book#** 46848

Method: LA-505-~~151~~/161 8-28-95 JK **Rev/Mod** B-0

Worklist Comment: ICP BY-108R (Acid Digest)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	ICSA				@ICP-QC	QC		
4	ICSAB				@ICP-QC	QC		
5	PREPSTDTJA				@ICP-A01	SOLID		
6	PREPBLKTJA				@ICP-A01	SOLID		
7	SAMPLE	S95T001483	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
8	DUP	S95T001483	0	A	@ICP-A01	SOLID		
9	SPK-PREDIG	S95T001483	0	A	@ICP-A01	SOLID		
10	SAMPLE	S95T001484	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
11	DUP	S95T001484	0	A	@ICP-A01	SOLID		
12	CCV				@ICP-QC	QC		
13	CCB				@ICP-QC	QC		
14	SAMPLE	S95T001485	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
15	DUP	S95T001485	0	A	@ICP-A01	SOLID		
16	SAMPLE	S95T001486	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
17	DUP	S95T001486	0	A	@ICP-A01	SOLID		

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2097

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
18	ICSA				@ICP-QC	QC		
19	ICSAB				@ICP-QC	QC		
20	CCV				@ICP-QC	QC		
21	CCB				@ICP-QC	QC		

Final page for worklist # 2097

JK [illegible] 08-28-95
Analyst Signature Date

Reviewed & Validated by:
Samuel M. Parry 08/31/95
Analyst Signature Date

PrepSYSTJa 5 ml each, WHC 1a & 2, in 100 ml
PrepblkTJa 100 ml

595T001483_L, 1.0240g → 100 ml, (100 x 25)/1.0240 = 2441.4
595T001483 1.0240g → 100 (100 x 5)/1.024 = 488.3
595T001483_D 1.0090g → 100 (100 x 5)/1.0090 = 495.5
595T001483_S 1.0870g → 100 (100 x 5)/1.0870 = 460.0

595T001484_L, 1.0330g → 100 ml, (100 x 25)/1.0330 = 2420.1
595T001484 1.0330g → 100 (100 x 5)/1.0330 = 484.0
595T001484_D 1.0320g → 100 (100 x 5)/1.0320 = 484.5

595T001485_L, 1.0050g → 100 ml, (100 x 25)/1.0050 = 2487.6
595T001485 1.0050g → 100 (100 x 5)/1.0050 = 497.5
595T001485_D 1.0410g → 100 (100 x 5)/1.0410 = 480.3

595T001486_L, 1.0400g → 100 ml, (100 x 25)/1.0400 = 2403.8
595T001486 1.0400g → 100 (100 x 5)/1.0400 = 480.8
595T001486_D 1.0800g → 100 (100 x 5)/1.0800 = 463.0
595T001486_S 1.0346g → 100 (100 x 5)/1.0346 = 483.3

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	950828A	ICP2	08/28/95	12:34	DKS	Q	CONC
2	ICB	950828A	ICP2	08/28/95	12:37	DKS	Q	CONC
3	ICSA	950828A	ICP2	08/28/95	12:40	DKS	Q	CONC
4	ICSAB	950828A	ICP2	08/28/95	12:43	DKS	Q	CONC
5	PREPSTDTJA	950828A	ICP2	08/28/95	12:49	DKS	S	CONC
6	PREPBLKTJA	950828A	ICP2	08/28/95	12:54	DKS	S	CONC
7	S95T001483_L	950828A	ICP2	08/28/95	12:59	DKS	S	CONC
8	S95T001483	950828A	ICP2	08/28/95	13:03	DKS	S	CONC
9	S95T001483_D	950828A	ICP2	08/28/95	13:07	DKS	S	CONC
10	S95T001483_S	950828A	ICP2	08/28/95	13:11	DKS	S	CONC
11	CCV	950828A	ICP2	08/28/95	13:17	DKS	Q	CONC
12	CCB 8-28-95	950828A	ICP2	08/28/95	13:22	DKS	Q	CONC
13	S95T001484-1_L	950828A	ICP2	08/28/95	13:26	DKS	S	CONC
14	S95T001484	950828A	ICP2	08/28/95	13:32	DKS	S	CONC
15	S95T001484_D	950828A	ICP2	08/28/95	13:36	DKS	S	CONC
16	S95T001485_L	950828A	ICP2	08/28/95	13:42	DKS	S	CONC
17	S95T001485	950828A	ICP2	08/28/95	13:46	DKS	S	CONC
18	S95T001485_D	950828A	ICP2	08/28/95	13:49	DKS	S	CONC
19	CCV_1	950828A	ICP2	08/28/95	13:57	DKS	Q	CONC
20	CCB_1	950828A	ICP2	08/28/95	14:01	DKS	Q	CONC
21	S95T001486_L	950828A	ICP2	08/28/95	14:05	DKS	S	CONC
22	S95T001486	950828A	ICP2	08/28/95	14:09	DKS	S	CONC
23	S95T001486_D	950828A	ICP2	08/28/95	14:12	DKS	S	CONC
24	S95T001486_S	950828A	ICP2	08/28/95	14:16	DKS	S	CONC
25	ICSA	950828A	ICP2	08/28/95	14:22	DKS	Q	CONC
26	ICSAB	950828A	ICP2	08/28/95	14:26	DKS	Q	CONC
27	CCV_2	950828A	ICP2	08/28/95	14:35	DKS	Q	CONC
28	CCB_2	950828A	ICP2	08/28/95	14:39	DKS	Q	CONC

DK 8-28-95

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08-28-95

BY-108 S95T001483
S95T001484
S95T001485

Worklist # 2097

WHC-SD-WM-DP-145, REV. 1

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 563 TO 568.

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.964	5.050	5.226	5.069	5.105	5.269
2	ICB	.0012	.0073	.0055	.0014	-.0001	.0002
3	ICSA	-.0006	251.2	-.0199	-.0023	.0018	.0002
4	ICSAB	.9591	247.0	-.0026	-.0038	.4703	.4830
5	PREPSTDTJA	.7852	5.131	4.597	4.987	4.549	4.948
6	PREPBLKTJA	.0004	.1509	.0214	.2668	.0005	.0001
7	S95T001483_L	-.2549	48120.	30.97	28.16	1.250	.1747
8	S95T001483	.6012	46790.	4.384	27.68	1.510	.2761
9	S95T001483_D	1.195	50090.	8.917	36.46	1.260	.2599
10	S95T001483_S	77.62	46250.	448.9	437.7	421.7	450.2
11	CCV	5.058	5.107	5.340	5.148	5.182	5.396
12	CCB	.0016	.0052	.0069	.0023	-.0000	-.0000
13	S95T001484_1_L	-.2882	39280.	17.42	14.64	1.656	.2533
14	S95T001484	.6911	38640.	2.705	5.960	1.785	.3014
15	S95T001484_D	.8143	34750.	-11.65	7.519	1.889	.2499
16	S95T001485_L	.7407	18610.	15.29	16.19	1.555	.1697
17	S95T001485	.3164	18300.	7.044	7.263	1.520	.2408
18	S95T001485_D	.8210	19770.	-.3485	7.039	1.672	.2495
19	CCV_1	5.033	5.089	5.293	5.120	5.146	5.353
20	CCB_1	.0014	-.0027	-.0046	.0046	-.0000	.0001
21	S95T001486_L	1.474	24110.	-9.402	10.36	20.76	.6152
22	S95T001486	.6721	23320.	.8248	11.60	20.00	.2834
23	S95T001486_D	.9566	23830.	-1.382	10.79	20.71	.2633
24	S95T001486_S	80.13	26040.	468.5	460.2	453.6	466.6
25	ICSA	.0016	250.0	.0051	-.0106	.0018	.0003
26	ICSAB	.9640	247.3	.0250	-.0004	.4692	.4868
27	CCV_2	4.954	5.023	5.264	5.071	5.085	5.305
28	CCB_2	.0011	-.0064	.0086	.0051	.0000	-.0001

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.072	5.200	5.181	5.125	5.157	5.214
2	ICB	-.0006	.0039	.0004	-.0025	.0023	.0013
3	ICSA	.0090	248.8	.0012	.0082	.0007	.0071
4	ICSAB	-.0088	251.2	.9565	.0132	.4750	.4872
5	PREPSTDTJA	4.386	4.731	4.509	4.594	4.611	4.590
6	PREPBLKTJA	-.0063	.1130	-.0007	-.0011	.0005	.0028
7	S95T001483_L	15.32	331.1	.2979	-10.06	1.095	132.9
8	S95T001483	15.32	205.1	.6433	.1141	4.380	126.0
9	S95T001483_D	12.26	121.0	.6879	2.368	3.919	111.3
10	S95T001483_S	437.1	607.8	439.0	429.5	444.8	552.4
11	CCV	5.189	5.433	5.329	5.196	5.281	5.355
12	CCB	.0096	.0042	.0003	.0026	.0007	.0007
13	S95T001484_1_L	5.651	253.8	.8954	-12.07	-.4050	129.0
14	S95T001484	-3.062	138.4	1.333	.0141	4.609	127.4
15	S95T001484_D	-.7228	125.6	1.108	-1.076	4.899	141.2
16	S95T001485_L	5.533	267.0	3.042	3.236	7.377	139.5
17	S95T001485	19.82	140.7	.6269	.1610	6.382	134.4
18	S95T001485_D	7.687	133.4	.5055	2.475	5.335	146.6
19	CCV_1	5.080	5.382	5.270	5.168	5.244	5.311
20	CCB_1	-.0019	.0033	-.0002	-.0058	-.0016	-.0001
21	S95T001486_L	70.54	1063.	1.741	.0233	15.63	273.6

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#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
22	S95T001486	79.97	895.4	1.282	-2.249	16.05	258.8
23	S95T001486_D	67.47	885.0	.7323	-2.304	15.71	261.8
24	S95T001486_S	497.0	1432.	459.1	440.6	472.8	741.6
25	ICSA	-.0014	256.2	.0012	.0194	.0009	.0062
26	ICSAB	-.0287	255.4	.9632	.0177	.4779	.4926
27	CCV_2	5.099	5.343	5.202	5.097	5.169	5.240
28	CCB_2	-.0126	.0047	.0007	.0007	-.0022	.0009

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	5.188	.0073	5.195	5.187	5.125	5.040
2	ICB	.0004	.0011	.0003	.0009	-.0004	.0013
3	ICSA	-.0095	-.0078	94.15	.1316	-.0037	.0032
4	ICSAB	.4787	-.0141	93.55	.4115	-.0034	.9774
5	PREPSTDTJA	4.497	.0058	4.586	4.370	4.614	4.437
6	PREPBLKTJA	.0029	-.0007	.0473	.0929	-.0003	.0003
7	S95T001483_L	6.937	3.500	396.7	1557.	-1.542	22.38
8	S95T001483	5.067	.9856	389.4	1224.	-.0654	18.42
9	S95T001483_D	4.939	1.234	305.3	1091.	.2118	17.60
10	S95T001483_S	427.5	1.369	764.7	1537.	435.5	434.3
11	CCV	5.263	.0076	5.329	5.083	5.195	5.041
12	CCB	.0006	.0014	.0010	.0952	.0011	.0014
13	S95T001484_L	2.806	3.077	463.5	1588.	-.3816	5.547
14	S95T001484	3.965	.9342	455.5	1122.	.3141	3.282
15	S95T001484_D	4.366	.8775	450.3	1275.	-.1245	3.378
16	S95T001485_L	3.360	4.659	478.8	1747.	1.849	5.226
17	S95T001485	4.281	.6290	467.2	1327.	.4344	.9977
18	S95T001485_D	3.116	.8891	511.8	1380.	.4775	1.009
19	CCV_1	5.223	.0080	5.292	4.960	5.164	5.016
20	CCB_1	-.0005	.0017	.0006	.1931	-.0011	.0020
21	S95T001486_L	7.895	3.766	2917.	2077.	1.794	4.591
22	S95T001486	4.026	1.308	2773.	1519.	1.560	1.515
23	S95T001486_D	3.362	1.289	2718.	1658.	1.763	1.415
24	S95T001486_S	389.9	2.091	2762.	2139.	449.5	425.6
25	ICSA	-.0093	-.0221	95.23	.2866	-.0038	.0042
26	ICSAB	.4776	-.0218	94.25	.3098	-.0026	.9705
27	CCV_2	5.177	.0077	5.215	4.929	5.108	5.019
28	CCB_2	.0004	.0018	.0011	.2630	.0007	.0018

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.042	5.088	5.199	5.039	5.230	5.149
2	ICB	.0038	.0004	.0012	.0081	.0020	.0095
3	ICSA	252.7	-.0063	-.0059	195.5	.0025	-.0141
4	ICSAB	249.7	.4534	-.0122	191.3	.0055	.9176
5	PREPSTDTJA	4.436	4.485	4.634	6.045	4.559	4.600
6	PREPBLKTJA	.0126	.0001	.0005	1.013	.0028	.0159
7	S95T001483_L	47.40	5.401	8.256	118000.	4.125	272.0
8	S95T001483	31.29	4.313	5.926	111900.	.9813	253.6
9	S95T001483_D	19.53	3.290	5.190	98740.	1.653	244.8
10	S95T001483_S	445.4	425.6	454.2	117600.	427.6	685.3
11	CCV	5.128	5.190	5.324	5.050	5.293	5.293

WHO-SD-WM-DP-145, REV.1

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
12	CCB	.0043	.0003	-.0025	.0120	.0031	.0085
13	S95T001484_L	3.364	4.101	5.402	172100.	-5.082	354.3
14	S95T001484	12.97	3.118	6.403	164800.	-.1748	337.9
15	S95T001484_D	18.10	3.016	4.956	162600.	.2408	359.4
16	S95T001485_L	19.91	3.690	3.090	190000.	3.217	483.5
17	S95T001485	16.44	2.660	6.079	183300.	1.703	447.4
18	S95T001485_D	12.82	2.811	5.720	180000.	.0770	469.1
19	CCV_1	5.105	5.148	5.289	5.012	5.264	5.261
20	CCB_1	-.0063	.0006	.0005	.0166	.0001	.0064
21	S95T001486_L	103.7	25.97	4.779	166100.	10.16	1654.
22	S95T001486	99.26	24.01	7.004	159200.	7.923	1551.
23	S95T001486_D	101.6	23.68	6.840	160100.	9.192	1553.
24	S95T001486_S	545.3	462.4	475.5	171600.	447.8	2109.
25	ICSA	253.4	-.0060	-.0109	191.6	.0031	-.0152
26	ICSAB	250.9	.4561	-.0108	190.0	.0037	.9341
27	CCV_2	5.039	5.072	5.221	5.004	5.216	5.178
28	CCB_2	.0031	.0005	-.0006	.0159	.0030	.0063

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.059	5.193	5.173	4.891	5.130	4.906
2	ICB	.0484	.0076	.0182	-.0002	.0441	.0096
3	ICSA	.2080	.0064	-.0262	.0032	.5797	.0186
4	ICSAB	.1350	.9943	-.0154	-.0028	.5977	.0183
5	PREPSTDTJA	4.478	4.478	4.553	4.285	4.577	9.478
6	PREPBLKTJA	.0719	-.0071	.0707	-.0081	.0291	.4413
7	S95T001483_L	4991.	26.93	1791.	-23.75	93.74	271.9
8	S95T001483	4877.	51.10	1708.	-1.391	33.40	239.3
9	S95T001483_D	3048.	57.00	1666.	-1.043	49.05	195.4
10	S95T001483_S	7353.	484.5	2143.	419.8	461.2	632.8
11	CCV	5.171	5.305	5.264	4.991	5.302	5.007
12	CCB	.0489	.0048	.0057	-.0044	.0350	.0096
13	S95T001484_L	3161.	44.35	4014.	-3.423	42.90	195.5
14	S95T001484	3061.	45.51	3964.	-2.197	-37.85	161.5
15	S95T001484_D	2670.	47.66	4312.	-1.819	-46.48	181.0
16	S95T001485_L	5205.	55.79	7164.	-9.867	-15.41	154.8
17	S95T001485	5085.	48.02	7074.	-2.646	-96.83	102.2
18	S95T001485_D	5103.	51.81	7589.	-4.137	-96.28	107.9
19	CCV_1	5.218	5.271	5.265	4.964	5.212	4.969
20	CCB_1	.0685	-.0146	.0105	-.0150	.0461	.0114
21	S95T001486_L	3076.	146.4	17830.	-8.569	22.26	851.2
22	S95T001486	2934.	162.8	17320.	-3.703	-62.88	785.1
23	S95T001486_D	2776.	138.1	16910.	2.024	-72.61	814.5
24	S95T001486_S	3189.	613.8	18680.	437.9	386.2	1367.
25	ICSA	.2316	.0129	-.0175	-.0100	.5889	.0143
26	ICSAB	.1691	.9979	-.0078	-.0078	.6105	.0167
27	CCV_2	5.212	5.167	5.230	4.912	5.188	4.904
28	CCB_2	.0733	.0066	.0158	.0009	.0528	.0112

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WHO-CD-WM-DP-145, REV.1

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.140	5.045	.0200	4.999	5.055	10.20
2	ICB	.0127	.0001	.0003	-.0002	-.0191	.0441
3	ICSA	-.0024	.0018	-.0070	.0004	.0574	-.0970
4	ICSAB	.0093	.0017	.0056	.0014	.0850	-.1049
5	PREPSTDTJA	4.626	4.544	.0209	4.491	4.434	9.216
6	PREPBLKTJA	-.0049	.0030	.0012	.0006	.0146	-.0274
7	S95T001483_L	39.19	5.422	-12.79	7.606	23.13	205.1
8	S95T001483	8.092	4.940	-2.110	8.063	5.220	107.5
9	S95T001483_D	10.81	4.613	-2.520	4.612	-8.642	115.4
10	S95T001483_S	436.5	433.5	-.1647	432.2	425.7	954.7
11	CCV	5.206	5.130	.0231	5.097	5.141	10.32
12	CCB	.0162	.0002	-.0014	-.0004	-.0195	.0509
13	S95T001484_L	35.63	10.78	-13.17	.5511	8.592	250.2
14	S95T001484	9.110	10.22	-.6934	2.108	-2.603	173.7
15	S95T001484_D	9.736	10.52	-5.097	2.211	4.928	178.9
16	S95T001485_L	54.91	30.87	1.679	.5933	-29.02	342.8
17	S95T001485	7.226	30.01	-.5791	.8309	.7675	179.8
18	S95T001485_D	9.885	31.35	-.1455	.8065	5.930	190.3
19	CCV_1	5.186	5.105	.0214	5.072	5.139	10.26
20	CCB_1	.0224	.0000	-.0071	-.0006	-.0024	.0761
21	S95T001486_L	36.57	1148.	4.176	7.981	28.82	2709.
22	S95T001486	8.754	1109.	2.349	8.932	7.684	2516.
23	S95T001486_D	8.492	1172.	.2187	9.842	13.54	2588.
24	S95T001486_S	452.0	1663.	5.483	452.3	440.8	3640.
25	ICSA	.0074	.0016	.0035	.0006	.0908	-.1329
26	ICSAB	.0100	.0017	.0034	.0008	.0653	-.1237
27	CCV_2	5.124	5.046	.0204	5.001	5.122	10.18
28	CCB_2	.0217	-.0003	-.0054	-.0002	.0011	.0738

#	Sample Name	V	Y	Zn	Zr
1	ICV	5.155	.0142	5.155	5.084
2	ICB	.0031	.0008	-.0010	.0017
3	ICSA	.0022	.0082	.0013	-.0023
4	ICSAB	.4763	.0086	.9847	-.0035
5	PREPSTDTJA	4.533	.0112	4.396	4.561
6	PREPBLKTJA	-.0003	-.0002	.0051	-.0001
7	S95T001483_L	15.81	2.296	41.58	5.688
8	S95T001483	10.20	.6124	22.24	1.863
9	S95T001483_D	7.556	.8157	21.35	2.348
10	S95T001483_S	440.6	1.587	459.4	203.5
11	CCV	5.276	.0149	5.276	5.175
12	CCB	.0034	.0009	-.0017	.0024
13	S95T001484_L	12.76	2.276	44.09	7.050
14	S95T001484	6.911	.6829	22.66	2.791
15	S95T001484_D	5.954	.7596	22.88	3.143
16	S95T001485_L	17.49	3.510	42.02	5.916
17	S95T001485	7.931	.6240	21.38	1.564
18	S95T001485_D	9.531	.6777	21.23	2.706
19	CCV_1	5.239	.0148	5.237	5.142
20	CCB_1	.0044	.0013	-.0018	.0031
21	S95T001486_L	10.48	4.711	106.8	11.50

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#	Sample Name	V	Y	Zn	Zr
22	S95T001486	3.261	2.337	86.78	10.21
23	S95T001486_D	2.758	2.395	26.85	11.04
24	S95T001486_S	453.2	3.751	486.3	463.2
25	ICSA	.0045	.0089	.0003	-.0016
26	ICSAB	.4811	.0091	.9908	-.0005
27	CCV_2	5.172	.0144	5.161	5.079
28	CCB_2	.0044	.0013	-.0020	.0029

8-28-95

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WHO-SD-WM DP-145, REV. 1

FILE # 0950907A

LABCORE Data Entry Template for Worklist# 2098

Analyst: B. GOECKE **Instrument:** ~~ICP01~~ ICP02 9-7-95 **Book#** 46B4B3

Method: LA-505-~~151~~ 161 9-7-95 Rev/Mod B-0

Worklist Comment: ICP BY-108R (Acid Digest)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	ICSA				@ICP-QC	QC		
4	ICSAB				@ICP-QC	QC		
5	PREPSTDTJA				@ICP-A01	SOLID		
6	PREPBLKTJA				@ICP-A01	SOLID		
7	SAMPLE	S95T001487	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested:				LI-A-01 , NI-A-01			
8	DUP	S95T001487	0	A	@ICP-A01	SOLID		
9	SAMPLE	S95T001488	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested:				LI-A-01 , NI-A-01			
10	DUP	S95T001488	0	A	@ICP-A01	SOLID		
11	CCV				@ICP-QC	QC		
12	CCB				@ICP-QC	QC		
13	SAMPLE	S95T001489	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested:				LI-A-01 , NI-A-01			
14	DUP	S95T001489	0	A	@ICP-A01	SOLID		
15	SPK-PREDIG	S95T001489	0	A	@ICP-A01	SOLID		
16	ICSA				@ICP-QC	QC		
17	ICSAB				@ICP-QC	QC		

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2098

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
18	CCV				@ICP-QC	QC		
19	CCB				@ICP-QC	QC		

Final page for worklist # 2098

Reviewed & Validated by:

Analyst Signature — Date: 9-7-95

Analyst Signature — Date: 09/11/95

		D.F.
PKL/STD TJA	5mL ea. (WHK-1A, WHK-2) in 100mL	1
PREP BLK TJA	100mL DI H2O	1
S95T001487_L	1.0010g in 100mL - 1mL-9mL-2mL-8mL	4995
S95T001487	1.0010g in 100mL - 1mL-9mL	999
S95T001487_D	1.0083g in 100mL - 1mL-9mL	992
~~S95T001487_A~~	~~1.0010g in 100mL~~	
S95T001488_L	1.0632g in 100mL - 1mL-9mL-2mL-8mL	4703
S95T001488	1.0632g in 100mL - 1mL-9mL	941
S95T001488_D	1.0789g in 100mL - 1mL-9mL	927
S95T001489_L	1.0289g in 100mL - 1mL-9mL-2mL-8mL	4860
S95T001489	1.0289g in 100mL - 1mL-9mL	972
S95T001489_D	1.0362g in 100mL - 1mL-9mL	965
S95T001489_S	1.0544g in 100mL - 1mL-9mL	948

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Analysis Report Summary Thu 09-07-95 11:56:50 AM page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	950907A	ICP2	09/07/95	10:10	BJG	Q	CONC
2	ICB	950907A	ICP2	09/07/95	10:16	BJG	Q	CONC
3	ICSA	950907A	ICP2	09/07/95	10:20	BJG	Q	CONC
4	ICSAB	950907A	ICP2	09/07/95	10:24	BJG	Q	CONC
5	PREPSTDTJA	950907A	ICP2	09/07/95	10:29	BJG	S	CONC
6	PREPBLKTJA	950907A	ICP2	09/07/95	10:38	BJG	S	CONC
7	S95T001487_L	950907A	ICP2	09/07/95	10:42	BJG	S	CONC
8	S95T001487_	950907A	ICP2	09/07/95	10:45	BJG	S	CONC
9	S95T001487_D	950907A	ICP2	09/07/95	10:49	BJG	S	CONC
10	S95T001488_L	950907A	ICP2	09/07/95	10:53	BJG	S	CONC
11	S95T001488_	950907A	ICP2	09/07/95	10:57	BJG	S	CONC
12	S95T001488_D	950907A	ICP2	09/07/95	11:00	BJG	S	CONC
13	CCV	950907A	ICP2	09/07/95	11:16	BJG	Q	CONC
14	CCB	950907A	ICP2	09/07/95	11:19	BJG	Q	CONC
15	S95T001489_L	950907A	ICP2	09/07/95	11:23	BJG	S	CONC
16	S95T001489_	950907A	ICP2	09/07/95	11:26	BJG	S	CONC
17	S95T001489_D	950907A	ICP2	09/07/95	11:30	BJG	S	CONC
18	S95T001489_S	950907A	ICP2	09/07/95	11:33	BJG	S	CONC
19	ICSA	950907A	ICP2	09/07/95	11:41	BJG	Q	CONC
20	ICSAB	950907A	ICP2	09/07/95	11:45	BJG	Q	CONC
21	CCV_1	950907A	ICP2	09/07/95	11:49	BJG	Q	CONC
22	CCB_1	950907A	ICP2	09/07/95	11:53	BJG	Q	CONC

BJGarch 9-7-95
SY-108R
S95T001487-89
ACID DIGEST
FILE# 950907A

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 571 **TO** 575.

WHC-SD-WM-DP-145, REV. 1

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.882	5.032	5.145	5.067	5.098	5.213
2	ICB	-.0004	-.0091	-.0049	.0038	-.0000	-.0001
3	ICSA	.0001	256.0	-.0875	.0001	.0019	.0001
4	ICSAB	.9634	255.5	-.0630	-.0011	.4903	.4966
5	PREPSTDTJA	.9064	5.256	5.229	5.428	5.187	5.496
6	PREPBLKTJA	-.0003	.0118	-.0067	.0723	.0001	-.0001
7	S95T001487_L	-2.836	24390.	41.05	21.68	5.972	-.0412
8	S95T001487	-.3626	23850.	-.7019	13.69	5.815	.3205
9	S95T001487_D	-.6069	22290.	-5.185	14.88	5.998	.3143
10	S95T001488_L	-1.785	21780.	-25.05	42.18	2.153	-.3593
11	S95T001488	1.166	21390.	-9.499	14.30	2.002	.0834
12	S95T001488_D	-.7987	23880.	-10.38	12.32	1.324	.0507
13	CCV	4.847	4.889	5.004	4.931	4.867	5.042
14	CCB	.0009	.0002	-.0023	.0050	.0001	.0000
15	S95T001489_L	5.555	25700.	-5.768	15.62	2.067	.4828
16	S95T001489	-.2391	25570.	-12.97	16.92	2.068	.4166
17	S95T001489_D	.0142	23650.	-11.22	31.76	2.563	.2098
18	S95T001489_S	85.15	23590.	481.6	512.3	448.9	477.7
19	ICSA	.0002	247.2	-.0566	.0034	.0018	.0003
20	ICSAB	.9445	246.2	-.0623	.0044	.4645	.4799
21	CCV_1	4.877	4.951	5.087	4.993	4.959	5.156
22	CCB_1	.0001	.0012	.0006	.0086	.0001	.0000

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.015	4.985	5.100	5.131	5.059	5.133
2	ICB	-.0493	.0094	-.0004	-.0074	-.0029	-.0013
3	ICSA	-.0463	248.4	.0018	.0247	.0016	.0070
4	ICSAB	-.0425	251.2	.9742	.0119	.4788	.4912
5	PREPSTDTJA	4.980	5.300	5.134	5.242	5.198	5.175
6	PREPBLKTJA	-.0065	-.0710	-.0007	.0030	.0008	.0004
7	S95T001487_L	-156.9	624.0	2.291	6.503	10.84	153.5
8	S95T001487	-11.15	507.0	.5220	-.9440	5.816	150.0
9	S95T001487_D	-11.45	514.3	1.518	13.16	5.270	143.2
10	S95T001488_L	-113.3	286.6	.0950	24.19	-.9449	140.7
11	S95T001488	-2.522	156.2	.3847	6.988	7.350	142.8
12	S95T001488_D	-26.07	119.1	-.6664	.5302	7.296	155.3
13	CCV	4.901	4.889	4.990	4.967	4.992	5.017
14	CCB	-.0665	.0169	.0005	.0083	-.0008	.0004
15	S95T001489_L	-67.21	272.5	-.3315	-6.453	35.12	215.3
16	S95T001489	-34.32	138.9	.6076	-6.946	31.94	214.6
17	S95T001489_D	-48.79	131.9	.9979	4.227	35.70	221.2
18	S95T001489_S	405.2	649.9	476.2	471.1	514.6	693.7
19	ICSA	-.0576	239.4	.0023	.0154	-.0001	.0054
20	ICSAB	-.0504	240.8	.9467	.0103	.4687	.4769
21	CCV_1	4.918	4.950	5.044	5.059	5.033	5.070
22	CCB_1	-.0418	.0203	.0002	.0006	-.0003	-.0007

WHO-CD-WM-DP-145, REV. 1

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	5.160	.0041	5.136	4.556	5.124	5.100
2	ICB	-.0006	.0000	-.0013	-.3068	-.0007	.0000
3	ICSA	-.0101	-.0169	95.33	.0841	-.0019	.0025
4	ICSAB	.4942	-.0179	95.64	-.2135	-.0033	1.038
5	PREPSTDTJA	5.130	.0038	5.151	4.914	5.242	5.146
6	PREPBLKTJA	.0062	.0007	.0093	-.2510	.0010	.0003
7	S95T001487_L	7.964	2.411	1205.	771.2	1.368	1.549
8	S95T001487	5.214	.4114	1188.	1503.	.8233	.6197
9	S95T001487_D	5.137	1.077	826.4	1361.	2.800	.7179
10	S95T001488_L	3.572	7.058	305.8	511.6	2.794	8.265
11	S95T001488	4.932	1.881	288.6	1542.	1.463	1.751
12	S95T001488_D	3.896	1.030	228.8	1561.	.2053	.9583
13	CCV	5.049	.0071	5.005	4.829	4.950	4.897
14	CCB	.0008	.0011	.0000	-.2821	.0015	.0013
15	S95T001489_L	5.764	3.450	411.6	483.6	-.9928	4.463
16	S95T001489	4.614	.4792	412.7	1671.	-.4435	.8926
17	S95T001489_D	4.320	1.367	609.6	1391.	.7172	1.477
18	S95T001489_S	466.7	2.124	1039.	1963.	469.3	451.5
19	ICSA	-.0109	.0060	92.46	.0094	-.0026	.0032
20	ICSAB	.4816	.0067	92.57	-.1441	-.0041	.9975
21	CCV_1	5.162	.0065	5.052	4.718	5.054	5.025
22	CCB_1	.0008	.0011	.0002	-.1990	.0005	.0012

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	4.990	5.004	5.087	5.023	5.259	5.108
2	ICB	-.0137	.0001	-.0002	.0008	-.0028	-.0033
3	ICSA	258.5	-.0073	-.0049	201.8	.0031	-.0232
4	ICSAB	258.1	.4607	-.0070	202.1	.0027	.9081
5	PREPSTDTJA	5.086	5.093	5.145	5.427	5.214	5.228
6	PREPBLKTJA	.0076	.0001	-.0001	.1145	.0009	-.0108
7	S95T001487_L	84.87	7.965	2.113	201100.	1.977	1298.
8	S95T001487	44.44	6.515	6.702	193600.	1.250	1277.
9	S95T001487_D	52.57	5.642	8.168	191700.	.5558	1354.
10	S95T001488_L	-36.67	4.209	.3719	178400.	-8.161	1094.
11	S95T001488	2.195	2.198	5.686	173500.	-1.886	1095.
12	S95T001488_D	1.886	1.486	7.409	173600.	-2.029	927.3
13	CCV	4.856	4.896	5.028	4.873	5.075	4.977
14	CCB	.0029	.0006	.0003	.0110	.0007	-.0078
15	S95T001489_L	-29.92	5.090	4.188	179700.	-1.959	757.6
16	S95T001489	13.75	3.391	9.079	177200.	1.123	744.9
17	S95T001489_D	15.06	4.403	6.280	174600.	3.339	832.1
18	S95T001489_S	472.6	456.1	490.6	177000.	466.2	1294.
19	ICSA	250.0	-.0068	-.0051	193.9	.0042	-.0273
20	ICSAB	249.0	.4445	-.0063	193.6	.0015	.8982
21	CCV_1	4.904	4.921	5.086	4.946	5.184	5.004
22	CCB_1	.0061	.0006	.0010	.0102	.0002	-.0057

HO-CD-VM-DP-145, REV. 1

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.412	5.045	5.077	4.777	5.050	4.808
2	ICB	.0184	.0116	-.0032	-.0034	.0118	.0028
3	ICSA	.1539	.0384	-.0394	-.0058	-.0846	.0062
4	ICSAB	.0958	1.013	-.0329	.0053	-.0803	.0043
5	PREPSTDTJA	5.380	5.077	5.064	4.824	5.189	7.760
6	PREPBLKTJA	.0291	-.0005	.0096	-.0025	.0334	.0703
7	S95T001487_L	3019.	120.4	17690.	-13.07	149.5	371.4
8	S95T001487_	2850.	98.55	17300.	1.044	26.87	337.8
9	S95T001487_D	4288.	96.15	17790.	4.319	37.01	363.5
10	S95T001488_L	7562.	105.5	20790.	6.919	175.1	318.1
11	S95T001488_	7339.	73.00	20500.	9.039	34.84	258.0
12	S95T001488_D	1394.	58.90	21610.	-4.994	21.77	246.7
13	CCV	5.049	4.994	4.931	4.722	4.893	4.780
14	CCB	.0339	.0070	.0047	.0019	.0413	.0143
15	S95T001489_L	1176.	134.7	26410.	-11.21	165.1	532.8
16	S95T001489_	981.8	88.47	26260.	-.6395	26.29	477.8
17	S95T001489_D	1571.	81.95	29480.	.6065	31.46	672.5
18	S95T001489_S	1788.	554.6	32170.	450.3	522.5	1256.
19	ICSA	.1278	.0352	-.0267	.0021	-.0386	.0133
20	ICSAB	.0728	.9895	-.0187	.0072	-.0437	.0123
21	CCV_1	5.106	5.019	4.962	4.765	5.040	4.789
22	CCB_1	.0324	.0088	.0088	-.0008	.0453	.0107

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.145	5.046	-.0710	4.940	4.995	10.13
2	ICB	-.0051	.0001	-.0033	-.0004	.0055	-.0070
3	ICSA	-.0081	.0022	-.0164	.0015	.0444	.0348
4	ICSAB	-.0082	.0021	-.0134	.0017	.0355	-.0069
5	PREPSTDTJA	5.238	5.162	-.0753	5.015	5.035	10.40
6	PREPBLKTJA	.0048	.0005	-.0000	.0009	-.0055	.0201
7	S95T001487_L	7.551	168.6	-19.18	6.359	78.08	795.0
8	S95T001487_	.2215	164.2	-3.935	3.385	-2.976	721.0
9	S95T001487_D	5.796	173.2	.4351	3.370	28.18	777.1
10	S95T001488_L	76.44	32.49	-15.20	3.100	88.76	632.3
11	S95T001488_	19.84	31.02	-2.816	1.225	8.320	404.2
12	S95T001488_D	11.69	19.29	-7.956	.6061	10.63	337.7
13	CCV	4.964	4.847	-.0564	4.842	4.845	9.929
14	CCB	.0099	.0005	.0018	.0008	.0267	.0484
15	S95T001489_L	47.55	19.08	-14.75	2.080	26.39	516.8
16	S95T001489_	2.917	17.48	-3.402	1.412	18.42	366.2
17	S95T001489_D	12.31	20.68	2.808	1.814	10.08	452.4
18	S95T001489_S	481.0	477.1	-4.633	462.7	474.5	1378.
19	ICSA	.0071	.0018	-.0121	.0017	.0289	.1052
20	ICSAB	.0039	.0019	-.0155	.0017	.0589	.0851
21	CCV_1	5.091	4.960	-.0524	4.937	4.868	10.12
22	CCB_1	.0110	.0005	.0011	.0002	.0102	.0403

WHC-CD-WM-DP-145, REV. 1

#	Sample Name	V	Y	Zn	Zr
1	ICV	5.068	.0127	5.025	5.029
2	ICB	.0002	-.0001	.0037	-.0003
3	ICSA	-.0020	.0074	-.0196	-.0025
4	ICSAB	.4780	.0073	.9684	-.0023
5	PREPSTDTJA	5.093	.0115	4.992	5.091
6	PREPBLKTJA	.0018	.0002	-.0153	.0017
7	S95T001487_L	5.030	2.350	54.14	6.583
8	S95T001487	1.619	.6266	23.70	3.685
9	S95T001487_D	3.387	1.167	22.80	3.843
10	S95T001488_L	20.88	4.794	54.46	11.59
11	S95T001488	6.300	1.254	20.73	4.789
12	S95T001488_D	3.077	.7995	18.45	3.019
13	CCV	4.988	.0139	4.989	4.937
14	CCB	.0028	.0006	.0026	.0015
15	S95T001489_L	10.84	2.667	61.25	8.984
16	S95T001489	1.456	.4573	27.06	2.685
17	S95T001489_D	3.894	.9079	24.89	4.281
18	S95T001489_S	468.9	2.378	502.3	476.9
19	ICSA	.0019	.0084	-.0193	-.0008
20	ICSAB	.4713	.0080	.9513	-.0009
21	CCV_1	5.064	.0136	5.014	5.019
22	CCB_1	.0027	.0007	.0032	.0007

WI-10-CD-VM-DP-145, REV. 1

FILE # 08509088

LABCORE Data Entry Template for Worklist# 2099

Analyst: B. Goecke Instrument: ~~ICP01~~ ICP02 Book# 468488

Method: LA-505-~~151~~ 161 Rev/Mod 8-0

Worklist Comment: ICP BY-108R (Acid Digest)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	ICSA				@ICP-QC	QC		
4	ICSAB				@ICP-QC	QC		
5	PREPSTDTJA				@ICP-A01	SOLID		
6	PREPBLKTJA				@ICP-A01	SOLID		
7	SAMPLE	S95T001490	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
8	DUP	S95T001490	0	A	@ICP-A01	SOLID		
~~9~~	~~SPK~~	~~S95T001490~~	~~0~~	~~A~~	~~@ICP-A01~~	~~SOLID~~		
10	SAMPLE	S95T001491	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
11	DUP	S95T001491	0	A	@ICP-A01	SOLID		
12	CCV				@ICP-QC	QC		
13	CCB				@ICP-QC	QC		
14	SAMPLE	S95T001492	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
15	DUP	S95T001492	0	A	@ICP-A01	SOLID		
16	SAMPLE	S95T001493	0	A	@ICP-A01	SOLID	95000104	BY-108 (R)
	Analytes Requested: LI-A-01 , NI-A-01							
17	DUP	S95T001493	0	A	@ICP-A01	SOLID		

Spike SP 09/11/95

SP 09/11/95

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2099

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
18	ICSA				@ICP-QC	QC		
19	ICSAB				@ICP-QC	QC		
20	CCV				@ICP-QC	QC		
21	CCB				@ICP-QC	QC		

Final page for worklist # 2099

Analyst Signature: [signature] Date: 9-8-95

Reviewed + Validated by: [signature] Analyst Signature: [signature] Date: 09/11/95

		D.F.
PREPBLKTJA	100 mL DIRECT	1
PREPSTD TJA	5mL ea. EWHC1A+2 in 100mL	1
S95T001490_L	1.0483g in 100mL -1mL-5mL-2mL-5mL	4770
S95T001490	1.0483g in 100mL -1mL-5mL	954
S95T001490_D	1.0464g in 100mL -1mL-5mL	956
S95T001491_L	1.0342g in 100mL -1mL-5mL-2mL-5mL	4835
S95T001491	1.0342g in 100mL -1mL-5mL -	967
S95T001491_D	1.0331g in 100mL -1mL-5mL	968
S95T001492_L	1.0564g in 100mL -1mL-5mL-2mL-5mL	4733
S95T001492	1.0564g in 100mL -1mL-5mL	947
S95T001492_D	1.0570g in 100mL -1mL-5mL	946
S95T001493_L	.9289g in 100mL -1mL-5mL-2mL-5mL	5383
S95T001493	.9289g in 100mL -1mL-5mL	1076
S95T001493_D	.9272g in 100mL -1mL-5mL	1078
S95T001493_S	.9720g in 100mL -1mL-5mL	1029

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	950908B	ICP2	09/08/95	09:49	BJG	Q	CONC
2	ICB	950908B	ICP2	09/08/95	09:55	BJG	Q	CONC
3	ICSA	950908B	ICP2	09/08/95	09:58	BJG	Q	CONC
4	ICSAB	950908B	ICP2	09/08/95	10:03	BJG	Q	CONC
5	PREPSTDTJA	950908B	ICP2	09/08/95	10:07	BJG	S	CONC
6	PREPBLKTJA	950908B	ICP2	09/08/95	10:13	BJG	S	CONC
7	S95T001490_L	950908B	ICP2	09/08/95	10:17	BJG	S	CONC
8	S95T001490	950908B	ICP2	09/08/95	10:21	BJG	S	CONC
9	S95T001490_D	950908B	ICP2	09/08/95	10:25	BJG	S	CONC
10	S95T001491_L	950908B	ICP2	09/08/95	10:33	BJG	S	CONC
11	S95T001491	950908B	ICP2	09/08/95	10:37	BJG	S	CONC
12	S95T001491_D	950908B	ICP2	09/08/95	10:42	BJG	S	CONC
13	CCV	950908B	ICP2	09/08/95	10:53	BJG	Q	CONC
14	CCB	950908B	ICP2	09/08/95	10:57	BJG	Q	CONC
15	S95T001492_L	950908B	ICP2	09/08/95	11:01	BJG	S	CONC
16	S95T001492	950908B	ICP2	09/08/95	11:05	BJG	S	CONC
17	S95T001492_D	950908B	ICP2	09/08/95	11:08	BJG	S	CONC
18	S95T001493_L	950908B	ICP2	09/08/95	11:15	BJG	S	CONC
19	S95T001493	950908B	ICP2	09/08/95	11:18	BJG	S	CONC
20	S95T001493_D	950908B	ICP2	09/08/95	11:22	BJG	S	CONC
21	S95T001493_S	950908B	ICP2	09/08/95	11:27	BJG	S	CONC
22	ICSA	950908B	ICP2	09/08/95	11:31	BJG	Q	CONC
23	ICSAB	950908B	ICP2	09/08/95	11:34	BJG	Q	CONC
24	CCV_1	950908B	ICP2	09/08/95	11:39	BJG	Q	CONC
25	CCB_1	950908B	ICP2	09/08/95	11:43	BJG	Q	CONC

WHC-CD-WM-DP-146, REV. 1

B/Good 9-8-95 By-108R S95T001490-93 1-L-9-L

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 578 TO 582.

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.900	4.943	5.087	4.996	4.940	5.152
2	ICB	-.0037	.0056	-.0045	.0018	-.0001	.0001
3	ICSA	-.0015	247.6	-.0484	.0000	.0035	.0004
4	ICSAB	.9558	248.5	-.0515	-.0113	.4734	.4866
5	PREPSTDTJA	.8436	5.002	5.016	5.196	4.897	5.243
6	PREPBLKTJA	-.0013	.0095	-.0110	.0009	.0001	.0001
7	S95T001490_L	-7.265	14840.	-13.08	4.603	190.2	1.304
8	S95T001490	-.8590	14440.	-18.97	14.34	184.7	.2783
9	S95T001490_D	-2.090	14450.	-15.86	16.95	184.3	.1154
10	S95T001491_L	-4.184	10380.	-1.462	20.15	441.7	1.327
11	S95T001491	-1.144	10210.	-21.06	5.431	435.0	.1962
12	S95T001491_D	-.0122	10120.	-28.21	14.91	429.2	.1424
13	CCV	4.976	5.025	5.224	5.064	5.022	5.291
14	CCB	-.0018	.0056	-.0085	.0014	-.0001	.0002
15	S95T001492_L	-4.517	6739.	-44.55	7.284	149.4	.1413
16	S95T001492	-1.735	6677.	-16.33	16.10	147.6	.0083
17	S95T001492_D	-.9692	6684.	-23.21	15.26	147.6	.1419
18	S95T001493_L	.2105	5874.	-73.79	-7.704	48.12	.7953
19	S95T001493	-1.326	5842.	-35.05	10.15	47.85	-.0857
20	S95T001493_D	-1.214	5873.	-16.69	14.61	48.08	.0965
21	S95T001493_S	90.20	9897.	487.5	548.7	583.9	530.9
22	ICSA	-.0025	251.3	-.0840	-.0064	.0036	.0004
23	ICSAB	.9589	249.0	-.0587	-.0067	.4707	.4875
24	CCV_1	4.964	5.026	5.173	5.046	5.037	5.250
25	CCB_1	-.0026	.0117	-.0028	.0064	-.0000	.0002

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.944	4.928	5.094	5.027	5.086	5.103
2	ICB	-.0114	-.0002	.0002	-.0069	-.0026	-.0010
3	ICSA	.0140	242.9	.0011	.0102	-.0009	-.0064
4	ICSAB	-.0026	244.1	.9595	.0011	.4744	.4700
5	PREPSTDTJA	4.794	4.957	4.979	5.010	5.086	4.999
6	PREPBLKTJA	.0145	-.0897	.0007	.0039	-.0007	.0010
7	S95T001490_L	523.0	24130.	2.051	25.63	-17.66	344.2
8	S95T001490	559.7	23160.	3.089	-4.577	-3.008	336.6
9	S95T001490_D	549.6	23000.	1.855	-12.79	-4.766	333.4
10	S95T001491_L	1145.	7810.	12.40	-36.20	-16.84	389.4
11	S95T001491	1104.	7578.	5.357	-34.48	-10.98	385.9
12	S95T001491_D	1085.	7501.	3.340	-36.73	-9.794	379.7
13	CCV	5.085	5.112	5.227	5.129	5.197	5.219
14	CCB	-.0090	.0030	.0002	-.0038	-.0047	-.0014
15	S95T001492_L	787.6	15540.	4.765	-8.212	-18.02	80.48
16	S95T001492	742.4	15310.	4.690	14.93	-9.496	77.53
17	S95T001492_D	760.0	15450.	3.712	15.46	-8.825	79.12
18	S95T001493_L	389.0	7457.	.7783	3.020	-5.322	46.98
19	S95T001493	407.6	7272.	3.383	41.92	-5.581	42.61
20	S95T001493_D	425.2	7260.	6.026	49.09	-8.639	42.69
21	S95T001493_S	1384.	11490.	525.7	576.3	511.6	580.0
22	ICSA	-.0145	247.1	.0007	.0121	-.0024	-.0068
23	ICSAB	-.0128	246.5	.9569	.0129	.4734	.4723
24	CCV_1	5.023	5.086	5.150	5.138	5.139	5.183

WHC-SD-WM-DP-165, REV. 1

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
25	CCB_1	-.0040	.0061	-.0006	-.0004	-.0024	-.0006

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	5.117	.0055	5.085	4.963	5.012	4.941
2	ICB	-.0004	-.0005	-.0017	-.1828	-.0012	-.0001
3	ICSA	-.0084	-.0035	93.10	.1249	-.0044	.0024
4	ICSAB	.4864	-.0010	93.12	-.0971	-.0058	1.008
5	PREPSTDTJA	4.980	.0046	4.973	4.979	5.014	4.889
6	PREPBLKTJA	.0078	-.0012	.0287	-.0269	-.0001	-.0007
7	S95T001490_L	2.912	22.52	7772.	1236.	35.74	5.715
8	S95T001490	6.525	18.39	7475.	1262.	33.27	4.477
9	S95T001490_D	5.756	18.81	7441.	1088.	31.89	4.486
10	S95T001491_L	7.176	-5.111	9599.	716.8	63.88	3.862
11	S95T001491	8.967	-2.917	9384.	1017.	65.76	4.248
12	S95T001491_D	8.996	-2.456	9282.	1122.	64.32	4.253
13	CCV	5.219	.0048	5.211	4.950	5.121	5.022
14	CCB	-.0008	-.0005	-.0012	-.1359	-.0009	.0001
15	S95T001492_L	9.595	7.537	13500.	248.9	18.60	3.781
16	S95T001492	12.80	6.889	13240.	1022.	24.69	3.971
17	S95T001492_D	12.42	7.234	13320.	888.6	25.78	3.967
18	S95T001493_L	31.11	-.4523	19050.	554.8	29.10	8.600
19	S95T001493	29.83	-2.092	18630.	693.5	36.26	4.083
20	S95T001493_D	29.61	-2.347	18720.	913.8	36.43	4.305
21	S95T001493_S	541.6	-5.534	38440.	1601.	571.0	502.8
22	ICSA	-.0105	-.0079	94.20	.0360	-.0036	.0020
23	ICSAB	.4858	-.0066	93.48	.1147	-.0037	1.007
24	CCV_1	5.230	.0045	5.175	4.956	5.129	5.097
25	CCB_1	-.0004	-.0009	-.0005	-.0009	-.0004	-.0003

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	4.899	4.970	5.116	4.909	5.133	5.044
2	ICB	-.0077	-.0000	-.0008	-.0040	-.0042	-.0080
3	ICSA	247.7	-.0078	-.0107	192.5	.0184	-.0272
4	ICSAB	248.4	.4491	-.0119	194.7	.0161	.9143
5	PREPSTDTJA	4.872	4.904	5.146	5.156	4.976	5.068
6	PREPBLKTJA	-.0005	-.0001	-.0015	.0622	-.0011	-.0091
7	S95T001490_L	984.0	98.71	-11.67	133600.	58.68	15540.
8	S95T001490	977.7	93.30	-2.563	130700.	66.96	14850.
9	S95T001490_D	966.4	93.00	-2.122	131200.	67.02	14770.
10	S95T001491_L	962.4	158.7	-.3343	111300.	147.5	10280.
11	S95T001491	997.5	156.2	-.7483	109200.	139.5	9920.
12	S95T001491_D	981.8	155.3	-2.642	107800.	138.8	9790.
13	CCV	4.999	5.060	5.225	4.990	5.233	5.158
14	CCB	-.0165	.0001	-.0005	-.0036	-.0046	-.0040
15	S95T001492_L	459.3	142.6	-7.472	111400.	62.63	5803.
16	S95T001492	552.1	140.7	.0205	109400.	67.09	5647.
17	S95T001492_D	552.2	142.1	-3.367	108600.	66.79	5672.
18	S95T001493_L	630.1	264.5	-6.584	81550.	62.71	3623.
19	S95T001493	626.2	258.6	-3.342	80980.	64.10	3599.
20	S95T001493_D	604.9	259.5	-.1740	81210.	64.68	3612.

WHC-SD-WM-DP-145, REV. 1

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
21	S95T001493_S	1560.	966.2	531.1	126600.	608.8	6917.
22	ICSA	251.0	-.0080	-.0135	195.9	.0134	-.0154
23	ICSAB	249.3	.4492	-.0103	194.4	.0150	.9017
24	CCV_1	4.991	5.024	5.191	5.036	5.257	5.125
25	CCB_1	-.0085	-.0000	-.0012	-.0083	-.0031	-.0090

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.077	5.073	5.048	4.795	5.055	4.816
2	ICB	.0046	-.0245	.0030	-.0003	.0009	.0019
3	ICSA	.0215	.0048	.0569	-.0082	-.0726	.0085
4	ICSAB	.0064	.9619	.0397	.0009	-.0704	.0114
5	PREPSTDTJA	5.164	4.927	4.996	4.795	5.120	6.230
6	PREPBLKTJA	.0081	-.0052	-.0052	.0040	.0201	.0129
7	S95T001490_L	24240.	434.1	9464.	-3.788	151.1	2529.
8	S95T001490	23690.	459.0	9308.	14.99	-.8266	2453.
9	S95T001490_D	24150.	450.5	9297.	.6170	8.818	2439.
10	S95T001491_L	13700.	642.0	1735.	55.48	78.21	2238.
11	S95T001491	13550.	638.3	1618.	-1.837	46.21	2214.
12	S95T001491_D	13480.	613.9	1640.	8.967	53.54	2203.
13	CCV	5.261	5.151	5.097	4.894	5.201	4.913
14	CCB	.0103	-.0059	-.0002	-.0052	.0295	.0019
15	S95T001492_L	27440.	321.3	1434.	2.495	76.92	1036.
16	S95T001492	27410.	334.1	1384.	3.074	25.14	1025.
17	S95T001492_D	27240.	332.7	1391.	-5.596	28.40	1030.
18	S95T001493_L	16630.	458.4	1599.	-9.686	215.6	1204.
19	S95T001493	16520.	496.0	1553.	.5970	56.02	1168.
20	S95T001493_D	16130.	522.7	1534.	2.997	51.16	1169.
21	S95T001493_S	27490.	1562.	2295.	495.7	562.7	2382.
22	ICSA	.0112	.0072	.0380	-.0085	-.0498	.0053
23	ICSAB	.0304	.9771	.0102	-.0006	-.0466	.0082
24	CCV_1	5.406	5.123	5.123	4.862	5.153	4.887
25	CCB_1	.0149	-.0121	-.0007	-.0094	.0193	-.0002

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.023	4.913	-.0610	4.912	4.939	10.01
2	ICB	-.0083	-.0001	.0000	-.0011	.0157	-.0211
3	ICSA	-.0150	-.0046	-.0166	.0010	.0032	.0131
4	ICSAB	-.0205	-.0047	-.0151	.0006	.0265	.0020
5	PREPSTDTJA	4.991	4.914	-.0624	4.978	4.836	10.06
6	PREPBLKTJA	-.0161	-.0001	.0031	-.0009	-.0135	-.0283
7	S95T001490_L	-16.01	9999.	-106.0	24.76	32.06	21040.
8	S95T001490	-1.336	9798.	-113.3	26.56	-8.669	20530.
9	S95T001490_D	-2.064	9794.	-125.1	26.62	-18.75	20540.
10	S95T001491_L	-24.33	23920.	-329.3	51.21	83.40	54440.
11	S95T001491	1.843	24200.	-311.9	52.05	-5.041	53710.
12	S95T001491_D	4.132	23920.	-302.6	51.50	-37.58	52950.
13	CCV	5.116	5.036	-.0598	5.030	5.049	10.19
14	CCB	-.0083	-.0001	-.0007	-.0013	-.0081	-.0228
15	S95T001492_L	-6.001	5578.	-236.2	27.53	-2.772	35670.
16	S95T001492	3.455	5511.	-201.7	32.28	-.7837	35160.

HC-CD-WM-DP-145, REV. 1

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
17	S95T001492_D	10.19	5507.	-185.8	32.45	-18.65	35090.
18	S95T001493_L	23.69	1039.	-222.7	35.83	-32.55	39360.
19	S95T001493_	8.680	1027.	-211.7	38.25	-19.00	38920.
20	S95T001493_D	6.281	1030.	-217.3	38.32	-4.845	39050.
21	S95T001493_S	518.1	1929.	-379.0	578.5	481.5	66100.
22	ICSA	-.0212	-.0041	-.0099	.0002	.0430	-.0301
23	ICSAB	-.0156	-.0041	-.0055	.0004	.0321	-.0132
24	CCV_1	5.139	5.056	-.0630	5.020	4.987	10.24
25	CCB_1	-.0127	-.0001	.0059	-.0011	-.0059	-.0482

#	Sample Name	V	Y	Zn	Zr
1	ICV	5.070	.0129	5.065	5.013
2	ICB	-.0014	-.0003	.0003	-.0011
3	ICSA	-.0037	.0186	-.0086	-.0024
4	ICSAB	.4710	.0183	.9720	-.0032
5	PREPSTDTJA	4.962	.0112	4.904	5.061
6	PREPBLKTJA	-.0021	-.0008	-.0157	-.0019
7	S95T001490_L	1.690	14.96	143.6	13.88
8	S95T001490_	2.843	14.96	111.5	17.44
9	S95T001490_D	2.164	14.92	113.4	18.17
10	S95T001491_L	3.766	32.22	178.1	24.75
11	S95T001491_	8.237	32.98	146.0	26.26
12	S95T001491_D	8.934	32.71	145.6	26.29
13	CCV	5.191	.0130	5.154	5.122
14	CCB	-.0008	-.0003	.0008	-.0011
15	S95T001492_L	-.7562	24.12	102.0	9.023
16	S95T001492_	5.575	24.13	82.13	7.563
17	S95T001492_D	6.343	24.55	80.67	6.317
18	S95T001493_L	8.543	30.81	174.0	10.88
19	S95T001493_	7.399	29.53	171.3	8.252
20	S95T001493_D	6.606	29.50	149.5	8.637
21	S95T001493_S	518.4	49.06	790.8	208.4
22	ICSA	-.0040	.0185	-.0072	-.0030
23	ICSAB	.4741	.0187	.9740	-.0035
24	CCV_1	5.167	.0126	5.114	5.107
25	CCB_1	-.0027	-.0007	.0010	-.0018

WHC-SD-WM-DP-145, REV. 1

FILE # 09/10/27E

LABCORE Data Entry Template for Worklist# 2876

Analyst: B. GOECKE **Instrument:** ~~ICP01~~ ICP02 10-27-95 **Book#** 46848

Method: LA-505-~~151~~ 161 10-27-95 Rev/Mod 6-0

Worklist Comment: ICP BY-108 (ACID DIGEST)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	ICSA				@ICP-QC	QC		
4	ICSAB				@ICP-QC	QC		
5	PREPSTDTJA				@ICP-A01	SOLID		
6	PREPBLKTJA				@ICP-A01	SOLID		
7	SAMPLE	S95T002161	0	A	@ICP-A01	SOLID	95000118	BY-108 (R)
	Analytes Requested:	AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01						
8	DUP	S95T002161	0	A	@ICP-A01	SOLID		
9	SPK-PREDIG	S95T002161	0	A	@ICP-A01	SOLID		
10	ICSA				@ICP-QC	QC		
11	ICSAB				@ICP-QC	QC		
12	CCV				@ICP-QC	QC		
13	CCB				@ICP-QC	QC		

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2876

S Type	Sample#	R	A	Test	Matrix	Group#	Project

Final page for worklist # 2876

Analyst Signature: [signature] Date: 10-27-95

Reviewed by: [signature] Analyst Signature Date: 10/30/95

		D.F.
PREPSTD TSA	5mL EA (WITH IAH) in 100mL, DIRECT	1
PREPBLK TSA	100mL, DIRECT	1
SSSTWO 2161_L	1.0023g in 100mL - 1mL - 5mL - 2mL - 5mL	4988
SSSTWO 2161	1.0023g in 100mL - 1mL - 5mL	998
SSSTWO 2161_D	1.0189g in 100mL - 1mL - 5mL	982
SSSTWO 2161_S	1.0522g in 100mL - 1mL - 5mL	950

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	951027E	ICP2	10/27/95	14:00	BJG	Q	CONC
2	ICB	951027E	ICP2	10/27/95	14:03	BJG	Q	CONC
3	ICSA	951027E	ICP2	10/27/95	14:06	BJG	Q	CONC
4	ICSAB	951027E	ICP2	10/27/95	14:09	BJG	Q	CONC
5	PREPSTDTJA	951027E	ICP2	10/27/95	14:12	BJG	S	CONC
6	PREPBLKTJA	951027E	ICP2	10/27/95	14:15	BJG	S	CONC
7	S95T002161_L	951027E	ICP2	10/27/95	14:19	BJG	S	CONC
8	S95T002161_	951027E	ICP2	10/27/95	14:22	BJG	S	CONC
9	S95T002161_D	951027E	ICP2	10/27/95	14:25	BJG	S	CONC
10	S95T002161_S	951027E	ICP2	10/27/95	14:28	BJG	S	CONC
11	ICSA	951027E	ICP2	10/27/95	14:31	BJG	Q	CONC
12	ICSAB	951027E	ICP2	10/27/95	14:34	BJG	Q	CONC
13	CCV	951027E	ICP2	10/27/95	14:38	BJG	Q	CONC
14	CCB	951027E	ICP2	10/27/95	14:40	BJG	Q	CONC

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BJ Gaulke 10-27-95 BY-10X ACID DIGEST S95T002161 1ML-9-L

WHC-CD-WM-DP-145, REV. 1

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 585 TO 588.

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.987	4.840	5.123	4.972	4.958	5.101
2	ICB	-.0004	.0021	-.0028	.0063	-.0000	-.0000
3	ICSA	-.0123	236.0	-.0379	.0065	.0030	-.0001
4	ICSAB	.9294	236.0	-.0640	-.0041	.4607	.4651
5	PREPSTDTJA	.8805	4.989	4.518	6.022	4.606	4.855
6	PREPBLKTJA	.0008	.0234	-.0026	.0234	.0002	-.0001
7	S95T002161_L	-5.795	23860.	-33.27	48.36	2.633	.0548
8	S95T002161_	-.5499	23120.	-1.856	41.69	3.130	.2183
9	S95T002161_D	-.9029	14580.	8.274	56.71	3.346	.1797
10	S95T002161_S	91.77	15190.	475.2	634.0	447.2	471.8
11	ICSA	-.0137	239.8	-.0301	.0053	.0030	.0000
12	ICSAB	.9438	239.0	-.0285	-.0056	.4671	.4757
13	CCV	5.045	4.891	5.183	5.046	5.009	5.201
14	CCB	.0001	.0043	-.0069	.0042	.0000	.0000

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.034	5.170	5.022	5.124	5.022	5.075
2	ICB	-.0068	-.0020	-.0006	-.0023	-.0013	.0002
3	ICSA	-.0284	241.7	.0012	.0104	-.0002	-.0036
4	ICSAB	-.0106	244.6	.9170	.0131	.4546	.4584
5	PREPSTDTJA	4.418	5.826	4.366	4.782	4.507	4.534
6	PREPBLKTJA	-.0176	.1221	.0010	.0078	.0019	.0019
7	S95T002161_L	-105.7	326.1	3.766	-14.14	-3.356	99.84
8	S95T002161_	2.873	292.4	2.526	-2.191	1.928	93.10
9	S95T002161_D	-4.546	249.5	2.284	-2.677	.8251	92.76
10	S95T002161_S	464.9	815.7	459.8	464.3	471.0	557.3
11	ICSA	-.0390	251.0	.0003	.0127	-.0009	-.0034
12	ICSAB	-.0268	251.3	.9415	.0034	.4632	.4680
13	CCV	5.135	5.281	5.089	5.187	5.084	5.140
14	CCB	.0095	-.0006	.0002	.0014	.0002	.0012

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	5.075	.0075	5.047	5.126	5.047	5.033
2	ICB	.0006	-.0003	.0006	-.0173	-.0007	-.0002
3	ICSA	-.0085	.0012	89.98	.2434	-.0035	.0018
4	ICSAB	.4721	.0001	90.62	.1277	-.0034	.9842
5	PREPSTDTJA	4.551	.0063	4.519	4.662	4.733	4.734
6	PREPBLKTJA	.0020	-.0026	.0255	.1955	-.0004	-.0025
7	S95T002161_L	7.717	-1.608	1033.	833.2	-5.386	25.24
8	S95T002161_	6.145	-.3872	1005.	389.0	-.5637	26.51
9	S95T002161_D	5.077	-.3405	1209.	281.8	-.6332	25.23
10	S95T002161_S	458.9	.8321	1540.	840.5	463.7	485.1
11	ICSA	-.0091	-.0101	92.35	.1430	-.0043	.0020
12	ICSAB	.4786	-.0078	92.51	.0589	-.0044	.9895
13	CCV	5.158	.0078	5.105	5.409	5.102	5.123
14	CCB	.0006	-.0006	.0006	.1171	-.0002	-.0007

WHC-CD-WM-DP-146, REV. 1

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#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	4.898	4.920	5.027	5.000	5.086	4.991
2	ICB	.0057	.0001	.0011	-.0018	-.0014	-.0065
3	ICSA	242.8	-.0077	-.0164	195.5	.0083	-.0198
4	ICSAB	242.9	.4332	-.0118	195.1	.0095	.8770
5	PREPSTDTJA	4.630	4.407	4.643	8.232	4.641	4.466
6	PREPBLKTJA	.0176	-.0001	-.0014	.0815	.0011	.0003
7	S95T002161_L	63.16	14.11	-7.489	226800.	-14.99	137.4
8	S95T002161_	83.03	13.90	-.2877	218700.	-1.285	130.4
9	S95T002161_D	86.82	14.62	-1.157	222800.	-1.455	118.0
10	S95T002161_S	554.3	455.7	464.2	219600.	453.2	578.9
11	ICSA	247.3	-.0077	-.0145	196.2	.0069	-.0176
12	ICSAB	246.2	.4412	-.0118	196.0	.0077	.9015
13	CCV	4.959	4.967	5.096	5.053	5.146	5.033
14	CCB	.0145	-.0001	-.0023	-.0053	.0011	-.0024

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.943	5.051	4.876	4.794	4.872	4.903
2	ICB	.0135	.0120	.0123	.0045	.0064	.0036
3	ICSA	.0034	.0515	.0460	-.0033	-.0412	.0130
4	ICSAB	.0231	1.005	.0575	-.0024	-.0410	.0106
5	PREPSTDTJA	4.713	4.328	4.328	4.252	4.360	1.269
6	PREPBLKTJA	.0335	.0072	.0398	.0014	-.0119	.0672
7	S95T002161_L	34210.	47.25	1336.	-2.323	5.409	233.0
8	S95T002161_	33020.	57.11	1190.	4.603	-13.61	200.4
9	S95T002161_D	32450.	63.63	949.3	2.731	-10.19	378.8
10	S95T002161_S	36920.	542.3	1646.	446.7	446.0	2519.
11	ICSA	.0212	.0451	.0335	.0056	-.0460	.0160
12	ICSAB	.0218	1.025	.0487	.0091	-.0297	.0138
13	CCV	5.094	5.142	4.982	4.850	4.940	4.962
14	CCB	-.0122	.0143	-.0046	.0005	-.0116	.0021

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.913	4.933	.0362	4.861	4.828	9.489
2	ICB	.0010	.0001	-.0002	.0000	.0021	-.0075
3	ICSA	-.0101	-.0033	-.0134	.0017	.0461	.0799
4	ICSAB	-.0118	-.0041	-.0020	.0013	.0525	.0645
5	PREPSTDTJA	4.633	4.628	.0326	4.592	4.307	9.075
6	PREPBLKTJA	-.0252	-.0003	.0102	.0007	.0052	-.1029
7	S95T002161_L	-3.495	33.67	5.811	8.842	32.52	103.1
8	S95T002161_	-3.067	32.90	7.307	10.82	17.75	113.9
9	S95T002161_D	1.292	36.42	.3250	11.39	16.44	135.9
10	S95T002161_S	448.3	486.0	8.555	443.8	455.5	1011.
11	ICSA	-.0088	-.0034	-.0112	.0015	.0109	.0446
12	ICSAB	-.0127	-.0042	-.0157	.0011	.0233	.0271
13	CCV	4.985	4.994	.0457	4.930	4.936	9.600
14	CCB	-.0006	-.0000	.0046	.0004	.0093	-.0140

BEST AVAILABLE COPY

HC-CD-WM-DP-145, REV. 1

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.945	.0094	5.013	4.936
2	ICB	-.0003	-.0003	.0034	-.0003
3	ICSA	-.0028	.0173	.0026	-.0023
4	ICSAB	.4502	.0186	.9438	-.0042
5	PREPSTDTJA	4.477	.0061	4.278	4.628
6	PREPBLKTJA	-.0053	-.0019	.0156	-.0037
7	S95T002161_L	70.49	-1.217	68.67	-.5601
8	S95T002161_	69.40	-.1266	37.93	-.1600
9	S95T002161_D	67.92	.0192	44.46	.3565
10	S95T002161_S	526.5	.9855	504.1	203.7
11	ICSA	-.0020	.0179	.0011	-.0019
12	ICSAB	.4602	.0190	.9641	-.0024
13	CCV	5.018	.0094	5.073	4.993
14	CCB	-.0009	-.0004	.0017	-.0023

WHC-SD-WM-DP-145, REV. 1

BEST AVAILABLE COPY

SP
10/30/95

ICP MACRO

OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	2876	1			ICV	AG				4.9870		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
2	2876	1			ICV	AL				4.8366		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
3	2876	1			ICV	AS				5.1233		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
4	2876	1			ICV	B				4.8717		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
5	2876	1			ICV	BA				4.9578		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
6	2876	1			ICV	BE				5.1008		1.0000	10/27/95	14:00	bjg	0.005	@ICP-QC
7	2876	1			ICV	BI				5.0341		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
8	2876	1			ICV	CA				5.1700		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
9	2876	1			ICV	CD				5.0224		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
10	2876	1			ICV	CE				5.1243		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
11	2876	1			ICV	CO				5.0221		1.0000	10/27/95	14:00	bjg	0.02	@ICP-QC
12	2876	1			ICV	CR				5.0747		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
13	2876	1			ICV	CU				5.0754		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
14	2876	1			ICV	EU				0.0075		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
15	2876	1			ICV	FE				5.0474		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
16	2876	1			ICV	K				5.1280		1.0000	10/27/95	14:00	bjg	0.3	@ICP-QC
17	2876	1			ICV	LA				5.0468		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
18	2876	1			ICV	LI				5.0329		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
19	2876	1			ICV	MG				4.9985		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
20	2876	1			ICV	MN				4.8201		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
21	2876	1			ICV	MO				5.0271		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
22	2876	1			ICV	NA				5.0002		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
23	2876	1			ICV	ND				5.0865		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
24	2876	1			ICV	NI				4.9908		1.0000	10/27/95	14:00	bjg	0.02	@ICP-QC
25	2876	1			ICV	P				4.9428		1.0000	10/27/95	14:00	bjg	0.2	@ICP-QC
26	2876	1			ICV	PB				5.0509		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
27	2876	1			ICV	S				4.8757		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
28	2876	1			ICV	SB				4.7836		1.0000	10/27/95	14:00	bjg	0.2	@ICP-QC
29	2876	1			ICV	SE				4.8718		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
30	2876	1			ICV	SI				4.9031		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
31	2876	1			ICV	SM				4.9127		1.0000	10/27/95	14:00	bjg	0.1	@ICP-QC
32	2876	1			ICV	SR				4.9330		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
33	2876	1			ICV	TH				0.0362		1.0000	10/27/95	14:00	bjg	0	@ICP-QC
34	2876	1			ICV	TI				4.9613		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
35	2876	1			ICV	TL				4.8277		1.0000	10/27/95	14:00	bjg	0.2	@ICP-QC
36	2876	1			ICV	U				9.4888		1.0000	10/27/95	14:00	bjg	0.4	@ICP-QC
37	2876	1			ICV	V				4.9448		1.0000	10/27/95	14:00	bjg	0.05	@ICP-QC
38	2876	1			ICV	Y				0.0004		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
39	2876	1			ICV	ZN				5.0128		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
40	2876	1			ICV	ZR				4.9359		1.0000	10/27/95	14:00	bjg	0.01	@ICP-QC
41	2876	2			ICB	AG				-0.0004		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
42	2876	2			ICB	AL				0.0021		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
43	2876	2			ICB	AS				-0.0028		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
44	2876	2			ICB	B				0.0083		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
45	2876	2			ICB	BA				-0.0000		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
46	2876	2			ICB	BE				-0.0000		1.0000	10/27/95	14:03	bjg	0.005	@ICP-QC
47	2876	2			ICB	BI				-0.0088		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
48	2876	2			ICB	CA				-0.0020		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
49	2876	2			ICB	CD				-0.0006		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
50	2876	2			ICB	CE				-0.0023		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
51	2876	2			ICB	CO				-0.0013		1.0000	10/27/95	14:03	bjg	0.02	@ICP-QC
52	2876	2			ICB	CR				0.0002		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
53	2876	2			ICB	CU				0.0006		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
54	2876	2			ICB	EU				-0.0003		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
55	2876	2			ICB	FE				0.0006		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
56	2876	2			ICB	K				-0.0173		1.0000	10/27/95	14:03	bjg	0.3	@ICP-QC
57	2876	2			ICB	LA				-0.0007		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
58	2876	2			ICB	LI				-0.0002		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
59	2876	2			ICB	MG				0.0057		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
60	2876	2			ICB	MN				0.0001		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
61	2876	2			ICB	MO				0.0011		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
62	2876	2			ICB	NA				-0.0018		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
63	2876	2			ICB	ND				-0.0014		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
64	2876	2			ICB	NI				-0.0065		1.0000	10/27/95	14:03	bjg	0.02	@ICP-QC
65	2876	2			ICB	P				0.0135		1.0000	10/27/95	14:03	bjg	0.2	@ICP-QC
66	2876	2			ICB	PB				0.0120		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
67	2876	2			ICB	S				0.0123		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
68	2876	2			ICB	SB				0.0045		1.0000	10/27/95	14:03	bjg	0.2	@ICP-QC
69	2876	2			ICB	SE				0.0064		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
70	2876	2			ICB	SI				0.0036		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
71	2876	2			ICB	SM				0.0010		1.0000	10/27/95	14:03	bjg	0.1	@ICP-QC
72	2876	2			ICB	SR				0.0001		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
73	2876	2			ICB	TH				-0.0002		1.0000	10/27/95	14:03	bjg	0	@ICP-QC
74	2876	2			ICB	TI				0.0000		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
75	2876	2			ICB	TL				0.0021		1.0000	10/27/95	14:03	bjg	0.2	@ICP-QC
76	2876	2			ICB	U				-0.0075		1.0000	10/27/95	14:03	bjg	0.4	@ICP-QC
77	2876	2			ICB	V				-0.0003		1.0000	10/27/95	14:03	bjg	0.05	@ICP-QC
78	2876	2			ICB	Y				-0.0003		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
79	2876	2			ICB	ZN				0.0034		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
80	2876	2			ICB	ZR				-0.0003		1.0000	10/27/95	14:03	bjg	0.01	@ICP-QC
81	2876	3			ICSA	AG				-0.0123		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
82	2876	3			ICSA	AL				236.0356		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
83	2876	3			ICSA	AS				-0.0379		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
84	2876	3			ICSA	B				0.0085		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
85	2876	3			ICSA	BA				0.0030		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
86	2876	3			ICSA	BE				-0.0001		1.0000	10/27/95	14:08	bjg	0.005	@ICP-QC
87	2876	3			ICSA	BI				-0.0284		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
88	2876	3			ICSA	CA				241.7389		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
89	2876	3			ICSA	CD				0.0012		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
90	2876	3			ICSA	CE				0.0104		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
91	2876	3			ICSA	CO				-0.0002		1.0000	10/27/95	14:08	bjg	0.02	@ICP-QC
92	2876	3			ICSA	CR				-0.0036		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
93	2876	3			ICSA	CU				-0.0085		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
94	2876	3			ICSA	EU				0.0012		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
95	2876	3			ICSA	FE				99.9775		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
96	2876	3			ICSA	K				0.2434		1.0000	10/27/95	14:08	bjg	0.3	@ICP-QC
97	2876	3			ICSA	LA				-0.0035		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
98	2876	3			ICSA	LI				0.0018		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
99	2876	3			ICSA	MG				242.6238		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
100	2876	3			ICSA	MN				-0.0077		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
101	2876	3			ICSA	MO				-0.0164		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
102	2876	3			ICSA	NA				195.4803		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
103	2876	3			ICSA	ND				0.0083		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
104	2876	3			ICSA	NI				-0.0196		1.0000	10/27/95	14:08	bjg	0.02	@ICP-QC
105	2876	3			ICSA	P				0.0034		1.0000	10/27/95	14:08	bjg	0.2	@ICP-QC
106	2876	3			ICSA	PB				0.0515		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
107	2876	3			ICSA	S				0.0480		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
108	2876	3			ICSA	SB				-0.0033		1.0000	10/27/95	14:08	bjg	0.2	@ICP-QC
109	2876	3			ICSA	SE				-0.0412		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
110	2876	3			ICSA	SI				0.0130		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
111	2876	3			ICSA	SM				-0.0101		1.0000	10/27/95	14:08	bjg	0.1	@ICP-QC
112	2876	3			ICSA	SR				-0.0033		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
113	2876	3			ICSA	TH				-0.0134		1.0000	10/27/95	14:08	bjg	0	@ICP-QC
114	2876	3			ICSA	TI				0.0017		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
115	2876	3			ICSA	TL				0.0481		1.0000	10/27/95	14:08	bjg	0.2	@ICP-QC
116	2876	3			ICSA	U				0.0799		1.0000	10/27/95	14:08	bjg	0.4	@ICP-QC
117	2876	3			ICSA	V				-0.0028		1.0000	10/27/95	14:08	bjg	0.05	@ICP-QC
118	2876	3			ICSA	Y				0.0173		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
119	2876	3			ICSA	ZN				0.0026		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
120	2876	3			ICSA	ZR				-0.0023		1.0000	10/27/95	14:08	bjg	0.01	@ICP-QC
121	2876	4			ICSAB	AG				0.0294		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
122	2876	4			ICSAB	AL				236.0231		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC

WHC-CD-WM-DP-145, REV. 1

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
123	2876	4			ICSAB	AS				-0.0840		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
124	2876	4			ICSAB	B				-0.0041		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
125	2876	4			ICSAB	BA				0.4807		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
126	2876	4			ICSAB	BE				0.4851		1.0000	10/27/95	14:09	bjg	0.005	@ICP-QC
127	2876	4			ICSAB	BI				-0.0106		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
128	2876	4			ICSAB	CA				244.6132		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
129	2876	4			ICSAB	CD				0.9170		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
130	2876	4			ICSAB	CE				0.0131		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
131	2876	4			ICSAB	CO				0.4546		1.0000	10/27/95	14:09	bjg	0.02	@ICP-QC
132	2876	4			ICSAB	CR				0.4584		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
133	2876	4			ICSAB	CU				0.4721		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
134	2876	4			ICSAB	EU				0.0001		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
135	2876	4			ICSAB	FE				90.6203		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
136	2876	4			ICSAB	K				0.1277		1.0000	10/27/95	14:09	bjg	0.3	@ICP-QC
137	2876	4			ICSAB	LA				-0.0034		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
138	2876	4			ICSAB	LI				0.9842		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
139	2876	4			ICSAB	MG				242.8523		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
140	2876	4			ICSAB	MN				0.4332		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
141	2876	4			ICSAB	MO				-0.0118		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
142	2876	4			ICSAB	NA				195.0515		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
143	2876	4			ICSAB	ND				0.0085		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
144	2876	4			ICSAB	NI				0.8770		1.0000	10/27/95	14:09	bjg	0.02	@ICP-QC
145	2876	4			ICSAB	P				0.0231		1.0000	10/27/95	14:09	bjg	0.2	@ICP-QC
146	2876	4			ICSAB	PB				1.0063		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
147	2876	4			ICSAB	S				0.0575		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
148	2876	4			ICSAB	SB				-0.0024		1.0000	10/27/95	14:09	bjg	0.2	@ICP-QC
149	2876	4			ICSAB	SE				-0.0410		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
150	2876	4			ICSAB	SI				0.0108		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
151	2876	4			ICSAB	SM				-0.0118		1.0000	10/27/95	14:09	bjg	0.1	@ICP-QC
152	2876	4			ICSAB	SR				-0.0041		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
153	2876	4			ICSAB	TH				-0.0020		1.0000	10/27/95	14:09	bjg	0	@ICP-QC
154	2876	4			ICSAB	TI				0.0013		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
155	2876	4			ICSAB	TL				0.0525		1.0000	10/27/95	14:09	bjg	0.2	@ICP-QC
156	2876	4			ICSAB	U				0.0845		1.0000	10/27/95	14:09	bjg	0.4	@ICP-QC
157	2876	4			ICSAB	V				0.4502		1.0000	10/27/95	14:09	bjg	0.05	@ICP-QC
158	2876	4			ICSAB	Y				0.0186		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
159	2876	4			ICSAB	ZN				0.9438		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
160	2876	4			ICSAB	ZR				-0.0042		1.0000	10/27/95	14:09	bjg	0.01	@ICP-QC
161	2876	5			PREPSTDTJA	AG-A-01				0.8805		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
162	2876	5			PREPSTDTJA	AL-A-01				4.9887		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
163	2876	5			PREPSTDTJA	AS-A-01				4.5182		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
164	2876	5			PREPSTDTJA	B-A-01				6.0220		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
165	2876	5			PREPSTDTJA	BA-A-01				4.8080		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
166	2876	5			PREPSTDTJA	BE-A-01				4.8553		1.0000	10/27/95	14:12	bjg	0.005	@ICP-A01
167	2876	5			PREPSTDTJA	BI-A-01				4.4178		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
168	2876	5			PREPSTDTJA	CA-A-01				5.8281		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
169	2876	5			PREPSTDTJA	CD-A-01				4.3663		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
170	2876	5			PREPSTDTJA	CE-A-01				4.7822		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
171	2876	5			PREPSTDTJA	CO-A-01				4.5070		1.0000	10/27/95	14:12	bjg	0.02	@ICP-A01
172	2876	5			PREPSTDTJA	CR-A-01				4.5336		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
173	2876	5			PREPSTDTJA	CU-A-01				4.5505		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
174	2876	5			PREPSTDTJA	EU-A-01				0.0063		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
175	2876	5			PREPSTDTJA	FE-A-01				4.5188		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
176	2876	5			PREPSTDTJA	K-A-01				4.8822		1.0000	10/27/95	14:12	bjg	0.3	@ICP-A01
177	2876	5			PREPSTDTJA	LA-A-01				4.7332		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
178	2876	5			PREPSTDTJA	LI-A-01				4.7339		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
179	2876	5			PREPSTDTJA	MG-A-01				4.6296		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
180	2876	5			PREPSTDTJA	MN-A-01				4.4071		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
181	2876	5			PREPSTDTJA	MO-A-01				4.8431		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
182	2876	5			PREPSTDTJA	NA-A-01				5.2316		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
183	2876	5			PREPSTDTJA	ND-A-01				4.6409		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
184	2876	5			PREPSTDTJA	NI-A-01				4.4664		1.0000	10/27/95	14:12	bjg	0.02	@ICP-A01
185	2876	5			PREPSTDTJA	P-A-01				4.7132		1.0000	10/27/95	14:12	bjg	0.2	@ICP-A01
186	2876	5			PREPSTDTJA	PB-A-01				4.3281		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
187	2876	5			PREPSTDTJA	S-A-01				4.3278		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
188	2876	5			PREPSTDTJA	SB-A-01				4.2525		1.0000	10/27/95	14:12	bjg	0.2	@ICP-A01
189	2876	5			PREPSTDTJA	SE-A-01				4.3803		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
190	2876	5			PREPSTDTJA	SI-A-01				1.2888		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
191	2876	5			PREPSTDTJA	SM-A-01				4.8328		1.0000	10/27/95	14:12	bjg	0.1	@ICP-A01
192	2876	5			PREPSTDTJA	SR-A-01				4.6280		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
193	2876	5			PREPSTDTJA	TH-A-01				0.0326		1.0000	10/27/95	14:12	bjg	0	@ICP-A01
194	2876	5			PREPSTDTJA	TI-A-01				4.5920		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
195	2876	5			PREPSTDTJA	TL-A-01				4.3073		1.0000	10/27/95	14:12	bjg	0.2	@ICP-A01
196	2876	5			PREPSTDTJA	U-A-01				9.0752		1.0000	10/27/95	14:12	bjg	0.4	@ICP-A01
197	2876	5			PREPSTDTJA	V-A-01				4.4766		1.0000	10/27/95	14:12	bjg	0.05	@ICP-A01
198	2876	5			PREPSTDTJA	Y-A-01				0.0081		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
199	2876	5			PREPSTDTJA	ZN-A-01				4.2781		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
200	2876	5			PREPSTDTJA	ZR-A-01				4.6263		1.0000	10/27/95	14:12	bjg	0.01	@ICP-A01
201	2876	6			PREPBLKTJA	AG-A-01				0.0008		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
202	2876	6			PREPBLKTJA	AL-A-01				0.0234		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
203	2876	6			PREPBLKTJA	AS-A-01				-0.0026		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
204	2876	6			PREPBLKTJA	B-A-01				0.0234		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
205	2876	6			PREPBLKTJA	BA-A-01				0.0002		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
206	2876	6			PREPBLKTJA	BE-A-01				-0.0001		1.0000	10/27/95	14:15	bjg	0.005	@ICP-A01
207	2876	6			PREPBLKTJA	BI-A-01				-0.0176		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
208	2876	6			PREPBLKTJA	CA-A-01				0.1221		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
209	2876	6			PREPBLKTJA	CD-A-01				0.0010		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
210	2876	6			PREPBLKTJA	CE-A-01				0.0078		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
211	2876	6			PREPBLKTJA	CO-A-01				0.0019		1.0000	10/27/95	14:15	bjg	0.02	@ICP-A01
212	2876	6			PREPBLKTJA	CR-A-01				0.0019		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
213	2876	6			PREPBLKTJA	CU-A-01				0.0020		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
214	2876	6			PREPBLKTJA	EU-A-01				-0.0026		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
215	2876	6			PREPBLKTJA	FE-A-01				0.0255		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
216	2876	6			PREPBLKTJA	K-A-01				0.1955		1.0000	10/27/95	14:15	bjg	0.3	@ICP-A01
217	2876	6			PREPBLKTJA	LA-A-01				-0.0004		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
218	2876	6			PREPBLKTJA	LI-A-01				-0.0025		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
219	2876	6			PREPBLKTJA	MG-A-01				0.0178		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
220	2876	6			PREPBLKTJA	MN-A-01				-0.0002		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
221	2876	6			PREPBLKTJA	MO-A-01				-0.0014		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
222	2876	6			PREPBLKTJA	NA-A-01				0.0815		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
223	2876	6			PREPBLKTJA	ND-A-01				0.0011		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
224	2876	6			PREPBLKTJA	NI-A-01				0.0003		1.0000	10/27/95	14:15	bjg	0.02	@ICP-A01
225	2876	6			PREPBLKTJA	P-A-01				0.0335		1.0000	10/27/95	14:15	bjg	0.2	@ICP-A01
226	2876	6			PREPBLKTJA	PB-A-01				0.0072		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
227	2876	6			PREPBLKTJA	S-A-01				0.0396		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
228	2876	6			PREPBLKTJA	SB-A-01				0.0014		1.0000	10/27/95	14:15	bjg	0.2	@ICP-A01
229	2876	6			PREPBLKTJA	SE-A-01				-0.0119		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
230	2876	6			PREPBLKTJA	SI-A-01				0.0872		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
231	2876	6			PREPBLKTJA	SM-A-01				-0.0252		1.0000	10/27/95	14:15	bjg	0.1	@ICP-A01
232	2876	6			PREPBLKTJA	SR-A-01				-0.0003		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
233	2876	6			PREPBLKTJA	TH-A-01				0.0102		1.0000	10/27/95	14:15	bjg	0	@ICP-A01
234	2876	6			PREPBLKTJA	TI-A-01				0.0007		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
235	2876	6			PREPBLKTJA	TL-A-01				0.0052		1.0000	10/27/95	14:15	bjg	0.2	@ICP-A01
236	2876	6			PREPBLKTJA	U-A-01				-0.1029		1.0000	10/27/95	14:15	bjg	0.4	@ICP-A01
237	2876	6			PREPBLKTJA	V-A-01				-0.0053		1.0000	10/27/95	14:15	bjg	0.05	@ICP-A01
238	2876	6			PREPBLKTJA	Y-A-01				-0.0019		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
239	2876	6			PREPBLKTJA	ZN-A-01				0.0156		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
240	2876	6			PREPBLKTJA	ZR-A-01				-0.0037		1.0000	10/27/95	14:15	bjg	0.01	@ICP-A01
241	2876	7	S95T002161			AG-A-01			<	9.9800		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
242	2876	7	S95T002161			AL-A-01				23117.5273		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
243	2876	7	S95T002161			AS-A-01			<	49.9000		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
244	2876	7	S95T002161			B-A-01			<	49.9000		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01

ICP-CO-WM-DP/45, REV. 1

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
245	2876	7	S95T002161			BA-A-01			<	49.9000		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
246	2876	7	S95T002161			BE-A-01			<	4.9900		996.0000	10/27/95	14:22	bjg	0.005	@ICP-A01
247	2876	7	S95T002161			BI-A-01			<	99.8000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
248	2876	7	S95T002161			CA-A-01				292.4272		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
249	2876	7	S95T002161			CD-A-01			<	9.9800		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
250	2876	7	S95T002161			CE-A-01			<	99.8000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
251	2876	7	S95T002161			CO-A-01			<	19.9600		996.0000	10/27/95	14:22	bjg	0.02	@ICP-A01
252	2876	7	S95T002161			CR-A-01				93.0969		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
253	2876	7	S95T002161			CU-A-01			<	9.9800		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
254	2876	7	S95T002161			FE-A-01				1004.6347		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
255	2876	7	S95T002161			K-A-01				388.9676		996.0000	10/27/95	14:22	bjg	0.3	@ICP-A01
256	2876	7	S95T002161			LA-A-01			<	49.9000		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
257	2876	7	S95T002161			LI-A-01				28.5124		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
258	2876	7	S95T002161			MG-A-01			<	99.8000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
259	2876	7	S95T002161			MN-A-01				13.9007		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
260	2876	7	S95T002161			MO-A-01			<	49.9000		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
261	2876	7	S95T002161			NA-A-01				218674.5000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
262	2876	7	S95T002161			ND-A-01			<	99.8000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
263	2876	7	S95T002161			NI-A-01				130.4062		996.0000	10/27/95	14:22	bjg	0.02	@ICP-A01
264	2876	7	S95T002161			P-A-01				33024.6445		996.0000	10/27/95	14:22	bjg	0.2	@ICP-A01
265	2876	7	S95T002161			PB-A-01			<	99.8000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
266	2876	7	S95T002161			S-A-01				1190.0909		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
267	2876	7	S95T002161			SB-A-01			<	199.6000		996.0000	10/27/95	14:22	bjg	0.2	@ICP-A01
268	2876	7	S95T002161			SE-A-01			<	99.8000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
269	2876	7	S95T002161			SI-A-01				200.3808		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
270	2876	7	S95T002161			SM-A-01			<	99.8000		996.0000	10/27/95	14:22	bjg	0.1	@ICP-A01
271	2876	7	S95T002161			SR-A-01				32.9018		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
272	2876	7	S95T002161			TI-A-01				10.8204		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
273	2876	7	S95T002161			TL-A-01			<	199.6000		996.0000	10/27/95	14:22	bjg	0.2	@ICP-A01
274	2876	7	S95T002161			U-A-01			<	399.2000		996.0000	10/27/95	14:22	bjg	0.4	@ICP-A01
275	2876	7	S95T002161			V-A-01				69.4047		996.0000	10/27/95	14:22	bjg	0.05	@ICP-A01
276	2876	7	S95T002161			ZN-A-01				37.9265		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
277	2876	7	S95T002161			ZR-A-01			<	9.9800		996.0000	10/27/95	14:22	bjg	0.01	@ICP-A01
278	2876	8	S95T002161		DUP	AG-A-01		<9.9800		<9.8200		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
279	2876	8	S95T002161		DUP	AL-A-01		23117.5273		14577.5771		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
280	2876	8	S95T002161		DUP	AS-A-01		<49.9000		<49.1000		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
281	2876	8	S95T002161		DUP	B-A-01		<49.9000		56.7086		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
282	2876	8	S95T002161		DUP	BA-A-01		<49.9000		<49.1000		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
283	2876	8	S95T002161		DUP	BE-A-01		<4.9900		<4.9100		982.0000	10/27/95	14:25	bjg	0.005	@ICP-A01
284	2876	8	S95T002161		DUP	BI-A-01		<99.8000		<98.2000		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
285	2876	8	S95T002161		DUP	CA-A-01		292.4272		249.5220		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
286	2876	8	S95T002161		DUP	CD-A-01		<9.9800		<9.8200		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
287	2876	8	S95T002161		DUP	CE-A-01		<99.8000		<98.2000		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
288	2876	8	S95T002161		DUP	CO-A-01		<19.9600		<19.6400		982.0000	10/27/95	14:25	bjg	0.02	@ICP-A01
289	2876	8	S95T002161		DUP	CR-A-01		93.0969		92.7648		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
290	2876	8	S95T002161		DUP	CU-A-01		<9.9800		<9.8200		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
291	2876	8	S95T002161		DUP	FE-A-01		1004.6347		1209.0212		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
292	2876	8	S95T002161		DUP	K-A-01		388.9676		<294.6000		982.0000	10/27/95	14:25	bjg	0.3	@ICP-A01
293	2876	8	S95T002161		DUP	LA-A-01		<49.9000		<49.1000		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
294	2876	8	S95T002161		DUP	LI-A-01		28.5124		25.2258		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
295	2876	8	S95T002161		DUP	MG-A-01		<99.8000		<98.2000		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
296	2876	8	S95T002161		DUP	MN-A-01		13.9007		14.8185		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
297	2876	8	S95T002161		DUP	MO-A-01		<49.9000		<49.1000		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
298	2876	8	S95T002161		DUP	NA-A-01		218674.5000		222845.3750		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
299	2876	8	S95T002161		DUP	ND-A-01		<99.8000		<98.2000		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
300	2876	8	S95T002161		DUP	NI-A-01		130.4062		118.0260		982.0000	10/27/95	14:25	bjg	0.02	@ICP-A01
301	2876	8	S95T002161		DUP	P-A-01		33024.6445		32451.5977		982.0000	10/27/95	14:25	bjg	0.2	@ICP-A01
302	2876	8	S95T002161		DUP	PB-A-01		<99.8000		<98.2000		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
303	2876	8	S95T002161		DUP	S-A-01		1190.0909		949.3092		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
304	2876	8	S95T002161		DUP	SB-A-01		<199.6000		<196.4000		982.0000	10/27/95	14:25	bjg	0.2	@ICP-A01
305	2876	8	S95T002161		DUP	SE-A-01		<99.8000		<98.2000		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
306	2876	8	S95T002161		DUP	SI-A-01		200.3808		378.8168		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
307	2876	8	S95T002161		DUP	SM-A-01		<99.8000		<98.2000		982.0000	10/27/95	14:25	bjg	0.1	@ICP-A01
308	2876	8	S95T002161		DUP	SR-A-01		32.9018		36.4228		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
309	2876	8	S95T002161		DUP	TI-A-01		10.8204		11.3893		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
310	2876	8	S95T002161		DUP	TL-A-01		<199.6000		<196.4000		982.0000	10/27/95	14:25	bjg	0.2	@ICP-A01
311	2876	8	S95T002161		DUP	U-A-01		<399.2000		<392.8000		982.0000	10/27/95	14:25	bjg	0.4	@ICP-A01
312	2876	8	S95T002161		DUP	V-A-01		69.4047		67.9158		982.0000	10/27/95	14:25	bjg	0.05	@ICP-A01
313	2876	8	S95T002161		DUP	ZN-A-01		37.9265		44.4620		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
314	2876	8	S95T002161		DUP	ZR-A-01		<9.9800		<9.8200		982.0000	10/27/95	14:25	bjg	0.01	@ICP-A01
315	2876	9	S95T002161_S		SPK-PREDIG	AG-A-01		95		91.7653		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
316	2876	9	S95T002161_S		SPK-PREDIG	AL-A-01		n/a		n/a		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
317	2876	9	S95T002161_S		SPK-PREDIG	AS-A-01		475		475.2079		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
318	2876	9	S95T002161_S		SPK-PREDIG	B-A-01		475		634.0425		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
319	2876	9	S95T002161_S		SPK-PREDIG	BA-A-01		475		447.2317		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
320	2876	9	S95T002161_S		SPK-PREDIG	BE-A-01		475		471.7765		950.0000	10/27/95	14:28	bjg	0.005	@ICP-A01
321	2876	9	S95T002161_S		SPK-PREDIG	BI-A-01		475		464.9223		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
322	2876	9	S95T002161_S		SPK-PREDIG	CA-A-01		475		523.2411		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
323	2876	9	S95T002161_S		SPK-PREDIG	CD-A-01		475		459.8135		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
324	2876	9	S95T002161_S		SPK-PREDIG	CE-A-01		475		464.3141		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
325	2876	9	S95T002161_S		SPK-PREDIG	CO-A-01		475		471.0281		950.0000	10/27/95	14:28	bjg	0.02	@ICP-A01
326	2876	9	S95T002161_S		SPK-PREDIG	CR-A-01		475		464.2442		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
327	2876	9	S95T002161_S		SPK-PREDIG	CU-A-01		475		458.9155		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
328	2876	9	S95T002161_S		SPK-PREDIG	FE-A-01		475		535.1402		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
329	2876	9	S95T002161_S		SPK-PREDIG	K-A-01		475		451.5274		950.0000	10/27/95	14:28	bjg	0.3	@ICP-A01
330	2876	9	S95T002161_S		SPK-PREDIG	LA-A-01		475		463.6691		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
331	2876	9	S95T002161_S		SPK-PREDIG	LI-A-01		475		458.5097		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
332	2876	9	S95T002161_S		SPK-PREDIG	MG-A-01		475		584.2975		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
333	2876	9	S95T002161_S		SPK-PREDIG	MN-A-01		475		441.8214		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
334	2876	9	S95T002161_S		SPK-PREDIG	MO-A-01		475		464.2026		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
335	2876	9	S95T002161_S		SPK-PREDIG	NA-A-01		n/a		n/a		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
336	2876	9	S95T002161_S		SPK-PREDIG	ND-A-01		475		453.2446		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
337	2876	9	S95T002161_S		SPK-PREDIG	NI-A-01		475		448.4805		950.0000	10/27/95	14:28	bjg	0.02	@ICP-A01
338	2876	9	S95T002161_S		SPK-PREDIG	P-A-01		n/a		n/a		950.0000	10/27/95	14:28	bjg	0.2	@ICP-A01
339	2876	9	S95T002161_S		SPK-PREDIG	PB-A-01		475		542.2957		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
340	2876	9	S95T002161_S		SPK-PREDIG	S-A-01		475		458.7098		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
341	2876	9	S95T002161_S		SPK-PREDIG	SB-A-01		475		446.7351		950.0000	10/27/95	14:28	bjg	0.2	@ICP-A01
342	2876	9	S95T002161_S		SPK-PREDIG	SE-A-01		475		446.0139		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
343	2876	9	S95T002161_S		SPK-PREDIG	SI-A-01		n/a		n/a		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
344	2876	9	S95T002161_S		SPK-PREDIG	SM-A-01		475		448.3404		950.0000	10/27/95	14:28	bjg	0.1	@ICP-A01
345	2876	9	S95T002161_S		SPK-PREDIG	SR-A-01		475		453.1023		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
346	2876	9	S95T002161_S		SPK-PREDIG	TI-A-01		475		433.0248		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
347	2876	9	S95T002161_S		SPK-PREDIG	TL-A-01		475		455.4869		950.0000	10/27/95	14:28	bjg	0.2	@ICP-A01
348	2876	9	S95T002161_S		SPK-PREDIG	U-A-01		950		1011.0333		950.0000	10/27/95	14:28	bjg	0.4	@ICP-A01
349	2876	9	S95T002161_S		SPK-PREDIG	V-A-01		475		456.5892		950.0000	10/27/95	14:28	bjg	0.05	@ICP-A01
350	2876	9	S95T002161_S		SPK-PREDIG	ZN-A-01		475		466.1599		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
351	2876	9	S95T002161_S		SPK-PREDIG	ZR-A-01		475		407.4568		950.0000	10/27/95	14:28	bjg	0.01	@ICP-A01
352	2876	10			ICSA	AG				-0.0137		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
353	2876	10			ICSA	AL				239.7519		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
354	2876	10			ICSA	AS				-0.0301		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
355	2876	10			ICSA	B				0.0053		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
356	2876	10			ICSA	BA				0.0030		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
357	2876	10			ICSA	BE				0.0000		1.0000	10/27/95	14:31	bjg	0.005	@ICP-QC
358	2876	10			ICSA	BI				-0.0390		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
359	2876	10			ICSA	CA				250.9914		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
360	2876	10			ICSA	CD				0.0003		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
361	2876	10			ICSA	CE				0.0127		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
362	2876	10			ICSA	CO				-0.0009		1.0000	10/27/95	14:31	bjg	0.02	@ICP-QC
363	2876	10			ICSA	CR				-0.0034		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
364	2876	10			ICSA	CU				-0.0091		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
365	2876	10			ICSA	EU				-0.0101		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
366	2876	10			ICSA	FE				92.3515		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC

WHC-SD-WM-DP-/95, REV./

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
367	2876	10			ICSA	K				0.1430		1.0000	10/27/95	14:31	bjg	0.3	@ICP-QC
368	2876	10			ICSA	LA				-0.0043		1.0000	10/27/95	14:31	bjg	0.08	@ICP-QC
369	2876	10			ICSA	LI				0.0020		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
370	2876	10			ICSA	MG				247.2710		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
371	2876	10			ICSA	MN				-0.0077		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
372	2876	10			ICSA	MO				-0.0145		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
373	2876	10			ICSA	NA				196.2103		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
374	2876	10			ICSA	ND				0.0069		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
375	2876	10			ICSA	NI				-0.0176		1.0000	10/27/95	14:31	bjg	0.02	@ICP-QC
376	2876	10			ICSA	P				0.0212		1.0000	10/27/95	14:31	bjg	0.2	@ICP-QC
377	2876	10			ICSA	PB				0.0451		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
378	2876	10			ICSA	S				0.0335		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
379	2876	10			ICSA	SB				0.0056		1.0000	10/27/95	14:31	bjg	0.2	@ICP-QC
380	2876	10			ICSA	SE				-0.0460		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
381	2876	10			ICSA	SI				0.0180		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
382	2876	10			ICSA	SM				-0.0088		1.0000	10/27/95	14:31	bjg	0.1	@ICP-QC
383	2876	10			ICSA	SR				-0.0034		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
384	2876	10			ICSA	TH				-0.0112		1.0000	10/27/95	14:31	bjg	0	@ICP-QC
385	2876	10			ICSA	TI				0.0015		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
386	2876	10			ICSA	TL				0.0109		1.0000	10/27/95	14:31	bjg	0.2	@ICP-QC
387	2876	10			ICSA	U				0.0446		1.0000	10/27/95	14:31	bjg	0.4	@ICP-QC
388	2876	10			ICSA	V				-0.0020		1.0000	10/27/95	14:31	bjg	0.05	@ICP-QC
389	2876	10			ICSA	Y				0.0179		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
390	2876	10			ICSA	ZN				0.0011		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
391	2876	10			ICSA	ZR				-0.0019		1.0000	10/27/95	14:31	bjg	0.01	@ICP-QC
392	2876	11			ICSAB	AG				0.9438		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
393	2876	11			ICSAB	AL				239.0289		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
394	2876	11			ICSAB	AS				-0.0285		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
395	2876	11			ICSAB	B				-0.0056		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
396	2876	11			ICSAB	BA				0.4671		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
397	2876	11			ICSAB	BE				0.4757		1.0000	10/27/95	14:34	bjg	0.005	@ICP-QC
398	2876	11			ICSAB	BI				-0.0268		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
399	2876	11			ICSAB	CA				251.2771		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
400	2876	11			ICSAB	CD				0.9415		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
401	2876	11			ICSAB	CE				0.0034		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
402	2876	11			ICSAB	CO				0.4632		1.0000	10/27/95	14:34	bjg	0.02	@ICP-QC
403	2876	11			ICSAB	CR				0.4680		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
404	2876	11			ICSAB	CU				0.4788		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
405	2876	11			ICSAB	EU				-0.0078		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
406	2876	11			ICSAB	FE				92.5068		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
407	2876	11			ICSAB	K				0.0589		1.0000	10/27/95	14:34	bjg	0.3	@ICP-QC
408	2876	11			ICSAB	LA				-0.0044		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
409	2876	11			ICSAB	LI				0.9895		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
410	2876	11			ICSAB	MG				246.1810		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
411	2876	11			ICSAB	MN				0.4412		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
412	2876	11			ICSAB	MO				-0.0118		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
413	2876	11			ICSAB	NA				196.0070		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
414	2876	11			ICSAB	ND				0.0077		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
415	2876	11			ICSAB	NI				0.9015		1.0000	10/27/95	14:34	bjg	0.02	@ICP-QC
416	2876	11			ICSAB	P				0.0216		1.0000	10/27/95	14:34	bjg	0.2	@ICP-QC
417	2876	11			ICSAB	PB				1.0248		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
418	2876	11			ICSAB	S				0.0487		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
419	2876	11			ICSAB	SB				0.0091		1.0000	10/27/95	14:34	bjg	0.2	@ICP-QC
420	2876	11			ICSAB	SE				-0.0297		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
421	2876	11			ICSAB	SI				0.0138		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
422	2876	11			ICSAB	SM				-0.0127		1.0000	10/27/95	14:34	bjg	0.1	@ICP-QC
423	2876	11			ICSAB	SR				-0.0042		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
424	2876	11			ICSAB	TH				-0.0157		1.0000	10/27/95	14:34	bjg	0	@ICP-QC
425	2876	11			ICSAB	TI				0.0011		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
426	2876	11			ICSAB	TL				0.0233		1.0000	10/27/95	14:34	bjg	0.2	@ICP-QC
427	2876	11			ICSAB	U				0.0271		1.0000	10/27/95	14:34	bjg	0.4	@ICP-QC
428	2876	11			ICSAB	V				0.4602		1.0000	10/27/95	14:34	bjg	0.05	@ICP-QC
429	2876	11			ICSAB	Y				0.0190		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
430	2876	11			ICSAB	ZN				0.9641		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
431	2876	11			ICSAB	ZR				-0.0024		1.0000	10/27/95	14:34	bjg	0.01	@ICP-QC
432	2876	12			CCV	AG				5.0452		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
433	2876	12			CCV	AL				4.8912		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
434	2876	12			CCV	AS				5.1828		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
435	2876	12			CCV	B				5.0465		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
436	2876	12			CCV	BA				5.0094		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
437	2876	12			CCV	BE				5.2015		1.0000	10/27/95	14:38	bjg	0.005	@ICP-QC
438	2876	12			CCV	BI				5.1353		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
439	2876	12			CCV	CA				5.2813		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
440	2876	12			CCV	CD				5.0893		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
441	2876	12			CCV	CE				5.1673		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
442	2876	12			CCV	CO				5.0640		1.0000	10/27/95	14:38	bjg	0.02	@ICP-QC
443	2876	12			CCV	CR				5.1402		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
444	2876	12			CCV	CU				5.1580		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
445	2876	12			CCV	EU				0.0078		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
446	2876	12			CCV	FE				5.1048		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
447	2876	12			CCV	K				5.4093		1.0000	10/27/95	14:38	bjg	0.3	@ICP-QC
448	2876	12			CCV	LA				5.1019		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
449	2876	12			CCV	LI				5.1226		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
450	2876	12			CCV	MG				4.9592		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
451	2876	12			CCV	MN				4.9872		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
452	2876	12			CCV	MO				5.0963		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
453	2876	12			CCV	NA				5.0533		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
454	2876	12			CCV	ND				5.1464		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
455	2876	12			CCV	NI				5.0328		1.0000	10/27/95	14:38	bjg	0.02	@ICP-QC
456	2876	12			CCV	P				5.0941		1.0000	10/27/95	14:38	bjg	0.2	@ICP-QC
457	2876	12			CCV	PB				5.1418		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
458	2876	12			CCV	S				4.9825		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
459	2876	12			CCV	SB				4.8502		1.0000	10/27/95	14:38	bjg	0.2	@ICP-QC
460	2876	12			CCV	SE				4.9396		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
461	2876	12			CCV	SI				4.9615		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
462	2876	12			CCV	SM				4.9648		1.0000	10/27/95	14:38	bjg	0.1	@ICP-QC
463	2876	12			CCV	SR				4.9939		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
464	2876	12			CCV	TH				0.0457		1.0000	10/27/95	14:38	bjg	0	@ICP-QC
465	2876	12			CCV	TI				4.9296		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
466	2876	12			CCV	TL				4.9358		1.0000	10/27/95	14:38	bjg	0.2	@ICP-QC
467	2876	12			CCV	U				9.6003		1.0000	10/27/95	14:38	bjg	0.4	@ICP-QC
468	2876	12			CCV	V				5.0180		1.0000	10/27/95	14:38	bjg	0.05	@ICP-QC
469	2876	12			CCV	Y				0.0094		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
470	2876	12			CCV	ZN				5.0731		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
471	2876	12			CCV	ZR				4.9927		1.0000	10/27/95	14:38	bjg	0.01	@ICP-QC
472	2876	13			CCB	AG				0.0001		1.0000	10/27/95	14:40	bjg	0.01	@ICP-QC
473	2876	13			CCB	AL				0.0043		1.0000	10/27/95	14:40	bjg	0.05	@ICP-QC
474	2876	13			CCB	AS				-0.0069		1.0000	10/27/95	14:40	bjg	0.05	@ICP-QC
475	2876	13			CCB	B				0.0042		1.0000	10/27/95	14:40	bjg	0.05	@ICP-QC
476	2876	13			CCB	BA				0.0000		1.0000	10/27/95	14:40	bjg	0.05	@ICP-QC
477	2876	13			CCB	BE				0.0000		1.0000	10/27/95	14:40	bjg	0.005	@ICP-QC
478	2876	13			CCB	BI				0.0095		1.0000	10/27/95	14:40	bjg	0.1	@ICP-QC
479	2876	13			CCB	CA				-0.0006		1.0000	10/27/95	14:40	bjg	0.1	@ICP-QC
480	2876	13			CCB	CD				0.0002		1.0000	10/27/95	14:40	bjg	0.01	@ICP-QC
481	2876	13			CCB	CE				0.0014		1.0000	10/27/95	14:40	bjg	0.1	@ICP-QC
482	2876	13			CCB	CO				0.0002		1.0000	10/27/95	14:40	bjg	0.02	@ICP-QC
483	2876	13			CCB	CR				0.0012		1.0000	10/27/95	14:40	bjg	0.01	@ICP-QC
484	2876	13			CCB	CU				0.0006		1.0000	10/27/95	14:40	bjg	0.01	@ICP-QC
485	2876	13			CCB	EU				-0.0008		1.0000	10/27/95	14:40	bjg	0.05	@ICP-QC
486	2876	13			CCB	FE				0.0006		1.0000	10/27/95	14:40	bjg	0.05	@ICP-QC
487	2876	13			CCB	K				0.1171		1.0000	10/27/95	14:40	bjg	0.3	@ICP-QC
488	2876	13			CCB	LA				-0.0002		1.0000	10/27/95	14:40	bjg	0.05	@ICP-QC

WHC-SD-WM-DP-145, REV. 1

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ICP MACRO

OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
489	2876	13			CCB	LI				-0.0007		1.0000	10/27/95	14:40	blg	0.01	@ICP-QC
490	2876	13			CCB	MG				0.0145		1.0000	10/27/95	14:40	blg	0.1	@ICP-QC
491	2876	13			CCB	MN				-0.0001		1.0000	10/27/95	14:40	blg	0.01	@ICP-QC
492	2876	13			CCB	MO				-0.0023		1.0000	10/27/95	14:40	blg	0.05	@ICP-QC
493	2876	13			CCB	NA				-0.0053		1.0000	10/27/95	14:40	blg	0.1	@ICP-QC
494	2876	13			CCB	ND				0.0011		1.0000	10/27/95	14:40	blg	0.1	@ICP-QC
495	2876	13			CCB	NI				-0.0024		1.0000	10/27/95	14:40	blg	0.02	@ICP-QC
496	2876	13			CCB	P				-0.0122		1.0000	10/27/95	14:40	blg	0.2	@ICP-QC
497	2876	13			CCB	PB				0.0143		1.0000	10/27/95	14:40	blg	0.1	@ICP-QC
498	2876	13			CCB	S				-0.0046		1.0000	10/27/95	14:40	blg	0.05	@ICP-QC
499	2876	13			CCB	SB				0.0005		1.0000	10/27/95	14:40	blg	0.2	@ICP-QC
500	2876	13			CCB	SE				-0.0118		1.0000	10/27/95	14:40	blg	0.1	@ICP-QC
501	2876	13			CCB	SI				0.0021		1.0000	10/27/95	14:40	blg	0.05	@ICP-QC
502	2876	13			CCB	SM				-0.0006		1.0000	10/27/95	14:40	blg	0.1	@ICP-QC
503	2876	13			CCB	SR				-0.0000		1.0000	10/27/95	14:40	blg	0.01	@ICP-QC
504	2876	13			CCB	TH				0.0046		1.0000	10/27/95	14:40	blg	0	@ICP-QC
505	2876	13			CCB	TI				0.0004		1.0000	10/27/95	14:40	blg	0.01	@ICP-QC
506	2876	13			CCB	TL				0.0003		1.0000	10/27/95	14:40	blg	0.2	@ICP-QC
507	2876	13			CCB	U				-0.0140		1.0000	10/27/95	14:40	blg	0.4	@ICP-QC
508	2876	13			CCB	V				-0.0009		1.0000	10/27/95	14:40	blg	0.05	@ICP-QC
509	2876	13			CCB	Y				-0.0004		1.0000	10/27/95	14:40	blg	0.01	@ICP-QC
510	2876	13			CCB	ZN				0.0017		1.0000	10/27/95	14:40	blg	0.01	@ICP-QC
511	2876	13			CCB	ZR				-0.0023		1.0000	10/27/95	14:40	blg	0.01	@ICP-QC

WHC-SD-WM-DP-145, REV. 1

SP
10/30/95

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LABCORE Data Entry Template for Worklist# 2877

Analyst: B. Goecke **Instrument:** ~~ICP01~~ ICP02 BG 10-31-95 **Book#** 483498

Method: LA-505-~~151~~/161 Rev/Mod B-1 BG 10-31-95

Worklist Comment: ICP BY-108 (ACID DIGEST)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	ICSA				@ICP-QC	QC		
4	ICSAB				@ICP-QC	QC		
5	PREPSTDTJA				@ICP-A01	SOLID		
6	PREPBLKTJA				@ICP-A01	SOLID		
7	SAMPLE	S95T002162	0	A	@ICP-A01	SOLID	95000118	BY-108 (R)
		Analytes Requested:			AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
8	DUP	S95T002162	0	A	@ICP-A01	SOLID		
9	SPK-PREDIG	S95T002162	0	A	@ICP-A01	SOLID		
10	CCV				@ICP-QC	QC		
11	CCB				@ICP-QC	QC		
12	SAMPLE	S95T002163	0	A	@ICP-A01	SOLID	95000118	BY-108 (R)
		Analytes Requested:			AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 2877

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
13	DUP	S95T002163	0	A	@ICP-A01	SOLID		
14	SAMPLE	S95T002164	0	A	@ICP-A01	SOLID	95000118	BY-108 (R)
		Analytes Requested:			AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
15	DUP	S95T002164	0	A	@ICP-A01	SOLID		
16	ICSA				@ICP-QC	QC		
17	ICSAB				@ICP-QC	QC		
18	CCV				@ICP-QC	QC		
19	CCB				@ICP-QC	QC		

Final page for worklist # 2877

Reviewed by:

Analyst Signature	Date	Analyst Signature	Date
[illegible]	10-31-95	[illegible]	10/31/95

		D.F.
PREPSTDTJA	5mL KA (WHCIA+2) in 100mL, DIRECT	1
PREPBLKTJA	100mL, DIRECT	1
S95T002162-L	.7395 g in 100mL - 1mL - 5mL - 2mL - 5mL	6761
S95T002162	.7395 g in 100mL - 1mL - 5mL	1352
S95T002162-D	.7378 g in 100mL - 1mL - 5mL	1355
S95T002162-S	.8712 g in 100mL - 1mL - 5mL	1148
S95T002163-L	.7358 g in 100mL - 1mL - 5mL - 2mL - 5mL	6755
S95T002163	.7358 g in 100mL - 1mL - 5mL	1359
S95T002163-D	.6666 g in 100mL - 1mL - 5mL	1500
S95T002164-L	.9460 g in 100mL - 1mL - 5mL - 2mL - 5mL	5285
S95T002164	.9460 g in 100mL - 1mL - 5mL	1057
S95T002164-D	.9752 g in 100mL - 1mL - 5mL	1025

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	951031B	ICP2	10/31/95	12:42	BJG	Q	CONC
2	ICB	951031B	ICP2	10/31/95	12:45	BJG	Q	CONC
3	ICSA	951031B	ICP2	10/31/95	12:48	BJG	Q	CONC
4	ICSAB	951031B	ICP2	10/31/95	12:51	BJG	Q	CONC
5	PREPSTDTJA	951031B	ICP2	10/31/95	12:54	BJG	S	CONC
6	PREPBLKTJA	951031B	ICP2	10/31/95	12:58	BJG	S	CONC
7	S95T002162_L	951031B	ICP2	10/31/95	13:01	BJG	S	CONC
8	S95T002162	951031B	ICP2	10/31/95	13:04	BJG	S	CONC
9	S95T002162_D	951031B	ICP2	10/31/95	13:07	BJG	S	CONC
10	S95T002162_S	951031B	ICP2	10/31/95	13:10	BJG	S	CONC
11	CCV	951031B	ICP2	10/31/95	13:14	BJG	Q	CONC
12	CCB	951031B	ICP2	10/31/95	13:17	BJG	Q	CONC
13	S95T002163_L	951031B	ICP2	10/31/95	13:20	BJG	S	CONC
14	S95T002163	951031B	ICP2	10/31/95	13:23	BJG	S	CONC
15	S95T002163_D	951031B	ICP2	10/31/95	13:27	BJG	S	CONC
16	S95T002164_L	951031B	ICP2	10/31/95	13:31	BJG	S	CONC
17	S95T002164	951031B	ICP2	10/31/95	13:34	BJG	S	CONC
18	S95T002164_D	951031B	ICP2	10/31/95	13:37	BJG	S	CONC
19	ICSA	951031B	ICP2	10/31/95	13:41	BJG	Q	CONC
20	ICSAB	951031B	ICP2	10/31/95	13:43	BJG	Q	CONC
21	CCV_1	951031B	ICP2	10/31/95	13:49	BJG	Q	CONC
22	CCB_1	951031B	ICP2	10/31/95	13:52	BJG	Q	CONC

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BJ Gonda 10-31-95
BY-108
S95T002162,63,64
Acid Digest
1ML-5ml

WHC-SD-WM-DP-145, REV. 1

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 596 TO 600.

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.954	4.964	5.078	4.961	4.928	5.160
2	ICB	.0013	.0042	.0061	.0070	.0000	.0001
3	ICSA	-.0117	244.9	-.0924	-.0012	.0030	.0002
4	ICSAB	.9377	247.7	-.1025	.0014	.4740	.4848
5	PREPSTDTJA	.8640	5.120	4.490	5.975	4.702	4.959
6	PREPBLKTJA	.0004	.0379	-.0045	.0248	.0005	.0001
7	S95T002162_L	-.1118	35960.	-68.49	32.02	265.1	1.132
8	S95T002162_	.8629	34550.	-12.90	24.13	257.1	.6264
9	S95T002162_D	2.623	55800.	-25.79	10.32	409.7	1.034
10	S95T002162_S	109.5	47220.	538.0	574.1	878.5	554.0
11	CCV	5.105	5.128	5.304	5.093	5.118	5.346
12	CCB	.0007	.0060	-.0198	.0029	-.0001	.0002
13	S95T002163_L	6.383	43740.	-104.9	51.87	347.2	1.366
14	S95T002163_	1.319	42750.	-20.52	42.30	340.3	.7184
15	S95T002163_D	-1.232	41700.	-27.01	27.27	329.5	.8467
16	S95T002164_L	6.692	37790.	-54.83	3.048	148.2	1.052
17	S95T002164_	-.5221	36780.	-28.09	17.51	143.9	.5487
18	S95T002164_D	-.2347	32390.	-17.90	21.59	130.8	.4991
19	ICSA	-.0123	248.1	-.0800	-.0004	.0031	.0002
20	ICSAB	.9501	248.2	-.0802	-.0039	.4728	.4889
21	CCV_1	5.067	5.101	5.258	5.087	5.085	5.322
22	CCB_1	.0010	.0095	.0102	.0029	.0001	.0003

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.058	5.015	5.017	5.081	5.007	5.067
2	ICB	.0075	.0021	.0006	.0025	.0016	.0006
3	ICSA	-.0423	247.2	.0016	.0064	-.0016	-.0059
4	ICSAB	.0026	246.6	.9354	.0040	.4604	.4611
5	PREPSTDTJA	4.335	5.223	4.301	4.859	4.455	4.513
6	PREPBLKTJA	.0179	.1348	.0006	.0028	.0004	.0033
7	S95T002162_L	90.49	2788.	2.328	-4.025	-.4749	118.9
8	S95T002162_	32.84	2638.	.1369	7.713	7.124	114.5
9	S95T002162_D	28.48	4425.	1.276	8.659	4.520	165.6
10	S95T002162_S	586.0	4147.	543.0	557.3	545.1	681.2
11	CCV	5.174	5.258	5.186	5.256	5.170	5.242
12	CCB	.0060	.0013	-.0004	-.0023	-.0009	-.0001
13	S95T002163_L	-54.51	3003.	-1.847	22.46	-5.130	136.1
14	S95T002163_	50.01	2827.	.5552	7.410	7.145	129.6
15	S95T002163_D	32.41	2744.	1.153	-4.066	5.920	123.2
16	S95T002164_L	27.53	1728.	.4734	19.12	7.213	148.5
17	S95T002164_	18.73	1700.	-.4343	-3.617	3.195	138.4
18	S95T002164_D	7.706	1514.	.3109	.4942	3.238	117.0
19	ICSA	-.0120	251.4	.0016	.0136	.0007	-.0037
20	ICSAB	-.0150	254.6	.9506	.0037	.4670	.4727
21	CCV_1	5.195	5.251	5.151	5.224	5.130	5.211
22	CCB_1	.0394	.0000	-.0006	.0008	-.0001	.0008

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WHC-SD-WM-DP-145, REV. 1

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	5.082	.0065	5.054	4.823	5.027	5.033
2	ICB	-.0004	-.0008	.0000	.0980	.0004	-.0002
3	ICSA	-.0086	-.0041	92.13	.1256	-.0039	.0019
4	ICSAB	.4906	.0025	92.46	.0671	-.0040	1.018
5	PREPSTDTJA	4.647	.0041	4.538	4.649	4.844	4.937
6	PREPBLKTJA	.0017	-.0050	.0141	.1401	.0003	-.0018
7	S95T002162_L	1.259	-3.489	3291.	-252.4	.7615	.6459
8	S95T002162	5.202	1.078	3136.	570.5	2.884	1.023
9	S95T002162_D	5.700	3.929	5114.	847.6	5.495	2.822
10	S95T002162_S	541.6	3.235	4621.	1087.	554.0	552.6
11	CCV	5.257	.0065	5.239	5.024	5.210	5.206
12	CCB	.0002	-.0015	-.0006	-.0285	.0004	-.0009
13	S95T002163_L	9.291	-8.289	3300.	1517.	7.156	-8.365
14	S95T002163	6.232	1.078	3199.	1263.	3.731	-1.165
15	S95T002163_D	3.699	.7318	3147.	1020.	1.102	-1.853
16	S95T002164_L	8.025	-5.792	2308.	2089.	6.808	-4.515
17	S95T002164	4.284	.1186	2210.	1274.	.6832	-.8168
18	S95T002164_D	3.975	.1441	2000.	1273.	.9195	-1.277
19	ICSA	-.0080	-.0112	93.11	.1874	-.0026	.0019
20	ICSAB	.4882	-.0125	93.96	.1966	-.0030	1.008
21	CCV_1	5.237	.0065	5.208	5.065	5.180	5.234
22	CCB_1	-.0004	-.0011	-.0002	-.1265	.0006	-.0007

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	4.981	4.917	5.039	5.008	5.192	4.983
2	ICB	-.0026	-.0002	-.0005	-.0031	-.0028	-.0010
3	ICSA	249.9	-.0080	-.0146	196.0	.0072	-.0181
4	ICSAB	251.7	.4390	-.0144	201.4	.0061	.8968
5	PREPSTDTJA	4.695	4.388	4.597	7.741	4.904	4.420
6	PREPBLKTJA	.0143	-.0010	.0002	.0834	-.0010	-.0006
7	S95T002162_L	614.4	73.29	8.300	226300.	-33.38	283.2
8	S95T002162	665.9	70.61	1.683	217200.	.6817	287.1
9	S95T002162_D	1110.	113.9	-2.035	187400.	5.553	390.0
10	S95T002162_S	1459.	610.8	547.9	194200.	550.6	890.2
11	CCV	5.143	5.072	5.216	5.149	5.383	5.162
12	CCB	.0019	-.0003	.0007	-.0108	-.0031	-.0046
13	S95T002163_L	744.3	65.90	-14.66	195700.	-11.41	278.2
14	S95T002163	690.5	66.50	2.763	191000.	1.113	275.0
15	S95T002163_D	675.7	65.56	6.246	194300.	-2.091	267.8
16	S95T002164_L	482.5	40.56	9.770	189800.	-2.692	473.4
17	S95T002164	461.0	40.70	5.021	182700.	-2.661	432.5
18	S95T002164_D	399.3	34.71	6.109	188300.	-1.718	385.6
19	ICSA	253.5	-.0084	-.0143	199.9	.0084	-.0147
20	ICSAB	253.5	.4461	-.0104	199.6	.0063	.8005
21	CCV_1	5.101	5.036	5.184	5.165	5.355	5.152
22	CCB_1	-.0045	-.0000	.0000	-.0073	-.0048	-.0011

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WHC-SD-WM-DP-145, REV. 1

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.153	5.006	5.065	4.733	5.001	4.966
2	ICB	-.0053	-.0094	-.0036	.0028	.0302	-.0091
3	ICSA	.0106	.0490	.0336	.0080	.0240	.0011
4	ICSAB	.0211	.9823	.0372	.0100	-.0198	-.0024
5	PREPSTDTJA	4.589	4.212	4.264	4.130	4.557	4.128
6	PREPBLKTJA	.0618	.0148	.0454	.0056	.0363	.1411
7	S95T002162_L	2392.	134.7	3582.	18.64	245.7	277.5
8	S95T002162_	2344.	99.42	3522.	7.605	51.59	315.8
9	S95T002162_D	4143.	165.0	3294.	-2.833	27.39	282.2
10	S95T002162_S	4133.	679.0	3575.	328.2	560.7	521.5
11	CCV	5.424	5.176	5.218	4.900	5.209	5.117
12	CCB	.0057	.0038	-.0049	.0045	.0198	-.0112
13	S95T002163_L	6714.	113.1	6110.	-7.431	95.48	185.7
14	S95T002163_	6400.	151.6	5848.	3.299	45.91	268.0
15	S95T002163_D	4645.	153.1	5626.	10.12	34.14	279.3
16	S95T002164_L	2092.	139.6	5272.	3.282	187.7	177.7
17	S95T002164_	2047.	125.9	5155.	-1.758	36.36	220.9
18	S95T002164_D	3445.	98.84	4819.	-3.005	34.43	245.2
19	ICSA	.0374	.0389	.0280	-.0004	.0086	.0021
20	ICSAB	.0121	1.018	.0471	.0097	.0150	.0032
21	CCV_1	5.338	5.138	5.179	4.864	5.179	5.086
22	CCB_1	.0165	.0067	-.0055	.0071	.0310	-.0094

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.056	4.962	.0140	4.870	4.923	9.934
2	ICB	-.0064	-.0000	.0041	.0004	.0226	-.0207
3	ICSA	-.0144	-.0034	-.0134	.0009	.0478	.1001
4	ICSAB	-.0289	-.0041	-.0230	.0006	.0562	.0875
5	PREPSTDTJA	4.928	4.777	.0002	4.613	4.406	9.838
6	PREPBLKTJA	-.0539	-.0006	.0107	.0007	.0295	-.1899
7	[illegible]	-51.07	104.6	18.99	182.4	250.8	-87.20
8	[illegible]	-21.92	101.9	2.008	178.8	35.30	49.34
9	[illegible]_D	-20.62	163.5	4.088	282.3	-.3576	84.78
10	[illegible]_S	532.7	680.9	2.660	764.9	541.2	1155.
11	[illegible]	5.241	5.144	.0232	5.045	5.147	10.28
12	[illegible]	-.0144	-.0001	.0027	-.0002	.0270	-.0489
13	S95T002163_L	-99.81	105.4	37.48	204.9	197.0	-231.4
14	S95T002163_	-23.61	104.1	7.918	198.0	24.19	103.2
15	S95T002163_D	-30.50	102.1	.6524	193.8	51.34	72.60
16	S95T002164_L	-73.20	150.9	39.45	125.8	5.878	86.94
17	S95T002164_	-20.09	147.9	-1.466	121.0	18.81	274.9
18	S95T002164_D	-17.40	130.1	-.5189	109.2	-1.281	245.3
19	ICSA	-.0171	-.0035	-.0178	.0014	.0568	.1025
20	ICSAB	-.0187	-.0043	-.0128	.0013	.0628	.0800
21	[illegible]	5.208	5.121	.0289	5.022	5.108	10.23
22	CCB_1	-.0080	-.0001	.0020	-.0002	.0301	-.0302

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WHC-SD-WM-DP-145, REV. 1

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.983	.0090	4.997	4.955
2	ICB	-.0011	-.0004	.0000	-.0011
3	ICSA	-.0033	.0176	.0018	-.0024
4	ICSAB	4610	.0180	.9534	-.0048
5	PREPSTDTJA	4.527	.0052	4.149	4.651
6	PREPBLKTJA	-.0110	-.0032	.0117	-.0081
7	S95T002162_L	-9.270	-1.023	42.97	13.34
8	S95T002162_	-.9490	.4030	30.57	20.87
9	S95T002162_D	.7877	1.770	40.29	35.17
10	S95T002162_S	532.3	2.029	571.6	520.0
11	CCV	5.154	.0093	5.152	5.123
12	CCB	-.0026	-.0009	-.0008	-.0018
13	S95T002163_L	-15.49	-4.163	77.29	-2.936
14	S95T002163_	-.8752	.3823	32.24	15.96
15	S95T002163_D	-2.416	-.0309	33.76	14.59
16	S95T002164_L	-10.83	-3.352	75.45	-3.283
17	S95T002164_	-2.085	-.0340	31.29	9.412
18	S95T002164_D	-1.465	.0565	30.30	9.077
19	ICSA	-.0035	.0175	.0024	-.0027
20	ICSAB	.4670	.0189	.9731	-.0028
21	CCV_1	5.125	.0091	5.114	5.090
22	CCB_1	-.0017	-.0006	.0016	-.0009

SP 10/31/95

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WHC-CD-WM-DP-145, REV.1

600

ICP MACRO

OUTPUT.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	2877	1			ICV	AG				4.9645		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
2	2877	1			ICV	AL				4.9845		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
3	2877	1			ICV	AS				5.0783		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
4	2877	1			ICV	B				4.9610		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
5	2877	1			ICV	BA				4.9280		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
6	2877	1			ICV	BE				5.1001		1.0000	10/31/95	12:42	bjo	0.005	@ICP-QC
7	2877	1			ICV	BI				5.0579		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
8	2877	1			ICV	CA				5.0155		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
9	2877	1			ICV	CD				5.0109		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
10	2877	1			ICV	CE				5.0812		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
11	2877	1			ICV	CO				5.0086		1.0000	10/31/95	12:42	bjo	0.02	@ICP-QC
12	2877	1			ICV	CR				5.0070		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
13	2877	1			ICV	CU				5.0022		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
14	2877	1			ICV	EU				0.0085		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
15	2877	1			ICV	FE				5.0640		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
16	2877	1			ICV	K				4.8229		1.0000	10/31/95	12:42	bjo	0.3	@ICP-QC
17	2877	1			ICV	LA				5.0273		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
18	2877	1			ICV	LI				5.0331		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
19	2877	1			ICV	MG				4.9906		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
20	2877	1			ICV	MN				4.8173		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
21	2877	1			ICV	MO				5.0391		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
22	2877	1			ICV	NA				5.0079		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
23	2877	1			ICV	ND				5.1918		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
24	2877	1			ICV	NI				4.9635		1.0000	10/31/95	12:42	bjo	0.02	@ICP-QC
25	2877	1			ICV	P				5.1529		1.0000	10/31/95	12:42	bjo	0.2	@ICP-QC
26	2877	1			ICV	PB				5.0080		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
27	2877	1			ICV	S				5.0850		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
28	2877	1			ICV	SB				4.7330		1.0000	10/31/95	12:42	bjo	0.2	@ICP-QC
29	2877	1			ICV	SE				5.0011		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
30	2877	1			ICV	SI				4.9857		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
31	2877	1			ICV	SM				5.0556		1.0000	10/31/95	12:42	bjo	0.1	@ICP-QC
32	2877	1			ICV	SR				4.9823		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
33	2877	1			ICV	TH				0.0140		1.0000	10/31/95	12:42	bjo	0	@ICP-QC
34	2877	1			ICV	TI				4.8702		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
35	2877	1			ICV	TL				4.9234		1.0000	10/31/95	12:42	bjo	0.2	@ICP-QC
36	2877	1			ICV	U				9.8342		1.0000	10/31/95	12:42	bjo	0.4	@ICP-QC
37	2877	1			ICV	V				4.9634		1.0000	10/31/95	12:42	bjo	0.05	@ICP-QC
38	2877	1			ICV	Y				0.0080		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
39	2877	1			ICV	ZN				4.9872		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
40	2877	1			ICV	ZR				4.9553		1.0000	10/31/95	12:42	bjo	0.01	@ICP-QC
41	2877	2			ICB	AG				0.0013		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
42	2877	2			ICB	AL				0.0042		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
43	2877	2			ICB	AS				0.0061		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
44	2877	2			ICB	B				0.0070		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
45	2877	2			ICB	BA				0.0000		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
46	2877	2			ICB	BE				0.0001		1.0000	10/31/95	12:45	bjo	0.005	@ICP-QC
47	2877	2			ICB	BI				0.0075		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
48	2877	2			ICB	CA				0.0021		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
49	2877	2			ICB	CD				0.0006		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
50	2877	2			ICB	CE				0.0025		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
51	2877	2			ICB	CO				0.0016		1.0000	10/31/95	12:45	bjo	0.02	@ICP-QC
52	2877	2			ICB	CR				0.0006		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
53	2877	2			ICB	CU				-0.0004		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
54	2877	2			ICB	EU				-0.0008		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
55	2877	2			ICB	FE				0.0000		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
56	2877	2			ICB	K				0.0980		1.0000	10/31/95	12:45	bjo	0.3	@ICP-QC
57	2877	2			ICB	LA				0.0004		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
58	2877	2			ICB	LI				-0.0002		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
59	2877	2			ICB	MG				-0.0026		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
60	2877	2			ICB	MN				-0.0002		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
61	2877	2			ICB	MO				-0.0005		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
62	2877	2			ICB	NA				-0.0031		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
63	2877	2			ICB	ND				-0.0028		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
64	2877	2			ICB	NI				-0.0010		1.0000	10/31/95	12:45	bjo	0.02	@ICP-QC
65	2877	2			ICB	P				-0.0053		1.0000	10/31/95	12:45	bjo	0.2	@ICP-QC
66	2877	2			ICB	PB				-0.0094		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
67	2877	2			ICB	S				-0.0036		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
68	2877	2			ICB	SB				0.0028		1.0000	10/31/95	12:45	bjo	0.2	@ICP-QC
69	2877	2			ICB	SE				0.0302		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
70	2877	2			ICB	SI				-0.0091		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
71	2877	2			ICB	SM				-0.0064		1.0000	10/31/95	12:45	bjo	0.1	@ICP-QC
72	2877	2			ICB	SR				-0.0000		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
73	2877	2			ICB	TH				0.0041		1.0000	10/31/95	12:45	bjo	0	@ICP-QC
74	2877	2			ICB	TI				0.0004		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
75	2877	2			ICB	TL				0.0226		1.0000	10/31/95	12:45	bjo	0.2	@ICP-QC
76	2877	2			ICB	U				-0.0207		1.0000	10/31/95	12:45	bjo	0.4	@ICP-QC
77	2877	2			ICB	V				-0.0011		1.0000	10/31/95	12:45	bjo	0.05	@ICP-QC
78	2877	2			ICB	Y				-0.0004		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
79	2877	2			ICB	ZN				0.0000		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
80	2877	2			ICB	ZR				-0.0011		1.0000	10/31/95	12:45	bjo	0.01	@ICP-QC
81	2877	3			ICSA	AG				-0.0117		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
82	2877	3			ICSA	AL				244.8899		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
83	2877	3			ICSA	AS				-0.0824		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
84	2877	3			ICSA	B				-0.0012		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
85	2877	3			ICSA	BA				0.0030		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
86	2877	3			ICSA	BE				0.0002		1.0000	10/31/95	12:48	bjo	0.005	@ICP-QC
87	2877	3			ICSA	BI				-0.0423		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
88	2877	3			ICSA	CA				247.2219		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
89	2877	3			ICSA	CD				0.0016		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
90	2877	3			ICSA	CE				0.0064		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
91	2877	3			ICSA	CO				-0.0016		1.0000	10/31/95	12:48	bjo	0.02	@ICP-QC
92	2877	3			ICSA	CR				-0.0059		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
93	2877	3			ICSA	CU				-0.0086		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
94	2877	3			ICSA	EU				-0.0041		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
95	2877	3			ICSA	FE				92.1342		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
96	2877	3			ICSA	K				0.1256		1.0000	10/31/95	12:48	bjo	0.3	@ICP-QC
97	2877	3			ICSA	LA				-0.0039		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
98	2877	3			ICSA	LI				0.0019		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
99	2877	3			ICSA	MG				249.9020		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
100	2877	3			ICSA	MN				-0.0080		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
101	2877	3			ICSA	MO				-0.0146		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
102	2877	3			ICSA	NA				196.0353		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
103	2877	3			ICSA	ND				0.0072		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
104	2877	3			ICSA	NI				-0.0181		1.0000	10/31/95	12:48	bjo	0.02	@ICP-QC
105	2877	3			ICSA	P				0.0106		1.0000	10/31/95	12:48	bjo	0.2	@ICP-QC
106	2877	3			ICSA	PB				0.0490		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
107	2877	3			ICSA	S				0.0336		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
108	2877	3			ICSA	SB				0.0060		1.0000	10/31/95	12:48	bjo	0.2	@ICP-QC
109	2877	3			ICSA	SE				0.0240		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
110	2877	3			ICSA	SI				0.0011		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
111	2877	3			ICSA	SM				-0.0144		1.0000	10/31/95	12:48	bjo	0.1	@ICP-QC
112	2877	3			ICSA	SR				-0.0034		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
113	2877	3			ICSA	TH				-0.0134		1.0000	10/31/95	12:48	bjo	0	@ICP-QC
114	2877	3			ICSA	TI				0.0009		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
115	2877	3			ICSA	TL				0.0478		1.0000	10/31/95	12:48	bjo	0.2	@ICP-QC
116	2877	3			ICSA	U				0.1001		1.0000	10/31/95	12:48	bjo	0.4	@ICP-QC
117	2877	3			ICSA	V				-0.0033		1.0000	10/31/95	12:48	bjo	0.05	@ICP-QC
118	2877	3			ICSA	Y				0.0176		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
119	2877	3			ICSA	ZN				0.0018		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
120	2877	3			ICSA	ZR				-0.0024		1.0000	10/31/95	12:48	bjo	0.01	@ICP-QC
121	2877	4			ICSAB	AG				0.9377		1.0000	10/31/95	12:51	bjo	0.01	@ICP-QC
122	2877	4			ICSAB	AL				247.7245		1.0000	10/31/95	12:51	bjo	0.05	@ICP-QC

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
123	2877	4			ICSAB	AS				-0.1025		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
124	2877	4			ICSAB	B				0.0014		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
125	2877	4			ICSAB	BA				0.4740		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
126	2877	4			ICSAB	BE				0.4848		1.0000	10/31/95	12:51	bjg	0.005	@ICP-QC
127	2877	4			ICSAB	BI				0.0026		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
128	2877	4			ICSAB	CA				246.5786		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
129	2877	4			ICSAB	CD				0.9354		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
130	2877	4			ICSAB	CE				0.0040		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
131	2877	4			ICSAB	CO				0.4604		1.0000	10/31/95	12:51	bjg	0.02	@ICP-QC
132	2877	4			ICSAB	CR				0.4611		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
133	2877	4			ICSAB	CU				0.4906		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
134	2877	4			ICSAB	EU				0.0025		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
135	2877	4			ICSAB	FE				82.4902		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
136	2877	4			ICSAB	K				0.0871		1.0000	10/31/95	12:51	bjg	0.3	@ICP-QC
137	2877	4			ICSAB	LA				-0.0040		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
138	2877	4			ICSAB	LI				1.0178		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
139	2877	4			ICSAB	MG				251.7075		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
140	2877	4			ICSAB	MN				0.4390		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
141	2877	4			ICSAB	MO				-0.0144		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
142	2877	4			ICSAB	NA				201.4464		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
143	2877	4			ICSAB	ND				0.0061		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
144	2877	4			ICSAB	NI				0.0968		1.0000	10/31/95	12:51	bjg	0.02	@ICP-QC
145	2877	4			ICSAB	P				0.0211		1.0000	10/31/95	12:51	bjg	0.2	@ICP-QC
146	2877	4			ICSAB	PB				0.0823		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
147	2877	4			ICSAB	S				0.0372		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
148	2877	4			ICSAB	SB				0.0100		1.0000	10/31/95	12:51	bjg	0.2	@ICP-QC
149	2877	4			ICSAB	SE				-0.0196		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
150	2877	4			ICSAB	SI				-0.0024		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
151	2877	4			ICSAB	SM				-0.0289		1.0000	10/31/95	12:51	bjg	0.1	@ICP-QC
152	2877	4			ICSAB	SR				-0.0041		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
153	2877	4			ICSAB	TH				-0.0230		1.0000	10/31/95	12:51	bjg	0	@ICP-QC
154	2877	4			ICSAB	TI				0.0006		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
155	2877	4			ICSAB	TL				0.0562		1.0000	10/31/95	12:51	bjg	0.2	@ICP-QC
156	2877	4			ICSAB	U				0.0875		1.0000	10/31/95	12:51	bjg	0.4	@ICP-QC
157	2877	4			ICSAB	V				0.4610		1.0000	10/31/95	12:51	bjg	0.05	@ICP-QC
158	2877	4			ICSAB	Y				0.0180		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
159	2877	4			ICSAB	ZN				0.9534		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
160	2877	4			ICSAB	ZR				-0.0048		1.0000	10/31/95	12:51	bjg	0.01	@ICP-QC
161	2877	5			PREPSTDTJA	AG-A-01				0.8640		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
162	2877	5			PREPSTDTJA	AL-A-01				5.1200		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
163	2877	5			PREPSTDTJA	AS-A-01				4.4903		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
164	2877	5			PREPSTDTJA	B-A-01				5.9746		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
165	2877	5			PREPSTDTJA	BA-A-01				4.7019		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
166	2877	5			PREPSTDTJA	BE-A-01				4.9594		1.0000	10/31/95	12:54	bjg	0.005	@ICP-A01
167	2877	5			PREPSTDTJA	BI-A-01				4.3346		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
168	2877	5			PREPSTDTJA	CA-A-01				5.2229		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
169	2877	5			PREPSTDTJA	CD-A-01				4.3006		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
170	2877	5			PREPSTDTJA	CE-A-01				4.8590		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
171	2877	5			PREPSTDTJA	CO-A-01				4.4547		1.0000	10/31/95	12:54	bjg	0.02	@ICP-A01
172	2877	5			PREPSTDTJA	CR-A-01				4.5133		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
173	2877	5			PREPSTDTJA	CU-A-01				4.6468		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
174	2877	5			PREPSTDTJA	EU-A-01				0.0041		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
175	2877	5			PREPSTDTJA	FE-A-01				4.5377		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
176	2877	5			PREPSTDTJA	K-A-01				4.6492		1.0000	10/31/95	12:54	bjg	0.3	@ICP-A01
177	2877	5			PREPSTDTJA	LA-A-01				4.8437		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
178	2877	5			PREPSTDTJA	LI-A-01				4.9367		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
179	2877	5			PREPSTDTJA	MG-A-01				4.6948		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
180	2877	5			PREPSTDTJA	MN-A-01				4.3883		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
181	2877	5			PREPSTDTJA	MO-A-01				4.5986		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
182	2877	5			PREPSTDTJA	NA-A-01				7.7411		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
183	2877	5			PREPSTDTJA	ND-A-01				4.9040		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
184	2877	5			PREPSTDTJA	NI-A-01				4.4196		1.0000	10/31/95	12:54	bjg	0.02	@ICP-A01
185	2877	5			PREPSTDTJA	P-A-01				4.5893		1.0000	10/31/95	12:54	bjg	0.2	@ICP-A01
186	2877	5			PREPSTDTJA	PB-A-01				4.2125		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
187	2877	5			PREPSTDTJA	S-A-01				4.2838		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
188	2877	5			PREPSTDTJA	SB-A-01				4.1297		1.0000	10/31/95	12:54	bjg	0.2	@ICP-A01
189	2877	5			PREPSTDTJA	SE-A-01				4.5567		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
190	2877	5			PREPSTDTJA	SI-A-01				4.1275		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
191	2877	5			PREPSTDTJA	SM-A-01				4.9282		1.0000	10/31/95	12:54	bjg	0.1	@ICP-A01
192	2877	5			PREPSTDTJA	SR-A-01				4.7771		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
193	2877	5			PREPSTDTJA	TH-A-01				0.0002		1.0000	10/31/95	12:54	bjg	0	@ICP-A01
194	2877	5			PREPSTDTJA	TI-A-01				4.6128		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
195	2877	5			PREPSTDTJA	TL-A-01				4.4062		1.0000	10/31/95	12:54	bjg	0.2	@ICP-A01
196	2877	5			PREPSTDTJA	U-A-01				9.8376		1.0000	10/31/95	12:54	bjg	0.4	@ICP-A01
197	2877	5			PREPSTDTJA	V-A-01				4.5269		1.0000	10/31/95	12:54	bjg	0.05	@ICP-A01
198	2877	5			PREPSTDTJA	Y-A-01				0.0052		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
199	2877	5			PREPSTDTJA	ZN-A-01				4.1485		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
200	2877	5			PREPSTDTJA	ZR-A-01				4.6506		1.0000	10/31/95	12:54	bjg	0.01	@ICP-A01
201	2877	6			PREPBLKTJA	AG-A-01				0.0004		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
202	2877	6			PREPBLKTJA	AL-A-01				0.0379		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
203	2877	6			PREPBLKTJA	AS-A-01				-0.0045		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
204	2877	6			PREPBLKTJA	B-A-01				0.0248		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
205	2877	6			PREPBLKTJA	BA-A-01				0.0005		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
206	2877	6			PREPBLKTJA	BE-A-01				0.0001		1.0000	10/31/95	12:58	bjg	0.005	@ICP-A01
207	2877	6			PREPBLKTJA	BI-A-01				0.0179		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
208	2877	6			PREPBLKTJA	CA-A-01				0.1348		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
209	2877	6			PREPBLKTJA	CD-A-01				0.0006		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
210	2877	6			PREPBLKTJA	CE-A-01				0.0028		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
211	2877	6			PREPBLKTJA	CO-A-01				0.0004		1.0000	10/31/95	12:58	bjg	0.02	@ICP-A01
212	2877	6			PREPBLKTJA	CR-A-01				0.0033		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
213	2877	6			PREPBLKTJA	CU-A-01				0.0017		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
214	2877	6			PREPBLKTJA	EU-A-01				-0.0050		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
215	2877	6			PREPBLKTJA	FE-A-01				0.0141		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
216	2877	6			PREPBLKTJA	K-A-01				0.1401		1.0000	10/31/95	12:58	bjg	0.3	@ICP-A01
217	2877	6			PREPBLKTJA	LA-A-01				0.0003		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
218	2877	6			PREPBLKTJA	LI-A-01				-0.0018		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
219	2877	6			PREPBLKTJA	MG-A-01				0.0143		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
220	2877	6			PREPBLKTJA	MN-A-01				-0.0010		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
221	2877	6			PREPBLKTJA	MO-A-01				0.0002		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
222	2877	6			PREPBLKTJA	NA-A-01				0.0834		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
223	2877	6			PREPBLKTJA	ND-A-01				-0.0010		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
224	2877	6			PREPBLKTJA	NI-A-01				-0.0006		1.0000	10/31/95	12:58	bjg	0.02	@ICP-A01
225	2877	6			PREPBLKTJA	P-A-01				0.0818		1.0000	10/31/95	12:58	bjg	0.2	@ICP-A01
226	2877	6			PREPBLKTJA	PB-A-01				0.0148		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
227	2877	6			PREPBLKTJA	S-A-01				0.0454		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
228	2877	6			PREPBLKTJA	SB-A-01				0.0056		1.0000	10/31/95	12:58	bjg	0.2	@ICP-A01
229	2877	6			PREPBLKTJA	SE-A-01				0.0363		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
230	2877	6			PREPBLKTJA	SI-A-01				0.1411		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
231	2877	6			PREPBLKTJA	SM-A-01				-0.0539		1.0000	10/31/95	12:58	bjg	0.1	@ICP-A01
232	2877	6			PREPBLKTJA	SR-A-01				-0.0006		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
233	2877	6			PREPBLKTJA	TH-A-01				0.0107		1.0000	10/31/95	12:58	bjg	0	@ICP-A01
234	2877	6			PREPBLKTJA	TI-A-01				0.0007		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
235	2877	6			PREPBLKTJA	TL-A-01				0.0295		1.0000	10/31/95	12:58	bjg	0.2	@ICP-A01
236	2877	6			PREPBLKTJA	U-A-01				-0.1899		1.0000	10/31/95	12:58	bjg	0.4	@ICP-A01
237	2877	6			PREPBLKTJA	V-A-01				-0.0110		1.0000	10/31/95	12:58	bjg	0.05	@ICP-A01
238	2877	6			PREPBLKTJA	Y-A-01				-0.0032		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
239	2877	6			PREPBLKTJA	ZN-A-01				0.0117		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
240	2877	6			PREPBLKTJA	ZR-A-01				-0.0081		1.0000	10/31/95	12:58	bjg	0.01	@ICP-A01
241	2877	7	S95T002162			AG-A-01			<	13.5200		1352.0000	10/31/95	13:04	bjg	0.01	@ICP-A01
242	2877	7	S95T002162			AL-A-01				34551.8164		1352.0000	10/31/95	13:04	bjg	0.05	@ICP-A01
243	2877	7	S95T002162			AS-A-01			<	67.6000		1352.0000	10/31/95	13:04	bjg	0.05	@ICP-A01
244	2877	7	S95T002162			B-A-01			<	67.6000		1352.0000	10/31/95	13:04	bjg	0.05	@ICP-A01

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
346	2877	7	S95T002162			BA-A-01				257.1438		1352.0000	10/31/95	13:04	blg	0.05	@ICP-A01
347	2877	7	S95T002162			BE-A-01			<	6.7800		1352.0000	10/31/95	13:04	blg	0.005	@ICP-A01
348	2877	7	S95T002162			BI-A-01			<	135.2000		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
349	2877	7	S95T002162			CA-A-01				2638.4473		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
350	2877	7	S95T002162			CD-A-01			<	13.5200		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
351	2877	7	S95T002162			CE-A-01			<	135.2000		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
352	2877	7	S95T002162			CO-A-01			<	27.0400		1352.0000	10/31/95	13:04	blg	0.02	@ICP-A01
353	2877	7	S95T002162			CR-A-01				114.5430		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
354	2877	7	S95T002162			CU-A-01			<	13.5200		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
355	2877	7	S95T002162			FE-A-01				3135.8750		1352.0000	10/31/95	13:04	blg	0.05	@ICP-A01
356	2877	7	S95T002162			K-A-01				570.4827		1352.0000	10/31/95	13:04	blg	0.3	@ICP-A01
357	2877	7	S95T002162			LA-A-01			<	67.8000		1352.0000	10/31/95	13:04	blg	0.05	@ICP-A01
358	2877	7	S95T002162			LI-A-01			<	13.5200		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
359	2877	7	S95T002162			MG-A-01				685.8810		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
360	2877	7	S95T002162			MN-A-01				70.6112		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
361	2877	7	S95T002162			MO-A-01			<	67.8000		1352.0000	10/31/95	13:04	blg	0.05	@ICP-A01
362	2877	7	S95T002162			NA-A-01				217186.1406		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
363	2877	7	S95T002162			ND-A-01			<	135.2000		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
364	2877	7	S95T002162			NI-A-01				287.1411		1352.0000	10/31/95	13:04	blg	0.02	@ICP-A01
365	2877	7	S95T002162			P-A-01				2343.7795		1352.0000	10/31/95	13:04	blg	0.2	@ICP-A01
366	2877	7	S95T002162			PB-A-01			<	135.2000		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
367	2877	7	S95T002162			S-A-01				3521.6343		1352.0000	10/31/95	13:04	blg	0.05	@ICP-A01
368	2877	7	S95T002162			SB-A-01			<	270.4000		1352.0000	10/31/95	13:04	blg	0.2	@ICP-A01
369	2877	7	S95T002162			SE-A-01			<	135.2000		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
370	2877	7	S95T002162			SI-A-01				315.7552		1352.0000	10/31/95	13:04	blg	0.05	@ICP-A01
371	2877	7	S95T002162			SM-A-01			<	135.2000		1352.0000	10/31/95	13:04	blg	0.1	@ICP-A01
372	2877	7	S95T002162			SR-A-01				101.8969		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
373	2877	7	S95T002162			TI-A-01				178.7624		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
374	2877	7	S95T002162			TL-A-01			<	270.4000		1352.0000	10/31/95	13:04	blg	0.2	@ICP-A01
375	2877	7	S95T002162			U-A-01			<	540.8000		1352.0000	10/31/95	13:04	blg	0.4	@ICP-A01
376	2877	7	S95T002162			V-A-01			<	67.8000		1352.0000	10/31/95	13:04	blg	0.05	@ICP-A01
377	2877	7	S95T002162			ZN-A-01				30.5720		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
378	2877	7	S95T002162			ZR-A-01				20.8736		1352.0000	10/31/95	13:04	blg	0.01	@ICP-A01
379	2877	8	S95T002162		DUP	AG-A-01		<13.5200		<13.5500		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
380	2877	8	S95T002162		DUP	AL-A-01		34551.8164		55804.7500		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
381	2877	8	S95T002162		DUP	AS-A-01		<67.8000		<67.7500		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
382	2877	8	S95T002162		DUP	B-A-01		<67.8000		<67.7500		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
383	2877	8	S95T002162		DUP	BA-A-01		257.1438		409.7418		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
384	2877	8	S95T002162		DUP	BE-A-01		<6.7800		<6.7750		1355.0000	10/31/95	13:07	blg	0.005	@ICP-A01
385	2877	8	S95T002162		DUP	BI-A-01		<135.2000		<135.5000		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
386	2877	8	S95T002162		DUP	CA-A-01		2638.4473		4424.7705		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
387	2877	8	S95T002162		DUP	CD-A-01		<13.5200		<13.5500		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
388	2877	8	S95T002162		DUP	CE-A-01		<135.2000		<135.5000		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
389	2877	8	S95T002162		DUP	CO-A-01		<27.0400		<27.1000		1355.0000	10/31/95	13:07	blg	0.02	@ICP-A01
390	2877	8	S95T002162		DUP	CR-A-01		114.5430		165.8133		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
391	2877	8	S95T002162		DUP	CU-A-01		<13.5200		<13.5500		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
392	2877	8	S95T002162		DUP	FE-A-01		3135.8750		5114.3315		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
393	2877	8	S95T002162		DUP	K-A-01		570.4827		847.5649		1355.0000	10/31/95	13:07	blg	0.3	@ICP-A01
394	2877	8	S95T002162		DUP	LA-A-01		<67.8000		<67.7500		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
395	2877	8	S95T002162		DUP	LI-A-01		<13.5200		<13.5500		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
396	2877	8	S95T002162		DUP	MG-A-01		685.8810		1109.9597		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
397	2877	8	S95T002162		DUP	MN-A-01		70.6112		113.9473		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
398	2877	8	S95T002162		DUP	MO-A-01		<67.8000		<67.7500		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
399	2877	8	S95T002162		DUP	NA-A-01		217186.1406		187433.4844		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
400	2877	8	S95T002162		DUP	ND-A-01		<135.2000		<135.5000		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
401	2877	8	S95T002162		DUP	NI-A-01		287.1411		389.9585		1355.0000	10/31/95	13:07	blg	0.02	@ICP-A01
402	2877	8	S95T002162		DUP	P-A-01		2343.7795		4142.8657		1355.0000	10/31/95	13:07	blg	0.2	@ICP-A01
403	2877	8	S95T002162		DUP	PB-A-01		<135.2000		165.0136		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
404	2877	8	S95T002162		DUP	S-A-01		3521.6343		3294.4805		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
405	2877	8	S95T002162		DUP	SB-A-01		<270.4000		<271.0000		1355.0000	10/31/95	13:07	blg	0.2	@ICP-A01
406	2877	8	S95T002162		DUP	SE-A-01		<135.2000		<135.5000		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
407	2877	8	S95T002162		DUP	SI-A-01		315.7552		282.2214		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
408	2877	8	S95T002162		DUP	SM-A-01		<135.2000		<135.5000		1355.0000	10/31/95	13:07	blg	0.1	@ICP-A01
409	2877	8	S95T002162		DUP	SR-A-01		101.8969		163.4995		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
410	2877	8	S95T002162		DUP	TI-A-01		178.7624		282.3297		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
411	2877	8	S95T002162		DUP	TL-A-01		<270.4000		<271.0000		1355.0000	10/31/95	13:07	blg	0.2	@ICP-A01
412	2877	8	S95T002162		DUP	U-A-01		<540.8000		<542.0000		1355.0000	10/31/95	13:07	blg	0.4	@ICP-A01
413	2877	8	S95T002162		DUP	V-A-01		<67.8000		<67.7500		1355.0000	10/31/95	13:07	blg	0.05	@ICP-A01
414	2877	8	S95T002162		DUP	ZN-A-01		30.5720		40.2874		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
415	2877	8	S95T002162		DUP	ZR-A-01		20.8736		35.1696		1355.0000	10/31/95	13:07	blg	0.01	@ICP-A01
416	2877	9	S95T002162_S		SPK-PREDIG	AG-A-01		114.8		109.5455		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
417	2877	9	S95T002162_S		SPK-PREDIG	AL-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
418	2877	9	S95T002162_S		SPK-PREDIG	AS-A-01		574		538.0237		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
419	2877	9	S95T002162_S		SPK-PREDIG	B-A-01		574		574.0610		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
420	2877	9	S95T002162_S		SPK-PREDIG	BA-A-01		574		621.3893		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
421	2877	9	S95T002162_S		SPK-PREDIG	BE-A-01		574		553.9922		1148.0000	10/31/95	13:10	blg	0.005	@ICP-A01
422	2877	9	S95T002162_S		SPK-PREDIG	BI-A-01		574		585.9694		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
423	2877	9	S95T002162_S		SPK-PREDIG	CA-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
424	2877	9	S95T002162_S		SPK-PREDIG	CD-A-01		574		542.9978		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
425	2877	9	S95T002162_S		SPK-PREDIG	CE-A-01		574		557.3438		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
426	2877	9	S95T002162_S		SPK-PREDIG	CO-A-01		574		545.1093		1148.0000	10/31/95	13:10	blg	0.02	@ICP-A01
427	2877	9	S95T002162_S		SPK-PREDIG	CR-A-01		574		566.6383		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
428	2877	9	S95T002162_S		SPK-PREDIG	CU-A-01		574		541.6432		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
429	2877	9	S95T002162_S		SPK-PREDIG	FE-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
430	2877	9	S95T002162_S		SPK-PREDIG	K-A-01		574		518.7938		1148.0000	10/31/95	13:10	blg	0.3	@ICP-A01
431	2877	9	S95T002162_S		SPK-PREDIG	LA-A-01		574		554.0483		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
432	2877	9	S95T002162_S		SPK-PREDIG	LI-A-01		574		552.5579		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
433	2877	9	S95T002162_S		SPK-PREDIG	MG-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
434	2877	9	S95T002162_S		SPK-PREDIG	MN-A-01		574		540.1909		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
435	2877	9	S95T002162_S		SPK-PREDIG	MO-A-01		574		547.8990		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
436	2877	9	S95T002162_S		SPK-PREDIG	NA-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
437	2877	9	S95T002162_S		SPK-PREDIG	ND-A-01		574		550.5841		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
438	2877	9	S95T002162_S		SPK-PREDIG	NI-A-01		574		603.0122		1148.0000	10/31/95	13:10	blg	0.02	@ICP-A01
439	2877	9	S95T002162_S		SPK-PREDIG	P-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.2	@ICP-A01
440	2877	9	S95T002162_S		SPK-PREDIG	PB-A-01		574		679.0002		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
441	2877	9	S95T002162_S		SPK-PREDIG	S-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
442	2877	9	S95T002162_S		SPK-PREDIG	SB-A-01		574		328.2124		1148.0000	10/31/95	13:10	blg	0.2	@ICP-A01
443	2877	9	S95T002162_S		SPK-PREDIG	SE-A-01		574		560.7341		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
444	2877	9	S95T002162_S		SPK-PREDIG	SI-A-01		n/a		n/a		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
445	2877	9	S95T002162_S		SPK-PREDIG	SM-A-01		574		532.7098		1148.0000	10/31/95	13:10	blg	0.1	@ICP-A01
446	2877	9	S95T002162_S		SPK-PREDIG	SR-A-01		574		579.0320		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
447	2877	9	S95T002162_S		SPK-PREDIG	TI-A-01		574		586.1001		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
448	2877	9	S95T002162_S		SPK-PREDIG	TL-A-01		574		541.2181		1148.0000	10/31/95	13:10	blg	0.2	@ICP-A01
449	2877	9	S95T002162_S		SPK-PREDIG	U-A-01		1148		1155.3032		1148.0000	10/31/95	13:10	blg	0.4	@ICP-A01
450	2877	9	S95T002162_S		SPK-PREDIG	V-A-01		574		532.3481		1148.0000	10/31/95	13:10	blg	0.05	@ICP-A01
451	2877	9	S95T002162_S		SPK-PREDIG	ZN-A-01		574		541.0340		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
452	2877	9	S95T002162_S		SPK-PREDIG	ZR-A-01		574		498.1648		1148.0000	10/31/95	13:10	blg	0.01	@ICP-A01
453	2877	10			CCV	AG				5.1051		1.0000	10/31/95	13:14	blg	0.01	@ICP-QC
454	2877	10			CCV	AL				5.1277		1.0000	10/31/95	13:14	blg	0.05	@ICP-QC
455	2877	10			CCV	AS				5.3042		1.0000	10/31/95	13:14	blg	0.05	@ICP-QC
456	2877	10			CCV	B				5.0935		1.0000	10/31/95	13:14	blg	0.05	@ICP-QC
457	2877	10			CCV	BA				5.1177		1.0000	10/31/95	13:14	blg	0.05	@ICP-QC
458	2877	10			CCV	BE				5.3456		1.0000	10/31/95	13:14	blg	0.005	@ICP-QC
459	2877	10			CCV	BI				5.1747		1.0000	10/31/95	13:14	blg	0.1	@ICP-QC
460	2877	10			CCV	CA				5.2575		1.0000	10/31/95	13:14	blg	0.1	@ICP-QC
461	2877	10			CCV	CD				5.1861		1.0000	10/31/95	13:14	blg	0.01	@ICP-QC
462	2877	10			CCV	CE				5.2555		1.0000	10/31/95	13:14	blg	0.1	@ICP-QC
463	2877	10			CCV	CO				5.1700		1.0000	10/31/95	13:14	blg	0.02	@ICP-QC
464	2877	10			CCV	CR				5.2423		1.0000	10/31/95	13:14	blg	0.01	@ICP-QC
465	2877	10			CCV	CU				5.2573		1.0000	10/31/95	13:14	blg	0.01	@ICP-QC
466	2877	10			CCV	EU				0.0065		1.0000	10/31/95	13:14	blg	0.05	@ICP-QC
467	2877	10			CCV	FE				5.2386		1.0000	10/31/95	13:14	blg	0.05	@ICP-QC

WHC-CD-VM-DP/KS, REV. 1

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
367	2877	10			CCV	K				5.0240		1.0000	10/31/95	13:14	bjg	0.3	@ICP-QC
368	2877	10			CCV	LA				5.2097		1.0000	10/31/95	13:14	bjg	0.05	@ICP-QC
369	2877	10			CCV	LI				5.2061		1.0000	10/31/95	13:14	bjg	0.01	@ICP-QC
370	2877	10			CCV	MG				5.1429		1.0000	10/31/95	13:14	bjg	0.1	@ICP-QC
371	2877	10			CCV	MN				5.0719		1.0000	10/31/95	13:14	bjg	0.01	@ICP-QC
372	2877	10			CCV	MO				5.2158		1.0000	10/31/95	13:14	bjg	0.05	@ICP-QC
373	2877	10			CCV	NA				5.1488		1.0000	10/31/95	13:14	bjg	0.1	@ICP-QC
374	2877	10			CCV	ND				5.3827		1.0000	10/31/95	13:14	bjg	0.1	@ICP-QC
375	2877	10			CCV	NI				5.1817		1.0000	10/31/95	13:14	bjg	0.02	@ICP-QC
376	2877	10			CCV	P				5.4238		1.0000	10/31/95	13:14	bjg	0.2	@ICP-QC
377	2877	10			CCV	PB				5.1756		1.0000	10/31/95	13:14	bjg	0.1	@ICP-QC
378	2877	10			CCV	S				5.2177		1.0000	10/31/95	13:14	bjg	0.05	@ICP-QC
379	2877	10			CCV	SB				4.9004		1.0000	10/31/95	13:14	bjg	0.2	@ICP-QC
380	2877	10			CCV	SE				5.2080		1.0000	10/31/95	13:14	bjg	0.1	@ICP-QC
381	2877	10			CCV	SI				5.1170		1.0000	10/31/95	13:14	bjg	0.05	@ICP-QC
382	2877	10			CCV	SM				5.2410		1.0000	10/31/95	13:14	bjg	0.1	@ICP-QC
383	2877	10			CCV	SR				5.1440		1.0000	10/31/95	13:14	bjg	0.01	@ICP-QC
384	2877	10			CCV	TH				0.0232		1.0000	10/31/95	13:14	bjg	0	@ICP-QC
385	2877	10			CCV	TI				5.0454		1.0000	10/31/95	13:14	bjg	0.01	@ICP-QC
386	2877	10			CCV	TL				5.1475		1.0000	10/31/95	13:14	bjg	0.2	@ICP-QC
387	2877	10			CCV	U				10.2819		1.0000	10/31/95	13:14	bjg	0.4	@ICP-QC
388	2877	10			CCV	V				5.1535		1.0000	10/31/95	13:14	bjg	0.05	@ICP-QC
389	2877	10			CCV	Y				0.0093		1.0000	10/31/95	13:14	bjg	0.01	@ICP-QC
390	2877	10			CCV	ZN				5.1523		1.0000	10/31/95	13:14	bjg	0.01	@ICP-QC
391	2877	10			CCV	ZR				5.1228		1.0000	10/31/95	13:14	bjg	0.01	@ICP-QC
392	2877	11			CCB	AG				0.0007		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
393	2877	11			CCB	AL				0.0060		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
394	2877	11			CCB	AS				-0.0198		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
395	2877	11			CCB	B				0.0029		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
396	2877	11			CCB	BA				-0.0001		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
397	2877	11			CCB	BE				0.0002		1.0000	10/31/95	13:17	bjg	0.005	@ICP-QC
398	2877	11			CCB	BI				0.0060		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
399	2877	11			CCB	CA				0.0013		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
400	2877	11			CCB	CD				-0.0004		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
401	2877	11			CCB	CE				-0.0023		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
402	2877	11			CCB	CO				-0.0009		1.0000	10/31/95	13:17	bjg	0.02	@ICP-QC
403	2877	11			CCB	CR				-0.0001		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
404	2877	11			CCB	CU				0.0002		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
405	2877	11			CCB	EU				-0.0015		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
406	2877	11			CCB	FE				-0.0006		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
407	2877	11			CCB	K				-0.0285		1.0000	10/31/95	13:17	bjg	0.3	@ICP-QC
408	2877	11			CCB	LA				0.0004		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
409	2877	11			CCB	LI				-0.0009		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
410	2877	11			CCB	MG				0.0019		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
411	2877	11			CCB	MN				-0.0003		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
412	2877	11			CCB	MO				0.0007		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
413	2877	11			CCB	NA				-0.0106		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
414	2877	11			CCB	ND				-0.0031		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
415	2877	11			CCB	NI				-0.0046		1.0000	10/31/95	13:17	bjg	0.02	@ICP-QC
416	2877	11			CCB	P				0.0057		1.0000	10/31/95	13:17	bjg	0.2	@ICP-QC
417	2877	11			CCB	PB				0.0038		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
418	2877	11			CCB	S				-0.0049		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
419	2877	11			CCB	SB				0.0045		1.0000	10/31/95	13:17	bjg	0.2	@ICP-QC
420	2877	11			CCB	SE				0.0198		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
421	2877	11			CCB	SI				-0.0112		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
422	2877	11			CCB	SM				-0.0144		1.0000	10/31/95	13:17	bjg	0.1	@ICP-QC
423	2877	11			CCB	SR				-0.0002		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
424	2877	11			CCB	TH				0.0027		1.0000	10/31/95	13:17	bjg	0	@ICP-QC
425	2877	11			CCB	TI				-0.0002		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
426	2877	11			CCB	TL				0.0270		1.0000	10/31/95	13:17	bjg	0.2	@ICP-QC
427	2877	11			CCB	U				-0.0489		1.0000	10/31/95	13:17	bjg	0.4	@ICP-QC
428	2877	11			CCB	V				-0.0026		1.0000	10/31/95	13:17	bjg	0.05	@ICP-QC
429	2877	11			CCB	Y				-0.0009		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
430	2877	11			CCB	ZN				-0.0006		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
431	2877	11			CCB	ZR				-0.0018		1.0000	10/31/95	13:17	bjg	0.01	@ICP-QC
432	2877	12	S95T002163			AG-A-01			<	13.5900		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
433	2877	12	S95T002163			AL-A-01				42746.7852		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
434	2877	12	S95T002163			AS-A-01			<	67.9500		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
435	2877	12	S95T002163			B-A-01			<	67.9500		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
436	2877	12	S95T002163			BA-A-01				340.2886		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
437	2877	12	S95T002163			BE-A-01			<	6.7950		1350.0000	10/31/95	13:23	bjg	0.005	@ICP-A01
438	2877	12	S95T002163			BI-A-01			<	135.9000		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
439	2877	12	S95T002163			CA-A-01				2827.2373		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
440	2877	12	S95T002163			CD-A-01			<	13.5900		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
441	2877	12	S95T002163			CE-A-01			<	135.9000		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
442	2877	12	S95T002163			CO-A-01			<	27.1800		1350.0000	10/31/95	13:23	bjg	0.02	@ICP-A01
443	2877	12	S95T002163			CR-A-01				129.5899		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
444	2877	12	S95T002163			CU-A-01			<	13.5900		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
445	2877	12	S95T002163			FE-A-01				3198.5898		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
446	2877	12	S95T002163			K-A-01				1263.1814		1350.0000	10/31/95	13:23	bjg	0.3	@ICP-A01
447	2877	12	S95T002163			LA-A-01			<	67.9500		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
448	2877	12	S95T002163			LI-A-01			<	13.5900		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
449	2877	12	S95T002163			MG-A-01				690.4843		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
450	2877	12	S95T002163			MN-A-01				66.4962		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
451	2877	12	S95T002163			MO-A-01			<	67.9500		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
452	2877	12	S95T002163			NA-A-01				191038.0313		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
453	2877	12	S95T002163			ND-A-01			<	135.9000		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
454	2877	12	S95T002163			NI-A-01				275.0295		1350.0000	10/31/95	13:23	bjg	0.02	@ICP-A01
455	2877	12	S95T002163			P-A-01				6399.9534		1350.0000	10/31/95	13:23	bjg	0.2	@ICP-A01
456	2877	12	S95T002163			PB-A-01				151.6443		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
457	2877	12	S95T002163			S-A-01				5847.8882		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
458	2877	12	S95T002163			SB-A-01			<	271.8000		1350.0000	10/31/95	13:23	bjg	0.2	@ICP-A01
459	2877	12	S95T002163			SE-A-01			<	135.9000		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
460	2877	12	S95T002163			SI-A-01				267.9550		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
461	2877	12	S95T002163			SM-A-01			<	135.9000		1350.0000	10/31/95	13:23	bjg	0.1	@ICP-A01
462	2877	12	S95T002163			SR-A-01				104.1288		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
463	2877	12	S95T002163			TI-A-01				196.0140		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
464	2877	12	S95T002163			TL-A-01			<	271.8000		1350.0000	10/31/95	13:23	bjg	0.2	@ICP-A01
465	2877	12	S95T002163			U-A-01			<	543.6000		1350.0000	10/31/95	13:23	bjg	0.4	@ICP-A01
466	2877	12	S95T002163			V-A-01			<	67.9500		1350.0000	10/31/95	13:23	bjg	0.05	@ICP-A01
467	2877	12	S95T002163			ZN-A-01				32.2433		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
468	2877	12	S95T002163			ZR-A-01				15.9595		1350.0000	10/31/95	13:23	bjg	0.01	@ICP-A01
469	2877	13	S95T002163		DUP	AG-A-01		<13.5900		<15.0000		1500.0000	10/31/95	13:27	bjg	0.01	@ICP-A01
470	2877	13	S95T002163		DUP	AL-A-01		42746.7852		41700.6289		1500.0000	10/31/95	13:27	bjg	0.05	@ICP-A01
471	2877	13	S95T002163		DUP	AS-A-01		<67.9500		<75.0000		1500.0000	10/31/95	13:27	bjg	0.05	@ICP-A01
472	2877	13	S95T002163		DUP	B-A-01		<67.9500		<75.0000		1500.0000	10/31/95	13:27	bjg	0.05	@ICP-A01
473	2877	13	S95T002163		DUP	BA-A-01		340.2886		329.5367		1500.0000	10/31/95	13:27	bjg	0.05	@ICP-A01
474	2877	13	S95T002163		DUP	BE-A-01		<6.7950		<7.5000		1500.0000	10/31/95	13:27	bjg	0.005	@ICP-A01
475	2877	13	S95T002163		DUP	BI-A-01		<135.9000		<150.0000		1500.0000	10/31/95	13:27	bjg	0.1	@ICP-A01
476	2877	13	S95T002163		DUP	CA-A-01		2827.2373		2744.3892		1500.0000	10/31/95	13:27	bjg	0.1	@ICP-A01
477	2877	13	S95T002163		DUP	CD-A-01		<13.5900		<15.0000		1500.0000	10/31/95	13:27	bjg	0.01	@ICP-A01
478	2877	13	S95T002163		DUP	CE-A-01		<135.9000		<150.0000		1500.0000	10/31/95	13:27	bjg	0.1	@ICP-A01
479	2877	13	S95T002163		DUP	CO-A-01		<27.1800		<30.0000		1500.0000	10/31/95	13:27	bjg	0.02	@ICP-A01
480	2877	13	S95T002163		DUP	CR-A-01		129.5899		123.2490		1500.0000	10/31/95	13:27	bjg	0.01	@ICP-A01
481	2877	13	S95T002163		DUP	CU-A-01		<13.5900		<15.0000		1500.0000	10/31/95	13:27	bjg	0.01	@ICP-A01
482	2877	13	S95T002163		DUP	FE-A-01		3198.5898		3146.7720		1500.0000	10/31/95	13:27	bjg	0.05	@ICP-A01
483	2877	13	S95T002163		DUP	K-A-01		1263.1814		1019.6644		1500.0000	10/31/95	13:27	bjg	0.3	@ICP-A01
484	2877	13	S95T002163		DUP	LA-A-01		<67.9500		<75.0000		1500.0000	10/31/95	13:27	bjg	0.05	@ICP-A01
485	2877	13	S95T002163		DUP	LI-A-01		<13.5900		<15.0000		1500.0000	10/31/95	13:27	bjg	0.01	@ICP-A01
486	2877	13	S95T002163		DUP	MG-A-01		690.4843		675.6843		1500.0000	10/31/95	13:27	bjg	0.1	@ICP-A01
487	2877	13	S95T002163		DUP	MN-A-01		66.4962		65.5603		1500.0000	10/31/95	13:27	bjg	0.01	@ICP-A01
488	2877	13	S95T002163		DUP	MO-A-01		<67.9500		<75.0000		1500.0000	10/31/95	13:27	bjg	0.05	@ICP-A01

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
459	2877	13	895T002163		DUP	NA-A-01		191038.0313		194287.0938		1500.0000	10/31/95	13:27	blg	0.1	@ICP-A01
460	2877	13	895T002163		DUP	ND-A-01		<135.9000		<150.0000		1500.0000	10/31/95	13:27	blg	0.1	@ICP-A01
461	2877	13	895T002163		DUP	NI-A-01		275.0295		287.8193		1500.0000	10/31/95	13:27	blg	0.02	@ICP-A01
462	2877	13	895T002163		DUP	P-A-01		5399.9834		4645.1980		1500.0000	10/31/95	13:27	blg	0.2	@ICP-A01
463	2877	13	895T002163		DUP	PB-A-01		151.8443		153.0738		1500.0000	10/31/95	13:27	blg	0.1	@ICP-A01
464	2877	13	895T002163		DUP	S-A-01		5847.8662		5628.3389		1500.0000	10/31/95	13:27	blg	0.05	@ICP-A01
465	2877	13	895T002163		DUP	SB-A-01		<271.8000		<300.0000		1500.0000	10/31/95	13:27	blg	0.2	@ICP-A01
466	2877	13	895T002163		DUP	SE-A-01		<135.9000		<150.0000		1500.0000	10/31/95	13:27	blg	0.1	@ICP-A01
467	2877	13	895T002163		DUP	SI-A-01		287.9550		279.3307		1500.0000	10/31/95	13:27	blg	0.05	@ICP-A01
468	2877	13	895T002163		DUP	SM-A-01		<135.9000		<150.0000		1500.0000	10/31/95	13:27	blg	0.1	@ICP-A01
469	2877	13	895T002163		DUP	SR-A-01		104.1288		102.1284		1500.0000	10/31/95	13:27	blg	0.01	@ICP-A01
470	2877	13	895T002163		DUP	TI-A-01		198.0140		193.8451		1500.0000	10/31/95	13:27	blg	0.01	@ICP-A01
471	2877	13	895T002163		DUP	TL-A-01		<271.8000		<300.0000		1500.0000	10/31/95	13:27	blg	0.2	@ICP-A01
472	2877	13	895T002163		DUP	U-A-01		<543.8000		<600.0000		1500.0000	10/31/95	13:27	blg	0.4	@ICP-A01
473	2877	13	895T002163		DUP	V-A-01		<67.9500		<75.0000		1500.0000	10/31/95	13:27	blg	0.05	@ICP-A01
474	2877	13	895T002163		DUP	ZN-A-01		32.2433		33.7604		1500.0000	10/31/95	13:27	blg	0.01	@ICP-A01
475	2877	13	895T002163		DUP	ZR-A-01		15.9595		<15.0000		1500.0000	10/31/95	13:27	blg	0.01	@ICP-A01
476	2877	14	895T002164			AG-A-01			<	10.5700		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
477	2877	14	895T002164			AL-A-01				36780.8094		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
478	2877	14	895T002164			AS-A-01			<	52.8500		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
479	2877	14	895T002164			B-A-01			<	52.8500		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
480	2877	14	895T002164			BA-A-01				143.8734		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
481	2877	14	895T002164			BE-A-01			<	5.2850		1057.0000	10/31/95	13:34	blg	0.005	@ICP-A01
482	2877	14	895T002164			BI-A-01			<	105.7000		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
483	2877	14	895T002164			CA-A-01				1700.1991		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
484	2877	14	895T002164			CD-A-01			<	10.5700		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
485	2877	14	895T002164			CE-A-01			<	105.7000		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
486	2877	14	895T002164			CO-A-01			<	21.1400		1057.0000	10/31/95	13:34	blg	0.02	@ICP-A01
487	2877	14	895T002164			CR-A-01				138.3678		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
488	2877	14	895T002164			CU-A-01			<	10.5700		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
489	2877	14	895T002164			FE-A-01				2210.2856		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
490	2877	14	895T002164			K-A-01				1274.0453		1057.0000	10/31/95	13:34	blg	0.3	@ICP-A01
491	2877	14	895T002164			LA-A-01			<	52.8500		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
492	2877	14	895T002164			LI-A-01			<	10.5700		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
493	2877	14	895T002164			MG-A-01				460.9602		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
494	2877	14	895T002164			MN-A-01				40.6955		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
495	2877	14	895T002164			MO-A-01			<	52.8500		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
496	2877	14	895T002164			NA-A-01				182998.5625		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
497	2877	14	895T002164			ND-A-01			<	105.7000		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
498	2877	14	895T002164			NI-A-01				432.4795		1057.0000	10/31/95	13:34	blg	0.02	@ICP-A01
499	2877	14	895T002164			P-A-01				2047.0345		1057.0000	10/31/95	13:34	blg	0.2	@ICP-A01
500	2877	14	895T002164			PB-A-01				125.9321		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
501	2877	14	895T002164			S-A-01				5155.4009		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
502	2877	14	895T002164			SB-A-01			<	211.4000		1057.0000	10/31/95	13:34	blg	0.2	@ICP-A01
503	2877	14	895T002164			SE-A-01			<	105.7000		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
504	2877	14	895T002164			SI-A-01				220.9281		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
505	2877	14	895T002164			SM-A-01			<	105.7000		1057.0000	10/31/95	13:34	blg	0.1	@ICP-A01
506	2877	14	895T002164			SR-A-01				147.9049		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
507	2877	14	895T002164			TI-A-01				120.9728		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
508	2877	14	895T002164			TL-A-01			<	211.4000		1057.0000	10/31/95	13:34	blg	0.2	@ICP-A01
509	2877	14	895T002164			U-A-01			<	422.8000		1057.0000	10/31/95	13:34	blg	0.4	@ICP-A01
510	2877	14	895T002164			V-A-01			<	52.8500		1057.0000	10/31/95	13:34	blg	0.05	@ICP-A01
511	2877	14	895T002164			ZN-A-01				31.2886		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
512	2877	14	895T002164			ZR-A-01			<	10.5700		1057.0000	10/31/95	13:34	blg	0.01	@ICP-A01
513	2877	15	895T002164		DUP	AG-A-01		<10.5700		<10.2500		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
514	2877	15	895T002164		DUP	AL-A-01		36780.8094		32387.3887		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
515	2877	15	895T002164		DUP	AS-A-01		<52.8500		<51.2500		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
516	2877	15	895T002164		DUP	B-A-01		<52.8500		<51.2500		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
517	2877	15	895T002164		DUP	BA-A-01		143.8734		130.7855		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
518	2877	15	895T002164		DUP	BE-A-01		<5.2850		<5.1250		1025.0000	10/31/95	13:37	blg	0.005	@ICP-A01
519	2877	15	895T002164		DUP	BI-A-01		<105.7000		<102.5000		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
520	2877	15	895T002164		DUP	CA-A-01		1700.1991		1514.2659		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
521	2877	15	895T002164		DUP	CD-A-01		<10.5700		<10.2500		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
522	2877	15	895T002164		DUP	CE-A-01		<105.7000		<102.5000		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
523	2877	15	895T002164		DUP	CO-A-01		<21.1400		<20.5000		1025.0000	10/31/95	13:37	blg	0.02	@ICP-A01
524	2877	15	895T002164		DUP	CR-A-01		138.3678		116.9845		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
525	2877	15	895T002164		DUP	CU-A-01		<10.5700		<10.2500		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
526	2877	15	895T002164		DUP	FE-A-01		2210.2856		2000.1290		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
527	2877	15	895T002164		DUP	K-A-01		1274.0453		1273.4899		1025.0000	10/31/95	13:37	blg	0.3	@ICP-A01
528	2877	15	895T002164		DUP	LA-A-01		<52.8500		<51.2500		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
529	2877	15	895T002164		DUP	LI-A-01		<10.5700		<10.2500		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
530	2877	15	895T002164		DUP	MG-A-01		460.9602		399.3403		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
531	2877	15	895T002164		DUP	MN-A-01		40.6955		34.7144		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
532	2877	15	895T002164		DUP	MO-A-01		<52.8500		<51.2500		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
533	2877	15	895T002164		DUP	NA-A-01		182998.5625		188298.8125		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
534	2877	15	895T002164		DUP	ND-A-01		<105.7000		<102.5000		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
535	2877	15	895T002164		DUP	NI-A-01		432.4795		385.6053		1025.0000	10/31/95	13:37	blg	0.02	@ICP-A01
536	2877	15	895T002164		DUP	P-A-01		2047.0345		3445.2212		1025.0000	10/31/95	13:37	blg	0.2	@ICP-A01
537	2877	15	895T002164		DUP	PB-A-01		125.9321		<102.5000		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
538	2877	15	895T002164		DUP	S-A-01		5155.4009		4819.2974		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
539	2877	15	895T002164		DUP	SB-A-01		<211.4000		<205.0000		1025.0000	10/31/95	13:37	blg	0.2	@ICP-A01
540	2877	15	895T002164		DUP	SE-A-01		<105.7000		<102.5000		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
541	2877	15	895T002164		DUP	SI-A-01		220.9281		245.1788		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
542	2877	15	895T002164		DUP	SM-A-01		<105.7000		<102.5000		1025.0000	10/31/95	13:37	blg	0.1	@ICP-A01
543	2877	15	895T002164		DUP	SR-A-01		147.9049		130.1489		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
544	2877	15	895T002164		DUP	TI-A-01		120.9728		109.1980		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
545	2877	15	895T002164		DUP	TL-A-01		<211.4000		<205.0000		1025.0000	10/31/95	13:37	blg	0.2	@ICP-A01
546	2877	15	895T002164		DUP	U-A-01		<422.8000		<410.0000		1025.0000	10/31/95	13:37	blg	0.4	@ICP-A01
547	2877	15	895T002164		DUP	V-A-01		<52.8500		<51.2500		1025.0000	10/31/95	13:37	blg	0.05	@ICP-A01
548	2877	15	895T002164		DUP	ZN-A-01		31.2886		30.2983		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
549	2877	15	895T002164		DUP	ZR-A-01		<10.5700		<10.2500		1025.0000	10/31/95	13:37	blg	0.01	@ICP-A01
550	2877	16			ICSA	AG				-0.0123		1.0000	10/31/95	13:41	blg	0.01	@ICP-QC
551	2877	16			ICSA	AL				248.1340		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
552	2877	16			ICSA	AS				-0.0800		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
553	2877	16			ICSA	B				-0.0004		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
554	2877	16			ICSA	BA				0.0031		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
555	2877	16			ICSA	BE				0.0002		1.0000	10/31/95	13:41	blg	0.005	@ICP-QC
556	2877	16			ICSA	BI				-0.0120		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
557	2877	16			ICSA	CA				251.3747		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
558	2877	16			ICSA	CD				0.0016		1.0000	10/31/95	13:41	blg	0.01	@ICP-QC
559	2877	16			ICSA	CE				0.0136		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
560	2877	16			ICSA	CO				0.0007		1.0000	10/31/95	13:41	blg	0.02	@ICP-QC
561	2877	16			ICSA	CR				-0.0037		1.0000	10/31/95	13:41	blg	0.01	@ICP-QC
562	2877	16			ICSA	CU				-0.0080		1.0000	10/31/95	13:41	blg	0.01	@ICP-QC
563	2877	16			ICSA	EU				-0.0112		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
564	2877	16			ICSA	FE				93.1051		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
565	2877	16			ICSA	K				0.1874		1.0000	10/31/95	13:41	blg	0.3	@ICP-QC
566	2877	16			ICSA	LA				-0.0026		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
567	2877	16			ICSA	LI				0.0019		1.0000	10/31/95	13:41	blg	0.01	@ICP-QC
568	2877	16			ICSA	MG				253.4917		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
569	2877	16			ICSA	MN				-0.0084		1.0000	10/31/95	13:41	blg	0.01	@ICP-QC
570	2877	16			ICSA	MO				-0.0143		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
571	2877	16			ICSA	NA				199.9285		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
572	2877	16			ICSA	ND				0.0085		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
573	2877	16			ICSA	NI				-0.0147		1.0000	10/31/95	13:41	blg	0.02	@ICP-QC
574	2877	16			ICSA	P				0.0374		1.0000	10/31/95	13:41	blg	0.2	@ICP-QC
575	2877	16			ICSA	PB				0.0389		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
576	2877	16			ICSA	S				0.0290		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
577	2877	16			ICSA	SB				-0.0004		1.0000	10/31/95	13:41	blg	0.2	@ICP-QC
578	2877	16			ICSA	SE				0.0086		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC
579	2877	16			ICSA	SI				0.0021		1.0000	10/31/95	13:41	blg	0.05	@ICP-QC
580	2877	16			ICSA	SM				-0.0171		1.0000	10/31/95	13:41	blg	0.1	@ICP-QC

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
611	2877	16			ICSA	SR				-0.0035			1.0000	10/31/95	13:41	bjg	0.01 @ICP-QC
612	2877	16			ICSA	TH				-0.0178			1.0000	10/31/95	13:41	bjg	0 @ICP-QC
613	2877	16			ICSA	TI				0.0014			1.0000	10/31/95	13:41	bjg	0.01 @ICP-QC
614	2877	16			ICSA	TL				0.0668			1.0000	10/31/95	13:41	bjg	0.2 @ICP-QC
615	2877	16			ICSA	U				0.1025			1.0000	10/31/95	13:41	bjg	0.4 @ICP-QC
616	2877	16			ICSA	V				-0.0035			1.0000	10/31/95	13:41	bjg	0.05 @ICP-QC
617	2877	16			ICSA	Y				0.0175			1.0000	10/31/95	13:41	bjg	0.01 @ICP-QC
618	2877	16			ICSA	ZN				0.0024			1.0000	10/31/95	13:41	bjg	0.01 @ICP-QC
619	2877	16			ICSA	ZR				-0.0027			1.0000	10/31/95	13:41	bjg	0.01 @ICP-QC
620	2877	17			ICSAB	AG				0.9501			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
621	2877	17			ICSAB	AL				248.2460			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
622	2877	17			ICSAB	AS				-0.0802			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
623	2877	17			ICSAB	B				-0.0039			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
624	2877	17			ICSAB	BA				0.4726			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
625	2877	17			ICSAB	BE				0.4689			1.0000	10/31/95	13:43	bjg	0.005 @ICP-QC
626	2877	17			ICSAB	BI				-0.0150			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
627	2877	17			ICSAB	CA				254.5918			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
628	2877	17			ICSAB	CD				0.9606			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
629	2877	17			ICSAB	CE				0.0037			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
630	2877	17			ICSAB	CO				0.4670			1.0000	10/31/95	13:43	bjg	0.02 @ICP-QC
631	2877	17			ICSAB	CR				0.4727			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
632	2877	17			ICSAB	CU				0.4882			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
633	2877	17			ICSAB	EU				-0.0125			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
634	2877	17			ICSAB	FE				93.9622			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
635	2877	17			ICSAB	K				0.1966			1.0000	10/31/95	13:43	bjg	0.3 @ICP-QC
636	2877	17			ICSAB	LA				-0.0030			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
637	2877	17			ICSAB	LI				1.0082			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
638	2877	17			ICSAB	MG				253.5022			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
639	2877	17			ICSAB	MN				0.4461			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
640	2877	17			ICSAB	MO				-0.0104			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
641	2877	17			ICSAB	NA				199.8398			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
642	2877	17			ICSAB	ND				0.0063			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
643	2877	17			ICSAB	NI				0.9605			1.0000	10/31/95	13:43	bjg	0.02 @ICP-QC
644	2877	17			ICSAB	P				0.0121			1.0000	10/31/95	13:43	bjg	0.2 @ICP-QC
645	2877	17			ICSAB	PB				1.0182			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
646	2877	17			ICSAB	S				0.0471			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
647	2877	17			ICSAB	SB				0.0097			1.0000	10/31/95	13:43	bjg	0.2 @ICP-QC
648	2877	17			ICSAB	SE				0.0150			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
649	2877	17			ICSAB	SI				0.0032			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
650	2877	17			ICSAB	SM				-0.0187			1.0000	10/31/95	13:43	bjg	0.1 @ICP-QC
651	2877	17			ICSAB	SR				-0.0043			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
652	2877	17			ICSAB	TH				-0.0128			1.0000	10/31/95	13:43	bjg	0 @ICP-QC
653	2877	17			ICSAB	TI				0.0013			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
654	2877	17			ICSAB	TL				0.0628			1.0000	10/31/95	13:43	bjg	0.2 @ICP-QC
655	2877	17			ICSAB	U				0.0800			1.0000	10/31/95	13:43	bjg	0.4 @ICP-QC
656	2877	17			ICSAB	V				0.4670			1.0000	10/31/95	13:43	bjg	0.05 @ICP-QC
657	2877	17			ICSAB	Y				0.0189			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
658	2877	17			ICSAB	ZN				0.9731			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
659	2877	17			ICSAB	ZR				-0.0028			1.0000	10/31/95	13:43	bjg	0.01 @ICP-QC
660	2877	18			CCV	AG				5.0866			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
661	2877	18			CCV	AL				5.1008			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
662	2877	18			CCV	AS				5.2582			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
663	2877	18			CCV	B				5.0673			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
664	2877	18			CCV	BA				5.0851			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
665	2877	18			CCV	BE				5.3222			1.0000	10/31/95	13:49	bjg	0.005 @ICP-QC
666	2877	18			CCV	BI				5.1950			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
667	2877	18			CCV	CA				5.2512			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
668	2877	18			CCV	CD				5.1506			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
669	2877	18			CCV	CE				5.2242			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
670	2877	18			CCV	CO				5.1297			1.0000	10/31/95	13:49	bjg	0.02 @ICP-QC
671	2877	18			CCV	CR				5.2106			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
672	2877	18			CCV	CU				5.2366			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
673	2877	18			CCV	EU				0.0065			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
674	2877	18			CCV	FE				5.2084			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
675	2877	18			CCV	K				5.0651			1.0000	10/31/95	13:49	bjg	0.3 @ICP-QC
676	2877	18			CCV	LA				5.1800			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
677	2877	18			CCV	LI				5.2344			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
678	2877	18			CCV	MG				5.1010			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
679	2877	18			CCV	MN				5.0361			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
680	2877	18			CCV	MO				5.1841			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
681	2877	18			CCV	NA				5.1648			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
682	2877	18			CCV	ND				5.3551			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
683	2877	18			CCV	NI				5.1518			1.0000	10/31/95	13:49	bjg	0.02 @ICP-QC
684	2877	18			CCV	P				5.3376			1.0000	10/31/95	13:49	bjg	0.2 @ICP-QC
685	2877	18			CCV	PB				5.1381			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
686	2877	18			CCV	S				5.1795			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
687	2877	18			CCV	SB				4.8643			1.0000	10/31/95	13:49	bjg	0.2 @ICP-QC
688	2877	18			CCV	SE				5.1792			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
689	2877	18			CCV	SI				5.0857			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
690	2877	18			CCV	SM				5.2083			1.0000	10/31/95	13:49	bjg	0.1 @ICP-QC
691	2877	18			CCV	SR				5.1213			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
692	2877	18			CCV	TH				0.0289			1.0000	10/31/95	13:49	bjg	0 @ICP-QC
693	2877	18			CCV	TI				5.0222			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
694	2877	18			CCV	TL				5.1076			1.0000	10/31/95	13:49	bjg	0.2 @ICP-QC
695	2877	18			CCV	U				10.2294			1.0000	10/31/95	13:49	bjg	0.4 @ICP-QC
696	2877	18			CCV	V				5.1248			1.0000	10/31/95	13:49	bjg	0.05 @ICP-QC
697	2877	18			CCV	Y				0.0091			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
698	2877	18			CCV	ZN				5.1141			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
699	2877	18			CCV	ZR				5.0805			1.0000	10/31/95	13:49	bjg	0.01 @ICP-QC
700	2877	19			CCB	AG				0.0010			1.0000	10/31/95	13:52	bjg	0.01 @ICP-QC
701	2877	19			CCB	AL				0.0095			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
702	2877	19			CCB	AS				0.0102			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
703	2877	19			CCB	B				0.0029			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
704	2877	19			CCB	BA				0.0001			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
705	2877	19			CCB	BE				0.0003			1.0000	10/31/95	13:52	bjg	0.005 @ICP-QC
706	2877	19			CCB	BI				0.0394			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
707	2877	19			CCB	CA				0.0000			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
708	2877	19			CCB	CD				-0.0006			1.0000	10/31/95	13:52	bjg	0.01 @ICP-QC
709	2877	19			CCB	CE				0.0008			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
710	2877	19			CCB	CO				-0.0001			1.0000	10/31/95	13:52	bjg	0.02 @ICP-QC
711	2877	19			CCB	CR				0.0008			1.0000	10/31/95	13:52	bjg	0.01 @ICP-QC
712	2877	19			CCB	CU				-0.0004			1.0000	10/31/95	13:52	bjg	0.01 @ICP-QC
713	2877	19			CCB	EU				-0.0011			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
714	2877	19			CCB	FE				-0.0002			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
715	2877	19			CCB	K				-0.1285			1.0000	10/31/95	13:52	bjg	0.3 @ICP-QC
716	2877	19			CCB	LA				0.0006			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
717	2877	19			CCB	LI				-0.0007			1.0000	10/31/95	13:52	bjg	0.01 @ICP-QC
718	2877	19			CCB	MG				-0.0045			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
719	2877	19			CCB	MN				-0.0000			1.0000	10/31/95	13:52	bjg	0.01 @ICP-QC
720	2877	19			CCB	MO				0.0000			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
721	2877	19			CCB	NA				-0.0073			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
722	2877	19			CCB	ND				-0.0048			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
723	2877	19			CCB	NI				-0.0011			1.0000	10/31/95	13:52	bjg	0.02 @ICP-QC
724	2877	19			CCB	P				0.0165			1.0000	10/31/95	13:52	bjg	0.2 @ICP-QC
725	2877	19			CCB	PB				0.0087			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
726	2877	19			CCB	S				-0.0055			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
727	2877	19			CCB	SB				0.0071			1.0000	10/31/95	13:52	bjg	0.2 @ICP-QC
728	2877	19			CCB	SE				0.0310			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
729	2877	19			CCB	SI				-0.0094			1.0000	10/31/95	13:52	bjg	0.05 @ICP-QC
730	2877	19			CCB	SM				-0.0080			1.0000	10/31/95	13:52	bjg	0.1 @ICP-QC
731	2877	19			CCB	SR				-0.0001			1.0000	10/31/95	13:52	bjg	0.01 @ICP-QC
732	2877	19			CCB	TH				0.0020			1.0000	10/31/95	13:52	bjg	0 @ICP-QC

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OUTPUT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
733	2877	19			CCB	TI				-0.0002		1.0000	10/31/95	13:52	bjg	0.01	●ICP-QC
734	2877	19			CCB	TL				0.0301		1.0000	10/31/95	13:52	bjg	0.2	●ICP-QC
735	2877	19			CCB	U				-0.0302		1.0000	10/31/95	13:52	bjg	0.4	●ICP-QC
736	2877	19			CCB	V				-0.0017		1.0000	10/31/95	13:52	bjg	0.05	●ICP-QC
737	2877	19			CCB	Y				-0.0006		1.0000	10/31/95	13:52	bjg	0.01	●ICP-QC
738	2877	19			CCB	ZN				0.0016		1.0000	10/31/95	13:52	bjg	0.01	●ICP-QC
739	2877	19			CCB	ZR				-0.0009		1.0000	10/31/95	13:52	bjg	0.01	●ICP-QC

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