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

DOCUMENT NUMBER: SD-WM-DP-164

SECTION 5 **OF** 12

TITLE: Final Report for Tank 241BY104 Rotary Mode Cores 116 & 117 [Pgs. 796 Thru 995]

DATE: 06/25/1996

ORIGINATOR: Benar CJ

CO: WHC

RECIPIENT:

CO:

REFERENCES: ECN-629043

Identity 1: S95T003653_A Identity 2: .25sam+2sst5+8hno3 1:31 PM February 7, 1996

Task name : OPTIMA

Sample Weight : 1.0000 Solution Volume : 41.00

On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	55.288	40.822	40.572	40.901	88.347	40.762	40.825	37.956
S.D.	0.183	0.204	0.185	0.225	0.027	0.222	0.226	0.158
% R.S.D.	0.330	0.499	0.457	0.549	0.031	0.544	0.552	0.416

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.754	40.565	41.177	43.693	42.309	49.835	42.935	78.633
S.D.	0.098	0.171	0.185	0.154	0.212	0.406	0.271	1.806
% R.S.D.	0.242	0.422	0.450	0.353	0.500	0.815	0.631	2.297

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	39.477	39.848	39.850	43.771	56.666	38.484	40.471	576.343
S.D.	0.584	0.262	0.213	0.650	0.718	0.104	0.800	1.384
% R.S.D.	1.479	0.656	0.535	1.485	1.267	0.271	1.978	0.240

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.371	37.845	32.429	41.336	39.926	40.175	40.799	15262.935
S.D.	0.097	0.403	0.200	0.263	0.139	0.146	0.229	37.854
% R.S.D.	0.240	1.066	0.616	0.635	0.349	0.363	0.562	0.248

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	40.646	35.370	41.274	40.493	36.718
S.D.	0.092	0.819	0.117	0.174	1.452
% R.S.D.	0.225	2.317	0.284	0.429	3.953

Identity 1: ICSA Identity 2: Quality Control 1:36 PM February 7, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.005	0.002	-0.030	0.004	195.936	0.002	0.008	0.000
S.D.	0.002	0.000	0.009	0.006	0.715	0.002	0.001	0.000
% R.S.D.	31.670	7.216	30.557	145.467	0.365	95.706	11.182	111.577

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.001	0.005	98.791	101.279	0.005	0.018	-0.083
S.D.	0.000	0.002	0.002	0.450	0.327	0.004	0.014	0.079
% R.S.D.	6.941	163.527	47.698	0.455	0.322	77.019	76.033	95.010

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.021	-0.013	0.003	-0.001	-0.044	101.509	-0.001	192.125
S.D.	0.014	0.013	0.000	0.008	0.002	0.558	0.006	3.437
% R.S.D.	69.563	103.806	9.897	597.477	4.585	0.549	714.833	1.789

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.000	-0.027	0.004	-0.014	-0.001	0.003	0.010	0.198
S.D.	0.002	0.011	0.001	0.012	0.000	0.000	0.001	0.019
% R.S.D.	351.935	42.552	21.892	85.020	37.638	1.332	7.755	9.646

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.003	-0.113	-0.001	0.003	-0.055
S.D.	0.001	0.037	0.001	0.000	0.036
% R.S.D.	20.073	32.724	59.452	7.696	64.559

Identity 1: ICSAB Identity 2: Quality Control 1:39 PM February 7, 1996
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	0.002	-0.047	0.010	195.524	0.497	0.506	0.932
S.D.	0.002	0.000	0.011	0.005	0.597	0.000	0.004	0.015
% R.S.D.	57.075	5.808	23.592	49.041	0.306	0.006	0.695	1.646

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.005	0.973	0.000	98.989	101.295	0.512	0.043	-0.012
S.D.	0.002	0.006	0.002	0.112	0.029	0.004	0.005	0.073
% R.S.D.	0.178	0.617	395.129	0.114	0.028	0.781	12.281	617.504

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.055	-0.018	0.505	0.016	-0.024	102.537	0.014	190.321
S.D.	0.020	0.012	0.002	0.012	0.006	0.635	0.006	2.851
% R.S.D.	36.582	68.017	0.464	71.756	26.845	0.619	39.585	1.498

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.000	-0.010	1.020	1.013	-0.000	0.999	0.013	0.263
S.D.	0.002	0.033	0.001	0.013	0.001	0.004	0.001	0.018
% R.S.D.	394.541	330.597	0.082	1.263	386.942	0.386	3.747	6.984

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.502	-0.047	0.501	0.499	-0.017
S.D.	0.001	0.017	0.001	0.001	0.042
% R.S.D.	0.202	36.491	0.196	0.145	253.139

Identity 1: CCV Identity 2: Quality Control 1:46 PM February 7, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	5.007	5.043	4.992	4.807	4.991	5.088	5.161	5.112
S.D.	0.023	0.031	0.035	0.011	0.021	0.010	0.039	0.064
% R.S.D.	0.463	0.613	0.696	0.228	0.415	0.205	0.757	1.257

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.051	4.993	5.132	5.104	5.094	5.028	5.455	9.669
S.D.	0.008	0.007	0.016	0.044	0.027	0.013	0.041	0.024
% R.S.D.	0.161	0.130	0.305	0.857	0.535	0.267	0.749	0.244

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.110	5.120	5.063	4.973	4.890	4.840	5.103	5.092
S.D.	0.024	0.026	0.036	0.270	0.123	0.009	0.035	0.061
% R.S.D.	0.461	0.508	0.707	5.429	2.522	0.186	0.677	1.193

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.043	4.880	4.893	5.055	4.950	5.004	5.205	5.278
S.D.	0.009	0.014	0.009	0.013	0.021	0.010	0.025	0.046
% R.S.D.	0.175	0.281	0.187	0.255	0.416	0.202	0.476	0.868

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.000	4.722	5.096	5.196	4.824
S.D.	0.013	0.039	0.015	0.023	0.014
% R.S.D.	0.256	0.834	0.289	0.447	0.298

Identity 1: CCB Identity 2: Quality Control 1:49 PM February 7, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.002	0.000	0.003	0.001	0.008	-0.002	0.001	0.000
S.D.	0.001	0.000	0.004	0.001	0.003	0.002	0.000	0.000
% R.S.D.	46.344	115.470	157.807	93.697	34.634	87.064	29.202	72.115

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.001	-0.001	-0.001	0.001	0.000	-0.005	-0.038
S.D.	0.000	0.001	0.001	0.002	0.000	0.001	0.011	0.045
% R.S.D.	43.338	133.905	171.988	256.712	8.571	647.842	236.122	118.054

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.007	-0.007	0.000	-0.019	-0.008	0.000	-0.006	0.044
S.D.	0.009	0.007	0.000	0.005	0.001	0.000	0.002	0.002
% R.S.D.	127.008	97.773	77.540	25.027	19.265	115.470	33.666	4.477

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.001	0.006	0.002	-0.010	0.000	0.002	-0.001	0.112
S.D.	0.001	0.005	0.001	0.000	0.000	0.000	0.000	0.013
% R.S.D.	175.064	78.499	39.702	4.681	403.871	25.057	35.630	11.364

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.046	-0.001	0.000	-0.049
S.D.	0.000	0.020	0.000	0.000	0.010
% R.S.D.	1.590	42.892	17.228	93.222	20.328

02-07-96

LABCORE Data Entry Template for Worklist# 4646

Analyst: KSato **Instrument:** ICP01 **Book#** 30B48Q

Method: LA-505-151/161 Rev/Mod D-3

Worklist Comment: ICP BY-104 (FUSION)

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	PREPBLKARL				@ICP-F01	SOLID		
6	SAMPLE	S95T003654	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						
7	DUP	S95T003654	0	Z	@ICP-F01	SOLID		
8	SPK	S95T003654	0	Z	@ICP-F01	SOLID		
9	CCV				@ICP-QC	QC		
10	CCB				@ICP-QC	QC		
11	SAMPLE	S95T003655	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						
12	DUP	S95T003655	0	Z	@ICP-F01	SOLID		
13	SPK	S95T003655	0	Z	@ICP-F01	SOLID		
~~14~~	~~PREPBLKARL~~	02-09-96			@ICP-F01	SOLID		
15	SAMPLE	S95T003656	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 ,						

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 4646

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
					U-F-01			
16	DUP	S95T003656	0	Z	@ICP-F01	SOLID		
17	SPK	S95T003656	0	Z	@ICP-F01	SOLID		
18	CCV				@ICP-QC	QC		
19	CCB				@ICP-QC	QC		
20	SAMPLE	S95T003657	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
		Analytes Requested:			AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01			
21	DUP	S95T003657	0	Z	@ICP-F01	SOLID		
22	SPK	S95T003657	0	Z	@ICP-F01	SOLID		
23	ICSA				@ICP-QC	QC		
24	ICSAB				@ICP-QC	QC		
25	CCV				@ICP-QC	QC		
26	CCB				@ICP-QC	QC		

Final page for worklist # 4646

DK [illegible] 02-09-96
Analyst Signature **Date**

[illegible] .25.10
[illegible]003656_L, .25-10-2-8, DF 205
[illegible]003656 .25-10 41
[illegible]003656_D .25-10 41
[illegible]003656_G .25-10 41, .25 ml sample + 2 ml SST5 + 8 ml HNO_3
[illegible]003655_L, .25-10-2-8, DF 205
[illegible]003655 .25-10 41
[illegible]003655_D .25-10 41
[illegible]003655_G .25-10 41, .25 ml sample + 2 ml SST5 + 8 ml HNO_3

Reviewed by:
Saul M. Pang 2/13/96
Analyst Signature **Date**

S95T003656_L, .25-10-2-8, DF 205
S95T003656 .25-10 41
S95T003656_D .25-10 41
S95T003656_G .25-10 41, .25 ml sample + 2 ml SST5 + 8 ml HNO_3
S95T003657_L, .25-10-2-8, DF 205
S95T003657 .25-10 41
S95T003657_D .25-10 41
S95T003657_G .25-10 41, .25 ml sample + 2 ml SST5 + 8 ml HNO_3

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1/1/c: 960209G

Identity 1: ICV Identity 2: Quality Control 9:28 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	5.002	5.083	5.087	4.795	5.036	5.160	5.132	5.192
S.D.	0.009	0.015	0.019	0.014	0.018	0.004	0.023	0.072
% R.S.D.	0.175	0.289	0.383	0.296	0.362	0.077	0.439	1.380

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.099	5.060	5.036	5.063	5.054	5.091	5.079	9.799
S.D.	0.003	0.006	0.018	0.023	0.010	0.004	0.014	0.008
% R.S.D.	0.069	0.110	0.363	0.450	0.207	0.084	0.273	0.084

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.201	5.095	5.093	5.271	5.110	4.969	5.184	5.128
S.D.	0.006	0.011	0.017	0.136	0.067	0.005	0.009	0.072
% R.S.D.	0.107	0.220	0.325	2.585	1.304	0.109	0.164	1.398

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.151	4.909	4.957	5.069	4.991	5.069	5.083	4.971
S.D.	0.015	0.043	0.001	0.037	0.008	0.004	0.014	0.068
% R.S.D.	0.292	0.875	0.016	0.730	0.153	0.080	0.269	1.362

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.037	4.738	5.101	5.239	4.922
S.D.	0.008	0.044	0.007	0.010	0.018
% R.S.D.	0.161	0.923	0.147	0.185	0.370

DK
02-09-96
BY-104 5957003654-5957003657
Worklist #4646

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 803 TO 831.

Identity 1: ICB Identity 2: Quality Control 9:31 AM February 9, 1996
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	-0.002	-0.015	-0.005	-0.002	-0.001
S.D.	0.001	0.000	0.006	0.002	0.007	0.002	0.000	0.000
% R.S.D.	21.942	23.077	456.467	93.958	44.760	28.957	15.134	29.400

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	-0.005	-0.002	0.003	0.000	-0.003	-0.015	-0.132
S.D.	0.001	0.001	0.001	0.002	0.000	0.001	0.003	0.017
% R.S.D.	117.398	17.737	66.955	85.003	38.188	32.213	21.561	13.221

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.029	-0.034	-0.000	-0.007	-0.001	0.000	-0.003	-0.014
S.D.	0.004	0.005	0.000	0.009	0.002	0.000	0.006	0.000
% R.S.D.	14.357	14.738	24.673	128.254	335.394	28.868	187.727	0.002

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.000	0.008	-0.000	-0.012	-0.001	-0.000	0.000	-0.146
S.D.	0.001	0.010	0.000	0.012	0.000	0.000	0.000	0.019
% R.S.D.	1650.198	119.822	95.760	96.264	43.369	433.355	67.660	13.017

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.022	-0.002	-0.000	0.059
S.D.	0.000	0.023	0.000	0.000	0.013
% R.S.D.	45.910	102.037	11.159	106.194	22.352

Identity 1: ICSA Identity 2: Quality Control 9:33 AM February 9, 1996
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	0.006	0.002	-0.033	0.007	199.001	-0.005	0.000	-0.000
S.D.	0.000	0.000	0.003	0.004	0.659	0.000	0.000	0.000
% R.S.D.	1.894	4.774	8.793	63.889	0.331	0.065	178.553	41.970

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.004	0.000	-0.000	98.153	102.498	0.002	-0.004	-0.040
S.D.	0.000	0.001	0.001	0.108	0.130	0.001	0.004	0.007
% R.S.D.	10.676	421.944	161.859	0.110	0.127	24.029	98.002	18.083

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.016	-0.007	0.003	0.010	-0.035	99.858	0.007	195.844
S.D.	0.004	0.002	0.000	0.001	0.001	0.117	0.003	2.099
% R.S.D.	27.130	26.916	1.974	9.130	3.882	0.118	41.293	1.072

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.033	0.001	0.015	-0.000	0.003	0.013	-0.134
S.D.	0.001	0.014	0.001	0.003	0.000	0.001	0.000	0.011
% R.S.D.	94.942	43.197	49.454	20.461	59.269	29.689	2.071	8.380

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.005	-0.008	-0.002	0.002	0.069
S.D.	0.000	0.037	0.000	0.000	0.010
% R.S.D.	8.619	481.260	11.208	4.860	14.857

Identity 1: ICSAB Identity 2: Quality Control 9:36 AM February 9, 1996
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	0.002	-0.038	0.011	198.124	0.487	0.515	1.006
S.D.	0.001	0.000	0.006	0.002	0.428	0.001	0.001	0.007
% R.S.D.	44.863	4.493	16.451	18.362	0.216	0.306	0.271	0.678

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.987	0.974	-0.001	98.971	102.300	0.499	0.014	-0.011
S.D.	0.003	0.003	0.001	0.247	0.265	0.003	0.011	0.043
% R.S.D.	0.295	0.272	203.574	0.250	0.259	0.507	78.862	401.013

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.010	-0.013	0.516	0.037	-0.032	98.231	0.015	196.960
S.D.	0.013	0.008	0.001	0.003	0.008	0.605	0.005	1.052
% R.S.D.	128.497	62.912	0.209	8.333	24.096	0.616	29.265	0.534

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	-0.050	1.016	0.989	-0.000	0.998	0.013	-0.143
S.D.	0.001	0.015	0.002	0.025	0.000	0.004	0.000	0.022
% R.S.D.	80.911	30.357	0.196	2.569	715.602	0.419	2.365	15.700

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.500	-0.017	0.494	0.505	0.003
S.D.	0.003	0.012	0.002	0.001	0.018
% R.S.D.	0.515	68.174	0.451	0.201	589.723

Identity 1: PREPBLK Identity 2: Quality Control 9:41 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.173	0.000	0.001	0.006	-0.004	0.004	-0.001	-0.000
S.D.	0.001	0.000	0.004	0.003	0.007	0.003	0.000	0.000
% R.S.D.	0.435	37.500	446.161	52.045	171.934	59.774	17.734	66.669

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	-0.003	-0.005	0.003	0.011	0.003	-0.006	-0.107
S.D.	0.000	0.002	0.001	0.002	0.000	0.001	0.008	0.018
% R.S.D.	49.290	80.092	15.405	85.435	0.858	15.277	135.331	16.723

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.010	-0.051	0.000	0.010	-0.005	0.002	-0.002	0.149
S.D.	0.004	0.007	0.000	0.017	0.004	0.000	0.004	0.001
% R.S.D.	41.192	13.018	793.725	169.065	78.867	10.415	151.180	0.756

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.000	-0.040	0.001	0.020	-0.001	0.002	-0.001	427.047
S.D.	0.002	0.013	0.000	0.005	0.001	0.000	0.001	0.985
% R.S.D.	624.142	33.230	26.497	23.752	39.166	24.996	86.760	0.231

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.038	0.000	0.000	0.045
S.D.	0.000	0.024	0.001	0.000	0.011
% R.S.D.	58.329	62.947	115.302	4.632	23.756

Identity 1: S95T003654_L Identity 2: .25-10-2-8 ml 9:45 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	1.616	0.551	2.393	3.960	44.521	0.717	-0.224	-0.137
S.D.	0.222	0.024	0.888	0.524	0.815	0.310	0.046	0.066
% R.S.D.	13.756	4.337	37.114	13.231	1.830	43.182	20.552	48.081

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.062	-0.042	-0.350	1.388	-0.200	8.915	-0.752	-22.269
S.D.	0.073	0.248	0.256	0.119	0.019	0.144	1.407	10.665
% R.S.D.	117.576	596.517	73.137	8.538	9.750	1.619	186.940	47.890

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.354	-12.479	-0.047	3.037	13.017	0.443	0.319	528.909
S.D.	2.598	2.181	0.057	1.198	0.639	0.031	0.565	6.283
% R.S.D.	191.815	17.476	120.465	39.464	4.910	6.977	176.938	1.188

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.017	-7.556	-0.261	2.166	-0.289	0.164	-0.001	14301.289
S.D.	0.210	0.427	0.201	1.924	0.061	0.145	0.033	175.362
% R.S.D.	1248.845	5.657	76.837	88.843	20.978	88.139	2581.951	1.226

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.020	-3.490	-0.132	-0.003	8.762
S.D.	0.001	3.124	0.066	0.024	2.683
% R.S.D.	6.228	89.521	50.423	750.422	30.621

Identity 1: S95T003654 Identity 2: .25-10 ml 9:48 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	2.528	0.609	1.231	0.986	46.803	0.071	0.036	0.008
S.D.	0.104	0.004	0.590	0.153	0.210	0.107	0.025	0.014
% R.S.D.	4.110	0.576	47.939	15.502	0.449	149.807	69.781	187.593

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.033	0.354	-0.033	1.610	0.387	9.017	0.262	1.588
S.D.	0.019	0.085	0.060	0.094	0.005	0.047	0.314	3.490
% R.S.D.	57.900	24.112	182.960	5.815	1.319	0.521	119.902	219.771

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.530	-1.145	0.030	1.800	13.805	0.115	0.054	508.975
S.D.	0.774	0.543	0.013	0.175	0.108	0.004	0.102	10.111
% R.S.D.	146.046	47.375	43.574	9.700	0.781	3.093	188.021	1.987

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.068	-2.628	0.101	0.704	-0.002	0.099	0.086	13383.853
S.D.	0.019	0.559	0.051	0.148	0.043	0.018	0.024	242.294
% R.S.D.	27.557	21.269	50.445	20.993	2064.812	18.233	28.592	1.810

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.091	-1.500	0.084	0.013	0.739
S.D.	0.006	1.366	0.055	0.012	1.623
% R.S.D.	6.263	91.043	65.384	95.933	219.519

Identity 1: S95T003654_D Identity 2: .25-10 ml 9:51 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.708	0.604	0.794	0.764	49.963	-0.143	0.191	-0.024
S.D.	0.030	0.004	0.119	0.045	0.057	0.107	0.016	0.008
% R.S.D.	4.291	0.581	14.972	5.882	0.114	74.919	8.265	34.316

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.144	-0.101	1.193	0.275	6.824	-0.631	1.508
S.D.	0.006	0.081	0.077	0.048	0.001	0.132	0.289	1.457
% R.S.D.	117.510	56.327	76.403	4.012	0.535	1.930	45.720	96.654

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.276	-0.991	-0.005	2.404	13.078	0.095	-0.136	502.464
S.D.	0.419	0.155	0.007	0.208	0.179	0.000	0.072	3.885
% R.S.D.	32.821	15.678	140.517	8.644	1.371	0.000	52.702	0.773

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.079	-1.071	-0.020	-0.616	-0.006	0.042	-0.024	14801.064
S.D.	0.017	0.439	0.018	0.553	0.008	0.014	0.015	88.309
% R.S.D.	21.575	41.020	88.282	89.735	132.142	32.917	63.064	0.597

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.049	0.056	-0.100	-0.008	-0.081
S.D.	0.006	0.507	0.047	0.005	0.528
% R.S.D.	12.280	906.770	47.472	59.715	653.864

Identity 1: S95T003654_A Identity 2: .25sam+2sst5+8hno3 9:54 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	43.295	41.838	40.803	39.644	87.871	41.555	41.636	39.392
S.D.	0.141	0.152	0.454	0.074	0.205	0.124	0.189	0.217
% R.S.D.	0.325	0.363	1.114	0.188	0.234	0.297	0.454	0.550

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.978	41.303	41.356	42.859	41.315	50.290	41.563	75.627
S.D.	0.051	0.329	0.375	0.379	0.165	0.060	0.472	0.917
% R.S.D.	0.125	0.797	0.907	0.885	0.400	0.120	1.135	1.213

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	41.284	39.285	41.110	42.523	54.210	39.689	41.921	564.442
S.D.	0.219	0.133	0.161	1.102	0.191	0.049	0.444	3.086
% R.S.D.	0.531	0.339	0.392	2.593	0.353	0.125	1.058	0.547

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.514	38.977	28.641	41.933	40.442	40.985	40.640	13748.663
S.D.	0.013	0.213	0.227	0.467	0.090	0.131	0.176	107.678
% R.S.D.	0.031	0.547	0.794	1.115	0.223	0.320	0.432	0.783

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.110	35.945	41.511	41.619	41.701
S.D.	0.104	1.218	0.062	0.112	0.637
% R.S.D.	0.253	3.390	0.149	0.270	1.527

Identity 1: CCV Identity 2: Quality Control 9:59 AM February 9, 1996
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	5.013	5.019	5.057	4.811	4.998	5.226	5.055	4.971
S.D.	0.009	0.011	0.012	0.009	0.013	0.015	0.026	0.074
% R.S.D.	0.174	0.222	0.246	0.192	0.261	0.278	0.506	1.492

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.221	5.160	5.082	5.210	5.052	5.213	5.158	9.507
S.D.	0.010	0.011	0.022	0.016	0.017	0.019	0.037	0.020
% R.S.D.	0.196	0.204	0.431	0.305	0.345	0.355	0.717	0.213

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.093	4.979	5.007	5.241	5.090	5.058	5.189	4.941
S.D.	0.014	0.017	0.018	0.066	0.034	0.014	0.018	0.070
% R.S.D.	0.270	0.336	0.356	1.254	0.671	0.275	0.337	1.410

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.182	4.853	5.062	5.172	4.986	5.161	5.163	5.056
S.D.	0.015	0.040	0.007	0.021	0.005	0.015	0.022	0.086
% R.S.D.	0.289	0.825	0.133	0.402	0.096	0.286	0.430	1.707

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.151	4.769	5.177	5.237	4.946
S.D.	0.010	0.022	0.012	0.013	0.021
% R.S.D.	0.188	0.467	0.235	0.240	0.432

Identity 1: CCB Identity 2: Quality Control 10:02 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.001	-0.000	0.009	0.005	-0.024	-0.005	-0.001	-0.001
S.D.	0.002	0.000	0.005	0.002	0.004	0.002	0.000	0.000
% R.S.D.	171.985	251.661	55.043	47.158	17.135	28.759	31.481	41.810

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.000	-0.005	0.002	0.004	0.000	0.001	-0.015	0.003
S.D.	0.000	0.001	0.003	0.003	0.000	0.001	0.006	0.059
% R.S.D.	460.146	24.997	120.809	87.614	0.000	89.843	39.380	2241.952

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.021	-0.018	-0.000	-0.013	0.001	0.000	0.000	-0.006
S.D.	0.017	0.010	0.000	0.009	0.003	0.000	0.004	0.005
% R.S.D.	81.310	57.268	77.817	71.035	453.616	173.205	755.888	88.188

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.000	-0.027	-0.001	0.004	-0.000	0.000	0.003	-0.023
S.D.	0.000	0.005	0.001	0.014	0.001	0.000	0.000	0.016
% R.S.D.	199.894	19.555	151.130	323.274	160.554	100.485	16.572	68.658

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.045	-0.005	-0.000	0.011
S.D.	0.000	0.011	0.001	0.000	0.036
% R.S.D.	42.802	25.576	16.015	158.844	340.522

Identity 1: S95T003655_L Identity 2: .25-10-2-8 ml 10:05 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	3.188	0.532	0.759	5.350	46.854	-0.890	-0.288	-0.184
S.D.	0.197	0.007	2.207	0.514	0.732	0.309	0.064	0.020
% R.S.D.	6.168	1.246	290.684	9.614	1.562	34.763	22.070	10.652

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.052	-0.185	-0.349	1.435	-0.034	9.801	-3.751	-20.014
S.D.	0.051	0.410	0.001	0.199	0.007	0.232	0.337	1.342
% R.S.D.	97.996	222.342	0.172	13.888	21.651	2.366	8.978	6.707

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-7.018	-4.567	-0.150	4.836	15.918	0.484	0.285	539.850
S.D.	0.196	0.369	0.014	0.421	0.633	0.036	0.287	2.604
% R.S.D.	2.795	8.080	9.563	8.698	3.974	7.370	100.552	0.482

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.378	-7.106	-0.313	0.417	-0.148	0.044	-0.182	17480.851
S.D.	0.100	2.052	0.036	1.041	0.011	0.000	0.135	102.408
% R.S.D.	26.382	28.885	11.440	249.248	7.501	0.180	74.316	0.586

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.020	-4.165	-0.981	-0.068	9.310
S.D.	0.000	5.069	0.044	0.039	2.085
% R.S.D.	0.787	121.695	4.512	57.663	22.395

Identity 1: S95T003655 Identity 2: .25-10 ml 10:08 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	3.675	0.587	0.660	0.939	51.004	0.108	0.019	0.022
S.D.	0.046	0.002	0.220	0.131	0.263	0.062	0.016	0.016
% R.S.D.	1.264	0.391	33.325	13.942	0.516	57.238	84.160	74.484

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.031	0.320	-0.035	1.894	0.527	10.090	-0.089	-3.294
S.D.	0.021	0.059	0.030	0.227	0.000	0.099	0.411	1.992
% R.S.D.	67.520	18.521	83.954	11.959	0.000	0.978	460.276	60.472

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.588	-2.368	0.026	1.984	16.478	0.119	-0.080	520.983
S.D.	0.441	0.423	0.010	0.222	0.085	0.000	0.124	7.055
% R.S.D.	74.958	17.881	37.807	11.190	0.517	0.000	155.980	1.354

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.023	-0.350	0.124	0.837	-0.049	0.044	0.051	16439.443
S.D.	0.012	0.675	0.031	0.133	0.014	0.009	0.015	187.952
% R.S.D.	52.989	192.660	25.451	15.918	27.434	20.288	29.576	1.143

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.102	-0.157	0.041	-0.001	2.231
S.D.	0.006	0.839	0.044	0.005	0.827
% R.S.D.	6.161	536.090	109.203	601.931	37.057

Identity 1: S95T003655_D Identity 2: .25-10 ml 10:11 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	0.661	0.515	0.542	0.628	45.726	0.037	-0.027	-0.015
S.D.	0.072	0.005	0.246	0.126	0.047	0.061	0.028	0.020
% R.S.D.	10.909	0.928	45.463	20.065	0.102	167.779	106.803	131.600

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.028	0.305	-0.105	1.649	0.259	10.800	-0.693	-6.606
S.D.	0.013	0.072	0.165	0.191	0.003	0.136	0.315	3.403
% R.S.D.	47.151	23.758	157.645	11.574	0.984	1.263	45.488	51.519

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.195	-2.304	0.010	1.520	15.106	0.107	-0.007	506.332
S.D.	0.724	0.659	0.013	0.560	0.262	0.006	0.207	6.526
% R.S.D.	370.842	28.592	126.320	36.814	1.735	5.769	2983.347	1.289

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.058	-2.162	-0.015	0.215	-0.064	0.044	0.113	13187.541
S.D.	0.015	0.216	0.041	0.341	0.021	0.018	0.017	138.267
% R.S.D.	26.002	10.001	266.592	158.664	33.502	40.668	15.384	1.048

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.102	-1.208	-0.060	-0.006	3.902
S.D.	0.016	0.548	0.068	0.000	1.890
% R.S.D.	15.638	45.360	113.111	6.727	48.433

Identity 1: S95T003655_A Identity 2: .25sam+2sst5_8hno3 10:14 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	44.386	40.870	40.251	40.242	91.343	42.519	40.291	36.731
S.D.	0.070	0.274	0.352	0.118	0.142	0.376	0.337	0.539
% R.S.D.	0.157	0.671	0.873	0.294	0.155	0.884	0.836	1.467

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	42.127	42.203	41.203	43.531	40.455	52.916	40.960	75.448
S.D.	0.109	0.096	0.205	0.179	0.275	0.017	0.271	3.170
% R.S.D.	0.260	0.228	0.498	0.411	0.679	0.032	0.663	4.202

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.914	38.167	39.888	44.219	57.691	40.542	41.680	543.467
S.D.	0.796	0.540	0.308	1.453	0.296	0.072	0.578	7.090
% R.S.D.	1.945	1.416	0.771	3.287	0.513	0.177	1.386	1.305

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.959	37.712	21.137	42.847	40.222	41.647	40.353	15975.584
S.D.	0.068	0.319	0.514	0.195	0.115	0.062	0.310	188.196
% R.S.D.	0.162	0.845	2.433	0.455	0.287	0.149	0.768	1.178

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.921	38.846	42.140	41.164	41.204
S.D.	0.070	0.689	0.035	0.204	1.182
% R.S.D.	0.167	1.773	0.084	0.496	2.869

Identity 1: S95T003656_L Identity 2: .25-10-2-8 ml 10:17 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	3.438	0.532	1.813	3.820	51.665	-0.000	-0.244	-0.051
S.D.	0.095	0.013	2.214	0.621	2.066	0.308	0.105	0.071
% R.S.D.	2.756	2.492	122.126	16.247	3.999	110540.237	42.975	138.952

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.067	-0.367	-0.508	0.984	0.128	11.837	-4.216	2.977
S.D.	0.167	0.053	0.394	0.125	0.007	0.359	1.999	10.378
% R.S.D.	251.249	14.583	77.555	12.656	5.774	3.031	47.417	348.561

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-2.961	-3.043	-0.054	0.952	12.672	0.515	-1.107	553.459
S.D.	1.885	1.767	0.044	1.648	0.700	0.036	0.581	4.243
% R.S.D.	63.681	58.072	81.445	173.164	5.520	6.928	52.514	0.767

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.394	-9.986	0.207	0.264	-0.052	0.165	0.298	13119.949
S.D.	0.099	0.909	0.079	1.850	0.053	0.130	0.125	102.981
% R.S.D.	25.031	9.100	38.304	701.829	101.726	78.677	41.950	0.785

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.070	-8.321	-0.439	-0.013	-2.146
S.D.	0.001	1.604	0.136	0.022	4.273
% R.S.D.	1.774	19.272	31.065	165.214	199.103

Identity 1: S95T003656 Identity 2: .25-10 ml 10:20 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	3.656	0.564	0.561	0.855	54.738	-0.107	-0.030	-0.010
S.D.	0.027	0.001	0.577	0.164	0.202	0.062	0.028	0.003
% R.S.D.	0.731	0.235	102.814	19.230	0.369	57.576	94.061	24.771

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.054	0.362	0.069	1.708	0.709	12.094	-0.488	1.279
S.D.	0.024	0.060	0.107	0.065	0.001	0.098	0.421	1.081
% R.S.D.	45.007	16.709	155.045	3.816	0.208	0.809	86.179	84.554

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.617	-0.540	0.012	2.860	14.895	0.130	-0.015	552.472
S.D.	0.220	0.104	0.002	0.143	0.160	0.004	0.120	4.442
% R.S.D.	35.555	19.279	19.516	4.988	1.072	2.749	773.589	0.804

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.058	-0.981	0.044	1.356	0.022	0.054	0.003	12731.367
S.D.	0.015	0.316	0.013	0.722	0.020	0.036	0.018	66.699
% R.S.D.	25.976	32.174	29.925	53.269	93.249	67.175	592.569	0.524

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.090	-1.672	-0.069	-0.006	-0.038
S.D.	0.006	0.517	0.023	0.008	0.579
% R.S.D.	6.579	30.952	33.623	140.511	1508.255

Identity 1: S95T003656_D Identity 2: .25-10 ml 10:23 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	10.258	0.529	0.501	0.435	53.909	0.179	-0.020	0.003
S.D.	0.046	0.003	0.527	0.147	0.161	0.000	0.010	0.010
% R.S.D.	0.452	0.501	105.204	33.844	0.298	0.099	47.287	292.039

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.020	0.327	0.034	1.616	0.525	11.039	-0.303	-0.223
S.D.	0.019	0.023	0.088	0.096	0.001	0.079	0.129	1.377
% R.S.D.	95.864	6.906	259.777	5.971	0.280	0.720	42.511	617.863

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.422	-1.483	0.012	2.353	14.442	0.101	0.032	538.142
S.D.	0.348	0.229	0.004	0.453	0.175	0.000	0.070	2.123
% R.S.D.	82.364	15.454	37.889	19.262	1.214	0.000	218.385	0.394

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.132	-1.411	0.054	0.173	0.017	0.057	-0.017	9597.123
S.D.	0.008	0.032	0.018	0.478	0.007	0.021	0.011	19.750
% R.S.D.	5.711	2.246	33.641	275.798	42.117	36.783	65.626	0.206

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.098	-0.186	0.025	0.007	3.753
S.D.	0.000	0.803	0.027	0.012	1.000
% R.S.D.	0.165	430.889	106.509	160.606	26.647

Identity 1: S95T003656_A Identity 2: .25sam+2sst5+8hno3 10:26 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	44.309	41.169	40.932	39.749	94.465	42.233	40.657	37.458
S.D.	0.064	0.255	0.217	0.158	0.499	0.164	0.282	0.655
% R.S.D.	0.145	0.620	0.530	0.398	0.528	0.388	0.694	1.748

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	41.850	41.767	40.983	43.464	40.991	54.441	41.051	77.572
S.D.	0.068	0.116	0.079	0.159	0.191	0.272	0.254	2.632
% R.S.D.	0.162	0.277	0.192	0.365	0.465	0.499	0.619	3.394

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	41.274	38.712	40.269	44.684	56.264	40.366	41.619	570.525
S.D.	0.470	0.322	0.274	0.668	0.267	0.024	0.294	9.858
% R.S.D.	1.140	0.831	0.680	1.495	0.474	0.058	0.707	1.728

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.855	37.940	29.303	42.433	40.297	41.566	40.619	12409.832
S.D.	0.018	1.090	0.040	0.500	0.129	0.150	0.036	155.157
% R.S.D.	0.043	2.872	0.137	1.179	0.320	0.360	0.090	1.250

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.756	35.954	41.974	41.470	42.248
S.D.	0.092	0.367	0.070	0.154	1.221
% R.S.D.	0.220	1.022	0.168	0.371	2.891

Identity 1: CCV Identity 2: Quality Control 10:29 AM February 9, 1996
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	5.010	5.008	5.066	4.821	4.979	5.270	5.013	4.861
S.D.	0.020	0.038	0.024	0.012	0.031	0.019	0.047	0.090
% R.S.D.	0.392	0.750	0.465	0.245	0.623	0.357	0.928	1.857

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.259	5.183	5.079	5.241	5.033	5.247	5.134	9.518
S.D.	0.012	0.011	0.018	0.015	0.029	0.025	0.029	0.038
% R.S.D.	0.222	0.220	0.355	0.287	0.574	0.479	0.574	0.396

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.114	4.966	4.981	5.291	5.135	5.096	5.222	4.859
S.D.	0.034	0.029	0.042	0.013	0.021	0.015	0.006	0.080
% R.S.D.	0.668	0.574	0.847	0.237	0.413	0.288	0.107	1.645

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.216	4.835	5.081	5.193	4.986	5.181	5.136	5.016
S.D.	0.028	0.026	0.008	0.019	0.021	0.007	0.029	0.067
% R.S.D.	0.534	0.540	0.155	0.365	0.419	0.134	0.571	1.343

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.178	4.786	5.195	5.229	4.910
S.D.	0.014	0.025	0.016	0.021	0.012
% R.S.D.	0.263	0.518	0.308	0.401	0.242

Identity 1: CCB Identity 2: Quality Control 10:32 AM February 9, 1996

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	0.006	-0.017	-0.001	-0.001	-0.001
S.D.	0.002	0.000	0.012	0.006	0.013	0.000	0.001	0.000
% R.S.D.	112.218	169.097	159.714	111.580	73.651	1.285	110.392	61.579

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	-0.004	-0.003	-0.000	0.000	0.001	-0.022	-0.087
S.D.	0.001	0.003	0.003	0.001	0.000	0.002	0.010	0.086
% R.S.D.	99.474	87.707	104.002	577.587	7.217	373.791	44.508	98.997

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.018	-0.038	-0.000	0.012	0.001	0.000	-0.004	-0.004
S.D.	0.025	0.017	0.000	0.006	0.003	0.000	0.004	0.009
% R.S.D.	138.849	43.814	95.247	46.179	197.025	57.735	90.572	229.110

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.000	-0.033	0.001	0.001	-0.000	0.001	0.004	0.006
S.D.	0.000	0.014	0.002	0.017	0.001	0.001	0.001	0.022
% R.S.D.	150.536	43.310	267.388	1277.661	338.695	92.266	14.107	368.057

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.010	-0.003	-0.000	-0.044
S.D.	0.000	0.022	0.001	0.000	0.052
% R.S.D.	10.714	208.071	37.627	396.263	118.776

Identity 1: S95T003657_L Identity 2: .25-10-2-8 ml 10:34 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	18.550	0.440	2.490	3.577	55.323	0.357	-0.043	-0.039
S.D.	0.261	0.007	1.238	0.578	0.944	0.000	0.049	0.034
% R.S.D.	1.407	1.506	49.728	16.155	1.707	0.056	113.845	87.972

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.037	0.310	-0.338	1.463	-0.081	10.577	-2.981	2.873
S.D.	0.105	0.329	0.254	0.172	0.013	0.357	0.561	1.524
% R.S.D.	281.595	106.021	75.290	11.779	15.789	3.371	18.837	53.055

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.709	-5.123	-0.005	5.031	13.259	0.453	0.383	546.388
S.D.	0.300	0.257	0.008	0.716	0.108	0.018	0.490	1.834
% R.S.D.	17.546	5.013	152.753	14.225	0.815	3.937	127.922	0.336

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.091	-8.261	0.352	1.200	-0.032	0.345	0.066	18460.274
S.D.	0.038	1.661	0.031	1.527	0.053	0.113	0.049	67.792
% R.S.D.	41.452	20.107	8.855	127.218	163.179	32.837	74.562	0.367

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.105	-9.646	-0.172	-0.039	6.159
S.D.	0.030	3.331	0.120	0.023	0.744
% R.S.D.	28.994	34.527	69.568	57.552	12.072

Identity 1: S95T003657 Identity 2: .25-10 ml 10:37 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	18.841	0.442	0.622	-0.078	58.842	0.108	-0.017	-0.009
S.D.	0.070	0.006	0.248	0.104	0.151	0.062	0.017	0.013
% R.S.D.	0.370	1.308	39.979	133.678	0.257	57.382	99.806	152.111

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.045	0.241	-0.138	1.400	0.579	10.758	-0.808	-5.703
S.D.	0.012	0.038	0.058	0.076	0.001	0.106	0.259	2.684
% R.S.D.	26.904	15.631	42.286	5.453	0.254	0.984	32.036	47.069

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.589	-1.918	0.006	2.505	14.421	0.111	-0.193	525.706
S.D.	0.775	0.587	0.015	0.149	0.358	0.004	0.070	7.053
% R.S.D.	131.586	30.606	236.487	5.960	2.479	3.208	36.077	1.342

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.022	-2.693	0.092	0.581	-0.074	0.056	0.104	17371.986
S.D.	0.031	0.616	0.047	0.340	0.013	0.038	0.008	183.574
% R.S.D.	143.680	22.864	50.767	58.438	17.831	66.417	7.636	1.057

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.060	-0.711	0.056	0.004	1.575
S.D.	0.016	0.493	0.029	0.005	1.088
% R.S.D.	26.443	69.328	51.681	118.399	69.053

Identity 1: S95T003657_D Identity 2: .25-10 ml 10:40 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	15.234	0.427	0.482	0.155	60.808	0.000	-0.053	-0.020
S.D.	0.054	0.004	0.296	0.073	0.171	0.164	0.013	0.005
% R.S.D.	0.354	0.821	61.311	47.271	0.282	81281.037	23.965	27.004

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.049	0.359	-0.000	1.498	0.254	10.978	-0.196	-0.803
S.D.	0.003	0.076	0.106	0.034	0.003	0.055	0.538	2.495
% R.S.D.	5.971	21.060	60580.901	2.246	1.003	0.500	274.397	310.676

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.805	-2.974	-0.003	0.923	14.701	0.111	0.131	540.330
S.D.	0.453	0.402	0.010	0.411	0.236	0.004	0.083	3.353
% R.S.D.	56.265	13.518	357.727	44.506	1.602	3.208	63.246	0.621

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.076	-1.563	0.062	0.476	-0.032	0.102	0.098	16358.155
S.D.	0.025	0.445	0.052	0.172	0.017	0.023	0.027	116.173
% R.S.D.	32.636	28.487	83.886	36.223	53.545	22.286	27.413	0.710

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.077	-0.879	0.073	0.005	-1.341
S.D.	0.000	0.848	0.036	0.004	1.207
% R.S.D.	0.381	96.517	50.052	92.322	90.037

Identity 1: S95T003657_A Identity 2: .25sam+2sst5+8hno3 10:43 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	60.243	41.100	41.012	39.857	99.458	42.875	40.516	36.800
S.D.	0.094	0.075	0.382	0.051	0.168	0.124	0.125	0.236
% R.S.D.	0.157	0.183	0.931	0.127	0.169	0.288	0.308	0.642

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	42.378	42.256	41.358	43.339	40.688	53.738	40.300	80.540
S.D.	0.140	0.198	0.078	0.100	0.053	0.168	0.449	1.633
% R.S.D.	0.329	0.470	0.190	0.230	0.131	0.312	1.114	2.028

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.119	39.971	40.193	44.989	56.403	40.860	41.222	554.487
S.D.	0.063	0.323	0.085	1.005	0.600	0.022	0.481	3.726
% R.S.D.	0.157	0.807	0.211	2.233	1.064	0.055	1.168	0.672

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	42.240	37.920	21.355	42.831	40.553	42.016	40.840	16958.622
S.D.	0.109	0.271	0.141	0.476	0.050	0.174	0.177	84.239
% R.S.D.	0.258	0.715	0.662	1.111	0.122	0.413	0.433	0.497

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	42.152	37.140	42.414	41.408	41.331
S.D.	0.127	1.138	0.078	0.071	0.868
% R.S.D.	0.302	3.065	0.184	0.171	2.100

Identity 1: ICSA Identity 2: Quality Control 10:47 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.005	0.002	-0.005	0.003	200.947	-0.000	0.000	-0.000
S.D.	0.002	0.000	0.007	0.004	0.555	0.000	0.000	0.000
% R.S.D.	34.067	6.063	151.740	112.620	0.276	10.900	115.577	126.251

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.004	0.000	0.001	102.299	105.604	0.008	0.006	-0.095
S.D.	0.000	0.002	0.001	0.125	0.031	0.002	0.002	0.056
% R.S.D.	7.163	471.626	142.600	0.122	0.029	23.205	42.957	59.309

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.004	0.039	0.003	0.029	-0.044	102.768	0.019	192.500
S.D.	0.012	0.010	0.000	0.013	0.008	0.436	0.005	2.062
% R.S.D.	333.375	26.545	9.262	43.011	18.319	0.425	28.297	1.071

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.019	0.009	0.026	-0.001	0.003	0.014	0.027
S.D.	0.001	0.004	0.001	0.008	0.000	0.001	0.002	0.007
% R.S.D.	178.603	18.243	13.743	30.887	38.094	16.700	14.705	26.777

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.003	-0.039	-0.001	0.003	-0.004
S.D.	0.000	0.024	0.001	0.000	0.031
% R.S.D.	0.881	62.021	207.504	0.267	772.883

Identity 1: ICSAB Identity 2: Quality Control 10:50 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.001	0.002	-0.030	0.002	198.985	0.506	0.506	0.949
S.D.	0.003	0.000	0.012	0.003	1.034	0.003	0.004	0.010
% R.S.D.	498.368	10.715	39.079	225.121	0.519	0.598	0.697	1.004

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.019	0.998	-0.004	101.855	104.153	0.517	0.006	-0.176
S.D.	0.003	0.003	0.003	0.021	0.344	0.004	0.003	0.081
% R.S.D.	0.283	0.272	72.373	0.021	0.330	0.734	52.234	46.295

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.005	-0.026	0.512	0.055	-0.026	102.702	0.019	188.363
S.D.	0.022	0.017	0.004	0.008	0.010	0.198	0.003	1.687
% R.S.D.	421.846	66.567	0.713	15.240	37.341	0.193	18.413	0.895

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Tl (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	-0.052	1.040	1.019	-0.001	1.027	0.015	0.088
S.D.	0.000	0.008	0.001	0.021	0.000	0.001	0.000	0.018
% R.S.D.	5.312	15.619	0.102	2.096	43.056	0.125	3.186	20.458

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.515	-0.005	0.507	0.511	0.042
S.D.	0.002	0.002	0.000	0.002	0.043
% R.S.D.	0.383	46.718	0.024	0.487	103.406

Identity 1: CCV Identity 2: Quality Control 10:55 AM February 9, 1996

Task name : OPTIMA

WHC-SD-WM-DP-164, 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	5.054	5.057	5.081	4.836	5.004	5.263	5.088	4.948
S.D.	0.016	0.017	0.014	0.013	0.013	0.020	0.011	0.023
% R.S.D.	0.314	0.334	0.278	0.267	0.251	0.375	0.210	0.462

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.254	5.203	5.156	5.288	5.095	5.247	5.297	9.526
S.D.	0.014	0.014	0.009	0.025	0.016	0.030	0.026	0.040
% R.S.D.	0.270	0.267	0.183	0.474	0.322	0.569	0.485	0.425

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.103	5.012	5.041	5.378	5.138	5.091	5.224	4.935
S.D.	0.031	0.016	0.016	0.050	0.034	0.018	0.018	0.028
% R.S.D.	0.606	0.313	0.316	0.930	0.663	0.356	0.346	0.571

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.203	4.891	5.092	5.190	5.013	5.202	5.232	5.111
S.D.	0.016	0.022	0.013	0.030	0.016	0.013	0.024	0.024
% R.S.D.	0.311	0.445	0.252	0.583	0.327	0.245	0.467	0.473

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.194	4.778	5.220	5.277	4.927
S.D.	0.017	0.036	0.017	0.019	0.026
% R.S.D.	0.325	0.754	0.319	0.367	0.518

Identity 1: CCB Identity 2: Quality Control 10:58 AM February 9, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.002	-0.000	-0.004	0.003	-0.023	-0.003	-0.002	-0.001
S.D.	0.001	0.000	0.005	0.001	0.002	0.000	0.000	0.000
% R.S.D.	52.180	43.301	125.504	18.118	10.630	0.175	22.868	35.445

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	-0.005	-0.004	0.003	0.001	-0.001	-0.028	-0.098
S.D.	0.000	0.002	0.001	0.002	0.000	0.001	0.005	0.047
% R.S.D.	25.573	33.784	38.341	64.285	6.415	83.092	16.333	48.453

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.050	-0.043	-0.001	0.015	-0.002	0.001	-0.005	-0.004
S.D.	0.018	0.011	0.000	0.010	0.001	0.000	0.005	0.002
% R.S.D.	35.483	26.196	34.109	67.218	42.508	14.434	88.288	50.006

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.001	-0.018	-0.001	0.009	0.000	0.001	0.003	0.054
S.D.	0.000	0.013	0.001	0.006	0.000	0.000	0.001	0.022
% R.S.D.	63.813	71.588	77.513	64.489	1476.515	28.684	20.262	40.038

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	0.014	-0.004	-0.001	-0.001
S.D.	0.000	0.026	0.001	0.000	0.025
% R.S.D.	42.996	184.303	25.444	1.173	2775.574

02-09-96

File: 960208C

LABCORE Data Entry Template for Worklist# 4649

Analyst: DK Soto **Instrument:** ICP01 _____ **Book#** 50B48a

Method: LA-505-151/161 Rev/Mod D-3

Worklist Comment: ICP BY-104 (FUSION)

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	PREPBLKARL				@ICP-F01	SOLID		
6	SAMPLE	S95T003658	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						
7	DUP	S95T003658	0	Z	@ICP-F01	SOLID		
8	SPK	S95T003658	0	Z	@ICP-F01	SOLID		
9	CCV				@ICP-QC	QC		
10	CCB				@ICP-QC	QC		
11	SAMPLE	S95T003659	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						
12	DUP	S95T003659	0	Z	@ICP-F01	SOLID		
13	SPK	S95T003659	0	Z	@ICP-F01	SOLID		
~~14~~	~~PREPBLKARL~~	DK 02-08-96			@ICP-F01	SOLID		
15	SAMPLE	S95T003660	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 ,						

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 4649

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
					U-F-01			
16	DUP	S95T003660	0	Z	@ICP-F01	SOLID		
17	SPK	S95T003660	0	Z	@ICP-F01	SOLID		
18	CCV				@ICP-QC	QC		
19	CCB				@ICP-QC	QC		
20	SAMPLE	S95T003661	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
		Analytes Requested:			AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01			
21	DUP	S95T003661	0	Z	@ICP-F01	SOLID		
22	SPK	S95T003661	0	Z	@ICP-F01	SOLID		
23	ICSA				@ICP-QC	QC		
24	ICSAB				@ICP-QC	QC		
25	CCV				@ICP-QC	QC		
26	CCB				@ICP-QC	QC		

Final page for worklist # 4649

02-08-96

Analyst Signature **Date**

00[illegible] .25-10
003658_L, .25-10-2-8, DF205
003658 .25-10 41
003658_D .25-10 41
003658_Q .25-10 41, .25ml sample + 2ml 5575 + 8ml HNO_3
003659_L, .25-10-2-8, DF205
003659 .25-10 41
003659_D .25-10 41
003659_Q .25-10 41, .25ml sample + 2ml 5575 + 8ml HNO_3

Reviewed by:
Saul M. Parra 2/14/96

Analyst Signature **Date**

S95T003660_L, .25-10-2-8, DF205
S95T003660 .25-10 41
S95T003660_D .25-10 41
S95T003660_Q .25-10 41, .25ml sample + 2ml 5575 + 8ml HNO_3
S95T003661_L, .25-10-2-8, DF205
S95T003661 .25-10 41
S95T003661_D .25-10 41
S95T003661_Q .25-10 41, .25ml sample + 2ml 5575 + 8ml HNO_3

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

file 960208C

Identity 1: ICV Identity 2: Quality Control 5:21 PM February 8, 1996
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	4.985	5.078	5.059	4.787	4.974	5.074	5.143	5.174
S.D.	0.014	0.009	0.011	0.013	0.011	0.016	0.007	0.031
% R.S.D.	0.287	0.184	0.209	0.272	0.213	0.307	0.134	0.604

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.026	5.002	5.068	5.066	5.091	5.027	5.203	9.741
S.D.	0.013	0.018	0.024	0.013	0.013	0.021	0.028	0.037
% R.S.D.	0.250	0.356	0.465	0.249	0.257	0.412	0.544	0.379

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.178	5.141	5.105	4.845	4.881	4.907	5.143	5.094
S.D.	0.015	0.014	0.010	0.061	0.033	0.015	0.004	0.034
% R.S.D.	0.292	0.268	0.196	1.264	0.678	0.308	0.077	0.663

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.073	4.989	4.929	5.013	4.961	5.026	5.095	5.074
S.D.	0.018	0.016	0.013	0.032	0.012	0.007	0.006	0.051
% R.S.D.	0.360	0.324	0.267	0.629	0.234	0.140	0.118	0.997

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.034	4.743	5.075	5.228	4.925
S.D.	0.020	0.024	0.016	0.012	0.018
% R.S.D.	0.404	0.510	0.313	0.222	0.359

JK Gold
02-08-96
BY-104 595T003658-595T003661
Worklist #1 4647

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 834 TO 842.

Identity 1: ICB Identity 2: Quality Control 5:24 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.004	0.000	0.012	-0.009	-0.018	0.000	-0.001	-0.000
S.D.	0.001	0.000	0.008	0.003	0.010	0.002	0.000	0.000
% R.S.D.	15.846	259.808	66.257	30.336	52.512	7658.922	78.890	1055.126

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	-0.003	-0.001	-0.005	-0.003	-0.001	0.011	-0.161
S.D.	0.001	0.001	0.001	0.001	0.000	0.000	0.002	0.017
% R.S.D.	53.306	35.730	159.586	26.442	5.992	41.715	22.339	10.321

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.026	0.010	-0.000	-0.007	0.000	0.000	0.006	-0.007
S.D.	0.008	0.006	0.000	0.013	0.003	0.000	0.005	0.002
% R.S.D.	30.223	66.209	154.524	180.384	549.968	0.000	73.331	30.002

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	0.001	-0.000	-0.016	-0.001	-0.001	0.001	-0.067
S.D.	0.001	0.003	0.000	0.014	0.000	0.000	0.001	0.011
% R.S.D.	25.148	430.317	49.083	86.597	28.830	77.619	89.927	16.627

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.001	-0.002	-0.000	0.064
S.D.	0.000	0.008	0.001	0.000	0.008
% R.S.D.	0.823	632.385	36.380	53.199	12.957

Identity 1: ICSA Identity 2: Quality Control 5:27 PM February 8, 1996
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	0.004	0.002	-0.016	0.004	196.824	-0.000	0.001	0.000
S.D.	0.001	0.000	0.005	0.006	0.859	0.000	0.000	0.000
% R.S.D.	26.496	5.626	29.237	144.168	0.436	9.630	15.040	95.951

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.003	-0.001	98.607	100.694	0.003	0.010	-0.151
S.D.	0.000	0.001	0.002	0.261	0.320	0.001	0.004	0.056
% R.S.D.	8.501	36.364	151.132	0.264	0.318	18.141	44.912	37.059

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.018	0.044	0.003	0.010	-0.003	102.565	0.010	189.770
S.D.	0.014	0.009	0.000	0.002	0.008	0.301	0.005	1.590
% R.S.D.	76.903	20.967	7.897	24.201	236.178	0.294	46.553	0.838

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	0.007	0.001	-0.015	-0.001	0.002	0.016	0.030
S.D.	0.001	0.004	0.001	0.006	0.000	0.001	0.002	0.009
% R.S.D.	173.234	58.559	161.474	38.903	14.533	65.558	10.395	29.122

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.005	0.002	0.001	0.003	0.058
S.D.	0.001	0.016	0.001	0.000	0.010
% R.S.D.	17.484	1053.774	115.829	11.812	16.726

Identity 1: ICSAB Identity 2: Quality Control 5:30 PM February 8, 1996
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	0.004	0.002	-0.017	0.010	200.632	0.493	0.514	0.970
S.D.	0.002	0.000	0.004	0.004	1.041	0.002	0.003	0.017
% R.S.D.	44.038	7.783	21.511	38.555	0.519	0.320	0.574	1.703

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.000	0.991	0.000	99.486	102.445	0.503	-0.016	-0.023
S.D.	0.001	0.003	0.001	0.226	0.048	0.001	0.008	0.053
% R.S.D.	0.118	0.327	165.006	0.227	0.047	0.212	50.772	233.356

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.021	0.048	0.521	0.014	-0.008	102.184	0.033	196.830
S.D.	0.016	0.010	0.002	0.003	0.012	0.224	0.001	3.324
% R.S.D.	73.710	20.290	0.400	18.038	143.696	0.219	3.802	1.689

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	0.006	1.027	0.980	-0.000	1.008	0.015	-0.019
S.D.	0.002	0.009	0.001	0.016	0.001	0.002	0.000	0.013
% R.S.D.	95.158	141.838	0.068	1.589	154.904	0.158	3.226	64.991

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.508	0.006	0.500	0.511	-0.003
S.D.	0.001	0.053	0.001	0.000	0.031
% R.S.D.	0.191	844.790	0.185	0.058	1084.300

Identity 1: PREPBLK Identity 2: Quality Control 5:33 PM February 8, 1996
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	0.091	0.000	-0.001	-0.029	-0.012	-0.003	0.000	0.000
S.D.	0.002	0.000	0.006	0.005	0.004	0.002	0.001	0.000
% R.S.D.	1.939	50.332	619.185	15.708	37.097	58.029	218.341	202.035

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	-0.001	-0.000	0.002	0.002	-0.002	0.008	-0.084
S.D.	0.000	0.000	0.002	0.003	0.000	0.002	0.007	0.055
% R.S.D.	24.724	12.890	5529.161	160.293	20.192	102.041	90.056	64.958

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.003	0.005	0.000	-0.043	-0.004	0.003	-0.003	0.169
S.D.	0.013	0.010	0.000	0.019	0.003	0.001	0.002	0.002
% R.S.D.	439.311	219.576	102.528	43.824	87.916	21.651	80.017	1.402

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.031	0.000	-0.017	-0.001	0.000	-0.001	435.093
S.D.	0.002	0.007	0.001	0.012	0.001	0.001	0.001	3.474
% R.S.D.	190.231	24.105	233.343	70.334	56.541	1000.761	118.019	0.798

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.021	-0.000	0.000	0.046
S.D.	0.000	0.016	0.001	0.000	0.040
% R.S.D.	316.580	76.367	331.047	77.736	86.320

Identity 1: S95T003658_L Identity 2: .25-10-2-8 ml 5:37 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	8.279	0.562	0.210	-2.283	45.209	-0.372	-0.210	-0.005
S.D.	0.257	0.007	1.151	0.244	0.269	0.324	0.020	0.021
% R.S.D.	3.106	1.246	546.826	10.689	0.596	87.097	9.299	450.335

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.173	-0.497	0.423	0.939	0.268	9.842	2.413	-14.532
S.D.	0.053	0.346	0.297	0.277	0.020	0.172	1.203	1.159
% R.S.D.	30.777	69.536	70.316	29.444	7.638	1.748	49.854	7.977

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.717	7.281	-0.002	0.143	15.530	0.141	1.071	528.473
S.D.	0.368	0.160	0.003	0.343	0.710	0.019	0.904	1.058
% R.S.D.	21.408	2.197	173.205	240.088	4.570	13.324	84.406	0.200

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.079	-9.825	-0.056	-1.624	-0.112	0.155	-0.096	12374.337
S.D.	0.155	2.369	0.086	0.695	0.022	0.097	0.082	59.505
% R.S.D.	196.280	24.109	153.707	42.796	19.366	62.742	85.073	0.481

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.075	9.225	0.034	-0.002	6.977
S.D.	0.032	2.865	0.142	0.062	2.261
% R.S.D.	42.275	31.052	416.844	2796.644	32.405

Identity 1: S95T003658 Identity 2: .25-10 ml 5:40 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	8.641	0.576	0.502	-0.189	48.335	-0.299	-0.010	-0.008
S.D.	0.024	0.002	0.595	0.166	0.460	0.065	0.022	0.010
% R.S.D.	0.275	0.421	118.706	87.902	0.951	21.609	219.045	115.850

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.014	0.463	-0.000	1.449	1.013	9.626	0.116	-0.673
S.D.	0.025	0.115	0.052	0.096	0.005	0.067	0.248	1.257
% R.S.D.	181.767	24.821	29468.827	6.609	0.457	0.695	214.299	186.740

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.919	1.156	0.007	1.998	14.738	0.059	0.022	517.795
S.D.	0.437	0.218	0.005	0.061	0.136	0.007	0.067	1.565
% R.S.D.	47.527	18.818	75.154	3.068	0.926	11.111	302.291	0.302

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.009	-1.507	0.004	-0.042	0.056	0.021	0.031	11933.364
S.D.	0.019	0.591	0.025	0.191	0.039	0.047	0.019	38.034
% R.S.D.	207.354	39.204	582.697	454.474	69.031	219.349	61.800	0.319

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.087	0.076	0.025	0.005	-2.202
S.D.	0.011	0.285	0.029	0.000	0.637
% R.S.D.	12.461	374.006	114.555	3.210	28.915

Identity 1: S95T003658_D Identity 2: .25-10 ml 5:43 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	2.521	0.556	-0.306	-0.518	41.183	-0.186	-0.037	-0.021
S.D.	0.026	0.001	0.178	0.001	0.033	0.065	0.013	0.003
% R.S.D.	1.013	0.252	58.302	0.267	0.081	34.762	34.308	12.998

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.040	0.408	0.033	1.300	0.531	9.990	-0.101	-3.776
S.D.	0.020	0.078	0.029	0.048	0.010	0.106	0.476	0.929
% R.S.D.	48.695	19.174	89.902	3.684	1.815	1.064	472.675	24.593

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.389	0.278	0.003	0.916	15.006	0.048	0.023	513.170
S.D.	0.210	0.182	0.006	0.392	0.250	0.004	0.168	1.772
% R.S.D.	15.120	65.685	222.692	42.813	1.669	7.873	746.277	0.345

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.046	-1.756	-0.048	-0.567	-0.038	0.028	-0.028	13012.815
S.D.	0.021	0.492	0.010	0.175	0.006	0.030	0.045	49.540
% R.S.D.	45.754	28.004	20.739	30.857	16.908	108.626	163.516	0.381

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.095	0.212	-0.048	0.005	0.009
S.D.	0.013	1.047	0.008	0.000	0.582
% R.S.D.	13.430	493.818	17.065	2.646	6712.596

Identity 1: S95T003658_A Identity 2: .25sam+2sst5+8hno3 5:46 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	48.951	41.223	41.254	38.968	88.273	40.725	41.091	38.876
S.D.	0.049	0.057	0.165	0.199	0.182	0.130	0.143	0.449
% R.S.D.	0.099	0.138	0.399	0.510	0.207	0.318	0.349	1.154

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.673	41.007	40.893	42.970	41.615	50.826	42.115	74.021
S.D.	0.123	0.063	0.208	0.015	0.056	0.145	0.409	1.359
% R.S.D.	0.301	0.153	0.508	0.034	0.133	0.285	0.971	1.835

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.547	40.560	40.554	44.421	55.547	39.274	41.381	550.884
S.D.	0.459	0.175	0.082	0.767	0.566	0.093	0.460	6.241
% R.S.D.	1.132	0.432	0.201	1.727	1.019	0.236	1.112	1.133

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.882	38.413	32.537	41.149	39.835	40.526	40.306	11884.892
S.D.	0.144	0.618	0.161	1.165	0.056	0.092	0.097	113.107
% R.S.D.	0.352	1.610	0.496	2.831	0.141	0.227	0.241	0.952

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.013	34.206	41.186	41.172	42.118
S.D.	0.139	0.729	0.075	0.037	0.833
% R.S.D.	0.339	2.130	0.182	0.089	1.977

Identity 1: CCV Identity 2: Quality Control 5:51 PM February 8, 1996
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	4.988	5.068	5.008	4.752	4.949	5.009	5.151	5.144
S.D.	0.011	0.029	0.023	0.009	0.028	0.012	0.049	0.103
% R.S.D.	0.221	0.580	0.455	0.184	0.557	0.238	0.952	1.994

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	4.990	4.989	5.087	5.099	5.098	4.996	5.312	9.677
S.D.	0.010	0.014	0.025	0.012	0.025	0.016	0.045	0.008
% R.S.D.	0.207	0.279	0.483	0.228	0.493	0.318	0.848	0.085

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.103	5.145	5.102	4.968	4.897	4.867	5.128	5.087
S.D.	0.008	0.025	0.038	0.019	0.058	0.014	0.016	0.085
% R.S.D.	0.157	0.493	0.736	0.389	1.175	0.280	0.315	1.663

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.014	4.949	4.917	5.010	4.936	5.008	5.102	5.117
S.D.	0.007	0.035	0.005	0.021	0.015	0.015	0.017	0.056
% R.S.D.	0.136	0.711	0.092	0.410	0.296	0.292	0.329	1.087

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.022	4.779	5.065	5.216	4.919
S.D.	0.012	0.036	0.008	0.017	0.030
% R.S.D.	0.232	0.760	0.164	0.322	0.607

Identity 1: CCB Identity 2: Quality Control 5:55 PM February 8, 1996
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	0.016	-0.010	-0.029	0.003	-0.001	-0.000
S.D.	0.000	0.000	0.011	0.002	0.001	0.002	0.000	0.000
% R.S.D.	8.639	28.868	64.936	24.951	5.073	57.379	36.127	24.122

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	-0.001	-0.005	-0.005	-0.003	-0.002	-0.008	-0.137
S.D.	0.000	0.003	0.001	0.002	0.000	0.001	0.001	0.017
% R.S.D.	52.942	378.703	24.622	39.678	0.000	55.895	15.978	12.670

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.029	0.033	-0.000	-0.011	0.003	0.000	-0.002	-0.001
S.D.	0.005	0.002	0.000	0.016	0.001	0.000	0.001	0.002
% R.S.D.	17.779	6.825	22.678	148.324	54.534	173.205	53.348	173.265

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.000	-0.008	-0.002	-0.008	-0.001	-0.000	0.002	0.059
S.D.	0.002	0.005	0.001	0.009	0.000	0.000	0.000	0.006
% R.S.D.	3893.813	70.517	31.738	113.725	30.147	578.568	12.916	9.678

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	0.015	-0.001	0.000	0.011
S.D.	0.000	0.016	0.001	0.000	0.007
% R.S.D.	186.979	107.861	76.147	63.186	64.141

Identity 1: S95T003659_L Identity 2: .25-10-2-8 ml 7:50 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	7.141	0.695	0.764	-2.742	44.590	-1.115	0.165	0.122
S.D.	0.346	0.031	0.458	0.476	0.732	0.324	0.073	0.087
% R.S.D.	4.846	4.389	59.894	17.340	1.642	29.101	44.395	71.480

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.249	-0.482	-0.543	0.883	-0.281	8.714	2.896	-58.938
S.D.	0.115	0.115	0.254	0.240	0.008	0.238	1.372	13.557
% R.S.D.	46.133	23.899	46.714	27.180	2.749	2.735	47.377	23.002

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	4.351	-0.714	0.151	-1.346	14.798	0.033	-1.165	478.022
S.D.	3.383	2.969	0.055	0.980	1.072	0.033	1.110	3.974
% R.S.D.	77.761	415.865	36.621	72.833	7.243	100.000	95.241	0.831

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.133	-2.142	0.384	-3.111	-0.469	-0.002	0.032	14327.507
S.D.	0.151	2.525	0.214	2.489	0.097	0.118	0.260	162.102
% R.S.D.	113.427	117.872	55.683	79.999	20.664	6363.589	811.932	1.131

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.172	2.516	0.874	-0.062	0.689
S.D.	0.002	2.227	0.156	0.040	4.358
% R.S.D.	0.931	88.510	17.851	64.677	632.920

Identity 1: S95T003659 Identity 2: .25-10 ml 7:53 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	8.437	0.638	-0.017	-0.170	45.388	0.038	-0.003	0.008
S.D.	0.024	0.001	0.110	0.072	0.182	0.065	0.009	0.004
% R.S.D.	0.288	0.220	661.335	42.404	0.400	170.834	316.168	51.426

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.035	0.621	0.016	1.712	0.417	8.977	0.484	-3.639
S.D.	0.016	0.083	0.059	0.030	0.006	0.039	0.115	0.892
% R.S.D.	44.952	13.432	377.347	1.733	1.334	0.434	23.779	24.500

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.262	0.944	0.032	1.087	15.370	0.048	-0.061	458.038
S.D.	0.177	0.194	0.002	0.188	0.280	0.004	0.064	3.149
% R.S.D.	67.573	20.539	7.435	17.305	1.821	7.873	105.411	0.687

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.034	1.044	0.041	-0.039	-0.011	0.003	0.091	13581.494
S.D.	0.029	0.297	0.017	0.076	0.005	0.011	0.041	86.828
% R.S.D.	86.049	28.422	42.510	195.344	45.259	411.617	45.034	0.639

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.092	1.235	0.104	0.026	1.551
S.D.	0.006	0.606	0.009	0.009	0.560
% R.S.D.	6.857	49.096	8.520	35.933	36.106

Identity 1: S95T003659_D Identity 2: .25-10 ml 7:56 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	8.295	0.582	0.400	0.098	39.321	-0.187	-0.049	-0.030
S.D.	0.016	0.003	0.142	0.188	0.033	0.129	0.014	0.015
% R.S.D.	0.195	0.481	35.484	190.798	0.084	69.239	27.820	49.953

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.026	0.438	0.017	1.407	0.759	8.397	-0.096	-1.518
S.D.	0.010	0.039	0.031	0.112	0.003	0.062	0.261	2.237
% R.S.D.	36.974	8.822	184.894	7.955	0.353	0.737	272.022	147.379

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.541	0.725	-0.006	1.364	14.527	0.039	0.178	477.154
S.D.	0.591	0.429	0.010	0.044	0.491	0.000	0.147	0.886
% R.S.D.	38.344	59.072	163.817	3.248	3.376	0.000	82.476	0.186

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.040	-0.921	-0.083	-0.031	0.077	-0.007	0.069	13708.798
S.D.	0.036	0.454	0.024	0.355	0.022	0.014	0.011	21.402
% R.S.D.	89.514	49.285	28.711	1156.862	28.695	217.044	15.300	0.156

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.084	2.606	-0.024	-0.000	-2.342
S.D.	0.006	0.375	0.011	0.005	0.976
% R.S.D.	7.330	14.378	45.616	1003.669	41.673

Identity 1: S95T003659_A Identity 2: .25sam+2sst5+8hno3 7:59 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	49.311	41.791	41.045	39.391	86.104	41.062	41.371	38.781
S.D.	0.128	0.086	0.278	0.035	0.493	0.171	0.024	0.134
% R.S.D.	0.259	0.205	0.679	0.090	0.572	0.417	0.057	0.345

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.645	41.252	41.340	42.899	41.454	50.123	42.645	74.246
S.D.	0.059	0.065	0.089	0.177	0.042	0.102	0.470	0.884
% R.S.D.	0.146	0.158	0.215	0.413	0.102	0.204	1.102	1.190

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	41.013	41.412	41.017	44.910	55.729	39.495	41.368	508.505
S.D.	0.324	0.224	0.071	2.236	0.625	0.129	0.123	1.688
% R.S.D.	0.790	0.540	0.173	4.979	1.121	0.327	0.297	0.332

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.039	40.074	28.976	40.624	40.163	40.669	40.135	13915.061
S.D.	0.149	0.171	0.069	0.803	0.096	0.201	0.038	42.616
% R.S.D.	0.362	0.426	0.238	1.976	0.239	0.493	0.096	0.306

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.285	38.895	41.440	41.316	40.282
S.D.	0.100	0.799	0.062	0.134	0.517
% R.S.D.	0.242	2.054	0.149	0.325	1.283

Identity 1: S95T003660_L Identity 2: .25-10-2-8 ml 8:02 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	1.087	0.837	1.968	-2.091	42.010	0.752	-0.320	-0.113
S.D.	0.247	0.025	1.144	0.375	0.573	0.324	0.049	0.102
% R.S.D.	22.734	3.017	58.153	17.945	1.363	43.096	15.384	90.008

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.132	0.862	-0.872	1.153	-0.049	8.699	1.768	-26.691
S.D.	0.026	0.208	0.154	0.422	0.008	0.230	0.210	13.056
% R.S.D.	19.855	24.170	17.686	36.591	15.746	2.649	11.866	48.915

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-4.631	1.413	-0.048	5.113	16.913	0.043	0.443	487.132
S.D.	2.785	1.982	0.063	1.396	1.405	0.019	0.303	2.557
% R.S.D.	60.129	140.223	132.725	27.314	8.307	43.301	68.340	0.525

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.168	-7.872	-0.047	0.308	-0.272	0.185	0.194	17377.447
S.D.	0.232	0.456	0.267	0.825	0.037	0.071	0.042	110.773
% R.S.D.	137.665	5.787	570.581	267.818	13.689	38.249	21.720	0.637

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.131	-0.934	-0.053	0.051	3.303
S.D.	0.033	1.218	0.159	0.064	4.990
% R.S.D.	25.176	130.514	301.943	126.346	151.076

Identity 1: S95T003660 Identity 2: .25-10 ml 8:05 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	1.648	0.872	0.330	-0.684	48.929	0.113	-0.040	-0.001
S.D.	0.061	0.004	0.301	0.171	0.056	0.065	0.033	0.011
% R.S.D.	3.677	0.482	91.295	24.919	0.115	57.584	82.346	1106.987

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.005	0.824	-0.088	2.269	0.972	9.559	-0.135	-3.975
S.D.	0.011	0.017	0.080	0.086	0.004	0.121	0.382	2.648
% R.S.D.	245.943	2.122	91.319	3.791	0.420	1.265	283.376	66.598

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.684	0.500	0.025	1.974	18.160	0.061	0.197	479.424
S.D.	0.628	0.426	0.015	0.655	0.108	0.010	0.233	6.343
% R.S.D.	91.827	85.118	58.805	33.160	0.595	16.366	118.461	1.323

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.065	1.129	-0.081	-0.384	-0.024	0.027	0.142	16455.250
S.D.	0.053	0.344	0.033	0.152	0.021	0.019	0.017	179.840
% R.S.D.	81.560	30.417	40.157	39.503	85.374	71.087	12.054	1.093

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.106	0.166	0.017	0.015	0.824
S.D.	0.025	1.134	0.032	0.005	1.287
% R.S.D.	23.828	681.106	189.460	32.656	156.108

Identity 1: S95T003660_D Identity 2: .25-10 ml 8:08 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.665	0.878	0.266	-0.371	51.321	-0.224	-0.027	-0.021
S.D.	0.024	0.001	0.236	0.036	0.182	0.065	0.014	0.005
% R.S.D.	3.582	0.159	88.765	9.798	0.354	28.908	54.453	22.493

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.019	0.906	-0.121	2.269	0.467	10.813	-0.046	-1.346
S.D.	0.024	0.029	0.079	0.087	0.003	0.045	0.212	0.909
% R.S.D.	127.119	3.199	65.613	3.816	0.573	0.414	455.564	67.548

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.019	0.750	0.011	2.660	18.238	0.059	0.035	483.936
S.D.	0.225	0.199	0.004	0.204	0.100	0.000	0.074	2.864
% R.S.D.	22.100	26.488	32.146	7.652	0.548	0.000	210.898	0.592

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.091	-0.468	-0.050	-0.206	-0.015	0.090	0.043	13448.885
S.D.	0.011	0.698	0.034	0.256	0.007	0.034	0.029	65.150
% R.S.D.	12.188	149.159	67.732	124.503	45.616	37.546	67.046	0.484

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.110	1.730	0.014	0.016	0.698
S.D.	0.011	0.392	0.028	0.005	0.522
% R.S.D.	9.970	22.682	200.533	30.569	74.718

Identity 1: S95T003660_A Identity 2: .25sam+2sst5+8hno3 8:10 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	42.447	42.072	40.604	39.658	89.944	41.323	41.338	38.263
S.D.	0.066	0.155	0.557	0.005	0.289	0.065	0.200	0.370
% R.S.D.	0.154	0.368	1.372	0.012	0.321	0.157	0.483	0.966

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.947	41.641	41.393	44.039	41.701	51.461	42.546	75.849
S.D.	0.066	0.101	0.257	0.146	0.145	0.400	0.142	1.376
% R.S.D.	0.160	0.242	0.621	0.331	0.348	0.777	0.334	1.815

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	41.115	41.133	41.038	45.015	59.263	39.773	41.373	530.535
S.D.	0.442	0.315	0.181	0.563	0.096	0.000	0.330	4.775
% R.S.D.	1.076	0.765	0.441	1.252	0.163	0.000	0.797	0.900

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.275	38.521	30.530	40.548	40.375	41.057	40.257	16999.233
S.D.	0.035	0.996	0.151	0.321	0.065	0.065	0.190	127.881
% R.S.D.	0.086	2.585	0.493	0.791	0.162	0.159	0.472	0.752

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.585	40.153	41.654	41.286	39.472
S.D.	0.046	0.496	0.039	0.031	0.481
% R.S.D.	0.110	1.236	0.094	0.074	1.219

Identity 1: CCV Identity 2: Quality Control 8:17 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	5.009	5.055	5.044	4.812	4.931	5.111	5.092	5.000
S.D.	0.005	0.006	0.017	0.005	0.009	0.006	0.011	0.015
% R.S.D.	0.097	0.116	0.344	0.105	0.176	0.111	0.211	0.309

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.111	5.080	5.086	5.162	5.091	5.116	5.268	9.654
S.D.	0.008	0.010	0.003	0.006	0.007	0.011	0.024	0.033
% R.S.D.	0.152	0.195	0.062	0.114	0.131	0.213	0.463	0.347

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.109	5.100	5.062	5.345	5.091	4.982	5.154	4.965
S.D.	0.007	0.006	0.008	0.104	0.007	0.007	0.012	0.013
% R.S.D.	0.127	0.127	0.164	1.940	0.132	0.133	0.236	0.258

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.105	4.946	5.018	5.106	4.965	5.094	5.134	5.121
S.D.	0.007	0.011	0.005	0.016	0.002	0.015	0.013	0.009
% R.S.D.	0.132	0.222	0.090	0.309	0.044	0.289	0.255	0.179

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.123	4.758	5.135	5.232	4.881
S.D.	0.006	0.019	0.005	0.005	0.013
% R.S.D.	0.117	0.400	0.102	0.087	0.258

Identity 1: CCB Identity 2: Quality Control 8:20 PM February 8, 1996
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	0.009	-0.011	-0.024	-0.002	-0.000	0.000
S.D.	0.001	0.000	0.001	0.002	0.004	0.004	0.000	0.000
% R.S.D.	24.833	50.918	12.423	15.093	16.783	231.051	159.943	89.984

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	-0.003	0.000	-0.003	-0.003	-0.001	0.024	-0.109
S.D.	0.000	0.001	0.001	0.001	0.000	0.002	0.005	0.025
% R.S.D.	35.170	34.726	397.633	36.608	0.000	132.692	22.513	22.601

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.002	0.004	0.000	-0.029	0.003	0.000	0.004	-0.001
S.D.	0.008	0.005	0.000	0.004	0.005	0.000	0.001	0.002
% R.S.D.	441.389	112.922	54.810	15.377	172.288	467255488.510	27.150	173.216

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.043	0.001	-0.007	-0.001	0.001	0.004	0.011
S.D.	0.001	0.002	0.001	0.005	0.000	0.001	0.001	0.011
% R.S.D.	78.675	5.692	76.568	69.548	12.806	102.276	21.245	98.661

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	0.064	0.002	0.000	0.028
S.D.	0.000	0.030	0.001	0.000	0.012
% R.S.D.	33.741	47.103	35.744	168.202	42.656

Identity 1: S95T003661_L Identity 2: .25-10-2-8 ml 8:23 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	12.056	0.647	3.804	2.945	42.917	-0.560	-0.344	-0.077
S.D.	0.452	0.031	1.688	0.704	1.062	0.323	0.085	0.082
% R.S.D.	3.748	4.719	44.368	23.912	2.475	57.719	24.571	107.238

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.213	0.693	-0.607	0.469	-0.187	8.125	-1.438	-11.068
S.D.	0.114	0.525	0.540	0.049	0.008	0.234	1.196	12.905
% R.S.D.	53.341	75.820	89.089	10.399	4.124	2.875	83.184	116.596

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-6.652	-0.104	-0.082	-0.653	18.625	0.369	-0.011	495.400
S.D.	3.547	2.618	0.073	1.566	0.519	0.019	0.896	5.189
% R.S.D.	53.317	2506.493	88.341	239.639	2.786	5.094	8152.632	1.047

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.070	-7.086	-0.371	-2.727	0.095	-0.000	0.213	14051.453
S.D.	0.298	2.880	0.156	2.860	0.087	0.054	0.100	127.999
% R.S.D.	423.438	40.639	41.957	104.855	91.370	12879.971	46.696	0.911

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.130	-4.550	-0.410	-0.002	6.196
S.D.	0.033	3.687	0.145	0.049	3.453
% R.S.D.	25.641	81.033	35.358	2829.730	55.739

Identity 1: S95T003661 Identity 2: .25-10 ml 8:26 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	12.611	0.687	0.952	0.231	48.824	-0.149	-0.031	0.012
S.D.	0.051	0.003	0.515	0.165	0.245	0.000	0.030	0.017
% R.S.D.	0.404	0.408	54.141	71.171	0.501	0.222	96.930	145.177

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.025	0.533	-0.224	1.459	0.791	8.715	0.244	-1.697
S.D.	0.014	0.031	0.078	0.098	0.007	0.049	0.232	2.579
% R.S.D.	56.572	5.807	34.611	6.690	0.895	0.557	95.120	152.003

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.200	1.769	0.023	3.057	18.739	0.117	-0.320	481.021
S.D.	0.878	0.569	0.015	0.325	0.122	0.000	0.087	3.222
% R.S.D.	438.397	32.136	67.712	10.633	0.650	0.000	27.337	0.670

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.000	-0.588	0.045	-0.733	0.145	-0.047	0.081	13351.806
S.D.	0.013	0.334	0.053	0.271	0.026	0.014	0.017	73.169
% R.S.D.	3855.386	56.765	117.581	37.011	17.715	30.431	21.561	0.548

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.076	0.763	0.160	0.010	-1.753
S.D.	0.011	1.558	0.057	0.005	1.594
% R.S.D.	14.246	204.057	35.773	46.167	90.939

Identity 1: S95T003661_D Identity 2: .25-10 ml 8:29 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	8.946	0.696	0.497	0.363	48.005	-0.262	-0.035	-0.022
S.D.	0.073	0.005	0.237	0.160	0.073	0.112	0.025	0.020
% R.S.D.	0.813	0.725	47.689	44.057	0.152	42.794	69.588	93.456

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.011	0.474	0.034	1.521	1.932	8.350	-0.042	-1.651
S.D.	0.006	0.050	0.080	0.168	0.004	0.074	0.311	3.103
% R.S.D.	55.560	10.612	237.520	11.053	0.212	0.881	743.836	187.927

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.245	1.562	0.006	5.015	19.296	0.109	0.100	494.756
S.D.	0.945	0.718	0.017	0.576	0.172	0.004	0.157	6.341
% R.S.D.	75.880	45.951	270.416	11.486	0.894	3.464	156.878	1.282

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.053	0.628	-0.005	-0.117	0.309	0.018	0.022	17248.342
S.D.	0.037	0.433	0.050	0.171	0.014	0.005	0.024	183.924
% R.S.D.	69.797	68.989	1089.634	145.875	4.550	29.527	107.084	1.066

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.120	1.043	0.076	0.008	1.128
S.D.	0.011	0.658	0.052	0.005	1.521
% R.S.D.	8.906	63.100	68.296	65.330	134.864

Identity 1: S95T003661_A Identity 2: .25sam+2sst5+8hno3 8:32 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	53.675	42.263	40.566	39.585	89.647	40.575	42.202	40.044
S.D.	0.047	0.125	0.425	0.038	0.374	0.194	0.148	0.251
% R.S.D.	0.088	0.297	1.048	0.096	0.417	0.479	0.352	0.628

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.472	40.887	41.547	43.061	42.327	49.412	43.282	75.006
S.D.	0.156	0.223	0.052	0.147	0.075	0.208	0.287	0.661
% R.S.D.	0.386	0.544	0.125	0.341	0.177	0.420	0.664	0.881

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.619	41.523	41.609	45.994	59.324	39.265	41.424	538.776
S.D.	0.172	0.246	0.124	0.457	0.539	0.070	0.375	3.056
% R.S.D.	0.423	0.593	0.299	0.993	0.908	0.177	0.906	0.567

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.776	39.860	29.204	40.445	40.454	40.582	40.819	13856.466
S.D.	0.103	0.284	0.281	0.673	0.073	0.210	0.092	44.138
% R.S.D.	0.254	0.713	0.961	1.665	0.181	0.518	0.224	0.319

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.100	38.259	41.492	41.590	39.468
S.D.	0.052	1.634	0.046	0.070	0.427
% R.S.D.	0.127	4.270	0.110	0.169	1.081

Identity 1: ICSA Identity 2: Quality Control 8:41 PM February 8, 1996
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	0.004	0.002	-0.001	0.004	199.654	-0.001	0.002	0.001
S.D.	0.001	0.000	0.015	0.005	0.322	0.002	0.001	0.000
% R.S.D.	34.343	4.020	1384.550	132.700	0.161	160.956	29.442	6.704

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.005	0.002	100.193	102.375	0.000	0.003	-0.186
S.D.	0.000	0.001	0.002	0.168	0.113	0.002	0.003	0.051
% R.S.D.	3.974	13.528	108.975	0.168	0.110	1786.980	103.595	27.430

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.027	0.034	0.004	0.020	0.010	102.143	0.032	194.967
S.D.	0.013	0.008	0.000	0.001	0.012	0.426	0.005	1.626
% R.S.D.	48.091	24.220	3.663	5.704	121.011	0.417	15.035	0.834

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	-0.009	0.004	-0.004	-0.001	0.001	0.013	0.004
S.D.	0.000	0.006	0.001	0.014	0.000	0.001	0.001	0.008
% R.S.D.	18.461	64.371	26.124	351.081	58.007	67.775	6.871	216.331

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.003	0.013	0.003	0.002	0.056
S.D.	0.000	0.028	0.001	0.000	0.025
% R.S.D.	12.348	220.691	17.701	8.170	45.291

Identity 1: ICSAB Identity 2: Quality Control 8:43 PM February 8, 1996
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	0.002	-0.039	-0.001	200.272	0.504	0.512	0.950
S.D.	0.002	0.000	0.011	0.003	0.891	0.004	0.004	0.006
% R.S.D.	117.492	6.398	28.694	242.098	0.445	0.828	0.698	0.632

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.013	0.995	0.001	100.376	102.828	0.513	0.012	-0.108
S.D.	0.002	0.005	0.002	0.189	0.485	0.001	0.007	0.066
% R.S.D.	0.239	0.529	249.501	0.188	0.471	0.158	59.872	60.677

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.029	0.049	0.519	0.024	0.020	103.567	0.032	193.246
S.D.	0.021	0.014	0.004	0.006	0.013	0.221	0.006	1.085
% R.S.D.	72.467	28.701	0.745	26.439	63.596	0.213	19.360	0.561

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.001	-0.031	1.043	1.012	-0.001	1.013	0.014	0.072
S.D.	0.001	0.012	0.002	0.009	0.001	0.002	0.000	0.024
% R.S.D.	64.139	39.248	0.209	0.885	55.600	0.165	1.192	32.765

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.514	0.017	0.508	0.510	0.116
S.D.	0.002	0.028	0.001	0.002	0.035
% R.S.D.	0.449	160.842	0.134	0.448	30.342

Identity 1: CCV Identity 2: Quality Control 8:48 PM February 8, 1996
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	5.032	5.101	5.124	4.852	4.999	5.147	5.155	5.137
S.D.	0.010	0.015	0.030	0.004	0.012	0.009	0.021	0.015
% R.S.D.	0.189	0.292	0.589	0.079	0.248	0.171	0.403	0.298

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.164	5.092	5.109	5.180	5.115	5.126	5.251	9.802
S.D.	0.011	0.005	0.012	0.018	0.012	0.005	0.025	0.031
% R.S.D.	0.204	0.095	0.233	0.341	0.244	0.101	0.474	0.313

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.172	5.153	5.111	5.432	5.193	5.014	5.205	5.097
S.D.	0.014	0.020	0.018	0.084	0.035	0.011	0.020	0.005
% R.S.D.	0.278	0.390	0.354	1.538	0.677	0.211	0.383	0.101

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.157	5.026	5.055	5.075	5.006	5.107	5.168	5.221
S.D.	0.009	0.023	0.006	0.039	0.007	0.014	0.007	0.001
% R.S.D.	0.165	0.452	0.121	0.764	0.138	0.282	0.139	0.025

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.129	4.819	5.150	5.261	4.964
S.D.	0.010	0.029	0.008	0.018	0.021
% R.S.D.	0.193	0.610	0.147	0.340	0.417

Identity 1: CCB Identity 2: Quality Control 8:53 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.004	0.000	0.014	-0.014	-0.022	0.003	-0.000	0.000
S.D.	0.001	0.000	0.011	0.002	0.002	0.002	0.001	0.000
% R.S.D.	30.172	458.258	77.801	18.397	8.289	57.400	2182.553	13.635

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	0.000	-0.004	-0.001	-0.002	0.001	0.018	-0.183
S.D.	0.000	0.002	0.001	0.001	0.000	0.002	0.006	0.035
% R.S.D.	37.329	766.793	17.348	135.691	2.165	190.112	35.032	18.840

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.006	0.005	0.000	-0.006	-0.006	0.000	0.006	0.003
S.D.	0.010	0.007	0.000	0.005	0.006	0.000	0.002	0.000
% R.S.D.	179.569	134.562	66.583	80.871	108.895	34.641	36.721	0.014

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.000	-0.025	0.001	-0.024	-0.002	0.000	0.001	-0.002
S.D.	0.000	0.005	0.001	0.014	0.000	0.001	0.000	0.017
% R.S.D.	482.321	20.385	115.477	55.754	21.118	465.593	41.939	737.410

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	0.011	0.002	0.000	0.011
S.D.	0.000	0.022	0.001	0.000	0.024
% R.S.D.	65.295	212.581	28.874	49.361	205.903

02-08-96

LABCORE Data Entry Template for Worklist# 4650

Analyst: JK Soto **Instrument:** ICP01 **Book#** 50848a

Method: LA-505-151/161 Rev/Mod D3

Worklist Comment: ICP BY-104 (FUSION)

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	PREPBLKARL				@ICP-F01	SOLID		
6	SAMPLE	S95T003662	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:				AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01			
7	DUP	S95T003662	0	Z	@ICP-F01	SOLID		
8	SPK	S95T003662	0	Z	@ICP-F01	SOLID		
9	CCV				@ICP-QC	QC		
10	CCB				@ICP-QC	QC		
11	SAMPLE	S95T003663	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:				AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01			
12	DUP	S95T003663	0	Z	@ICP-F01	SOLID		
13	SPK	S95T003663	0	Z	@ICP-F01	SOLID		
~~14~~	~~PREPBLKARL~~	JK 010896			@ICP-F01	SOLID		
15	SAMPLE	S95T003664	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:				AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 ,			

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 4650

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
					U-F-01			
16	DUP	S95T003664	0	Z	@ICP-F01	SOLID		
17	SPK	S95T003664	0	Z	@ICP-F01	SOLID		
18	CCV				@ICP-QC	QC		
19	CCB				@ICP-QC	QC		
20	SAMPLE	S95T003665	0	Z	@ICP-F01	SOLID	95000180	BY104 ROTARY
		Analytes Requested:			AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01			
21	DUP	S95T003665	0	Z	@ICP-F01	SOLID		
22	SPK	S95T003665	0	Z	@ICP-F01	SOLID		
23	ICSA				@ICP-QC	QC		
24	ICSAB				@ICP-QC	QC		
25	CCV				@ICP-QC	QC		
26	CCB				@ICP-QC	QC		

Final page for worklist # 4650

02-08-96

Analyst Signature **Date**

pb/KGVL ,25-10
5700366L-L, 25-10-2-8, DF 205
5700366L ,25-10 41
5700366L-D ,25-10 41
5700366L-Q ,25-10 41, .25ml sample + 2ml SSTS + 8ml HNO3
5700366 3_L, 25-10-2-8, DF 205
5700366 3 ,25-10 41
5700366 3_D ,25-10 41
5700366 3_Q ,25-10 41, .25 ml sample + 2ml SSTS + 8ml HNO3

Reviewed by:
Saul R. Pang 2/14/96

Analyst Signature **Date**

S95T003664_L, 25-10-2-8, DF 205
S95T003664 ,25-10 41
S95T003664_D ,25-10 41
S95T003664_Q ,25-10 41, .25ml sample + 2ml SSTS + 8ml HNO3
S95T003665_L, 25-10-2-8, DF 205
S95T003665 ,25-10 41
S95T003665_D ,25-10 41
S95T003665_Q ,25-10 41, .25ml sample + 2ml SSTS + 8ml HNO3

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

File: 160208G

Identity 1: ICV Identity 2: Quality Control 10:03 AM February 8, 1996

Task name : OPTIMA

WHC-SD-WM-DP-164, 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	4.994	4.997	4.986	4.760	4.914	5.074	5.137	5.096
S.D.	0.021	0.023	0.025	0.009	0.021	0.023	0.021	0.024
% R.S.D.	0.423	0.465	0.506	0.195	0.426	0.449	0.412	0.464

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.057	4.982	5.037	5.072	5.041	5.034	5.196	9.697
S.D.	0.007	0.027	0.031	0.021	0.024	0.024	0.033	0.053
% R.S.D.	0.138	0.536	0.612	0.407	0.477	0.469	0.641	0.547

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.026	5.072	5.033	4.964	4.903	4.861	5.088	5.015
S.D.	0.022	0.017	0.025	0.057	0.013	0.021	0.011	0.019
% R.S.D.	0.428	0.333	0.496	1.152	0.257	0.426	0.222	0.386

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.052	4.821	4.892	5.010	4.965	5.010	5.140	5.039
S.D.	0.025	0.020	0.014	0.016	0.024	0.025	0.010	0.010
% R.S.D.	0.501	0.405	0.281	0.328	0.493	0.490	0.191	0.206

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.002	4.743	5.096	5.190	4.893
S.D.	0.023	0.015	0.021	0.028	0.004
% R.S.D.	0.452	0.324	0.416	0.539	0.087

JK [illegible]
02-08-96

BY-104 595T003662-595T003665

Worklist # 4650

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 865 TO 893.

Identity 1: ICB Identity 2: Quality Control 10:07 AM February 8, 1996
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	0.009	0.005	0.010	-0.003	0.001	0.000
S.D.	0.001	0.000	0.012	0.003	0.001	0.000	0.000	0.000
% R.S.D.	42.320	19.245	129.083	50.922	6.623	0.086	52.044	32.735

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	0.001	-0.001	-0.003	0.000	0.003	-0.010	0.050
S.D.	0.000	0.001	0.001	0.001	0.000	0.001	0.004	0.018
% R.S.D.	122.913	53.461	59.333	56.800	25.000	42.424	40.968	36.327

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.018	-0.008	0.000	-0.010	-0.002	-0.000	0.000	0.005
S.D.	0.004	0.003	0.000	0.005	0.002	0.000	0.003	0.002
% R.S.D.	19.585	30.551	25.714	45.064	115.264	173.206	888.765	49.498

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.000	0.046	0.001	0.017	0.001	0.002	0.003	0.044
S.D.	0.001	0.007	0.000	0.006	0.000	0.001	0.000	0.003
% R.S.D.	327.522	15.434	14.199	33.953	36.561	50.434	6.652	7.900

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.032	0.003	0.000	-0.030
S.D.	0.000	0.021	0.000	0.000	0.009
% R.S.D.	59.770	63.720	9.757	24.864	30.780

Identity 1: ICSA Identity 2: Quality Control 10:10 AM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.004	0.002	-0.022	0.002	195.109	-0.002	0.002	-0.000
S.D.	0.001	0.000	0.006	0.001	0.659	0.000	0.000	0.000
% R.S.D.	28.146	4.583	28.893	53.384	0.338	0.733	9.976	77.671

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.003	0.007	0.000	98.882	102.285	0.006	0.008	-0.128
S.D.	0.001	0.002	0.001	0.233	0.289	0.001	0.007	0.025
% R.S.D.	34.747	26.304	393.730	0.235	0.283	22.599	87.201	19.608

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.000	0.006	0.003	-0.004	-0.043	101.005	0.001	189.422
S.D.	0.006	0.005	0.000	0.003	0.006	0.458	0.003	0.475
% R.S.D.	1200.853	82.917	4.552	96.186	14.617	0.453	228.586	0.251

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.002	0.065	0.002	0.028	0.000	0.004	0.015	0.059
S.D.	0.001	0.012	0.000	0.010	0.000	0.000	0.001	0.014
% R.S.D.	37.352	18.110	15.403	36.489	1721.184	10.743	4.836	23.073

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.006	0.024	0.003	0.003	-0.045
S.D.	0.000	0.029	0.001	0.000	0.013
% R.S.D.	6.926	124.146	24.397	6.967	28.657

Identity 1: ICSAB Identity 2: Quality Control 10:12 AM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.008	0.002	-0.016	0.010	197.128	0.497	0.511	0.935
S.D.	0.001	0.000	0.005	0.001	0.846	0.004	0.003	0.008
% R.S.D.	14.081	7.178	31.290	7.707	0.429	0.835	0.573	0.849

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.018	1.001	0.000	99.947	103.853	0.514	0.007	0.140
S.D.	0.002	0.001	0.002	0.151	0.307	0.002	0.005	0.060
% R.S.D.	0.150	0.123	6516.236	0.152	0.295	0.384	72.478	43.164

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.021	0.047	0.513	0.002	-0.048	101.677	0.007	190.300
S.D.	0.014	0.010	0.003	0.003	0.017	0.136	0.002	1.498
% R.S.D.	66.160	20.912	0.489	217.221	35.582	0.134	32.968	0.787

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.001	-0.018	1.024	1.037	0.002	1.021	0.016	0.037
S.D.	0.001	0.009	0.002	0.009	0.000	0.006	0.001	0.011
% R.S.D.	225.788	50.766	0.193	0.842	31.138	0.560	4.387	28.582

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.513	-0.033	0.508	0.510	-0.083
S.D.	0.001	0.022	0.000	0.002	0.025
% R.S.D.	0.242	68.420	0.037	0.467	30.017

Identity 1: PREPBLK Identity 2: Quality Control 10:16 AM February 8, 1996
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	0.307	0.001	0.019	-0.001	0.016	-0.009	0.000	-0.000
S.D.	0.000	0.000	0.005	0.003	0.010	0.003	0.001	0.000
% R.S.D.	0.162	5.587	26.840	409.058	61.080	34.649	122.851	107.824

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	-0.004	-0.005	-0.000	0.008	0.000	0.003	-0.089
S.D.	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.027
% R.S.D.	91.606	35.177	15.657	258.967	1.291	327.886	24.925	30.295

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.032	-0.015	0.001	-0.018	-0.010	0.003	-0.002	0.199
S.D.	0.006	0.004	0.000	0.001	0.002	0.000	0.005	0.000
% R.S.D.	17.371	30.386	12.542	8.124	19.622	5.263	218.610	0.000

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.003	0.003	-0.004	-0.001	-0.001	0.001	504.911
S.D.	0.000	0.006	0.000	0.014	0.000	0.001	0.000	3.173
% R.S.D.	29.693	238.006	14.605	318.428	21.074	91.399	26.537	0.628

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.014	0.004	-0.000	-0.014
S.D.	0.000	0.006	0.001	0.000	0.016
% R.S.D.	3761.198	45.224	20.040	81.601	112.469

Identity 1: S95T003662_L Identity 2: .25-10-2-8 ml 10:31 AM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	12.075	0.675	2.567	9.113	57.972	-1.858	0.050	-0.109
S.D.	0.084	0.012	1.600	0.527	0.650	0.322	0.017	0.027
% R.S.D.	0.696	1.796	62.333	5.778	1.122	17.321	34.884	24.957

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.093	1.306	-0.801	1.286	0.780	8.109	1.250	6.202
S.D.	0.026	0.137	0.311	0.204	0.000	0.515	1.245	4.052
% R.S.D.	27.775	10.523	38.858	15.835	0.000	6.353	99.552	65.323

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.564	4.238	-0.006	2.094	17.890	0.448	0.022	522.378
S.D.	0.785	0.213	0.007	0.791	0.924	0.000	0.333	0.851
% R.S.D.	139.278	5.029	115.470	37.754	5.165	0.000	1489.311	0.163

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.035	-6.292	-0.137	0.400	-0.012	-0.047	0.446	12629.023
S.D.	0.078	0.332	0.103	2.267	0.052	0.072	0.051	78.472
% R.S.D.	222.974	5.277	74.898	566.837	443.526	152.158	11.327	0.621

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.126	-5.561	0.283	0.014	-13.124
S.D.	0.054	3.903	0.062	0.024	0.764
% R.S.D.	43.071	70.186	21.982	165.968	5.821

B

Identity 1: S95T003662 Identity 2: .25-10 ml 10:34 AM February 8, 1996

Task name : OPTIMA

Sample Weight : 1.0000 Solution Volume : 41.00

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	12.098	0.704	1.178	4.113	58.084	-0.111	0.037	-0.011
S.D.	0.036	0.004	0.000	0.024	0.292	0.111	0.006	0.002
% R.S.D.	0.295	0.526	0.010	0.581	0.502	99.917	15.691	14.299

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.061	0.545	-0.071	1.846	0.793	8.091	0.249	0.906
S.D.	0.011	0.051	0.053	0.126	0.004	0.046	0.227	0.386
% R.S.D.	18.447	9.378	75.476	6.806	0.518	0.571	91.363	42.612

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.707	0.879	0.031	2.215	20.241	0.115	-0.192	509.677
S.D.	0.173	0.101	0.004	0.126	0.185	0.000	0.222	1.886
% R.S.D.	24.515	11.441	11.315	5.706	0.912	0.000	115.637	0.370

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.101	1.470	0.055	0.910	0.031	0.003	0.147	12010.097
S.D.	0.014	0.181	0.004	0.139	0.002	0.016	0.060	54.752
% R.S.D.	13.642	12.326	6.732	15.250	7.347	594.015	40.730	0.456

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.112	-0.900	0.213	-0.011	0.633
S.D.	0.011	0.640	0.012	0.000	0.475
% R.S.D.	9.719	71.046	5.440	0.462	75.078

Identity 1: S95T003662_D Identity 2: .25-10 ml 10:37 AM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	17.694	0.733	1.034	1.278	57.840	-0.150	0.046	0.013
S.D.	0.092	0.004	0.341	0.106	0.314	0.064	0.015	0.005
% R.S.D.	0.522	0.505	32.963	8.260	0.542	42.898	33.030	41.959

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.063	0.609	0.147	1.898	2.421	8.302	0.147	8.194
S.D.	0.008	0.046	0.054	0.089	0.012	0.083	0.317	2.006
% R.S.D.	11.870	7.565	37.123	4.694	0.501	0.997	215.479	24.484

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.439	0.352	0.045	2.990	21.190	0.113	-0.455	523.060
S.D.	0.471	0.525	0.010	0.434	0.442	0.004	0.277	5.719
% R.S.D.	32.736	148.895	22.787	14.498	2.084	3.268	60.757	1.093

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.106	0.736	0.124	0.054	0.062	0.034	0.165	13934.711
S.D.	0.044	0.367	0.023	0.204	0.026	0.027	0.018	119.182
% R.S.D.	41.892	49.921	18.697	379.518	42.069	79.251	10.670	0.855

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.114	0.203	0.291	-0.010	-1.273
S.D.	0.017	1.017	0.038	0.000	0.823
% R.S.D.	14.816	499.768	13.102	2.536	64.681

Identity 1: S95T003662_A Identity 2: .25sam+2sst5+8hno3 10:42 AM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	53.197	40.907	41.262	44.912	99.566	41.777	40.645	37.417
S.D.	0.110	0.089	0.606	0.121	0.322	0.112	0.109	0.336
% R.S.D.	0.206	0.217	1.468	0.269	0.323	0.267	0.267	0.899

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	41.249	41.397	40.727	43.271	40.645	50.071	40.498	82.023
S.D.	0.059	0.084	0.242	0.403	0.125	0.186	0.241	2.055
% R.S.D.	0.143	0.203	0.594	0.930	0.308	0.372	0.594	2.505

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.526	40.419	39.991	41.645	59.108	39.634	41.355	560.526
S.D.	0.421	0.247	0.097	1.053	0.242	0.033	0.193	4.581
% R.S.D.	1.039	0.611	0.242	2.527	0.409	0.085	0.467	0.817

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.589	38.322	17.056	42.112	40.285	40.846	40.024	12252.007
S.D.	0.127	0.169	0.128	0.095	0.063	0.069	0.117	97.490
% R.S.D.	0.305	0.442	0.752	0.225	0.158	0.169	0.293	0.796

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.059	37.165	41.783	41.057	35.992
S.D.	0.146	0.710	0.003	0.118	0.455
% R.S.D.	0.355	1.909	0.006	0.288	1.265

Identity 1: CCV Identity 2: Quality Control 10:45 AM February 8, 1996
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	4.992	4.980	4.977	4.776	4.913	5.177	5.054	4.928
S.D.	0.008	0.006	0.018	0.005	0.012	0.011	0.008	0.007
% R.S.D.	0.169	0.116	0.364	0.102	0.241	0.212	0.161	0.134

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.115	5.044	4.991	5.078	4.993	5.103	5.015	9.465
S.D.	0.004	0.004	0.006	0.022	0.007	0.013	0.032	0.017
% R.S.D.	0.070	0.075	0.120	0.425	0.141	0.252	0.631	0.179

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.045	4.979	4.985	4.940	4.942	4.942	5.134	4.891
S.D.	0.014	0.008	0.007	0.179	0.062	0.006	0.018	0.005
% R.S.D.	0.272	0.168	0.148	3.621	1.245	0.125	0.347	0.103

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.142	4.879	4.913	5.040	4.973	5.066	5.064	4.912
S.D.	0.006	0.015	0.005	0.024	0.006	0.010	0.012	0.018
% R.S.D.	0.126	0.307	0.092	0.468	0.112	0.196	0.229	0.364

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.028	4.734	5.124	5.192	4.770
S.D.	0.005	0.014	0.005	0.008	0.021
% R.S.D.	0.105	0.288	0.091	0.151	0.448

Identity 1: CCB Identity 2: Quality Control 10:48 AM February 8, 1996
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	-0.003	0.013	0.000	0.001	0.000
S.D.	0.001	0.000	0.003	0.002	0.002	0.003	0.000	0.000
% R.S.D.	22.976	17.647	228.694	77.161	11.974	21123.470	24.045	61.105

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	-0.002	-0.004	-0.000	0.000	0.003	0.007	-0.100
S.D.	0.000	0.001	0.003	0.000	0.000	0.000	0.002	0.022
% R.S.D.	22.594	49.753	76.334	1.042	0.000	4.358	24.272	22.256

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.028	0.006	0.000	0.008	-0.008	0.000	-0.004	0.013
S.D.	0.010	0.004	0.000	0.007	0.001	0.000	0.004	0.003
% R.S.D.	35.587	77.160	29.123	79.666	19.000	86.602	116.809	24.121

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.002	-0.029	0.007	-0.005	-0.000	0.002	0.005	0.119
S.D.	0.001	0.010	0.001	0.008	0.000	0.000	0.001	0.018
% R.S.D.	53.469	32.455	16.570	150.598	73.675	8.223	23.463	15.444

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	0.012	0.005	0.000	-0.049
S.D.	0.000	0.005	0.001	0.000	0.011
% R.S.D.	161.826	39.652	18.317	63.254	22.903

Identity 1: S95T003663_L Identity 2: .25-10-2-8 ml 12:48 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.530	33.804	7.094	13.598	84.339	-1.122	0.504	-0.005
S.D.	0.231	0.032	3.023	0.853	1.383	0.557	0.075	0.027
% R.S.D.	43.666	0.095	42.617	6.272	1.640	49.621	14.978	603.957

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.829	26.777	-0.316	93.371	20.152	14.044	0.448	62.995
S.D.	0.122	0.352	0.270	0.927	0.028	0.167	0.648	5.854
% R.S.D.	14.776	1.314	85.383	0.993	0.139	1.186	144.858	9.293

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	2.040	0.724	0.836	16.743	12.367	2.920	0.152	365.240
S.D.	1.462	1.054	0.015	1.506	0.604	0.018	0.765	2.498
% R.S.D.	71.695	145.547	1.816	8.993	4.880	0.632	502.129	0.684

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.441	7.687	0.283	2.911	0.341	0.340	-0.287	13446.719
S.D.	0.130	0.998	0.144	1.240	0.130	0.190	0.023	116.568
% R.S.D.	29.569	12.983	50.837	42.609	38.056	55.761	7.897	0.867

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	1.470	-4.306	0.295	-0.006	2.369
S.D.	0.001	3.186	0.144	0.001	6.092
% R.S.D.	0.046	73.979	48.939	12.412	257.196

Identity 1: S95T003663 Identity 2: .25-10 ml 12:52 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	0.393	33.426	5.719	7.100	80.808	-0.044	0.162	0.004
S.D.	0.078	0.212	0.523	0.234	0.244	0.064	0.032	0.017
% R.S.D.	19.925	0.633	9.146	3.294	0.302	145.319	19.709	403.505

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.807	26.006	0.074	94.806	19.969	14.043	0.544	55.571
S.D.	0.013	0.180	0.053	0.038	0.123	0.157	0.099	2.117
% R.S.D.	1.617	0.691	71.229	0.040	0.617	1.117	18.185	3.809

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.460	0.118	0.808	18.089	14.670	2.680	-0.076	350.058
S.D.	0.674	0.488	0.005	0.608	0.152	0.006	0.142	4.845
% R.S.D.	46.176	412.655	0.656	3.359	1.038	0.239	187.005	1.384

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.128	-1.093	0.083	3.589	0.152	0.124	0.026	12656.218
S.D.	0.029	0.265	0.046	0.533	0.028	0.041	0.025	154.213
% R.S.D.	22.235	24.230	55.579	14.840	18.243	33.019	94.228	1.218

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	1.445	0.080	0.172	-0.010	-0.446
S.D.	0.011	0.388	0.054	0.005	1.786
% R.S.D.	0.749	487.808	31.432	47.212	400.951

Identity 1: S95T003663_D Identity 2: .25-10 ml 12:55 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	2.298	32.987	5.367	7.206	80.920	-0.156	0.168	0.018
S.D.	0.048	0.064	0.567	0.101	0.101	0.064	0.017	0.011
% R.S.D.	2.075	0.195	10.573	1.396	0.125	41.177	10.039	58.187

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.681	25.565	0.218	91.731	19.064	13.836	0.499	59.170
S.D.	0.018	0.156	0.061	0.247	0.035	0.125	0.135	1.301
% R.S.D.	2.577	0.611	28.186	0.269	0.184	0.904	26.974	2.198

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.771	0.911	0.797	17.947	15.514	2.586	-0.048	375.434
S.D.	0.376	0.215	0.002	1.067	0.131	0.010	0.114	2.010
% R.S.D.	21.211	23.609	0.288	5.943	0.843	0.378	239.240	0.535

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.127	-0.808	0.118	2.955	0.175	0.062	0.002	16340.737
S.D.	0.024	0.594	0.022	0.257	0.018	0.022	0.045	77.468
% R.S.D.	18.755	73.603	18.868	8.710	10.378	34.956	1914.344	0.474

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	1.398	-0.170	0.075	-0.009	-2.500
S.D.	0.025	1.299	0.046	0.010	0.647
% R.S.D.	1.803	765.628	61.723	102.893	25.895

Identity 1: S95T003663_A Identity 2: .25sam+2sst5+8hno3 12:58 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	41.123	74.559	46.176	48.561	120.990	40.805	41.738	38.362
S.D.	0.069	0.156	0.047	0.164	0.556	0.232	0.022	0.097
% R.S.D.	0.168	0.209	0.101	0.338	0.459	0.568	0.053	0.254

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.627	66.447	42.155	136.500	61.073	54.957	45.170	131.191
S.D.	0.133	0.355	0.341	0.247	0.016	0.207	0.107	1.736
% R.S.D.	0.326	0.535	0.808	0.181	0.026	0.376	0.236	1.323

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	42.308	41.053	41.407	56.719	52.425	41.009	40.157	394.720
S.D.	0.678	0.211	0.064	2.783	1.603	0.178	0.216	0.976
% R.S.D.	1.602	0.514	0.154	4.907	3.058	0.433	0.538	0.247

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.249	37.005	12.478	43.385	40.055	40.510	41.065	12934.739
S.D.	0.232	0.390	0.046	0.365	0.122	0.237	0.070	60.456
% R.S.D.	0.577	1.055	0.370	0.841	0.303	0.585	0.171	0.467

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.906	39.931	41.560	41.286	37.770
S.D.	0.085	1.382	0.125	0.050	0.950
% R.S.D.	0.204	3.461	0.300	0.121	2.514

Identity 1: S95T003664_L Identity 2: .25-10-2-8 ml 1:01 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	17.294	26.209	6.459	14.787	38.059	0.175	0.253	0.017
S.D.	0.142	0.055	0.829	0.530	0.492	0.322	0.034	0.035
% R.S.D.	0.820	0.209	12.841	3.586	1.293	183.766	13.469	199.189

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.546	14.484	0.134	51.435	13.838	1.196	0.138	81.135
S.D.	0.031	0.226	0.156	0.950	0.051	0.174	0.868	8.261
% R.S.D.	5.729	1.557	117.053	1.847	0.368	14.555	627.743	10.181

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	3.522	1.938	0.564	12.532	2.235	2.014	-1.078	146.915
S.D.	1.579	1.772	0.046	0.811	0.940	0.000	0.159	0.944
% R.S.D.	44.829	91.442	8.220	6.473	42.050	0.000	14.717	0.643

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.415	-4.314	0.148	1.966	0.482	0.397	-0.111	15908.247
S.D.	0.169	0.928	0.140	1.678	0.068	0.098	0.095	74.492
% R.S.D.	40.662	21.515	94.400	85.355	14.009	24.631	85.905	0.468

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.726	-7.951	0.007	0.065	7.268
S.D.	0.032	5.240	0.038	0.024	2.572
% R.S.D.	4.410	65.909	560.479	37.111	35.391

Identity 1: S95T003664 Identity 2: .25-10 ml 1:04 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	15.012	26.895	3.452	3.658	37.965	-0.191	0.061	-0.033
S.D.	0.077	0.035	0.110	0.016	0.192	0.064	0.015	0.009
% R.S.D.	0.516	0.130	3.174	0.428	0.506	33.503	25.278	27.294

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.302	14.014	0.099	52.801	14.246	1.146	-0.158	43.882
S.D.	0.018	0.071	0.082	0.102	0.010	0.107	0.570	1.800
% R.S.D.	6.051	0.509	83.435	0.193	0.072	9.349	360.955	4.101

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.427	0.465	0.560	11.510	2.700	1.712	-0.745	143.917
S.D.	0.419	0.334	0.008	0.463	0.050	0.004	0.079	0.216
% R.S.D.	98.106	71.857	1.395	4.023	1.858	0.216	10.539	0.150

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.048	-1.431	0.014	0.438	0.117	0.046	-0.032	15336.680
S.D.	0.078	0.123	0.036	0.060	0.013	0.036	0.044	9.524
% R.S.D.	160.992	8.566	255.312	13.700	11.052	77.973	137.326	0.062

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.744	1.615	0.005	-0.011	-2.354
S.D.	0.012	0.590	0.036	0.005	0.736
% R.S.D.	1.679	36.517	755.075	45.977	31.260

Identity 1: S95T003664_D Identity 2: .25-10 ml 1:07 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	6.957	20.349	3.240	3.192	30.238	-0.117	0.129	0.012
S.D.	0.029	0.034	0.141	0.078	0.130	0.111	0.009	0.008
% R.S.D.	0.420	0.169	4.359	2.436	0.429	95.539	6.820	69.185

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.261	11.609	0.006	40.318	13.345	0.921	0.598	39.695
S.D.	0.018	0.078	0.092	0.171	0.025	0.060	0.275	0.975
% R.S.D.	6.972	0.670	1677.147	0.424	0.187	6.552	46.008	2.457

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.158	0.154	0.464	6.255	3.932	1.578	-0.198	162.124
S.D.	0.331	0.313	0.006	0.723	0.233	0.004	0.282	1.113
% R.S.D.	28.599	203.182	1.308	11.554	5.933	0.234	142.627	0.687

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.050	-0.287	0.096	1.570	0.145	0.004	-0.051	19281.271
S.D.	0.031	0.082	0.017	0.247	0.004	0.034	0.057	87.149
% R.S.D.	62.313	28.666	17.634	15.708	2.981	755.929	111.776	0.452

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.596	0.894	0.084	-0.011	0.687
S.D.	0.006	0.095	0.019	0.005	0.569
% R.S.D.	1.077	10.579	22.061	41.466	82.858

Identity 1: S95T003664_A Identity 2: .25sam+2sst5+8hno3 1:11 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	55.609	67.318	43.802	44.641	78.245	41.289	41.491	37.792
S.D.	0.133	0.140	0.199	0.122	0.166	0.340	0.056	0.240
% R.S.D.	0.239	0.207	0.454	0.274	0.212	0.824	0.135	0.634

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.921	54.854	41.894	94.941	54.973	42.562	44.195	118.618
S.D.	0.004	0.034	0.278	0.369	0.079	0.032	0.571	0.519
% R.S.D.	0.009	0.063	0.664	0.388	0.143	0.076	1.291	0.437

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	41.734	41.479	41.016	51.983	41.626	40.571	40.955	181.410
S.D.	0.064	0.232	0.083	0.684	0.353	0.054	0.479	1.169
% R.S.D.	0.152	0.560	0.202	1.315	0.848	0.133	1.169	0.644

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.489	38.366	14.724	43.497	40.163	40.954	41.157	15111.593
S.D.	0.128	0.423	0.192	0.523	0.053	0.101	0.297	88.472
% R.S.D.	0.317	1.102	1.306	1.202	0.131	0.247	0.723	0.585

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.673	39.517	42.035	41.356	38.622
S.D.	0.050	1.991	0.054	0.021	0.824
% R.S.D.	0.121	5.039	0.129	0.050	2.134

Identity 1: CCV Identity 2: Quality Control 1:14 PM February 8, 1996
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	5.081	5.066	5.021	4.755	4.900	5.053	5.227	5.066
S.D.	0.008	0.012	0.013	0.001	0.006	0.017	0.025	0.041
% R.S.D.	0.155	0.239	0.259	0.017	0.115	0.346	0.470	0.801

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.012	5.042	5.240	5.216	5.173	5.042	5.635	9.916
S.D.	0.006	0.017	0.006	0.010	0.012	0.007	0.023	0.033
% R.S.D.	0.119	0.330	0.114	0.198	0.234	0.130	0.401	0.335

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.020	5.206	5.113	4.579	4.609	4.831	5.130	4.998
S.D.	0.003	0.013	0.016	0.122	0.018	0.007	0.012	0.038
% R.S.D.	0.053	0.252	0.319	2.662	0.380	0.139	0.225	0.753

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	4.994	4.843	4.851	5.044	4.982	5.073	5.275	5.030
S.D.	0.009	0.010	0.003	0.002	0.004	0.009	0.006	0.037
% R.S.D.	0.187	0.208	0.060	0.039	0.076	0.186	0.117	0.739

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.037	4.781	5.159	5.290	4.800
S.D.	0.007	0.054	0.003	0.008	0.010
% R.S.D.	0.134	1.130	0.052	0.158	0.206

Identity 1: CCB Identity 2: Quality Control 1:19 PM February 8, 1996
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	-0.001	0.000	0.035	0.011	0.002	-0.002	0.002	-0.000
S.D.	0.001	0.000	0.011	0.004	0.007	0.002	0.001	0.000
% R.S.D.	116.895	86.603	30.811	35.605	326.953	86.257	41.575	288.641

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.002	0.000	-0.000	0.001	0.001	-0.001	0.006	-0.010
S.D.	0.000	0.001	0.001	0.003	0.000	0.001	0.009	0.057
% R.S.D.	25.436	175.081	17128.368	292.741	0.000	105.485	156.999	577.496

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.014	0.010	0.000	-0.011	-0.006	-0.000	-0.007	0.011
S.D.	0.015	0.012	0.000	0.008	0.005	0.000	0.001	0.003
% R.S.D.	107.415	124.649	148.461	73.123	83.110	173.206	18.899	28.637

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.002	-0.007	0.005	0.008	0.001	0.001	0.001	-0.024
S.D.	0.001	0.009	0.001	0.008	0.001	0.001	0.001	0.011
% R.S.D.	32.758	121.173	21.448	103.978	136.131	72.408	138.539	46.248

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.014	0.002	-0.000	-0.004
S.D.	0.000	0.032	0.001	0.000	0.025
% R.S.D.	68.495	230.462	38.053	18955.229	562.487

Identity 1: S95T003665_L Identity 2: .25-10-2-8 ml 1:22 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	8.979	24.297	6.164	12.610	231.321	-0.935	0.518	0.030
S.D.	0.337	0.024	2.986	0.513	1.056	0.321	0.089	0.013
% R.S.D.	3.758	0.100	48.451	4.069	0.457	34.299	17.237	43.431

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.465	11.707	-0.332	31.427	9.602	1.768	0.180	45.940
S.D.	0.090	0.176	0.265	0.759	0.021	0.087	0.369	10.192
% R.S.D.	19.436	1.505	79.954	2.416	0.214	4.947	204.800	22.186

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	2.635	6.660	0.524	5.504	-0.023	1.513	-1.752	273.387
S.D.	2.566	2.071	0.052	2.394	0.745	0.018	1.009	2.498
% R.S.D.	97.407	31.094	9.935	43.494	3303.465	1.220	57.578	0.914

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.285	-1.921	0.260	1.514	0.151	0.182	-0.239	18653.539
S.D.	0.239	1.530	0.050	2.371	0.034	0.098	0.041	165.341
% R.S.D.	83.957	79.628	19.150	156.580	22.423	53.672	17.058	0.886

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.497	-12.013	0.156	0.006	-7.920
S.D.	0.056	8.374	0.151	0.049	4.057
% R.S.D.	11.263	69.708	96.353	828.000	51.227

Identity 1: S95T003665 Identity 2: .25-10 ml 1:25 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	8.990	24.642	3.592	5.281	232.527	-0.266	0.215	0.014
S.D.	0.097	0.073	0.212	0.102	0.205	0.064	0.019	0.011
% R.S.D.	1.079	0.296	5.913	1.931	0.088	24.128	8.966	84.193

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.365	11.621	0.150	31.002	8.743	1.960	0.386	45.260
S.D.	0.014	0.084	0.083	0.247	0.033	0.058	0.161	1.683
% R.S.D.	3.796	0.726	55.080	0.797	0.381	2.938	41.797	3.718

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.499	0.273	0.521	8.326	0.732	1.268	-0.153	265.646
S.D.	0.573	0.460	0.008	0.376	0.061	0.004	0.135	1.616
% R.S.D.	38.259	168.721	1.466	4.521	8.304	0.291	88.472	0.608

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.078	-0.931	0.145	1.073	0.103	0.107	0.002	17583.351
S.D.	0.024	0.209	0.043	0.115	0.022	0.030	0.018	106.721
% R.S.D.	30.763	22.469	29.221	10.758	20.873	28.324	1057.478	0.607

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.476	-0.624	0.168	-0.005	0.303
S.D.	0.006	0.589	0.019	0.008	1.510
% R.S.D.	1.328	94.362	11.112	161.057	498.612

Identity 1: S95T003665_D Identity 2: .25-10 ml 1:28 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	5.925	19.742	3.482	6.192	226.763	0.033	0.268	-0.001
S.D.	0.033	0.052	0.643	0.113	0.572	0.064	0.013	0.003
% R.S.D.	0.554	0.262	18.472	1.819	0.252	194.059	4.768	237.978

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.380	12.441	-0.036	27.822	10.189	2.932	-0.490	31.316
S.D.	0.025	0.190	0.031	0.372	0.017	0.084	0.076	0.732
% R.S.D.	6.702	1.527	85.493	1.337	0.168	2.857	15.558	2.338

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.577	0.015	0.436	10.400	0.763	1.635	-0.402	315.036
S.D.	0.334	0.180	0.003	0.628	0.255	0.004	0.127	2.020
% R.S.D.	57.930	1237.393	0.697	6.035	33.419	0.226	31.535	0.641

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.118	0.938	0.048	0.714	0.106	0.054	0.000	14842.403
S.D.	0.046	0.344	0.019	0.328	0.022	0.019	0.016	71.142
% R.S.D.	39.506	36.672	40.280	45.992	20.244	34.680	4560.124	0.479

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.436	-2.428	0.038	-0.002	-1.457
S.D.	0.006	0.179	0.019	0.005	0.646
% R.S.D.	1.460	7.392	50.406	305.518	44.322

Identity 1: S95T003665_A Identity 2: .25sam+2sst5+8hno3 1:31 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	50.253	65.771	43.642	45.918	275.437	40.397	42.158	38.089
S.D.	0.041	0.174	1.005	0.169	0.957	0.129	0.142	0.362
% R.S.D.	0.081	0.264	2.303	0.368	0.348	0.319	0.336	0.951

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.733	52.587	42.750	73.810	50.260	42.964	46.087	123.166
S.D.	0.143	0.049	0.245	0.422	0.120	0.045	0.273	1.425
% R.S.D.	0.352	0.092	0.573	0.572	0.238	0.104	0.593	1.157

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	39.790	41.758	41.461	47.141	38.142	39.879	40.738	308.237
S.D.	0.555	0.249	0.142	1.653	0.617	0.078	0.613	2.815
% R.S.D.	1.395	0.596	0.343	3.507	1.616	0.196	1.504	0.913

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.282	39.009	15.898	42.304	40.334	40.928	41.558	18135.494
S.D.	0.055	0.736	0.255	0.798	0.013	0.185	0.147	155.516
% R.S.D.	0.138	1.887	1.603	1.886	0.032	0.452	0.353	0.858

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.479	36.906	42.015	41.606	35.470
S.D.	0.104	0.657	0.049	0.026	1.028
% R.S.D.	0.252	1.779	0.116	0.064	2.898

Identity 1: ICSA Identity 2: Quality Control 1:37 PM February 8, 1996
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	0.007	0.002	0.006	0.009	194.968	-0.002	0.003	0.000
S.D.	0.001	0.000	0.012	0.002	0.353	0.003	0.000	0.000
% R.S.D.	10.214	3.121	196.415	23.478	0.181	147.282	8.617	361.497

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.003	0.005	-0.002	101.107	104.187	0.005	0.023	-0.017
S.D.	0.000	0.002	0.002	0.178	0.185	0.002	0.004	0.055
% R.S.D.	10.952	48.435	115.162	0.176	0.178	32.288	17.093	319.867

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.027	0.025	0.003	0.028	-0.077	99.365	0.015	189.103
S.D.	0.012	0.008	0.000	0.010	0.016	0.308	0.009	0.547
% R.S.D.	45.114	31.666	5.896	36.055	20.249	0.310	55.610	0.289

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.001	-0.015	0.009	0.021	0.001	0.003	0.013	0.008
S.D.	0.001	0.005	0.001	0.006	0.000	0.000	0.001	0.014
% R.S.D.	94.477	30.232	15.844	30.920	80.708	9.974	8.111	183.196

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.002	-0.045	0.004	0.002	-0.015
S.D.	0.000	0.020	0.001	0.000	0.022
% R.S.D.	7.149	43.893	25.161	4.910	145.606

Identity 1: ICSAB Identity 2: Quality Control 1:40 PM February 8, 1996

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	0.007	0.002	-0.032	0.019	195.116	0.484	0.519	0.937
S.D.	0.002	0.000	0.011	0.001	0.643	0.004	0.004	0.013
% R.S.D.	37.359	7.859	34.364	6.662	0.330	0.857	0.717	1.423

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.991	0.990	0.005	102.456	105.447	0.502	0.016	0.099
S.D.	0.003	0.006	0.002	0.046	0.097	0.008	0.012	0.081
% R.S.D.	0.257	0.631	47.524	0.045	0.092	1.520	73.645	82.441

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.004	0.049	0.516	-0.006	-0.081	97.740	0.025	190.075
S.D.	0.022	0.018	0.002	0.008	0.012	0.373	0.002	2.467
% R.S.D.	516.996	36.439	0.385	127.719	15.214	0.381	9.674	1.298

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.000	-0.013	1.009	0.994	0.002	1.012	0.014	-0.028
S.D.	0.001	0.001	0.002	0.019	0.001	0.003	0.001	0.020
% R.S.D.	1426.450	7.573	0.199	1.911	50.514	0.322	8.836	72.324

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.504	-0.050	0.505	0.512	-0.042
S.D.	0.003	0.016	0.002	0.002	0.038
% R.S.D.	0.599	31.992	0.409	0.374	90.880

Identity 1: CCV Identity 2: Quality Control 1:44 PM February 8, 1996
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	5.049	5.027	4.972	4.716	4.857	4.981	5.208	5.025
S.D.	0.009	0.014	0.017	0.006	0.014	0.007	0.018	0.031
% R.S.D.	0.178	0.274	0.347	0.119	0.292	0.144	0.341	0.609

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	4.967	5.015	5.233	5.236	5.153	5.007	5.764	10.088
S.D.	0.009	0.013	0.014	0.020	0.011	0.014	0.025	0.017
% R.S.D.	0.181	0.249	0.261	0.382	0.210	0.279	0.438	0.167

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	4.951	5.201	5.080	4.314	4.448	4.771	5.045	4.969
S.D.	0.013	0.015	0.016	0.208	0.087	0.009	0.015	0.021
% R.S.D.	0.258	0.289	0.322	4.818	1.950	0.181	0.296	0.425

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	4.904	4.818	4.820	5.000	4.930	5.035	5.292	5.039
S.D.	0.009	0.015	0.007	0.021	0.010	0.016	0.011	0.017
% R.S.D.	0.178	0.301	0.154	0.417	0.204	0.315	0.212	0.329

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	4.998	4.766	5.127	5.258	4.819
S.D.	0.013	0.073	0.005	0.014	0.011
% R.S.D.	0.257	1.529	0.101	0.270	0.224

Identity 1: CCB Identity 2: Quality Control 1:48 PM February 8, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.002	0.000	0.014	0.012	0.004	-0.001	0.002	0.000
S.D.	0.002	0.000	0.009	0.004	0.004	0.002	0.000	0.000
% R.S.D.	115.867	130.931	69.747	29.254	97.473	170.603	27.070	1064.338

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.004	0.001	-0.002	0.002	0.001	0.014	0.095
S.D.	0.000	0.001	0.001	0.001	0.000	0.001	0.013	0.071
% R.S.D.	8.468	15.164	139.334	61.764	4.167	41.879	91.763	74.436

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.007	0.021	0.000	-0.015	-0.005	0.000	-0.002	0.013
S.D.	0.021	0.014	0.000	0.007	0.004	0.000	0.002	0.005
% R.S.D.	324.759	68.676	374.938	48.410	80.140	43.301	152.616	36.466

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.002	-0.008	0.002	0.012	0.001	0.001	-0.000	-0.050
S.D.	0.000	0.008	0.001	0.013	0.001	0.000	0.001	0.022
% R.S.D.	17.917	101.729	74.310	104.057	55.416	68.934	598.125	43.026

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.035	0.000	-0.000	-0.030
S.D.	0.000	0.009	0.000	0.000	0.026
% R.S.D.	75.944	24.499	87.171	45.944	86.615

K Sch
02-08-96

File: 960212B

LABCORE Data Entry Template for Worklist# 4796

Analyst: JK Soto **Instrument:** ICP01 _____ **Book#** 30B48B

Method: LA-505-151/161 Rev/Mod J-3

WHC-SD-WM-DP-164, REV. 1

Worklist Comment: ICP BY-104 (FUSION)

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	PREPBLKARL				@ICP-F01	SOLID		
6	SAMPLE	S95T003771	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						
7	DUP	S95T003771	0	F	@ICP-F01	SOLID		
8	SPK	S95T003771	0	F	@ICP-F01	SOLID		
9	CCV				@ICP-QC	QC		
10	CCB				@ICP-QC	QC		
~~11~~	~~SAMPLE~~	~~S95T003786~~	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , PB-F-01 , S-F-01 , SB-F-01 , SE-F-01 , SI-F-01 , SM-F-01 , SR-F-01 , TI-F-01 , TL-F-01 , U-F-01 , V-F-01 , ZN-F-01 , ZR-F-01						
		JK 2-7-96						
~~12~~	~~DUP~~	~~S95T003786~~	0	F	@ICP-F01	SOLID		
		JK 2-9-96						
~~13~~	~~SPK~~	~~S95T003786~~	~~0~~	F	@ICP-F01	SOLID		
		JK 2-9-96						
14	SAMPLE	S95T003811	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 4796

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
15	DUP	S95T003811	0	F	@ICP-F01	SOLID		
16	SPK	S95T003811	0	F	@ICP-F01	SOLID		
~~17~~	~~CCV~~ JK 2-9-96				@ICP-QC	QC		
~~18~~	~~CCB~~ JK 2-9-96				@ICP-QC	QC		
19	SAMPLE	S95T003812	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
	Analytes Requested:	AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						
20	DUP	S95T003812	0	F	@ICP-F01	SOLID		
21	SPK	S95T003812	0	F	@ICP-F01	SOLID		
22	ICSA				@ICP-QC	QC		
23	ICSAB				@ICP-QC	QC		
24	CCV				@ICP-QC	QC		
25	CCB				@ICP-QC	QC		

Final page for worklist # 4796

JK Lotz 02-14-96
Analyst Signature **Date**

Reviewed by:
Saul M. Pavage 2/14/96
Analyst Signature **Date**

[illegible] L , 25-10
[illegible]003771_L , 25-10-2-8 , DF 205
[illegible]003771 , 25-10 41
[illegible]003771_D , 25-10 41
[illegible]003771_Q , 25-10 41 , .25 ml sample + 2 ml SSTS + 8 ml HNO_3
[illegible]003811_L , 25-10-2-8 , DF 205
[illegible]003811 , 25-10 41
[illegible]003811_D , 25-10 41
[illegible]003811_Q , 25-10 41 , .25 ml sample + 2 ml SSTS + 8 ml HNO_3

S95T003812_L , 25-10-2-8 , DF 205
S95T003812 , 25-10 41
S95T003812_D , 25-10 41
S95T003812_Q , 25-10 41 , .25 ml sample + 2 ml SSTS + 8 ml HNO_3

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

File: 96042B

Identity 1: ICV Identity 2: Quality Control 2:04 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	4.906	4.978	4.956	4.774	4.974	5.105	5.013	5.043
S.D.	0.007	0.011	0.015	0.011	0.007	0.015	0.020	0.049
% R.S.D.	0.134	0.226	0.299	0.227	0.140	0.291	0.399	0.981

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.086	5.001	4.917	4.989	4.945	5.046	4.886	9.548
S.D.	0.008	0.001	0.012	0.018	0.012	0.012	0.049	0.032
% R.S.D.	0.163	0.024	0.243	0.363	0.233	0.229	1.012	0.331

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.150	4.964	4.976	5.066	5.046	4.960	5.091	5.004
S.D.	0.016	0.011	0.015	0.068	0.009	0.009	0.012	0.037
% R.S.D.	0.319	0.224	0.309	1.348	0.176	0.185	0.245	0.738

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.085	5.067	4.940	4.997	4.912	4.989	4.999	5.085
S.D.	0.016	0.043	0.006	0.035	0.006	0.009	0.016	0.048
% R.S.D.	0.307	0.845	0.122	0.700	0.121	0.173	0.318	0.938

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.003	4.693	5.019	5.131	4.904
S.D.	0.006	0.067	0.002	0.011	0.008
% R.S.D.	0.121	1.423	0.046	0.223	0.170

JK Lo
02-12-96
BY-104 595T003771
595T003811
595T003812
Worklist # 4796

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 896 TO 918.

Identity 1: ICB Identity 2: Quality Control 2:32 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.003	-0.000	0.001	-0.005	0.001	-0.002	-0.002	-0.000
S.D.	0.001	0.000	0.001	0.003	0.002	0.001	0.000	0.000
% R.S.D.	36.796	49.487	158.212	55.094	241.358	87.255	21.923	76.375

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	0.001	-0.004	-0.001	0.001	-0.005	-0.003	-0.123
S.D.	0.001	0.000	0.000	0.000	0.000	0.002	0.001	0.052
% R.S.D.	173.174	25.891	0.588	80.334	7.901	37.534	22.455	42.615

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.010	0.010	-0.000	-0.004	-0.003	-0.000	-0.010	0.003
S.D.	0.011	0.010	0.000	0.003	0.002	0.000	0.002	0.000
% R.S.D.	112.276	97.289	51.174	84.350	77.090	0.000	18.334	0.018

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	0.004	-0.002	-0.028	-0.001	-0.001	0.001	0.068
S.D.	0.000	0.003	0.001	0.013	0.000	0.001	0.000	0.013
% R.S.D.	7.618	80.741	35.152	46.851	43.778	37.690	33.630	18.783

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.031	0.000	-0.000	-0.032
S.D.	0.000	0.004	0.001	0.000	0.023
% R.S.D.	58.688	13.067	3511.081	55.184	71.611

Identity 1: ICSA Identity 2: Quality Control 2:35 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.007	0.002	-0.019	-0.002	198.565	0.002	0.001	0.000
S.D.	0.001	0.000	0.003	0.005	0.962	0.001	0.001	0.000
% R.S.D.	21.085	5.782	17.891	243.088	0.484	63.373	100.888	198.486

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.007	0.002	97.250	100.427	0.002	0.023	-0.010
S.D.	0.001	0.002	0.003	0.182	0.298	0.001	0.008	0.039
% R.S.D.	14.118	30.715	138.806	0.187	0.297	52.539	35.027	375.815

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.015	0.024	0.003	0.015	0.004	100.497	0.001	192.024
S.D.	0.008	0.011	0.000	0.006	0.009	0.225	0.005	1.591
% R.S.D.	56.202	46.330	4.814	41.701	199.359	0.224	483.315	0.829

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	-0.006	0.000	-0.029	0.001	0.001	0.016	0.137
S.D.	0.001	0.019	0.001	0.008	0.001	0.001	0.001	0.012
% R.S.D.	10.042	309.306	479.536	28.409	94.985	126.839	3.672	8.987

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.003	-0.016	-0.000	0.002	0.027
S.D.	0.000	0.029	0.001	0.000	0.030
% R.S.D.	7.412	175.899	352.767	0.211	111.809

Identity 1: ICSAB Identity 2: Quality Control 2:38 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.005	0.002	-0.019	0.009	196.577	0.494	0.491	0.964
S.D.	0.002	0.000	0.006	0.003	0.962	0.001	0.002	0.004
% R.S.D.	37.833	6.383	29.729	29.451	0.489	0.289	0.491	0.381

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.002	0.974	-0.005	97.740	99.526	0.502	0.031	0.060
S.D.	0.003	0.004	0.001	0.440	0.564	0.002	0.010	0.077
% R.S.D.	0.332	0.380	14.519	0.451	0.567	0.376	31.142	128.478

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.009	0.051	0.501	0.010	0.011	100.049	0.013	189.622
S.D.	0.020	0.012	0.003	0.012	0.011	0.339	0.003	0.631
% R.S.D.	210.393	24.169	0.598	124.558	101.158	0.339	20.377	0.333

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	0.007	1.013	0.963	0.001	0.991	0.018	0.178
S.D.	0.001	0.013	0.003	0.005	0.000	0.003	0.000	0.026
% R.S.D.	46.844	188.362	0.303	0.524	49.437	0.256	1.673	14.462

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.501	-0.024	0.491	0.498	0.033
S.D.	0.001	0.022	0.002	0.002	0.037
% R.S.D.	0.130	92.450	0.471	0.342	110.923

Identity 1: PREPBLK Identity 2: Quality Control 2:42 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.001	0.000	0.000	-0.008	-0.000	-0.001	-0.002	-0.001
S.D.	0.003	0.000	0.007	0.006	0.010	0.003	0.001	0.001
% R.S.D.	250.873	692.820	5669.349	82.035	2709.850	347.316	62.170	114.470

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.259	0.002	0.002	0.018	-0.005	-0.006	0.019
S.D.	0.000	0.027	0.004	0.002	0.000	0.002	-0.015	0.127
% R.S.D.	38.711	10.461	154.492	91.079	0.619	46.388	239.070	660.880

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.022	0.048	-0.000	-0.005	-0.008	0.003	-0.013	0.176
S.D.	0.028	0.021	0.001	0.005	0.002	0.000	0.002	0.007
% R.S.D.	127.219	44.000	132.041	102.224	21.055	7.050	13.188	3.920

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.006	-0.019	-0.004	-0.031	0.000	-0.001	0.003	488.807
S.D.	0.000	0.017	0.002	0.006	0.001	0.001	0.001	5.591
% R.S.D.	7.217	90.916	43.294	19.095	353.988	87.416	20.896	1.144

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.028	-0.001	0.000	0.019
S.D.	0.000	0.010	0.002	0.000	0.059
% R.S.D.	26.726	34.953	136.357	4460.020	313.219

Identity 1: S95T003771_L Identity 2: .25-10-2-8 ml 2:45 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	0.334	0.039	2.870	6.595	48.946	-1.187	-0.203	0.024
S.D.	0.361	0.031	1.081	0.413	1.572	0.292	0.097	0.125
% R.S.D.	107.968	79.373	37.647	6.265	3.212	24.593	47.865	521.488

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.061	15.477	-0.323	0.853	0.146	0.898	-0.470	29.528
S.D.	0.090	2.898	0.261	0.160	0.015	0.433	2.108	19.746
% R.S.D.	148.255	18.724	80.895	18.738	10.189	48.243	448.746	66.871

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.417	7.718	-0.002	-2.854	-1.380	0.452	-1.809	197.256
S.D.	4.299	4.253	0.098	0.610	0.549	0.029	0.402	0.762
% R.S.D.	303.394	55.111	5273.519	21.372	39.794	6.522	22.246	0.386

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-1.311	0.937	-0.476	-10.699	0.123	-0.340	-0.098	16863.411
S.D.	0.218	1.129	0.275	0.543	0.075	0.113	0.057	71.315
% R.S.D.	16.594	120.550	57.667	5.072	60.805	33.209	58.162	0.423

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.087	-7.665	-0.600	-0.048	-6.878
S.D.	0.048	4.162	0.213	0.081	7.477
% R.S.D.	55.478	54.294	35.536	166.725	108.711

Identity 1: S95T003771 Identity 2: .25-10 ml 2:48 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.090	0.052	0.142	-0.236	50.588	-0.033	-0.005	-0.001
S.D.	0.054	0.006	0.435	0.070	0.279	0.058	0.018	0.014
% R.S.D.	59.770	11.847	307.662	29.618	0.551	173.920	352.626	1372.913

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.077	15.359	0.016	0.750	1.025	1.506	-0.169	-2.348
S.D.	0.024	0.234	0.078	0.095	0.005	0.102	0.052	2.773
% R.S.D.	31.331	1.524	497.260	12.701	0.522	6.802	30.480	118.068

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.230	-1.239	0.007	-0.217	-0.174	0.104	-0.199	196.552
S.D.	0.632	0.617	0.012	0.179	0.084	0.003	0.207	0.973
% R.S.D.	274.682	49.841	165.852	82.477	48.494	3.268	103.943	0.495

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.097	0.590	-0.068	-0.579	-0.018	-0.009	-0.004	16630.085
S.D.	0.036	0.455	0.037	0.293	0.022	0.009	0.058	74.066
% R.S.D.	36.657	77.031	54.180	50.572	124.080	97.668	1332.261	0.445

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.073	1.013	-0.054	-0.011	-1.996
S.D.	0.010	1.383	0.026	0.008	0.731
% R.S.D.	14.199	136.584	48.262	74.189	36.621

Identity 1: S95T003771_D Identity 2: .25-10 ml 2:50 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	-0.146	0.048	-0.191	1.105	44.877	-0.034	-0.054	-0.019
S.D.	0.028	0.004	0.263	0.051	0.153	0.058	0.007	0.002
% R.S.D.	19.491	7.391	137.854	4.631	0.342	174.498	12.650	8.625

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.023	11.099	-0.051	0.790	0.501	1.421	-0.556	-2.326
S.D.	0.024	0.495	0.030	0.108	0.003	0.014	0.044	1.063
% R.S.D.	104.708	4.457	57.476	13.684	0.592	0.958	7.916	45.700

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.869	0.234	-0.005	-0.197	-0.184	0.079	-0.437	185.406
S.D.	0.213	0.149	0.005	0.226	0.089	0.000	0.196	0.134
% R.S.D.	24.491	63.825	98.974	114.901	48.627	0.000	44.923	0.072

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.171	0.079	-0.140	-0.642	-0.022	-0.043	0.043	15675.023
S.D.	0.008	0.449	0.021	0.643	0.008	0.023	0.047	38.833
% R.S.D.	4.768	568.234	15.086	100.214	36.816	52.547	110.324	0.248

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.047	0.192	-0.126	-0.021	1.280
S.D.	0.012	0.387	0.024	0.009	0.636
% R.S.D.	25.079	201.151	19.293	42.483	49.668

Identity 1: S95T003771_A Identity 2: .25sam+2sst5+8hno3 2:53 PM February 12, 1996

Task name : OPTIMA

Sample Weight : 1.0000 Solution Volume : 41.00

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	39.805	40.082	40.811	40.523	87.088	40.835	40.260	38.161
S.D.	0.112	0.170	0.302	0.018	0.240	0.058	0.168	0.219
% R.S.D.	0.281	0.425	0.739	0.045	0.276	0.143	0.417	0.575

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.679	52.098	40.114	41.223	40.593	42.221	40.578	75.269
S.D.	0.122	0.325	0.104	0.507	0.173	0.061	0.132	1.666
% R.S.D.	0.300	0.624	0.260	1.229	0.426	0.144	0.324	2.213

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.797	39.939	39.904	39.087	39.652	39.448	40.702	218.832
S.D.	0.361	0.202	0.181	0.862	0.718	0.074	0.631	1.121
% R.S.D.	0.884	0.505	0.453	2.206	1.810	0.188	1.549	0.512

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.550	40.042	8.191	40.438	39.658	40.121	40.017	15431.906
S.D.	0.118	0.404	0.378	0.936	0.126	0.177	0.199	84.822
% R.S.D.	0.290	1.010	4.612	2.315	0.317	0.442	0.496	0.550

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	40.570	37.225	40.826	40.631	38.231
S.D.	0.068	1.176	0.099	0.133	0.506
% R.S.D.	0.168	3.158	0.243	0.327	1.325

Identity 1: CCV Identity 2: Quality Control 2:57 PM February 12, 1996
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	4.947	4.971	4.999	4.812	4.984	5.093	5.008	4.984
S.D.	0.022	0.029	0.029	0.014	0.016	0.026	0.026	0.022
% R.S.D.	0.436	0.590	0.576	0.289	0.328	0.507	0.515	0.445

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.110	5.043	5.006	5.067	4.994	5.079	5.057	9.695
S.D.	0.014	0.019	0.033	0.025	0.025	0.020	0.012	0.029
% R.S.D.	0.270	0.378	0.654	0.499	0.509	0.399	0.236	0.295

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.080	5.030	4.976	5.018	5.023	4.969	5.091	4.942
S.D.	0.030	0.023	0.030	0.064	0.049	0.015	0.027	0.023
% R.S.D.	0.595	0.455	0.604	1.266	0.975	0.310	0.523	0.457

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.079	5.031	4.988	5.032	4.930	5.033	5.096	5.174
S.D.	0.026	0.027	0.011	0.001	0.022	0.018	0.012	0.007
% R.S.D.	0.508	0.533	0.220	0.030	0.446	0.351	0.245	0.144

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.057	4.771	5.063	5.150	4.893
S.D.	0.011	0.032	0.017	0.021	0.014
% R.S.D.	0.209	0.664	0.326	0.416	0.278

Identity 1: CCB Identity 2: Quality Control 3:00 PM February 12, 1996
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	0.011	0.015	-0.007	-0.003	-0.002	-0.001
S.D.	0.002	0.000	0.010	0.003	0.005	0.003	0.001	0.001
% R.S.D.	72.046	193.254	86.086	20.000	66.028	86.086	42.964	105.605

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	0.004	0.003	0.001	0.002	-0.003	-0.004	0.173
S.D.	0.000	0.001	0.003	0.001	0.000	0.002	0.007	0.103
% R.S.D.	65.072	31.360	101.947	95.247	1.991	79.480	164.577	59.454

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.030	0.005	-0.001	-0.027	-0.004	-0.000	-0.008	-0.007
S.D.	0.023	0.019	0.001	0.002	0.002	0.000	0.005	0.003
% R.S.D.	76.236	356.545	91.083	6.566	37.751	173.205	69.569	45.824

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	0.020	0.003	-0.015	0.002	-0.000	0.002	0.051
S.D.	0.000	0.003	0.002	0.008	0.000	0.000	0.002	0.019
% R.S.D.	20.796	16.695	75.297	52.829	28.060	100.340	67.327	38.410

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.037	-0.003	-0.000	-0.009
S.D.	0.000	0.015	0.001	0.000	0.035
% R.S.D.	2.835	41.185	19.413	833.186	385.983

Identity 1: S95T003811_L Identity 2: .25-10-2-8 ml 3:03 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	0.174	1.179	0.738	8.258	75.106	-0.847	0.295	0.182
S.D.	0.057	0.012	1.628	0.467	1.211	0.293	0.058	0.029
% R.S.D.	32.758	0.987	220.506	5.650	1.613	34.547	19.831	15.801

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.141	9.178	-0.330	1.458	0.557	5.324	3.664	13.624
S.D.	0.062	0.260	0.253	0.286	0.007	0.256	0.699	4.985
% R.S.D.	44.203	2.829	76.632	19.651	1.332	4.805	19.065	36.587

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	6.948	3.006	0.206	8.238	8.410	0.422	-0.816	514.478
S.D.	1.277	1.127	0.016	1.652	1.024	0.000	0.588	0.762
% R.S.D.	18.376	37.480	7.802	20.057	12.170	0.000	71.965	0.148

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.377	1.194	0.442	-3.902	0.051	0.043	0.140	15509.449
S.D.	0.098	0.082	0.063	1.357	0.048	0.113	0.165	63.154
% R.S.D.	26.036	6.888	14.266	34.784	94.246	264.374	117.922	0.407

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.215	-4.559	0.674	0.015	9.222
S.D.	0.051	2.981	0.098	0.046	0.396
% R.S.D.	23.506	65.387	14.596	311.991	4.298

Identity 1: S95T003811 Identity 2: .25-10 ml 3:06 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	-0.128	1.092	0.795	2.234	71.315	0.237	0.030	0.013
S.D.	0.007	0.003	0.221	0.125	0.093	0.059	0.012	0.005
% R.S.D.	5.716	0.246	27.821	5.614	0.130	24.732	38.409	37.465

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.076	8.902	-0.119	2.100	1.049	5.122	0.172	-2.561
S.D.	0.010	0.076	0.087	0.127	0.001	0.015	0.123	1.195
% R.S.D.	12.675	0.857	73.157	6.033	0.142	0.289	71.215	46.668

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.462	0.763	0.039	10.267	9.509	0.132	-0.429	491.864
S.D.	0.342	0.225	0.005	0.317	0.123	0.000	0.167	1.214
% R.S.D.	73.943	29.460	11.438	3.086	1.295	0.000	38.819	0.247

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.129	2.706	-0.040	-0.786	0.015	0.005	0.077	14796.302
S.D.	0.029	0.201	0.034	0.331	0.025	0.018	0.012	37.516
% R.S.D.	22.884	7.428	83.210	42.062	164.800	345.924	15.077	0.254

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.090	-3.002	0.019	-0.003	1.868
S.D.	0.015	1.516	0.026	0.000	0.574
% R.S.D.	16.965	50.511	141.597	4.949	30.723

Identity 1: S95T003811_D Identity 2: .25-10 ml 3:08 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	-0.111	1.071	0.490	1.618	68.705	0.237	0.092	0.072
S.D.	0.016	0.002	0.140	0.023	0.109	0.059	0.002	0.004
% R.S.D.	14.286	0.217	28.467	1.422	0.159	24.752	2.009	6.120

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.113	11.729	-0.067	2.081	2.455	5.065	1.105	-0.284
S.D.	0.013	0.511	0.050	0.060	0.005	0.040	0.030	0.413
% R.S.D.	11.172	4.353	74.713	2.895	0.218	0.795	2.725	145.442

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	2.970	0.663	0.087	5.963	9.322	0.139	-0.068	484.472
S.D.	0.120	0.121	0.005	0.179	0.270	0.003	0.207	0.599
% R.S.D.	4.051	18.184	5.159	3.003	2.892	2.440	303.023	0.124

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.023	-0.323	0.148	-0.420	-0.011	0.059	0.144	12704.222
S.D.	0.047	0.311	0.018	0.317	0.009	0.053	0.006	38.072
% R.S.D.	202.053	96.149	12.421	75.387	85.483	89.908	3.887	0.300

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.112	0.604	0.199	0.026	1.113
S.D.	0.010	0.593	0.012	0.009	0.248
% R.S.D.	8.977	98.178	5.855	34.781	22.300

Identity 1: S95T003811_A Identity 2: .25sam+2sst5+8hno3 3:11 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	39.819	40.980	40.546	41.016	108.760	41.003	40.042	38.123
S.D.	0.083	0.150	0.473	0.047	0.543	0.155	0.145	0.313
% R.S.D.	0.209	0.366	1.167	0.114	0.499	0.378	0.361	0.822

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.919	49.003	39.864	42.095	40.388	45.813	39.362	80.692
S.D.	0.088	0.240	0.116	0.138	0.125	0.137	0.459	0.826
% R.S.D.	0.215	0.489	0.291	0.329	0.310	0.300	1.167	1.024

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.407	40.063	39.736	50.422	50.009	39.659	40.729	509.069
S.D.	0.202	0.121	0.161	0.796	0.275	0.063	0.089	3.934
% R.S.D.	0.501	0.301	0.406	1.579	0.549	0.160	0.218	0.773

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.972	40.411	7.516	40.489	39.636	40.090	39.583	14027.876
S.D.	0.222	0.424	0.406	0.361	0.081	0.091	0.161	86.550
% R.S.D.	0.542	1.048	5.401	0.893	0.205	0.227	0.408	0.617

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	40.526	37.818	40.605	40.506	39.583
S.D.	0.047	1.020	0.012	0.092	0.634
% R.S.D.	0.117	2.697	0.029	0.227	1.603

Identity 1: S95T003812_L Identity 2: .25-10-2-8 ml 3:14 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	-0.015	2.580	3.142	5.089	29.963	-1.354	-0.354	-0.139
S.D.	0.329	0.024	0.780	0.639	1.625	0.774	0.123	0.058
% R.S.D.	2130.312	0.939	24.825	12.553	5.425	57.151	34.639	41.790

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.123	8.637	0.174	3.795	1.842	3.399	-3.250	12.164
S.D.	0.103	0.547	0.257	0.633	0.027	0.151	0.737	11.119
% R.S.D.	84.229	6.339	147.631	16.671	1.452	4.454	22.682	91.411

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-9.103	13.584	-0.106	1.680	7.924	0.638	-1.165	534.864
S.D.	2.793	2.164	0.051	1.091	0.728	0.017	0.738	2.930
% R.S.D.	30.685	15.927	47.757	64.899	9.190	2.665	63.321	0.548

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.903	-0.085	-0.598	-2.437	0.163	-0.270	0.120	16532.692
S.D.	0.154	1.509	0.175	0.192	0.109	0.025	0.156	130.134
% R.S.D.	17.109	1779.430	29.169	7.892	66.846	9.198	130.710	0.787

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.131	-4.616	-0.822	-0.025	-7.270
S.D.	0.059	3.124	0.151	0.024	7.716
% R.S.D.	44.978	67.685	18.346	97.476	106.129

Identity 1: S95T003812 Identity 2: .25-10 ml 3:17 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	-0.127	2.686	0.556	1.365	30.509	-0.169	-0.014	-0.016
S.D.	0.050	0.010	0.278	0.073	0.163	0.117	0.013	0.002
% R.S.D.	39.694	0.361	50.100	5.319	0.534	69.169	97.949	10.157

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.075	8.309	0.001	4.505	2.517	4.158	0.215	2.040
S.D.	0.007	0.091	0.077	0.203	0.014	0.028	0.085	0.729
% R.S.D.	9.769	1.091	5463.928	4.512	0.563	0.668	39.397	35.754

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.636	0.276	0.050	3.486	9.940	0.249	-0.432	531.550
S.D.	0.284	0.208	0.004	0.103	0.166	0.006	0.030	1.832
% R.S.D.	44.732	75.281	8.413	2.956	1.670	2.362	6.836	0.345

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.144	-0.586	-0.062	-0.487	0.011	0.005	0.049	16150.133
S.D.	0.019	0.378	0.013	0.441	0.015	0.005	0.014	53.689
% R.S.D.	13.193	64.411	20.344	90.533	134.844	104.094	28.928	0.332

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.181	0.215	-0.022	0.000	1.471
S.D.	0.000	0.802	0.020	0.005	0.597
% R.S.D.	0.042	373.584	94.242	3985.664	40.604

Identity 1: S95T003812_D Identity 2: .25-10 ml 3:19 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	-0.011	2.744	0.963	0.983	31.060	-0.001	-0.032	0.003
S.D.	0.030	0.007	0.562	0.108	0.276	0.000	0.029	0.009
% R.S.D.	263.547	0.259	58.379	11.024	0.889	33.620	89.992	327.652

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.081	10.368	-0.030	4.329	2.159	4.103	-0.214	5.895
S.D.	0.014	0.190	0.058	0.029	0.016	0.063	0.078	1.889
% R.S.D.	16.701	1.829	189.273	0.675	0.728	1.528	36.307	32.045

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.417	1.230	0.055	7.449	8.876	0.224	-0.522	506.148
S.D.	0.464	0.401	0.007	0.109	0.119	0.003	0.129	5.193
% R.S.D.	111.338	32.615	13.032	1.460	1.335	1.519	24.675	1.026

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.121	1.092	-0.075	-0.754	0.043	-0.058	0.042	15536.286
S.D.	0.031	0.428	0.038	0.072	0.025	0.040	0.015	160.249
% R.S.D.	25.979	39.226	50.096	9.563	57.751	69.961	35.316	1.031

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.168	-1.279	-0.084	-0.015	0.568
S.D.	0.006	1.190	0.054	0.009	1.060
% R.S.D.	3.427	93.049	64.682	61.368	186.655

Identity 1: S95T003812_A Identity 2: .25sam+2sst5+8hno3 3:22 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	40.001	43.496	40.098	40.656	68.625	40.938	41.414	39.544
S.D.	0.059	0.182	0.482	0.114	0.037	0.155	0.189	0.314
% R.S.D.	0.146	0.417	1.201	0.279	0.054	0.378	0.455	0.795

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.800	49.723	40.544	45.315	43.012	44.823	41.500	57.792
S.D.	0.094	0.232	0.174	0.188	0.217	0.079	0.642	2.672
% R.S.D.	0.230	0.467	0.428	0.414	0.505	0.175	1.548	4.623

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.982	36.892	41.014	43.741	49.344	39.713	40.469	547.582
S.D.	0.437	0.213	0.192	0.633	0.596	0.007	0.295	3.350
% R.S.D.	1.065	0.578	0.468	1.448	1.208	0.017	0.729	0.612

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.773	38.832	6.434	40.073	40.060	40.230	40.825	15706.345
S.D.	0.019	0.757	0.244	0.249	0.084	0.039	0.104	141.589
% R.S.D.	0.046	1.950	3.795	0.622	0.211	0.097	0.255	0.901

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.014	38.841	41.223	41.238	39.171
S.D.	0.123	0.383	0.097	0.118	1.027
% R.S.D.	0.301	0.987	0.236	0.286	2.621

Identity 1: ICSA Identity 2: Quality Control 3:31 PM February 12, 1996
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	0.010	0.002	0.005	0.006	192.060	-0.004	-0.001	-0.000
S.D.	0.000	0.000	0.006	0.002	0.809	0.001	0.001	0.000
% R.S.D.	4.831	3.849	110.276	34.266	0.421	40.565	54.516	27.600

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.004	0.009	0.004	97.071	98.614	0.000	0.008	0.114
S.D.	0.000	0.001	0.002	0.145	0.339	0.002	0.006	0.039
% R.S.D.	8.881	12.841	48.967	0.150	0.344	678.578	80.300	34.583

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.019	0.060	0.002	0.019	0.018	99.822	0.009	183.739
S.D.	0.007	0.005	0.000	0.009	0.006	0.138	0.005	1.257
% R.S.D.	39.894	8.261	5.010	46.736	30.987	0.138	55.298	0.684

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	0.011	0.002	-0.018	0.002	0.001	0.018	0.331
S.D.	0.000	0.012	0.001	0.007	0.000	0.000	0.001	0.009
% R.S.D.	3.579	104.980	36.690	41.146	22.912	56.772	3.480	2.797

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.002	0.020	-0.002	0.003	-0.007
S.D.	0.001	0.018	0.001	0.000	0.015
% R.S.D.	28.901	90.427	76.237	4.053	212.670

Identity 1: ICSAB Identity 2: Quality Control 3:34 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.005	0.002	-0.025	0.013	194.978	0.486	0.489	0.954
S.D.	0.002	0.000	0.005	0.006	0.982	0.001	0.004	0.010
% R.S.D.	35.824	11.056	22.047	44.712	0.504	0.295	0.780	1.088

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.988	0.976	0.001	97.630	99.263	0.500	0.026	0.053
S.D.	0.004	0.003	0.001	0.434	0.557	0.003	0.008	0.111
% R.S.D.	0.387	0.301	193.201	0.444	0.561	0.545	31.676	209.933

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.023	0.038	0.500	0.033	0.014	99.091	-0.001	188.631
S.D.	0.019	0.020	0.004	0.003	0.007	0.146	0.004	1.736
% R.S.D.	85.686	53.319	0.778	8.604	48.999	0.147	530.044	0.920

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.006	0.026	1.002	0.942	0.001	0.987	0.018	0.219
S.D.	0.001	0.005	0.003	0.020	0.000	0.005	0.001	0.022
% R.S.D.	8.946	18.910	0.269	2.137	60.208	0.550	6.442	10.136

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.499	-0.038	0.488	0.499	-0.005
S.D.	0.002	0.030	0.001	0.003	0.041
% R.S.D.	0.355	78.137	0.197	0.527	896.761

Identity 1: CCV Identity 2: Quality Control 3:38 PM February 12, 1996
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	4.849	4.877	4.893	4.707	4.871	5.028	4.924	4.879
S.D.	0.008	0.014	0.014	0.013	0.021	0.026	0.010	0.033
% R.S.D.	0.158	0.291	0.292	0.280	0.430	0.521	0.201	0.678

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.034	4.973	4.907	4.997	4.889	5.017	5.004	9.346
S.D.	0.013	0.014	0.020	0.019	0.011	0.007	0.011	0.022
% R.S.D.	0.250	0.287	0.402	0.387	0.217	0.136	0.223	0.240

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	4.990	4.890	4.879	4.970	4.940	4.896	5.002	4.872
S.D.	0.020	0.009	0.014	0.048	0.039	0.014	0.020	0.029
% R.S.D.	0.407	0.187	0.286	0.968	0.782	0.283	0.396	0.595

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	4.995	5.014	4.899	4.980	4.835	4.962	4.981	5.148
S.D.	0.021	0.018	0.007	0.010	0.012	0.012	0.008	0.028
% R.S.D.	0.423	0.351	0.151	0.201	0.249	0.247	0.157	0.550

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	4.988	4.599	4.983	5.073	4.804
S.D.	0.012	0.030	0.012	0.010	0.004
% R.S.D.	0.241	0.646	0.233	0.199	0.089

Identity 1: CCB Identity 2: Quality Control 3:42 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.000	-0.000	0.012	-0.001	0.003	-0.001	-0.001	0.000
S.D.	0.001	0.000	0.006	0.002	0.006	0.001	0.000	0.000
% R.S.D.	411.431	458.258	50.095	202.257	217.689	171.956	57.595	325.331

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.003	-0.003	-0.002	-0.000	-0.001	0.005	0.029
S.D.	0.000	0.002	0.004	0.002	0.000	0.000	0.003	0.042
% R.S.D.	20.625	71.372	129.364	75.681	20.377	23.432	69.869	142.840

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.002	0.012	-0.000	-0.007	-0.004	-0.000	-0.006	0.018
S.D.	0.012	0.008	0.000	0.007	0.002	0.000	0.002	0.002
% R.S.D.	619.149	65.930	141.544	98.401	59.801	150.000	27.040	11.999

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.004	-0.024	-0.001	-0.027	0.001	-0.001	0.004	0.270
S.D.	0.001	0.004	0.001	0.005	0.000	0.000	0.000	0.023
% R.S.D.	13.719	17.094	101.875	18.210	44.851	20.456	4.473	8.709

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.006	-0.000	-0.000	0.008
S.D.	0.000	0.023	0.000	0.000	0.023
% R.S.D.	4438.399	386.187	266.384	61.685	306.437

JK 02-12-96

LABCORE Data Entry Template for Worklist# 4797

Analyst: DK Sato **Instrument:** ICP01 _____ **Book#** 50B48A

Method: LA-505-151/~~161~~ Rev/Mod D-3

Worklist Comment: ICP BY-104 (FUSION)

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	PREPBLKARL				@ICP-F01	SOLID		
6	SAMPLE	S95T003786	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
		Analytes Requested: AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , PB-F-01 , S-F-01 , SB-F-01 , SE-F-01 , SI-F-01 , SM-F-01 , SR-F-01 , TI-F-01 , TL-F-01 , U-F-01 , V-F-01 , ZN-F-01 , ZR-F-01						
7	DUP	S95T003786	0	F	@ICP-F01	SOLID		
8	SPK	S95T003786	0	F	@ICP-F01	SOLID		
9	CCV				@ICP-QC	QC		
10	CCB				@ICP-QC	QC		
11	SAMPLE	S95T003787	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
		Analytes Requested: AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						
12	DUP	S95T003787	0	F	@ICP-F01	SOLID		
13	SPK	S95T003787	0	F	@ICP-F01	SOLID		
14	SAMPLE	S95T003788	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
		Analytes Requested: AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01						

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 4797

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
15	DUP	S95T003788	0	F	@ICP-F01	SOLID		
16	SPK	S95T003788	0	F	@ICP-F01	SOLID		
17	CCV				@ICP-QC	QC		
18	CCB				@ICP-QC	QC		
19	SAMPLE	S95T003789	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
		Analytes Requested:			AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01			
20	DUP	S95T003789	0	F	@ICP-F01	SOLID		
21	SPK	S95T003789	0	F	@ICP-F01	SOLID		
22	SAMPLE	S95T003790	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY
		Analytes Requested:			AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01			
23	DUP	S95T003790	0	F	@ICP-F01	SOLID		
24	SPK	S95T003790	0	F	@ICP-F01	SOLID		
25	ICSA				@ICP-QC	QC		
26	ICSAB				@ICP-QC	QC		
27	CCV				@ICP-QC	QC		
28	CCB				@ICP-QC	QC		

Final page for worklist # 4797

Reviewed by:
Saul M. Parry 2/13/96

Analyst Signature **Date**

Analyst Signature **Date**

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 4797

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
15	DUP	S95T003789	0	F	@ICP-F01	SOLID		
16	SPK	S95T003789	0	F	@ICP-F01	SOLID		
17	CCV				@ICP-QC	QC		
18	CCB				@ICP-QC	QC		
19	SAMPLE	S95T003790	0	F	@ICP-F01	SOLID	95000200	BY104 ROTARY

Analytes Requested: AL-F-01 , BI-F-01 , CA-F-01 , CR-F-01 , FE-F-01 , LI-F-01 , MN-F-01 , NA-F-01 , NI-F-01 , P-F-01 , SI-F-01 , U-F-01

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
20	DUP	S95T003790	0	F	@ICP-F01	SOLID		
21	SPK	S95T003790	0	F	@ICP-F01	SOLID		
22	ICSA				@ICP-QC	QC		
23	ICSAB				@ICP-QC	QC		
24	CCV				@ICP-QC	QC		
25	CCB				@ICP-QC	QC		

Final page for worklist # 4797

Analyst Signature — Date: 02-12-96

Reviewed by: Saul M. Perez — 2/13/96

Analyst Signature — Date

[illegible] .25-10

S95T003786_L, .25-10-2-8, DF 205
S95T003786 .25-10 41
S95T003786_D .25-10 41
S95T003786_Q .25-10 41, .25 ml sample + 2 ml SSTS + 8 ml HNO3

S95T003787_L, .25-10-2-8, DF 205
S95T003787 .25-10 41
S95T003787_D .25-10 41
S95T003787_Q .25-10 41, .25 ml sample + 2 ml SSTS + 8 ml HNO3

S95T003788_L, .25-10-2-8, DF 205
S95T003788 .25-10 41
S95T003788_D .25-10 41
S95T003788_Q .25-10 41, .25 ml sample + 2 ml SSTS + 8 ml HNO3

S95T003789_L, .25-10-2-8, DF 205
S95T003789 .25-10 41
S95T003789_D .25-10 41
S95T003789_Q .25-10 41, .25 ml sample + 2 ml SSTS + 8 ml HNO3

S95T003790_L, .25-10-2-8, DF 205
S95T003790 .25-10 41
S95T003790_D .25-10 41
S95T003790_Q .25-10 41, .25 ml sample + 2 ml SSTS + 8 ml HNO3

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

File: 960212a

Identity 1: ICV Identity 2: Quality Control 9:19 AM February 12, 1996

Task name : OPTIMA

WHC-SD-WM-DP-164, 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	5.009	5.050	5.063	4.878	4.979	5.232	5.071	4.966
S.D.	0.003	0.008	0.013	0.002	0.010	0.025	0.020	0.045
% R.S.D.	0.067	0.160	0.258	0.034	0.195	0.484	0.392	0.914

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.187	5.125	5.046	5.121	5.060	5.193	4.999	9.040
S.D.	0.014	0.021	0.018	0.006	0.012	0.024	0.030	0.026
% R.S.D.	0.276	0.416	0.351	0.124	0.236	0.453	0.604	0.291

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.095	4.961	5.042	5.143	5.072	5.069	5.212	4.896
S.D.	0.018	0.012	0.014	0.038	0.036	0.018	0.011	0.029
% R.S.D.	0.363	0.239	0.268	0.732	0.702	0.363	0.214	0.598

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.201	5.073	5.000	5.101	4.999	5.142	5.091	4.821
S.D.	0.020	0.034	0.005	0.009	0.005	0.019	0.012	0.039
% R.S.D.	0.378	0.662	0.101	0.185	0.093	0.373	0.231	0.800

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.114	4.749	5.154	5.262	4.804
S.D.	0.014	0.016	0.007	0.003	0.015
% R.S.D.	0.269	0.341	0.129	0.064	0.313

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 922 TO 954.

[signature]

02-12-96

BY-104 595T003786
595T003787
595T003788
595T003789
595T003790

Worklist # 4797

Identity 1: ICB Identity 2: Quality Control 9:22 AM February 12, 1996

Task name : OPTIMA

WHC-SD-WM-DP-164, 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	-0.004	-0.003	-0.001	0.003	-0.001	-0.000
S.D.	0.001	0.000	0.003	0.001	0.002	0.000	0.000	0.000
% R.S.D.	32.923	108.253	77.311	22.610	251.050	0.237	42.046	263.393

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	-0.004	-0.005	-0.001	0.000	0.002	-0.011	-0.155
S.D.	0.000	0.001	0.001	0.000	0.000	0.001	0.006	0.047
% R.S.D.	24.017	24.069	27.993	63.970	28.868	33.065	54.826	30.493

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.007	-0.029	0.000	-0.006	-0.002	0.000	-0.007	0.003
S.D.	0.009	0.009	0.000	0.008	0.003	0.000	0.004	0.001
% R.S.D.	134.448	30.298	361.709	119.800	186.456	60.000	58.504	43.304

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.002	-0.006	0.002	0.002	-0.001	-0.000	0.003	-0.012
S.D.	0.001	0.009	0.001	0.006	0.000	0.001	0.001	0.014
% R.S.D.	37.112	134.656	63.584	259.279	39.142	386.276	18.381	120.569

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.030	0.002	-0.000	0.011
S.D.	0.000	0.006	0.001	0.000	0.021
% R.S.D.	144.258	20.342	53.342	26.736	187.441

Identity 1: ICSA Identity 2: Quality Control 9:25 AM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.003	0.002	-0.015	-0.007	195.663	0.003	0.001	0.000
S.D.	0.002	0.000	0.017	0.006	1.299	0.003	0.001	0.001
% R.S.D.	70.846	10.020	114.381	84.765	0.664	80.663	84.927	171.196

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.003	0.005	-0.007	98.693	101.022	0.007	-0.006	-0.212
S.D.	0.000	0.002	0.005	0.081	0.419	0.002	0.012	0.085
% R.S.D.	7.291	36.527	70.668	0.082	0.414	23.127	188.184	40.303

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.025	0.001	0.003	0.020	0.003	104.210	-0.013	181.078
S.D.	0.026	0.018	0.000	0.006	0.005	0.358	0.004	2.610
% R.S.D.	104.405	1614.937	12.344	29.862	157.380	0.344	29.369	1.441

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.001	-0.009	0.003	0.003	-0.001	0.000	0.016	0.080
S.D.	0.001	0.026	0.001	0.009	0.001	0.001	0.001	0.031
% R.S.D.	89.899	291.675	56.895	327.320	71.215	663.796	6.783	39.413

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.005	-0.035	0.002	0.002	0.017
S.D.	0.000	0.009	0.002	0.000	0.047
% R.S.D.	6.933	24.421	76.454	14.611	281.101

Identity 1: ICSAB Identity 2: Quality Control 9:27 AM February 12, 1996
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	0.002	-0.017	-0.001	194.566	0.513	0.478	0.887
S.D.	0.002	0.000	0.002	0.001	0.611	0.004	0.003	0.011
% R.S.D.	80.386	8.170	11.702	91.076	0.314	0.749	0.728	1.247

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.033	1.000	-0.007	99.900	100.637	0.523	-0.010	-0.103
S.D.	0.001	0.005	0.002	0.234	0.387	0.005	0.005	0.082
% R.S.D.	0.073	0.514	26.138	0.234	0.384	0.951	47.814	79.664

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.007	-0.022	0.489	0.024	0.009	104.847	-0.012	177.443
S.D.	0.020	0.015	0.003	0.002	0.011	0.346	0.007	1.869
% R.S.D.	271.080	70.645	0.566	8.504	128.603	0.330	56.826	1.053

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.002	0.028	1.030	1.003	0.000	1.023	0.019	0.156
S.D.	0.001	0.008	0.001	0.011	0.000	0.001	0.001	0.037
% R.S.D.	77.905	29.856	0.073	1.075	232.861	0.067	5.810	23.597

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.515	-0.027	0.502	0.500	0.067
S.D.	0.000	0.015	0.000	0.002	0.040
% R.S.D.	0.058	57.701	0.086	0.464	59.820

Identity 1: PREPBLK Identity 2: Quality Control 9:31 AM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. I

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.374	0.000	-0.007	-0.010	-0.013	0.004	-0.002	-0.001
S.D.	0.001	0.000	0.015	0.003	0.011	0.001	0.001	0.000
% R.S.D.	0.145		206.852	34.267	80.628	34.759	42.481	35.538

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	-0.002	-0.005	-0.002	-0.002	-0.001	-0.010	-0.064
S.D.	0.000	0.001	0.003	0.002	0.000	0.000	0.009	0.077
% R.S.D.	216.747	85.857	60.672	150.026	14.264	17.692	94.418	120.944

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.020	-0.082	-0.000	-0.008	-0.005	0.003	-0.015	0.143
S.D.	0.019	0.013	0.000	0.005	0.004	0.000	0.003	0.004
% R.S.D.	94.308	15.644	88.545	57.703	77.691	14.516	20.542	3.135

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.001	-0.008	-0.001	-0.020	-0.001	-0.002	0.004	400.796
S.D.	0.001	0.008	0.001	0.003	0.001	0.001	0.001	2.311
% R.S.D.	66.141	95.322	150.090	16.201	83.382	37.345	27.423	0.577

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.043	0.000	-0.001	-0.039
S.D.	0.000	0.006	0.001	0.000	0.043
% R.S.D.	104.142	12.819	481.383	22.414	112.281

Identity 1: S95T003786_L Identity 2: .25-10-2-8 ml 9:38 AM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	14.298	0.538	-0.871	3.113	73.036	1.211	-0.092	0.004
S.D.	0.181	0.017	1.432	0.417	0.949	0.299	0.044	0.056
% R.S.D.	1.267	3.160	164.370	13.399	1.299	24.685	47.722	1347.973

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.558	0.952	-0.744	1.533	0.490	7.705	1.310	-7.421
S.D.	0.053	0.392	0.284	0.438	0.007	0.177	2.114	5.931
% R.S.D.	9.575	41.224	38.187	28.566	1.456	2.295	161.313	79.921

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.140	-7.525	0.014	8.787	6.402	0.591	-2.032	453.959
S.D.	1.545	1.236	0.032	1.190	0.291	0.000	0.346	3.391
% R.S.D.	135.525	16.420	226.039	13.546	4.540	0.000	17.052	0.747

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.213	3.695	-0.051	-1.350	0.087	-0.202	0.804	14841.135
S.D.	0.085	2.454	0.080	0.310	0.041	0.087	0.144	92.371
% R.S.D.	40.007	66.412	157.311	22.989	47.090	42.797	17.863	0.622

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.118	-3.680	0.365	-0.052	-7.560
S.D.	0.029	1.962	0.098	0.039	1.306
% R.S.D.	24.441	53.334	26.807	74.585	17.269

Identity 1: S95T003786 Identity 2: .25-10 ml 9:41 AM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	13.891	0.512	0.193	1.678	73.574	0.070	-0.063	-0.038
S.D.	0.036	0.006	0.388	0.320	0.314	0.060	0.037	0.020
% R.S.D.	0.259	1.150	200.352	19.067	0.426	86.054	58.122	53.934

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.067	0.390	-0.085	1.888	0.803	8.035	-0.676	-5.658
S.D.	0.025	0.072	0.104	0.111	0.012	0.017	0.419	5.060
% R.S.D.	38.102	18.420	123.340	5.897	1.454	0.217	61.933	89.436

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.379	-1.189	-0.009	9.429	6.894	0.144	-0.385	439.340
S.D.	1.152	0.900	0.022	0.432	0.327	0.003	0.106	8.806
% R.S.D.	83.511	75.723	240.100	4.587	4.744	2.406	27.510	2.004

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.019	0.012	-0.071	-0.324	-0.012	-0.006	0.271	14143.872
S.D.	0.062	0.449	0.080	0.432	0.036	0.023	0.043	259.541
% R.S.D.	321.504	3859.609	113.140	133.315	294.109	361.840	15.847	1.835

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.094	-1.597	0.055	-0.006	-4.689
S.D.	0.020	0.796	0.088	0.012	2.333
% R.S.D.	21.703	49.814	160.530	200.971	49.764

Identity 1: S95T003786_D Identity 2: .25-10 ml 9:46 AM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	8.953	0.475	0.061	0.606	70.922	0.243	-0.106	-0.056
S.D.	0.030	0.004	0.152	0.295	0.567	0.059	0.038	0.025
% R.S.D.	0.337	0.813	249.200	48.761	0.799	24.377	35.974	44.412

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.040	0.426	-0.301	1.731	0.332	7.755	-1.628	-10.097
S.D.	0.008	0.033	0.031	0.108	0.007	0.065	0.374	4.320
% R.S.D.	20.570	7.656	10.153	6.238	1.970	0.835	22.971	42.784

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-2.257	-1.069	-0.025	7.737	7.135	0.132	-0.814	441.307
S.D.	0.959	0.870	0.022	0.466	0.068	0.003	0.048	6.585
% R.S.D.	42.488	81.373	85.120	6.021	0.947	2.624	5.935	1.492

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.022	0.585	-0.125	-0.174	-0.036	-0.047	0.217	15729.373
S.D.	0.014	0.386	0.084	0.211	0.032	0.026	0.008	173.335
% R.S.D.	64.564	66.022	66.974	121.275	90.187	56.478	3.641	1.102

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.105	-0.412	0.043	-0.014	-2.562
S.D.	0.011	1.164	0.038	0.004	2.239
% R.S.D.	10.852	282.634	88.160	26.894	87.361

Identity 1: S95T003786_A Identity 2: .25sam+2sst5+8hno3 9:49 AM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	50.312	39.463	40.497	40.543	113.743	43.145	38.329	34.170
S.D.	0.097	0.194	0.562	0.034	0.370	0.275	0.198	0.265
% R.S.D.	0.192	0.491	1.389	0.084	0.325	0.636	0.518	0.777

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	43.156	42.349	39.524	43.327	39.024	51.439	37.157	69.345
S.D.	0.101	0.139	0.198	0.279	0.144	0.120	0.347	1.900
% R.S.D.	0.234	0.329	0.502	0.644	0.369	0.233	0.933	2.740

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	39.721	37.393	38.151	48.267	48.402	41.474	41.095	472.232
S.D.	0.272	0.462	0.199	1.570	0.444	0.067	0.217	2.947
% R.S.D.	0.685	1.235	0.523	3.253	0.917	0.163	0.528	0.624

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	42.229	40.999	9.760	42.189	39.437	41.737	39.125	14149.145
S.D.	0.112	0.616	0.463	0.355	0.123	0.077	0.110	52.475
% R.S.D.	0.265	1.503	4.744	0.841	0.313	0.186	0.282	0.371

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.875	34.968	41.759	40.324	38.450
S.D.	0.062	0.169	0.069	0.126	1.261
% R.S.D.	0.147	0.483	0.166	0.312	3.278

Identity 1: CCV Identity 2: Quality Control 12:27 PM February 12, 1996
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	5.088	5.186	5.139	4.888	5.109	5.199	5.238	5.250
S.D.	0.012	0.019	0.019	0.010	0.014	0.005	0.019	0.024
% R.S.D.	0.232	0.372	0.373	0.207	0.269	0.095	0.368	0.456

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.137	5.107	5.123	5.132	5.159	5.152	5.141	10.108
S.D.	0.010	0.012	0.023	0.014	0.015	0.016	0.027	0.034
% R.S.D.	0.203	0.233	0.450	0.280	0.294	0.308	0.519	0.339

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.313	5.254	5.208	5.273	5.119	5.040	5.229	5.169
S.D.	0.009	0.015	0.021	0.029	0.018	0.009	0.012	0.017
% R.S.D.	0.174	0.281	0.407	0.553	0.353	0.187	0.228	0.323

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.197	5.249	5.019	5.058	5.079	5.118	5.170	5.058
S.D.	0.016	0.037	0.011	0.014	0.013	0.009	0.007	0.017
% R.S.D.	0.308	0.713	0.220	0.272	0.254	0.177	0.140	0.329

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.120	4.829	5.157	5.313	4.957
S.D.	0.015	0.020	0.009	0.009	0.025
% R.S.D.	0.302	0.409	0.170	0.164	0.512

Identity 1: CCB Identity 2: Quality Control 12:32 PM February 12, 1996
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	0.002	0.005	-0.006	0.002	-0.001	0.000
S.D.	0.001	0.000	0.007	0.004	0.006	0.000	0.001	0.000
% R.S.D.	44.783	94.373	277.253	66.305	106.599	0.200	89.001	179.983

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	0.002	-0.003	0.001	0.000	-0.003	0.002	0.129
S.D.	0.000	0.000	0.001	0.000	0.000	0.001	0.013	0.038
% R.S.D.	68.706	17.551	44.041	40.374	76.376	39.285	679.675	29.717

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.009	0.021	0.000	-0.009	-0.005	0.000	-0.004	0.006
S.D.	0.015	0.011	0.000	0.010	0.002	0.000	0.002	0.003
% R.S.D.	172.711	50.338	105.000	119.713	40.816	0.000	64.385	57.276

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	0.015	-0.001	-0.009	0.001	-0.000	0.003	0.079
S.D.	0.001	0.016	0.001	0.010	0.000	0.001	0.001	0.013
% R.S.D.	34.477	110.712	108.329	111.027	36.125	229.440	18.602	17.034

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.055	-0.001	0.000	0.031
S.D.	0.000	0.012	0.001	0.000	0.027
% R.S.D.	77.847	21.573	108.192	269.311	88.034

Identity 1: S95T003787_L Identity 2: .25-10-2-8 ml 12:36 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	16.840	1.998	4.094	5.732	80.089	-0.171	0.013	0.062
S.D.	0.320	0.024	1.701	0.980	1.186	0.773	0.065	0.082
% R.S.D.	1.898	1.213	41.565	17.093	1.481	450.879	490.369	131.514

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	2.097	1.677	0.431	5.577	0.390	34.863	0.501	21.210
S.D.	0.029	0.250	0.672	0.273	0.007	0.907	1.557	12.584
% R.S.D.	1.367	14.891	155.757	4.894	1.903	2.603	310.542	59.331

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	4.496	1.451	0.108	15.089	22.750	0.491	-0.972	420.314
S.D.	2.723	2.104	0.053	2.033	0.770	0.034	0.279	2.016
% R.S.D.	60.562	144.953	49.161	13.472	3.387	6.928	28.671	0.480

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.375	1.354	-0.077	-3.202	0.319	-0.001	0.573	17860.114
S.D.	0.321	1.043	0.189	2.852	0.121	0.113	0.070	134.072
% R.S.D.	85.631	77.049	244.198	89.082	37.904	16825.882	12.141	0.751

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.248	-11.543	0.077	0.002	4.228
S.D.	0.075	1.429	0.265	0.059	6.267
% R.S.D.	30.482	12.375	345.233	3903.109	148.250

Identity 1: S95T003787 Identity 2: .25-10 ml 12:39 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	11.731	1.974	0.573	1.067	79.968	0.067	-0.002	0.008
S.D.	0.163	0.002	0.080	0.014	0.202	0.058	0.007	0.013
% R.S.D.	1.388	0.118	13.939	1.347	0.253	86.690	382.115	156.509

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.173	1.606	0.003	5.010	1.442	35.554	0.265	4.188
S.D.	0.007	0.026	0.029	0.168	0.003	0.071	0.203	1.251
% R.S.D.	4.227	1.650	1131.833	3.353	0.206	0.199	76.717	29.874

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.286	0.111	0.069	16.016	23.743	0.194	-0.400	407.819
S.D.	0.296	0.287	0.007	0.199	0.219	0.003	0.091	2.879
% R.S.D.	103.584	258.755	10.127	1.245	0.923	1.750	22.874	0.706

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.148	-0.032	-0.001	0.148	0.035	0.152	0.181	17047.033
S.D.	0.021	0.470	0.018	0.384	0.013	0.037	0.017	84.125
% R.S.D.	14.375	1472.276	1247.706	259.787	36.335	24.352	9.560	0.493

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.269	-1.294	0.095	-0.009	0.409
S.D.	0.006	0.986	0.024	0.016	0.870
% R.S.D.	2.202	76.163	25.525	191.842	212.811

Identity 1: S95T003787_D Identity 2: .25-10 ml 12:41 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	10.157	1.878	0.823	1.101	76.938	0.068	-0.030	-0.021
S.D.	0.041	0.003	0.203	0.065	0.150	0.058	0.010	0.013
% R.S.D.	0.408	0.143	24.633	5.934	0.195	86.275	35.139	62.093

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.133	1.604	-0.150	4.806	1.340	33.937	-0.736	1.217
S.D.	0.013	0.052	0.030	0.087	0.001	0.069	0.074	1.319
% R.S.D.	9.819	3.252	19.803	1.812	0.111	0.203	10.061	108.369

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.277	1.665	0.049	21.066	22.266	0.204	-0.288	428.293
S.D.	0.335	0.240	0.005	0.406	0.427	0.003	0.112	0.403
% R.S.D.	26.218	14.422	9.185	1.926	1.920	1.665	38.682	0.094

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.135	0.990	-0.104	-0.383	0.015	0.130	0.127	13632.672
S.D.	0.017	0.287	0.015	0.270	0.004	0.043	0.007	13.888
% R.S.D.	12.229	29.008	14.692	70.444	28.667	33.106	5.424	0.102

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.249	-0.516	0.015	0.007	-4.144
S.D.	0.006	0.201	0.026	0.004	0.305
% R.S.D.	2.385	38.863	172.254	65.253	7.349

Identity 1: S95T003787_A Identity 2: .25sam+2sst5+8hno3 12:44 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	54.752	43.045	41.607	41.497	122.968	41.273	41.337	38.773
S.D.	0.242	0.155	0.865	0.037	0.344	0.101	0.130	0.136
% R.S.D.	0.442	0.361	2.079	0.090	0.280	0.246	0.316	0.352

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	41.340	42.286	40.910	46.353	42.056	77.665	40.210	84.237
S.D.	0.022	0.025	0.134	0.308	0.159	0.253	0.101	1.125
% R.S.D.	0.054	0.060	0.327	0.665	0.378	0.326	0.250	1.335

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	39.427	42.207	40.946	60.048	65.199	40.108	41.363	463.772
S.D.	0.213	0.312	0.157	0.567	0.118	0.126	0.059	2.011
% R.S.D.	0.541	0.740	0.384	0.944	0.181	0.313	0.143	0.434

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.178	42.138	12.491	39.957	40.467	40.913	40.343	17672.548
S.D.	0.106	0.446	0.779	0.403	0.169	0.247	0.080	39.878
% R.S.D.	0.257	1.058	6.232	1.008	0.419	0.604	0.199	0.226

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.420	38.428	41.347	41.274	38.068
S.D.	0.144	1.110	0.090	0.214	0.362
% R.S.D.	0.347	2.889	0.218	0.520	0.951

Identity 1: S95T003788_L Identity 2: .25-10-2-8 ml 12:47 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	10.670	11.047	2.886	8.369	59.121	-0.174	-0.006	-0.034
S.D.	0.080	0.020	1.642	0.149	1.604	0.293	0.050	0.000
% R.S.D.	0.750	0.182	56.888	1.782	2.712	168.919	910.715	0.008

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.111	5.332	0.019	19.720	4.750	9.037	-1.266	35.593
S.D.	0.092	0.325	0.143	0.288	0.022	0.239	1.472	4.892
% R.S.D.	82.737	6.095	752.167	1.461	0.469	2.639	116.223	13.745

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-1.341	4.015	0.216	7.924	9.779	1.002	-1.946	445.987
S.D.	0.421	0.155	0.011	1.672	0.174	0.017	0.496	1.545
% R.S.D.	31.406	3.852	5.172	21.100	1.776	1.698	25.470	0.346

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.918	6.443	0.214	-2.694	0.172	-0.003	0.061	17282.041
S.D.	0.236	0.794	0.069	2.226	0.020	0.074	0.071	86.453
% R.S.D.	25.694	12.327	32.150	82.625	11.656	2127.747	116.918	0.500

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.259	-9.431	0.118	-0.022	4.063
S.D.	0.001	3.002	0.079	0.022	2.954
% R.S.D.	0.218	31.828	66.777	102.365	72.710

Identity 1: S95T003788 Identity 2: .25-10 ml 12:50 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	8.376	10.940	1.496	1.160	59.683	0.167	0.005	-0.002
S.D.	0.118	0.071	0.330	0.146	0.169	0.117	0.032	0.026
% R.S.D.	1.413	0.648	22.095	12.546	0.283	70.033	675.876	1290.589

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.143	5.558	0.163	19.985	5.387	9.328	0.355	18.776
S.D.	0.021	0.056	0.078	0.252	0.031	0.126	0.481	4.169
% R.S.D.	14.610	1.011	48.124	1.263	0.578	1.354	135.366	22.206

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.257	0.081	0.232	7.538	10.597	0.731	-0.619	430.266
S.D.	0.929	0.764	0.016	0.359	0.089	0.003	0.121	5.583
% R.S.D.	361.427	947.141	7.094	4.762	0.842	0.466	19.488	1.298

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.095	-0.320	0.004	0.501	0.073	0.002	0.072	16386.505
S.D.	0.012	0.323	0.043	0.271	0.019	0.030	0.037	156.722
% R.S.D.	13.063	100.851	979.135	54.086	26.558	1790.871	52.126	0.956

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.323	-0.287	0.051	0.002	0.179
S.D.	0.005	1.283	0.047	0.010	1.434
% R.S.D.	1.646	446.891	92.296	455.457	801.770

Identity 1: S95T003788_D Identity 2: .25-10 ml 12:53 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	6.701	10.258	1.015	2.277	56.666	0.133	-0.004	0.007
S.D.	0.019	0.046	0.346	0.164	0.124	0.058	0.016	0.009
% R.S.D.	0.285	0.446	34.126	7.222	0.218	43.752	423.977	132.900

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.139	5.173	0.027	19.075	4.936	8.979	0.537	17.108
S.D.	0.014	0.092	0.028	0.102	0.026	0.070	0.222	2.498
% R.S.D.	10.134	1.771	102.853	0.533	0.521	0.782	41.434	14.602

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.361	0.347	0.208	6.317	10.084	0.723	-0.232	424.810
S.D.	0.736	0.349	0.005	0.183	0.261	0.003	0.051	3.386
% R.S.D.	203.944	100.631	2.424	2.903	2.585	0.471	22.040	0.797

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.077	0.345	0.020	0.039	0.063	0.036	0.137	12893.500
S.D.	0.026	0.092	0.049	0.179	0.010	0.018	0.027	86.535
% R.S.D.	34.248	26.576	244.252	458.078	15.950	49.582	20.096	0.671

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.337	0.363	0.045	0.010	-0.592
S.D.	0.000	0.927	0.016	0.009	0.274
% R.S.D.	0.082	255.541	35.148	94.328	46.306

Identity 1: S95T003788_A Identity 2: .25sam+2sst5+8hno3 12:55 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	49.812	51.120	41.673	41.079	101.214	41.340	40.304	37.739
S.D.	0.194	0.299	0.493	0.121	0.417	0.059	0.199	0.225
% R.S.D.	0.388	0.586	1.183	0.295	0.412	0.142	0.493	0.595

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	41.247	46.042	39.972	60.922	45.066	50.733	40.085	90.508
S.D.	0.116	0.060	0.355	0.465	0.222	0.246	0.566	2.034
% R.S.D.	0.281	0.130	0.887	0.764	0.493	0.485	1.411	2.247

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.702	39.781	40.024	49.788	51.317	40.472	40.861	474.515
S.D.	0.298	0.328	0.245	0.311	0.235	0.124	0.506	2.578
% R.S.D.	0.731	0.824	0.611	0.625	0.458	0.305	1.239	0.543

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.842	40.379	8.853	41.495	39.747	40.376	39.872	16712.248
S.D.	0.201	0.263	0.124	0.695	0.165	0.155	0.152	63.965
% R.S.D.	0.493	0.652	1.398	1.674	0.414	0.383	0.382	0.383

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	41.192	39.947	40.923	40.536	37.785
S.D.	0.107	0.842	0.086	0.281	1.210
% R.S.D.	0.260	2.108	0.210	0.694	3.203

Identity 1: CCV Identity 2: Quality Control 12:59 PM February 12, 1996
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	4.953	4.985	5.029	4.813	4.970	5.145	5.028	4.978
S.D.	0.020	0.026	0.017	0.008	0.028	0.015	0.029	0.057
% R.S.D.	0.411	0.514	0.332	0.166	0.564	0.288	0.576	1.154

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.141	5.066	5.003	5.081	4.994	5.123	4.992	9.595
S.D.	0.012	0.010	0.010	0.011	0.021	0.009	0.018	0.055
% R.S.D.	0.227	0.207	0.210	0.214	0.411	0.177	0.359	0.568

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.080	5.024	4.984	5.087	5.038	5.009	5.123	4.946
S.D.	0.032	0.023	0.027	0.041	0.005	0.018	0.032	0.056
% R.S.D.	0.637	0.456	0.545	0.803	0.091	0.367	0.630	1.131

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.121	5.058	5.001	5.050	4.943	5.062	5.076	5.128
S.D.	0.021	0.030	0.014	0.018	0.022	0.010	0.013	0.080
% R.S.D.	0.403	0.588	0.278	0.350	0.442	0.189	0.258	1.556

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.091	4.755	5.084	5.168	4.902
S.D.	0.012	0.027	0.015	0.021	0.018
% R.S.D.	0.235	0.570	0.302	0.414	0.374

Identity 1: CCB Identity 2: Quality Control 1:03 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.000	-0.000	0.005	0.004	-0.008	-0.002	-0.002	-0.001
S.D.	0.002	0.000	0.012	0.005	0.012	0.002	0.001	0.000
% R.S.D.	613.890	89.214	222.668	115.253	145.111	99.888	41.255	47.186

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	0.000	0.000	0.002	0.000	-0.004	-0.005	0.033
S.D.	0.001	0.002	0.001	0.002	0.000	0.001	0.002	0.057
% R.S.D.	268.563	3524.139	172.994	104.277	17.321	21.543	30.531	173.810

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.026	0.011	-0.000	-0.024	-0.002	-0.000	-0.013	-0.003
S.D.	0.015	0.007	0.000	0.006	0.005	0.000	0.005	0.002
% R.S.D.	55.941	61.110	62.231	23.710	213.582	0.000	40.630	86.633

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	-0.003	0.004	-0.039	0.000	-0.001	0.002	0.025
S.D.	0.002	0.002	0.001	0.004	0.001	0.000	0.000	0.016
% R.S.D.	37.791	70.771	25.631	10.266	866.329	20.506	25.266	64.447

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.022	-0.003	-0.000	0.027
S.D.	0.000	0.008	0.001	0.000	0.026
% R.S.D.	321.920	39.239	43.160	181.449	95.607

Identity 1: S95T003789_L Identity 2: .25-10-2-8 ml 1:06 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	5.234	0.714	0.782	1.109	39.344	0.509	0.084	0.038
S.D.	0.487	0.040	1.404	0.824	1.238	0.505	0.166	0.104
% R.S.D.	9.313	5.648	179.631	74.357	3.146	99.225	196.948	270.901

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.123	0.582	-1.183	1.750	-0.604	2.302	1.339	-11.503
S.D.	0.021	0.487	0.302	0.448	0.015	0.553	1.114	23.431
% R.S.D.	17.140	83.551	25.560	25.609	2.457	24.030	83.210	203.699

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	3.178	-0.365	0.080	3.685	3.463	0.373	-2.325	487.787
S.D.	5.518	4.321	0.108	2.922	0.248	0.017	0.591	5.501
% R.S.D.	173.635	1182.435	134.984	79.292	7.176	4.558	25.411	1.128

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.863	-0.223	0.179	-3.058	-0.104	-0.072	0.294	18313.135
S.D.	0.261	2.414	0.383	0.714	0.166	0.049	0.134	217.850
% R.S.D.	30.170	1081.915	214.302	23.334	160.327	68.973	45.733	1.190

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.152	-8.406	0.100	-0.041	-12.380
S.D.	0.032	5.218	0.383	0.021	10.441
% R.S.D.	20.828	62.078	382.012	51.558	84.339

Identity 1: S95T003789 Identity 2: .25-10 ml 1:09 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	5.707	0.663	0.224	1.510	37.627	0.034	0.007	0.009
S.D.	0.094	0.003	0.456	0.065	0.282	0.059	0.018	0.017
% R.S.D.	1.649	0.406	203.386	4.278	0.750	173.041	259.631	196.827

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.033	0.570	-0.051	1.636	0.371	2.744	0.215	-1.292
S.D.	0.010	0.041	0.079	0.042	0.004	0.135	0.497	3.362
% R.S.D.	31.685	7.125	154.617	2.580	1.058	4.903	231.109	260.186

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.358	1.201	0.035	2.744	5.161	0.128	-0.122	467.900
S.D.	0.748	0.624	0.016	0.261	0.138	0.009	0.143	3.202
% R.S.D.	209.219	51.991	46.505	9.522	2.675	7.050	117.277	0.684

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.180	0.475	0.004	-0.302	-0.008	0.039	0.156	17344.436
S.D.	0.026	0.582	0.047	0.231	0.012	0.035	0.041	91.203
% R.S.D.	14.536	122.610	1224.925	76.324	138.796	89.919	26.531	0.526

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.107	0.395	0.036	0.002	1.196
S.D.	0.006	1.190	0.002	0.004	1.228
% R.S.D.	5.565	301.404	5.883	174.704	102.623

Identity 1: S95T003789_D Identity 2: .25-10 ml 1:12 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	4.958	0.688	0.183	0.999	39.259	-0.034	-0.001	0.005
S.D.	0.033	0.003	0.218	0.161	0.085	0.059	0.018	0.010
% R.S.D.	0.660	0.391	119.345	16.102	0.216	173.559	1517.965	210.874

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.070	0.522	0.034	1.744	0.162	2.956	0.347	0.556
S.D.	0.019	0.077	0.051	0.056	0.006	0.008	0.409	1.624
% R.S.D.	27.719	14.664	149.278	3.183	3.995	0.280	117.791	292.179

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.520	0.666	0.028	2.931	5.364	0.102	-0.238	463.060
S.D.	0.622	0.521	0.011	0.379	0.124	0.006	0.150	4.227
% R.S.D.	119.539	78.203	37.517	12.914	2.306	5.769	63.119	0.913

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.097	-1.035	-0.008	0.076	-0.001	-0.006	0.134	13862.561
S.D.	0.053	0.236	0.033	0.570	0.018	0.010	0.040	83.775
% R.S.D.	54.452	22.856	418.732	751.363	1656.649	161.474	29.807	0.604

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.133	0.163	0.090	0.008	0.351
S.D.	0.010	0.762	0.032	0.009	1.121
% R.S.D.	7.378	468.011	35.423	117.996	318.856

Identity 1: S95T003789_A Identity 2: .25sam+2sst5+8hno3 1:15 PM February 12, 1996

Task name : OPTIMA

WHC-SD-WM-DP-164, REV. 1

Sample Weight : 1.0000 Solution Volume : 41.00

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	45.453	40.393	40.321	40.210	78.358	41.071	39.847	37.282
S.D.	0.205	0.215	0.355	0.034	0.393	0.102	0.242	0.328
% R.S.D.	0.451	0.533	0.881	0.084	0.501	0.247	0.607	0.879

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.943	40.664	39.661	41.683	39.456	43.795	39.008	78.038
S.D.	0.142	0.150	0.127	0.259	0.177	0.146	0.169	1.388
% R.S.D.	0.347	0.368	0.319	0.622	0.448	0.333	0.432	1.778

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	40.322	39.740	39.451	42.563	45.693	39.707	39.954	511.123
S.D.	0.410	0.118	0.215	0.887	0.355	0.093	0.380	4.526
% R.S.D.	1.017	0.298	0.546	2.084	0.777	0.234	0.951	0.885

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.795	40.232	3.829	40.038	39.504	40.169	39.318	17385.783
S.D.	0.112	0.753	0.150	0.967	0.127	0.175	0.213	121.702
% R.S.D.	0.276	1.870	3.922	2.415	0.322	0.436	0.541	0.700

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	40.688	34.657	40.688	40.201	39.180
S.D.	0.116	0.427	0.110	0.184	0.969
% R.S.D.	0.285	1.233	0.271	0.458	2.474

Identity 1: S95T003790_L Identity 2: .25-10-2-8 ml 1:18 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	6.657	0.939	2.125	1.474	49.037	-1.692	-0.397	-0.182
S.D.	0.087	0.018	1.313	0.136	0.322	0.774	0.074	0.033
% R.S.D.	1.304	1.894	61.761	9.227	0.657	45.776	18.562	18.223

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.072	0.634	-0.584	2.560	-0.634	2.986	0.919	9.460
S.D.	0.057	0.236	0.002	0.752	0.022	0.220	0.933	4.076
% R.S.D.	79.533	37.220	0.343	29.370	3.511	7.376	101.467	43.086

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-5.046	7.685	-0.108	-2.044	6.025	0.432	-1.360	501.133
S.D.	0.236	0.750	0.006	0.822	0.840	0.017	0.822	3.529
% R.S.D.	4.679	9.763	5.172	40.230	13.950	3.937	60.454	0.704

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.785	2.641	-0.509	-6.639	0.010	-0.256	0.488	14146.958
S.D.	0.131	1.119	0.092	0.541	0.099	0.128	0.247	81.752
% R.S.D.	16.707	42.362	18.036	8.152	979.105	49.912	50.619	0.578

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.066	-6.474	-0.374	-0.103	-4.223
S.D.	0.050	5.304	0.051	0.023	4.174
% R.S.D.	74.969	81.923	13.759	22.299	98.843

Identity 1: S95T003790 Identity 2: .25-10 ml 1:22 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	6.811	1.014	0.732	2.032	50.849	-0.102	0.045	0.021
S.D.	0.091	0.005	0.407	0.127	0.055	0.102	0.015	0.016
% R.S.D.	1.338	0.478	55.628	6.247	0.107	99.971	34.442	75.423

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.022	0.665	0.051	2.555	0.386	3.629	1.218	1.365
S.D.	0.012	0.077	0.128	0.164	0.004	0.049	0.290	2.466
% R.S.D.	53.716	11.524	249.141	6.426	1.016	1.349	23.830	180.579

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.267	-0.109	0.051	1.112	6.858	0.141	-0.033	493.829
S.D.	0.497	0.361	0.010	0.089	0.162	0.003	0.070	2.718
% R.S.D.	39.223	330.845	19.708	8.038	2.366	2.406	209.499	0.550

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.067	-0.775	0.094	-0.122	0.002	0.056	0.057	13800.529
S.D.	0.029	0.372	0.025	0.223	0.024	0.013	0.015	83.379
% R.S.D.	42.528	48.029	26.062	182.960	1333.933	23.054	26.953	0.604

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.176	-0.352	0.110	-0.010	0.791
S.D.	0.012	0.198	0.021	0.008	0.934
% R.S.D.	6.535	56.285	18.823	72.313	118.064

Identity 1: S95T003790_D Identity 2: .25-10 ml 1:25 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	7.970	1.092	0.056	0.371	48.923	-0.101	-0.011	-0.000
S.D.	0.064	0.004	0.264	0.134	0.112	0.101	0.017	0.012
% R.S.D.	0.808	0.369	469.896	36.014	0.228	100.640	150.562	13540.322

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.022	0.709	-0.086	2.565	0.404	3.855	-0.012	-4.293
S.D.	0.023	0.068	0.078	0.032	0.001	0.093	0.233	1.594
% R.S.D.	100.487	9.541	90.682	1.261	0.367	2.425	1987.408	37.136

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.114	0.736	0.035	0.898	7.261	0.120	-0.471	482.536
S.D.	0.646	0.324	0.007	0.136	0.114	0.000	0.283	6.428
% R.S.D.	568.675	43.942	20.708	15.208	1.569	0.000	60.009	1.332

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.138	-0.123	-0.037	-0.377	-0.039	-0.009	0.096	14449.537
S.D.	0.041	0.350	0.029	0.408	0.015	0.037	0.041	180.913
% R.S.D.	29.559	284.108	78.083	108.376	37.539	403.123	42.242	1.252

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.160	-0.241	0.111	0.002	9.068
S.D.	0.006	0.688	0.049	0.005	1.415
% R.S.D.	3.521	286.028	44.415	238.614	15.608

Identity 1: S95T003790_A Identity 2: .25sam+2sst5+8hno3 1:28 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	46.573	40.843	40.421	40.091	90.559	41.139	40.144	37.880
S.D.	0.121	0.234	0.462	0.044	0.161	0.155	0.244	0.479
% R.S.D.	0.259	0.574	1.142	0.110	0.178	0.377	0.609	1.265

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.793	40.832	40.048	42.828	39.804	44.725	40.365	76.773
S.D.	0.099	0.102	0.181	0.120	0.212	0.073	0.866	1.560
% R.S.D.	0.243	0.250	0.453	0.280	0.532	0.163	2.147	2.033

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	41.452	39.708	39.666	40.696	46.788	39.572	40.223	534.940
S.D.	0.260	0.254	0.250	1.113	0.499	0.078	0.578	6.303
% R.S.D.	0.627	0.640	0.630	2.734	1.066	0.196	1.437	1.178

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.689	40.148	3.967	40.449	39.456	40.195	39.637	13940.674
S.D.	0.224	1.126	0.209	0.337	0.178	0.128	0.201	142.226
% R.S.D.	0.551	2.804	5.262	0.834	0.452	0.319	0.508	1.020

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	40.644	36.226	40.806	40.459	39.394
S.D.	0.036	0.795	0.128	0.220	1.394
% R.S.D.	0.089	2.195	0.314	0.544	3.538

Identity 1: ICSA Identity 2: Quality Control 1:33 PM February 12, 1996
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	0.008	0.002	-0.006	0.002	196.335	0.001	-0.001	-0.001
S.D.	0.003	0.000	0.011	0.004	1.596	0.001	0.001	0.001
% R.S.D.	32.279	11.329	183.830	224.270	0.813	102.984	118.324	112.758

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.004	0.008	-0.002	97.287	99.975	0.003	0.022	0.066
S.D.	0.000	0.001	0.002	0.440	0.658	0.002	0.011	0.098
% R.S.D.	5.924	15.648	117.008	0.452	0.659	62.477	48.427	148.772

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.011	0.021	0.003	0.022	0.013	101.527	-0.007	189.153
S.D.	0.019	0.016	0.000	0.004	0.006	0.340	0.004	2.658
% R.S.D.	168.513	77.119	16.057	16.004	48.954	0.335	55.921	1.405

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	0.021	0.005	-0.033	0.001	-0.000	0.018	0.284
S.D.	0.000	0.023	0.002	0.010	0.001	0.001	0.001	0.026
% R.S.D.	5.498	108.684	28.027	30.966	63.212	832.093	6.658	9.055

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.003	-0.037	-0.001	0.002	0.003
S.D.	0.001	0.019	0.001	0.000	0.046
% R.S.D.	33.568	50.910	64.730	4.825	1585.024

Identity 1: ICSAB Identity 2: Quality Control 1:36 PM February 12, 1996

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	-0.000	0.001	-0.023	-0.007	199.942	0.495	0.503	0.975
S.D.	0.001	0.000	0.004	0.003	0.478	0.001	0.002	0.012
% R.S.D.	1237.388	3.797	16.357	52.143	0.239	0.290	0.316	1.183

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.010	0.987	-0.000	98.935	101.704	0.505	-0.004	-0.106
S.D.	0.002	0.005	0.001	0.204	0.255	0.006	0.019	0.034
% R.S.D.	0.194	0.504	219.795	0.206	0.251	1.138	520.930	32.312

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.059	0.034	0.514	0.025	-0.007	101.092	0.001	194.057
S.D.	0.012	0.008	0.002	0.009	0.010	0.467	0.004	1.839
% R.S.D.	20.057	25.153	0.344	35.962	136.050	0.462	353.122	0.948

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	0.037	1.025	0.959	-0.000	1.008	0.016	0.181
S.D.	0.000	0.006	0.002	0.019	0.000	0.002	0.001	0.006
% R.S.D.	5.653	15.974	0.186	1.930	188.093	0.206	3.234	3.393

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.507	-0.028	0.498	0.509	-0.080
S.D.	0.001	0.013	0.001	0.001	0.020
% R.S.D.	0.182	45.639	0.278	0.220	25.015

Identity 1: CCV Identity 2: Quality Control 1:39 PM February 12, 1996
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	5.010	5.092	5.041	4.813	5.027	5.135	5.141	5.112
S.D.	0.014	0.018	0.019	0.006	0.014	0.007	0.028	0.043
% R.S.D.	0.280	0.358	0.372	0.117	0.277	0.128	0.540	0.850

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.078	5.051	5.062	5.096	5.077	5.083	5.138	9.875
S.D.	0.004	0.010	0.020	0.027	0.022	0.006	0.053	0.044
% R.S.D.	0.083	0.190	0.385	0.521	0.434	0.123	1.041	0.441

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.228	5.138	5.110	5.062	5.036	4.980	5.138	5.081
S.D.	0.013	0.026	0.023	0.081	0.040	0.003	0.007	0.040
% R.S.D.	0.253	0.510	0.458	1.594	0.802	0.061	0.144	0.785

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.118	5.202	4.962	5.047	4.998	5.056	5.103	5.128
S.D.	0.007	0.014	0.012	0.016	0.013	0.007	0.026	0.040
% R.S.D.	0.140	0.277	0.243	0.308	0.254	0.138	0.512	0.775

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.066	4.810	5.094	5.242	4.952
S.D.	0.010	0.090	0.013	0.019	0.007
% R.S.D.	0.190	1.862	0.263	0.369	0.144

Identity 1: CCB Identity 2: Quality Control 1:42 PM February 12, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	-0.002	-0.000	0.002	-0.003	-0.004	0.002	-0.001	-0.001
S.D.	0.002	0.000	0.010	0.004	0.007	0.001	0.001	0.000
% R.S.D.	118.531	91.652	417.068	125.927	161.859	85.918	54.198	61.640

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	-0.000	0.000	-0.000	0.001	-0.004	-0.017	-0.093
S.D.	0.000	0.000	0.004	0.000	0.000	0.001	0.007	0.080
% R.S.D.	37.930	65.433	977.579	130.921	8.381	12.418	39.983	85.715

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.033	-0.012	-0.001	-0.008	-0.009	0.000	-0.007	0.006
S.D.	0.021	0.015	0.000	0.005	0.002	0.000	0.003	0.007
% R.S.D.	64.020	127.062	59.540	70.886	22.427	0.000	38.508	114.537

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	0.008	0.001	-0.018	-0.000	0.000	0.003	0.107
S.D.	0.000	0.004	0.001	0.009	0.001	0.001	0.001	0.027
% R.S.D.	12.619	43.994	233.105	50.239	25819.327	151.754	16.552	25.192

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	0.036	-0.002	-0.000	-0.030
S.D.	0.000	0.028	0.001	0.000	0.043
% R.S.D.	86.945	77.710	62.849	59.043	141.323

DK Lab
02-12-96

FILE # 08602238.TXT

LABCORE Data Entry Template for Worklist# 5690

Analyst: S. Goeckle **Instrument:** ~~ICP01~~ ICP02 2-25-96 **Book#** 518484

Method: LA-505-~~151~~ 161 2-29-96 Rev/Mod B-0

Worklist Comment: ICP BY-104 (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	S96T000604	0	A	@ICP-A01	SOLID	95000180	BY104 ROTARY

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	S96T000604	0	A	@ICP-A01	SOLID		
9	SPK-PREDIG	S96T000604	0	A	@ICP-A01	SOLID		
10	CCV				@ICP-QC	QC		
11	CCB				@ICP-QC	QC		
12	SAMPLE	S96T000605	0	A	@ICP-A01	SOLID	95000180	BY104 ROTARY

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# 5690

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
13	DUP	S96T000605	0	A	@ICP-A01	SOLID		
14	SAMPLE	S96T000606	0	A	@ICP-A01	SOLID	95000180	BY104 ROTARY

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	S96T000606	0	A	@ICP-A01	SOLID		
16	SAMPLE	S96T000607	0	A	@ICP-A01	SOLID	95000180	BY104 ROTARY

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

17	DUP	S96T000607	0	A	@ICP-A01	SOLID		
18	CCV				@ICP-QC	QC		
19	CCB				@ICP-QC	QC		
20	SAMPLE	S96T000608	0	A	@ICP-A01	SOLID	95000180	BY104 ROTARY

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

21	DUP	S96T000608	0	A	@ICP-A01	SOLID		
22	SAMPLE	S96T000609	0	A	@ICP-A01	SOLID	95000180	BY104 ROTARY

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 ,

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 5690

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
					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			
23	DUP	S96T000609	0	A	@ICP-A01	SOLID		
24	ICSA				@ICP-QC	QC		
25	ICSAB				@ICP-QC	QC		
26	CCV				@ICP-QC	QC		
27	CCB				@ICP-QC	QC		

Final page for worklist # 5690

Analyst Signature	Date
[signature]	2-28-96
	D.F.
PREPSTDTJA	1
PREPBLKTJA	1
S96T000604	2.5
S96T000604_D	2.5
S96T000604-S	2.5
S96T000605	2.5
S96T000605-D	2.5
S96T000606	2
S96T000606_D	2
S96T000607	2
S96T000607_D	2
S96T000608	2
S96T000608_D	2
S96T000609	2
S96T000609-D	2

Reviewed by:

Analyst Signature	Date
[signature]	3/5/96

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	960229B	ICP2	02/29/96	13:35	BJG	Q	CONC
2	ICB	960229B	ICP2	02/29/96	13:38	BJG	Q	CONC
3	ICSA	960229B	ICP2	02/29/96	13:42	BJG	Q	CONC
4	ICSAB	960229B	ICP2	02/29/96	13:45	BJG	Q	CONC
5	PREPSTDTJA	960229B	ICP2	02/29/96	13:48	BJG	S	CONC
6	PREPBLKTJA	960229B	ICP2	02/29/96	13:52	BJG	S	CONC
7	S96T000604	960229B	ICP2	02/29/96	14:01	BJG	S	CONC
8	S96T000604_D	960229B	ICP2	02/29/96	14:05	BJG	S	CONC
9	S96T000604_S	960229B	ICP2	02/29/96	14:08	BJG	S	CONC
10	CCV	960229B	ICP2	02/29/96	14:11	BJG	Q	CONC
11	CCB	960229B	ICP2	02/29/96	14:14	BJG	Q	CONC
12	S96T000605	960229B	ICP2	02/29/96	14:19	BJG	S	CONC
13	S96T000605_D	960229B	ICP2	02/29/96	14:23	BJG	S	CONC
14	S96T000606	960229B	ICP2	02/29/96	14:27	BJG	S	CONC
15	S96T000606_D	960229B	ICP2	02/29/96	14:30	BJG	S	CONC
16	S96T000607	960229B	ICP2	02/29/96	14:39	BJG	S	CONC
17	S96T000607_D	960229B	ICP2	02/29/96	14:43	BJG	S	CONC
18	CCV	960229B	ICP2	02/29/96	14:46	BJG	Q	CONC
19	CCB	960229B	ICP2	02/29/96	14:50	BJG	Q	CONC
20	S96T000608	960229B	ICP2	02/29/96	14:53	BJG	S	CONC
21	S96T000608_D	960229B	ICP2	02/29/96	14:56	BJG	S	CONC
22	S96T000609	960229B	ICP2	02/29/96	14:59	BJG	S	CONC
23	S96T000609_D	960229B	ICP2	02/29/96	15:02	BJG	S	CONC
24	ICSA	960229B	ICP2	02/29/96	15:05	BJG	Q	CONC
25	ICSAB	960229B	ICP2	02/29/96	15:08	BJG	Q	CONC
26	CCV	960229B	ICP2	02/29/96	15:11	BJG	Q	CONC
27	CCB	960229B	ICP2	02/29/96	15:14	BJG	Q	CONC

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 959 TO 962.

2-29-96
64-104 AND 1 digest
S96T000604-09

WHC-SD-WM-DP-164, REV. 1

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	5.048	4.974	5.255	5.090	5.133	5.232
2	ICB	-.0004	-.0007	.0017	.0055	-.0001	.0001
3	ICSA	-.0001	240.3	-.0768	.0049	.0023	.0003
4	ICSAB	.9791	239.9	-.0501	.0061	.4952	.4924
5	PREPSTDTJA	.9447	4.663	4.934	4.735	4.824	5.251
6	PREPBLKTJA	-.0005	.1037	-.0010	.5770	.0011	.0001
7	S96T000604	.0875	92.42	-.0985	.1214	.0298	.0016
8	S96T000604_D	.0873	87.65	-.0421	.1077	.0290	.0019
9	S96T000604_S	.9520	97.24	4.616	4.417	4.483	4.823
10	CCV	5.064	4.949	5.276	5.113	5.098	5.247
11	CCB	.0008	.0043	.0022	.0008	-.0002	.0002
12	S96T000605	.0755	80.48	-.0634	.4484	.0317	.0017
13	S96T000605_D	.0711	80.35	-.0158	.4242	.0317	.0018
14	S96T000606	.0789	99.85	-.0654	.2660	.0209	.0018
15	S96T000606_D	.0757	77.75	-.0674	.0826	.0189	.0013
16	S96T000607	.0910	90.33	-.0471	.0774	.0358	.0018
17	S96T000607_D	.1046	81.07	-.0942	.0805	.0288	.0017
18	CCV	5.083	4.968	5.327	5.083	5.133	5.286
19	CCB	-.0000	.0064	-.0009	.0059	-.0002	.0003
20	S96T000608	.0960	107.5	-.0933	.1291	.0546	.0325
21	S96T000608_D	.0836	94.76	-.0740	.1107	.0265	.0019
22	S96T000609	.0691	69.94	-.0644	.0775	.0191	.0013
23	S96T000609_D	.0785	84.84	-.1213	.1267	.0241	.0017
24	ICSA	-.0008	240.6	-.0342	-.0005	.0023	.0002
25	ICSAB	.9814	239.9	-.0339	.0009	.4874	.4867
26	CCV	5.014	4.884	5.209	5.018	5.009	5.157
27	CCB	-.0009	.0012	.0026	.0017	-.0002	.0001

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.121	5.057	5.093	5.255	5.099	5.137
2	ICB	-.0189	-.0000	-.0008	.0003	-.0046	-.0007
3	ICSA	.0061	246.5	-.0016	.0011	-.0020	.0016
4	ICSAB	.0340	249.9	.9669	.0144	.4733	.4878
5	PREPSTDTJA	4.733	4.800	4.707	4.984	4.820	4.761
6	PREPBLKTJA	.0430	.1072	-.0010	-.0113	.0002	.0014
7	S96T000604	.1504	2.249	.0490	.0166	.0320	7.778
8	S96T000604_D	.1717	2.307	.0474	-.0012	.0320	7.369
9	S96T000604_S	4.585	6.505	4.421	4.644	4.494	12.08
10	CCV	5.170	5.200	5.114	5.200	5.137	5.174
11	CCB	-.0040	-.0005	-.0003	-.0082	-.0024	-.0007
12	S96T000605	.1262	2.426	.0468	-.0088	.0336	5.592
13	S96T000605_D	.2171	2.446	.0504	-.0189	.0285	5.614
14	S96T000606	.1374	1.644	.0402	.0131	.0241	7.893
15	S96T000606_D	.0470	1.588	.0349	.0033	.0198	6.858
16	S96T000607	.2006	2.100	.0529	.0013	.0363	12.01
17	S96T000607_D	.1107	1.958	.0435	.0165	.0296	11.36
18	CCV	5.213	5.212	5.148	5.239	5.166	5.202
19	CCB	.0385	.0006	-.0005	-.0045	-.0023	-.0005
20	S96T000608	.2039	1.807	.0673	.0143	.0529	14.03
21	S96T000608_D	.1241	1.714	.0405	.0127	.0285	13.69
22	S96T000609	.1702	1.857	.0317	-.0124	.0262	11.17

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
23	S96T000609_D	.1903	1.680	.0405	.0038	.0300	14.60
24	ICSA	.0205	252.3	-.0020	.0102	-.0009	.0005
25	ICSAB	.0102	250.3	.9529	.0041	.4672	.4835
26	CCV	5.124	5.140	5.012	5.102	5.042	5.091
27	CCB	.0161	-.0012	-.0002	-.0086	-.0023	-.0011

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	5.223	-.0019	5.128	4.876	5.142	5.151
2	ICB	-.0015	-.0013	-.0008	-.1726	-.0001	-.0013
3	ICSA	-.0125	-.0170	96.15	-.1771	-.0058	.0017
4	ICSAB	.4834	-.0214	96.26	-.0165	-.0055	.9983
5	PREPSTDTJA	4.678	-.0020	4.792	4.757	4.860	4.859
6	PREPBLKTJA	.0235	-.0014	.0939	.0335	-.0009	-.0005
7	S96T000604	.0195	.0005	3.233	16.16	.0121	.0002
8	S96T000604_D	.0175	-.0010	3.223	14.75	.0099	-.0013
9	S96T000604_S	4.328	-.0041	7.244	20.14	4.552	4.560
10	CCV	5.183	-.0012	5.154	4.805	5.105	5.096
11	CCB	-.0011	-.0003	-.0007	-.0992	-.0003	-.0001
12	S96T000605	.0159	-.0032	3.232	12.93	.0084	-.0024
13	S96T000605_D	.0186	-.0023	3.239	12.86	.0057	-.0016
14	S96T000606	.0392	-.0010	2.239	15.56	.0090	-.0008
15	S96T000606_D	.0361	-.0010	2.077	11.92	.0081	-.0005
16	S96T000607	.0158	-.0014	3.388	14.63	.0150	-.0008
17	S96T000607_D	.0159	-.0028	2.873	13.06	.0130	-.0013
18	CCV	5.213	-.0013	5.195	4.578	5.149	5.092
19	CCB	-.0004	-.0005	-.0010	-.0172	-.0003	-.0001
20	S96T000608	.0438	-.0034	2.657	17.28	.0372	.0267
21	S96T000608_D	.0164	-.0014	2.671	15.61	.0117	-.0015
22	S96T000609	.0150	-.0017	2.031	11.25	.0049	-.0012
23	S96T000609_D	.0146	-.0018	2.647	13.59	.0080	-.0013
24	ICSA	-.0136	-.0298	96.46	-.2075	-.0057	.0032
25	ICSAB	.4788	-.0257	95.67	.0347	-.0056	.9978
26	CCV	5.106	-.0003	5.062	4.729	5.013	5.044
27	CCB	-.0018	-.0001	-.0009	-.1897	-.0014	.0001

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	4.940	5.013	5.114	5.074	5.191	5.038
2	ICB	-.0063	-.0003	.0036	-.0093	-.0032	.0004
3	ICSA	246.1	-.0076	-.0119	199.6	.0050	-.0063
4	ICSAB	245.3	.4560	-.0138	198.8	.0018	.9407
5	PREPSTDTJA	4.500	4.654	4.451	4.914	4.808	4.844
6	PREPBLKTJA	.0193	.0009	.0016	1.054	-.0018	.0252
7	S96T000604	.1365	.1708	.1313	1001.	.0215	.9349
8	S96T000604_D	.1190	.1674	.1260	1095.	.0151	.9113
9	S96T000604_S	4.304	4.399	4.275	921.9	4.488	5.289
10	CCV	4.946	5.026	5.138	5.004	5.123	5.113
11	CCB	-.0060	.0002	.0023	.0046	-.0023	-.0010
12	S96T000605	.1466	.1429	.1135	870.9	.0147	.9282
13	S96T000605_D	.1393	.1435	.1106	868.2	.0132	.9370
14	S96T000606	.1174	.1008	.1363	954.9	.0077	.5957

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
15	S96T000606_D	.1087	.0926	.1067	929.8	.0075	.5514
16	S96T000607	.1654	.1292	.1228	1031.	.0275	.9987
17	S96T000607_D	.1386	.1220	.1117	1271.	.0149	.8031
18	CCV	4.950	5.045	5.171	5.016	5.163	5.119
19	CCB	-.0053	.0001	.0057	-.0004	-.0017	-.0029
20	S96T000608	.1481	.1374	.1696	1072.	.0409	.7687
21	S96T000608_D	.1215	.1156	.1290	973.5	.0140	.7466
22	S96T000609	.1231	.1036	.0994	867.0	.0115	.5687
23	S96T000609_D	.1111	.1373	.1101	898.4	.0093	.7092
24	ICSA	247.6	-.0073	-.0130	197.6	.0003	-.0066
25	ICSAB	245.9	.4518	-.0149	198.4	.0015	.9114
26	CCV	4.874	4.939	5.050	4.957	5.045	5.013
27	CCB	-.0088	.0001	.0027	.0029	-.0033	.0032

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.174	5.060	4.926	4.839	4.975	4.911
2	ICB	-.0048	-.0066	.0054	-.0095	-.0229	.0027
3	ICSA	.0273	.0213	-.0213	-.0051	-.0769	.0076
4	ICSAB	.0338	1.032	-.0126	-.0014	-.0620	.0190
5	PREPSTDTJA	4.389	4.578	4.632	3.859	4.615	4.845
6	PREPBLKTJA	.0218	.0068	.1229	-.0017	.0052	.7686
7	S96T000604	9.684	.3207	32.99	-.0072	.0032	1.327
8	S96T000604_D	6.713	.3531	32.34	.0078	.0177	1.335
9	S96T000604_S	14.99	4.618	34.30	3.608	4.366	5.824
10	CCV	5.153	5.130	4.932	4.856	4.994	4.937
11	CCB	-.0028	.0031	-.0051	-.0026	.0056	.0051
12	S96T000605	3.815	.3621	29.29	-.0080	-.0034	2.404
13	S96T000605_D	3.804	.3404	29.08	-.0024	.0444	2.424
14	S96T000606	3.544	.3255	28.01	-.0086	.0402	1.287
15	S96T000606_D	3.125	.2435	25.82	.0013	.0073	.8327
16	S96T000607	4.086	.3575	32.23	.0177	.0020	.9624
17	S96T000607_D	3.762	.2761	28.94	-.0125	.0244	.9186
18	CCV	5.208	5.151	4.937	4.895	5.040	4.951
19	CCB	.0068	.0040	-.0047	-.0021	.0066	.0047
20	S96T000608	3.981	.3853	26.18	.0258	.0121	1.077
21	S96T000608_D	3.548	.3027	24.30	-.0032	.0130	1.202
22	S96T000609	2.958	.2245	22.25	.0013	.0365	1.043
23	S96T000609_D	3.515	.2594	28.35	.0111	.0185	1.442
24	ICSA	.0168	.0268	-.0171	.0051	-.0602	.0216
25	ICSAB	.0163	1.016	-.0315	-.0089	-.0525	.0225
26	CCV	5.107	5.043	4.873	4.799	4.930	4.885
27	CCB	-.0042	.0010	-.0033	-.0096	.0045	.0047

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.025	5.059	.0390	4.996	4.982	9.749
2	ICB	-.0172	-.0001	.0031	-.0004	-.0023	-.0740
3	ICSA	-.0153	-.0025	.0101	.0009	-.0340	.0801
4	ICSAB	-.0039	-.0026	.0273	.0010	-.0522	.0802
5	PREPSTDTJA	4.754	4.761	.0313	3.701	4.554	9.178
6	PREPBLKTJA	-.0207	.0000	-.0004	.0011	-.0058	-.0740

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
7	S96T000604	-.0114	1.134	.0497	.0064	.0141	2.327
8	S96T000604_D	-.0301	1.147	.0512	.0065	.0046	2.206
9	S96T000604_S	4.405	5.496	.0694	3.439	4.198	10.60
10	CCV	4.994	5.026	.0416	4.995	5.001	9.686
11	CCB	-.0043	.0000	.0050	-.0011	-.0027	-.0043
12	S96T000605	-.0629	1.260	.0516	.0070	-.0182	2.152
13	S96T000605_D	-.0400	1.262	.0352	.0075	-.0034	2.217
14	S96T000606	-.0234	.7631	.0338	.0052	-.0172	1.648
15	S96T000606_D	-.0207	.6956	.0240	.0034	.0320	1.473
16	S96T000607	-.0282	1.503	.0517	.0092	.0227	2.810
17	S96T000607_D	-.0349	1.205	.0512	.0067	-.0378	2.370
18	CCV	5.027	5.067	.0421	5.050	4.998	9.752
19	CCB	-.0056	.0000	.0018	-.0009	-.0098	-.0142
20	S96T000608	-.0218	1.124	.0249	.0274	.0332	1.956
21	S96T000608_D	-.0234	1.091	.0335	.0064	.0149	2.087
22	S96T000609	-.0323	.7357	.0175	.0048	.0111	1.440
23	S96T000609_D	-.0300	.9221	.0375	.0072	.0037	2.235
24	ICSA	.0111	-.0024	.0218	.0007	-.0123	.1298
25	ICSAB	.0073	-.0023	.0137	.0007	-.0412	.1094
26	CCV	4.896	4.950	.0358	4.907	4.883	9.529
27	CCB	-.0003	.0000	-.0041	-.0009	.0162	-.0072

#	Sample Name	V	Y	Zn	Zr
1	ICV	5.061	.0056	5.011	5.014
2	ICB	-.0031	-.0009	-.0012	-.0021
3	ICSA	-.0050	.0066	.0011	-.0059
4	ICSAB	.4701	.0071	.9686	-.0058
5	PREPSTDTJA	4.659	.0043	4.529	2.763
6	PREPBLKTJA	-.0019	-.0011	.0102	.0001
7	S96T000604	.0131	.0010	.0982	.0398
8	S96T000604_D	.0052	.0000	.0937	.0357
9	S96T000604_S	4.325	.0039	4.333	2.590
10	CCV	5.078	.0065	5.057	5.006
11	CCB	-.0005	-.0003	-.0007	-.0010
12	S96T000605	-.0045	-.0009	.0871	.0291
13	S96T000605_D	-.0033	-.0004	.0881	.0327
14	S96T000606	.0034	.0001	.0806	.0285
15	S96T000606_D	.0028	-.0003	.0808	.0255
16	S96T000607	.0014	.0007	.0998	.0530
17	S96T000607_D	-.0004	-.0002	.1009	.0357
18	CCV	5.111	.0064	5.076	5.041
19	CCB	-.0012	-.0004	-.0000	-.0011
20	S96T000608	.0252	-.0011	.1312	.0454
21	S96T000608_D	.0022	.0002	.0867	.0327
22	S96T000609	.0009	-.0001	.0986	.0228
23	S96T000609_D	.0023	.0000	.0945	.0329
24	ICSA	-.0006	.0076	.0010	-.0040
25	ICSAB	.4683	.0076	.9708	-.0034
26	CCV	5.000	.0064	4.995	4.913
27	CCB	-.0003	-.0003	-.0009	.0000

WHC-SD-WM-DP-164, REV. 1

8 3/5/96

LABCORE Data Entry Template for Worklist# 5813

Analyst: DK Sato **Instrument:** ICP01 **Book#** 50B48B

Method: LA-505-151/~~161~~ Rev/Mod D-3

WHC-SD-WM-DP-164, REV. 1

Worklist Comment: ICP BY-104 (FUSION)

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	PREPBLKARL				@ICP-F01	SOLID		
6	SAMPLE	S96T000374	0	F	@ICP-F01	SOLID	95000180	BY104 ROTARY

Analytes Requested: AG-F-01 , AL-F-01 , AS-F-01 , B-F-01 , BA-F-01 , BE-F-01 , BI-F-01 , CA-F-01 , CD-F-01 , CE-F-01 , CO-F-01 , CR-F-01 , CU-F-01 , FE-F-01 , K-F-01 , LA-F-01 , LI-F-01 , MG-F-01 , MN-F-01 , MO-F-01 , NA-F-01 , ND-F-01 , NI-F-01 , P-F-01 , PB-F-01 , S-F-01 , SB-F-01 , SE-F-01 , SI-F-01 , SM-F-01 , SR-F-01 , TI-F-01 , TL-F-01 , U-F-01 , V-F-01 , ZN-F-01 , ZR-F-01

7	DUP	S96T000374	0	F	@ICP-F01	SOLID		
8	SPK	S96T000374	0	F	@ICP-F01	SOLID		
9	ICSA				@ICP-QC	QC		
10	ICSAB				@ICP-QC	QC		
11	CCV				@ICP-QC	QC		
12	CCB				@ICP-QC	QC		

Final page for worklist # 5813

For: Saul M. Parry
D.K. Sato 2/21/96
Analyst Signature **Date**

Reviewed by:
Saul M. Parry 2/21/96
Analyst Signature **Date**

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 5813

S Type	Sample#	R A	Test	Matrix	Group#	Project
	PrepblKarl .25-10				D.F.	
	S96T000374-L .25-10-2-8 ml				205	
	S96T000374 .25-10				41	
	S96T000374-D .25-10				41	
	S96T000374-a .25-10				41	
	.25+2+8					

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Identity 1: ICB Identity 2: Quality Control 9:19 PM February 16, 1996
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	-0.004	0.000	0.000	0.001	-0.000	0.000	0.001	0.000
S.D.	0.003	0.000	0.013	0.005	0.005	0.001	0.001	0.001
% R.S.D.	65.857	171.847	6073.498	640.240	5330.179	12470.932	150.286	152.750

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	-0.003	-0.002	-0.001	0.001	-0.002	0.002	-0.093
S.D.	0.000	0.002	0.003	0.001	0.000	0.003	0.010	0.096
% R.S.D.	50.262	72.029	124.659	124.052	11.175	126.246	504.497	104.086

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.005	-0.026	0.000	-0.022	-0.009	0.000	0.011	0.003
S.D.	0.024	0.019	0.001	0.007	0.002	0.000	0.003	0.006
% R.S.D.	470.117	73.645	161.818	32.285	23.289	69.282	25.458	183.251

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	-0.023	0.000	-0.021	-0.001	0.000	-0.005	-0.202
S.D.	0.001	0.013	0.001	0.006	0.001	0.000	0.001	0.027
% R.S.D.	50.765	55.119	310.577	28.510	50.849	176.567	17.813	13.604

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.082	-0.002	0.000	-0.011
S.D.	0.000	0.016	0.002	0.000	0.051
% R.S.D.	3.510	19.395	70.397	110.963	465.146

Identity 1: ICSA Identity 2: Quality Control 9:21 PM February 16, 1996
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	0.005	0.002	-0.022	0.009	199.147	-0.000	0.002	0.000
S.D.	0.001	0.000	0.007	0.001	0.113	0.001	0.000	0.000
% R.S.D.	12.664	1.589	33.103	15.495	0.057	1691.079	17.498	75.653

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.004	0.003	96.998	102.344	0.003	-0.006	-0.021
S.D.	0.000	0.001	0.003	0.312	0.040	0.002	0.008	0.040
% R.S.D.	5.749	30.135	80.425	0.321	0.039	58.412	120.950	189.386

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.020	0.009	0.004	0.030	-0.042	98.375	0.028	199.589
S.D.	0.006	0.004	0.000	0.011	0.003	0.192	0.007	0.296
% R.S.D.	28.647	48.254	1.994	35.712	7.470	0.195	23.459	0.148

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	-0.020	0.003	0.013	-0.001	0.003	0.007	-0.175
S.D.	0.001	0.010	0.001	0.005	0.000	0.001	0.001	0.013
% R.S.D.	38.070	52.364	34.018	40.602	47.663	38.108	16.321	7.549

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	-0.064	-0.000	0.003	0.029
S.D.	0.000	0.008	0.000	0.000	0.007
% R.S.D.	41.918	13.322	571.569	4.007	25.164

Identity 1: ICSAB Identity 2: Quality Control 9:24 PM February 16, 1996
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	0.001	0.002	-0.037	0.017	200.261	0.485	0.528	1.055
S.D.	0.002	0.000	0.002	0.006	1.065	0.001	0.002	0.010
% R.S.D.	165.212	6.438	5.260	36.073	0.532	0.308	0.414	0.994

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.976	0.966	0.001	98.143	103.181	0.495	-0.016	-0.088
S.D.	0.004	0.005	0.001	0.190	0.324	0.005	0.008	0.056
% R.S.D.	0.437	0.517	56.746	0.193	0.314	0.999	48.375	63.583

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.015	0.022	0.529	0.015	-0.031	97.657	0.018	202.783
S.D.	0.009	0.011	0.003	0.002	0.003	0.337	0.010	1.972
% R.S.D.	64.775	48.906	0.538	12.349	9.270	0.346	57.829	0.972

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	-0.048	1.009	0.967	-0.002	0.984	0.008	-0.214
S.D.	0.000	0.003	0.001	0.005	0.000	0.004	0.001	0.010
% R.S.D.	13.587	7.057	0.059	0.564	19.407	0.365	11.586	4.910

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.493	-0.033	0.493	0.510	0.040
S.D.	0.001	0.018	0.002	0.002	0.027
% R.S.D.	0.142	52.440	0.367	0.392	66.656

Identity 1: PREPBLK Identity 2: Quality Control 9:28 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	0.166	0.000	-0.018	-0.019	-0.001	0.003	0.002	0.001
S.D.	0.001	0.000	0.011	0.003	0.007	0.001	0.001	0.000
% R.S.D.	0.650	16.496	62.808	15.785	862.921	57.694	31.419	47.322

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.000	-0.002	-0.000	0.006	0.004	-0.001	-0.004	-0.039
S.D.	0.000	0.001	0.003	0.002	0.000	0.002	0.007	0.027
% R.S.D.	73.976	39.882	14367.127	29.357	8.314	157.011	195.088	69.560

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.023	-0.033	0.001	-0.003	-0.010	0.003	0.007	0.162
S.D.	0.009	0.007	0.000	0.006	0.001	0.000	0.003	0.002
% R.S.D.	36.372	20.941	19.482	195.888	9.801	11.743	42.867	1.481

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	-0.044	0.002	-0.015	-0.002	0.001	-0.007	418.365
S.D.	0.001	0.004	0.001	0.007	0.001	0.000	0.000	2.874
% R.S.D.	20.653	8.223	31.697	49.028	40.703	33.473	4.369	0.687

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.036	0.000	-0.000	0.089
S.D.	0.000	0.013	0.000	0.000	0.008
% R.S.D.	57.392	36.987	50.498	43.049	8.989

Identity 1: S96T000374_L Identity 2: .25-10-2-8 ml 9:31 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	7.850	0.831	-1.663	-1.082	40.959	1.239	0.127	0.055
S.D.	0.096	0.000	1.257	0.914	0.649	0.530	0.075	0.029
% R.S.D.	1.227	0.000	75.556	84.429	1.585	42.731	58.633	52.108

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.604	0.047	-0.353	3.345	2.661	9.899	-2.313	-37.281
S.D.	0.029	0.219	0.435	0.630	0.027	0.234	0.622	4.315
% R.S.D.	4.743	470.203	123.448	18.822	1.006	2.363	26.903	11.574

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.542	-7.680	0.062	-1.480	16.875	0.839	-0.145	495.816
S.D.	1.455	0.646	0.023	3.358	0.379	0.035	0.377	1.227
% R.S.D.	268.315	8.406	36.740	226.923	2.246	4.174	259.324	0.247

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-1.262	-8.414	-0.097	-1.958	-0.416	0.072	-1.344	14204.250
S.D.	0.100	2.505	0.107	0.740	0.090	0.091	0.180	43.305
% R.S.D.	7.927	29.774	110.304	37.790	21.645	127.697	13.394	0.305

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.019	-4.337	-0.316	-0.018	5.131
S.D.	0.030	1.708	0.215	0.040	3.184
% R.S.D.	154.959	39.379	67.821	214.884	62.066

Identity 1: S96T000374 Identity 2: .25-10 ml 9:34 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	8.935	0.844	-0.323	0.057	44.159	0.141	0.065	0.014
S.D.	0.027	0.001	0.493	0.178	0.266	0.105	0.023	0.018
% R.S.D.	0.304	0.161	152.694	313.756	0.603	74.693	34.964	133.913

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.042	0.595	0.135	2.972	0.853	10.576	0.005	0.176
S.D.	0.022	0.060	0.001	0.115	0.006	0.148	0.555	2.966
% R.S.D.	50.847	10.148	1.032	3.877	0.758	1.401	10088.066	1683.089

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.764	-1.406	0.047	3.740	16.989	0.148	0.432	475.927
S.D.	0.636	0.443	0.012	0.786	0.184	0.004	0.040	6.731
% R.S.D.	83.260	31.533	24.587	21.014	1.085	2.373	9.231	1.414

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.113	-1.019	0.070	0.827	-0.030	0.084	-0.189	13258.265
S.D.	0.043	0.271	0.050	0.164	0.031	0.020	0.030	153.916
% R.S.D.	38.131	26.624	71.824	19.886	102.151	24.163	15.818	1.161

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.120	-1.424	0.049	0.018	2.108
S.D.	0.010	0.736	0.039	0.009	1.198
% R.S.D.	8.499	51.704	78.775	52.316	56.822

B
Identity 1: S96T000374_D Identity 2: .25-10 ml 9:37 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	9.858	0.992	-0.522	0.086	45.399	0.212	0.030	0.012
S.D.	0.054	0.005	0.395	0.076	0.107	0.061	0.002	0.015
% R.S.D.	0.551	0.493	75.747	88.828	0.235	28.944	7.323	127.947

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.035	0.659	-0.117	5.294	0.976	11.248	-0.464	-1.461
S.D.	0.024	0.103	0.051	0.092	0.000	0.135	0.179	2.149
% R.S.D.	69.557	15.574	43.325	1.744	0.000	1.202	38.671	147.052

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.386	-0.974	0.038	5.874	17.540	0.154	0.371	495.561
S.D.	0.483	0.446	0.009	0.117	0.279	0.004	0.111	2.534
% R.S.D.	125.058	45.749	23.362	1.990	1.589	2.279	29.905	0.511

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.122	-1.797	0.061	0.242	-0.058	0.110	-0.185	11368.394
S.D.	0.035	0.236	0.043	0.259	0.015	0.013	0.026	57.653
% R.S.D.	28.864	13.150	70.620	107.179	25.742	12.199	13.983	0.507

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.158	-0.531	0.099	0.002	0.763
S.D.	0.016	0.844	0.029	0.009	0.902
% R.S.D.	9.953	159.107	29.182	445.618	118.244

Identity 1: S96T000374_A Identity 2: .25sam+2sst5+8hno3 9:40 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	49.745	41.540	40.179	40.038	86.691	41.364	41.214	39.719
S.D.	0.094	0.203	0.335	0.026	0.086	0.162	0.193	0.378
% R.S.D.	0.189	0.489	0.833	0.065	0.099	0.391	0.469	0.952

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.943	41.396	40.810	44.205	40.925	52.471	40.884	78.458
S.D.	0.031	0.163	0.177	0.347	0.159	0.033	0.513	1.262
% R.S.D.	0.075	0.393	0.435	0.784	0.389	0.063	1.255	1.609

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	41.173	40.940	40.653	44.003	57.258	39.414	41.643	529.434
S.D.	0.081	0.119	0.212	0.642	0.400	0.067	0.075	5.070
% R.S.D.	0.196	0.290	0.522	1.459	0.699	0.170	0.181	0.958

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	41.151	40.931	33.701	40.817	40.367	40.542	40.522	13475.652
S.D.	0.020	0.937	0.129	0.388	0.099	0.076	0.195	103.867
% R.S.D.	0.049	2.289	0.384	0.951	0.245	0.188	0.481	0.771

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	40.917	37.160	41.351	41.255	42.136
S.D.	0.068	0.298	0.130	0.147	0.157
% R.S.D.	0.166	0.801	0.313	0.357	0.372

Identity 1: CCV Identity 2: Quality Control 9:43 PM February 16, 1996
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	5.049	5.119	5.028	4.910	5.056	5.097	5.232	5.339
S.D.	0.011	0.021	0.027	0.007	0.015	0.018	0.031	0.062
% R.S.D.	0.212	0.410	0.543	0.145	0.293	0.354	0.593	1.170

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.068	5.051	5.104	5.092	5.132	5.074	5.222	10.178
S.D.	0.001	0.014	0.019	0.006	0.022	0.006	0.031	0.020
% R.S.D.	0.029	0.285	0.382	0.120	0.431	0.127	0.587	0.193

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.177	5.240	5.166	4.883	4.928	4.911	5.167	5.275
S.D.	0.011	0.013	0.027	0.160	0.074	0.007	0.013	0.052
% R.S.D.	0.211	0.251	0.513	3.279	1.493	0.140	0.254	0.977

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.112	5.256	4.993	5.059	5.048	5.050	5.193	5.227
S.D.	0.006	0.045	0.014	0.019	0.011	0.011	0.019	0.038
% R.S.D.	0.113	0.861	0.287	0.381	0.212	0.226	0.362	0.728

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.043	4.823	5.114	5.279	5.000
S.D.	0.005	0.031	0.005	0.014	0.041
% R.S.D.	0.103	0.635	0.096	0.265	0.812

Identity 1: CCB Identity 2: Quality Control 9:46 PM February 16, 1996

Task name : OPTIMA

WHC-SD-WM-DP-164, 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	-0.001	0.000	0.008	0.007	0.000	-0.004	0.001	0.000
S.D.	0.000	0.000	0.008	0.002	0.003	0.000	0.000	0.000
% R.S.D.	29.323	156.125	93.316	22.737	518.580	0.095	7.397	76.378

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.000	-0.001	-0.000	-0.001	0.001	-0.004	-0.017	-0.018
S.D.	0.000	0.000	0.000	0.002	0.000	0.002	0.005	0.032
% R.S.D.	61.059	49.089	3.610	210.666	14.869	39.621	31.573	174.076

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.004	-0.015	0.000	-0.005	-0.002	0.000	0.007	0.006
S.D.	0.006	0.008	0.000	0.006	0.001	0.000	0.003	0.003
% R.S.D.	156.156	52.044	117.568	126.962	80.944	34.641	38.812	50.901

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	-0.046	0.002	-0.019	-0.000	-0.001	-0.004	-0.209
S.D.	0.001	0.006	0.001	0.004	0.000	0.000	0.000	0.020
% R.S.D.	29.501	13.921	31.002	18.957	73.714	24.940	5.030	9.659

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.028	-0.002	0.000	0.043
S.D.	0.000	0.005	0.000	0.000	0.007
% R.S.D.	74.918	17.033	4.483	180.290	16.431

Identity 1: S96T000379_L Identity 2: .25-10-2-8 ml 9:49 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 205.00
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	7.259	0.125	-2.859	-1.263	32.829	0.358	0.244	0.018
S.D.	0.365	0.031	3.499	0.613	0.650	0.307	0.099	0.052
% R.S.D.	5.028	24.804	122.356	48.539	1.980	85.582	40.677	284.832

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.115	-0.827	-1.278	0.254	0.021	2.674	-1.055	-43.054
S.D.	0.128	0.418	0.141	0.617	0.000	0.362	0.956	17.024
% R.S.D.	111.332	50.602	11.049	243.447	0.000	13.539	90.668	39.541

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.740	-9.808	0.041	4.721	7.795	0.364	1.190	607.307
S.D.	4.803	3.641	0.095	0.706	0.740	0.030	0.377	6.831
% R.S.D.	648.989	37.117	229.939	14.960	9.496	8.333	31.709	1.125

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.718	-6.451	0.190	-0.425	-0.629	0.057	-1.551	12133.898
S.D.	0.169	0.666	0.220	1.102	0.070	0.092	0.247	171.278
% R.S.D.	23.474	10.329	116.228	259.176	11.082	159.970	15.896	1.412

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.005	-6.630	-0.160	0.008	-3.563
S.D.	0.059	1.757	0.266	0.024	6.435
% R.S.D.	1161.497	26.506	166.321	318.299	180.611

Identity 1: S96T000379 Identity 2: .25-10 ml 9:52 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	8.654	0.125	-0.354	0.344	35.165	0.176	0.058	0.020
S.D.	0.019	0.001	0.641	0.170	0.454	0.061	0.018	0.006
% R.S.D.	0.221	1.083	180.866	49.508	1.290	34.707	31.860	31.589

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.015	0.125	0.187	0.583	0.534	2.875	-0.209	4.944
S.D.	0.040	0.032	0.001	0.080	0.004	0.039	0.325	1.379
% R.S.D.	264.937	25.532	0.349	13.796	0.834	1.355	155.381	27.884

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.624	-1.002	0.029	6.439	7.879	0.077	0.526	589.882
S.D.	0.327	0.203	0.005	0.620	0.063	0.004	0.130	6.425
% R.S.D.	52.395	20.237	15.544	9.625	0.802	4.558	24.645	1.089

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.175	-0.892	0.111	-0.457	-0.012	0.044	-0.331	11566.822
S.D.	0.037	0.145	0.016	0.557	0.021	0.009	0.033	103.592
% R.S.D.	21.382	16.213	14.767	121.879	179.322	20.031	9.883	0.896

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.002	-1.676	-0.058	-0.002	2.763
S.D.	0.006	0.023	0.019	0.008	0.617
% R.S.D.	251.767	1.402	32.291	383.731	22.337

Identity 1: S96T000379_D Identity 2: .25-10 ml 9:55 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 41.00
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	5.208	0.129	-0.168	-0.393	30.410	0.142	0.094	0.047
S.D.	0.036	0.004	0.349	0.164	0.056	0.106	0.019	0.007
% R.S.D.	0.697	2.777	208.097	41.666	0.185	74.505	19.959	14.821

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.008	-0.043	-0.070	0.395	0.127	2.231	0.558	-6.139
S.D.	0.021	0.058	0.051	0.089	0.001	0.035	0.110	0.930
% R.S.D.	246.854	135.174	72.571	22.546	1.170	1.559	19.767	15.151

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	1.866	-1.079	0.058	4.058	6.766	0.073	0.314	544.466
S.D.	0.526	0.267	0.006	0.326	0.155	0.006	0.120	2.606
% R.S.D.	28.186	24.724	11.247	8.034	2.296	8.333	38.207	0.479

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.086	-3.009	0.159	0.437	-0.119	0.044	-0.282	11344.353
S.D.	0.026	0.154	0.027	0.166	0.025	0.009	0.025	48.062
% R.S.D.	30.561	5.124	16.917	37.933	20.952	20.149	8.874	0.424

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.032	-0.937	0.095	0.004	1.624
S.D.	0.006	0.253	0.014	0.008	0.894
% R.S.D.	18.738	26.969	15.220	182.234	55.033

Identity 1: S96T000379_A Identity 2: .25sam+2sst5+8hno3 9:57 PM February 16, 1996

Task name : OPTIMA

Sample Weight : 1.0000 Solution Volume : 41.00

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	48.755	40.832	39.719	39.550	75.691	40.693	41.665	40.742
S.D.	0.062	0.127	0.535	0.110	0.216	0.162	0.121	0.293
% R.S.D.	0.127	0.310	1.347	0.277	0.285	0.397	0.291	0.720

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	40.137	40.174	40.659	40.924	40.592	43.616	41.588	79.799
S.D.	0.108	0.154	0.210	0.065	0.109	0.149	0.426	1.339
% R.S.D.	0.269	0.383	0.516	0.159	0.267	0.342	1.024	1.678

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	42.113	38.922	40.893	47.564	48.245	38.540	41.513	622.623
S.D.	0.493	0.298	0.137	0.738	0.651	0.053	0.394	3.984
% R.S.D.	1.171	0.766	0.334	1.553	1.349	0.137	0.948	0.640

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	40.324	41.393	32.829	40.003	40.077	40.505	40.335	11330.464
S.D.	0.209	0.521	0.080	0.714	0.064	0.156	0.090	64.674
% R.S.D.	0.519	1.258	0.245	1.784	0.160	0.384	0.222	0.571

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	40.061	38.252	40.873	41.121	43.876
S.D.	0.108	0.771	0.100	0.084	0.613
% R.S.D.	0.269	2.015	0.244	0.204	1.398

Identity 1: ICSA Identity 2: Quality Control 10:01 PM February 16, 1996
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	0.002	-0.034	0.001	197.464	0.002	0.002	0.001
S.D.	0.002	0.000	0.009	0.003	0.902	0.000	0.000	0.000
% R.S.D.	46.455	4.128	26.553	337.505	0.457	0.688	25.894	27.776

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.003	-0.003	98.437	102.199	0.003	0.001	-0.127
S.D.	0.001	0.002	0.001	0.057	0.323	0.001	0.001	0.058
% R.S.D.	15.021	81.580	25.940	0.058	0.316	42.336	178.574	45.646

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.029	-0.006	0.003	0.019	-0.010	100.952	0.022	192.396
S.D.	0.016	0.011	0.000	0.004	0.008	0.159	0.009	1.638
% R.S.D.	53.614	202.538	8.196	19.890	72.140	0.157	42.565	0.851

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.004	-0.044	0.002	-0.003	-0.001	0.003	0.011	0.061
S.D.	0.002	0.004	0.001	0.008	0.001	0.001	0.001	0.007
% R.S.D.	44.580	7.965	29.600	305.412	71.101	28.939	10.196	11.392

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.001	-0.048	0.000	0.003	-0.002
S.D.	0.000	0.030	0.001	0.000	0.029
% R.S.D.	27.118	62.618	432.760	3.783	1887.514

Identity 1: ICSAB Identity 2: Quality Control 10:04 PM February 16, 1996
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	0.004	0.002	-0.022	0.009	197.207	0.497	0.499	0.981
S.D.	0.001	0.000	0.004	0.008	0.588	0.003	0.003	0.009
% R.S.D.	32.353	7.024	20.097	87.866	0.298	0.521	0.556	0.874

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.006	0.980	0.002	98.030	101.525	0.508	-0.014	-0.020
S.D.	0.003	0.002	0.002	0.163	0.229	0.002	0.010	0.076
% R.S.D.	0.259	0.227	92.736	0.166	0.225	0.395	68.112	386.215

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.036	0.017	0.504	0.015	-0.008	102.035	0.024	191.638
S.D.	0.016	0.014	0.002	0.012	0.008	0.329	0.005	1.442
% R.S.D.	46.222	86.047	0.457	83.686	94.473	0.322	22.213	0.752

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.005	-0.034	1.022	0.994	-0.001	0.998	0.013	0.110
S.D.	0.001	0.021	0.001	0.014	0.001	0.001	0.001	0.021
% R.S.D.	18.711	61.900	0.067	1.420	92.708	0.150	9.265	19.228

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.501	-0.066	0.497	0.502	0.066
S.D.	0.001	0.010	0.001	0.002	0.029
% R.S.D.	0.185	14.901	0.253	0.310	44.105

Identity 1: CCV Identity 2: Quality Control 10:07 PM February 16, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 1.00
On-Peak Integrations : 3 Off-Peak Integrations : 1

WHC-SD-WM-DP-164, REV. 1

	Zr (ppm)	Sr (ppm)	Bi (ppm)	Si (ppm)	Al (ppm)	Co (ppm)	Cu (ppm)	Li (ppm)
Mean	4.924	4.953	4.897	4.844	4.988	5.104	5.030	5.117
S.D.	0.009	0.013	0.028	0.010	0.013	0.018	0.010	0.016
% R.S.D.	0.191	0.270	0.567	0.196	0.262	0.355	0.195	0.322

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.117	5.028	4.958	5.054	4.977	5.068	4.971	9.603
S.D.	0.007	0.008	0.009	0.017	0.007	0.020	0.048	0.015
% R.S.D.	0.140	0.153	0.173	0.327	0.134	0.396	0.974	0.157

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.032	4.971	4.967	4.990	4.997	4.933	5.107	5.131
S.D.	0.016	0.006	0.013	0.144	0.055	0.010	0.001	0.021
% R.S.D.	0.313	0.116	0.265	2.879	1.106	0.211	0.022	0.415

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.093	5.135	4.953	5.040	4.939	5.016	5.081	5.213
S.D.	0.009	0.037	0.005	0.040	0.012	0.011	0.007	0.042
% R.S.D.	0.185	0.727	0.096	0.802	0.248	0.210	0.137	0.803

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.014	4.694	5.053	5.148	4.869
S.D.	0.008	0.030	0.012	0.007	0.010
% R.S.D.	0.166	0.641	0.243	0.135	0.215

Identity 1: CCB Identity 2: Quality Control 10:10 PM February 16, 1996

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	-0.004	-0.000	-0.007	-0.000	-0.003	0.001	0.000	-0.000
S.D.	0.002	0.000	0.009	0.003	0.002	0.004	0.000	0.000
% R.S.D.	42.053	69.389	131.956	3381.850	84.773	509.931	118.024	130.768

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.000	-0.001	-0.004	-0.001	0.003	-0.002	-0.025	-0.120
S.D.	0.000	0.001	0.003	0.004	0.001	0.002	0.006	0.045
% R.S.D.	98.859	281.453	68.475	267.560	17.962	90.918	24.780	37.535

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.018	-0.021	-0.000	-0.010	0.004	0.002	0.006	0.019
S.D.	0.014	0.009	0.000	0.008	0.001	0.000	0.005	0.003
% R.S.D.	79.838	44.821	178.864	83.965	13.933	26.186	83.845	16.972

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.003	-0.042	0.002	-0.011	-0.001	0.001	-0.002	-0.012
S.D.	0.001	0.009	0.000	0.004	0.000	0.000	0.001	0.009
% R.S.D.	30.829	20.937	24.549	39.055	37.796	22.967	44.222	75.770

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.000	-0.005	-0.002	-0.000	0.025
S.D.	0.000	0.021	0.000	0.000	0.022
% R.S.D.	28.654	445.198	15.151	7.259	86.193

JK Lyd

02-16-96

File # 960401A.DAT

03/15/96 09:57
A-0004-1

WHC-SD-WM-DP-164, REV. 1

LABCORE Data Entry Template for Worklist# 6544

Analyst: B. Goecke **Instrument:** ICP01 _____ **Book#** 538346

Method: LA-505-151/~~161~~ 96 Rev/Mod D-3

Worklist Comment: ICP BY-104 (SOLID WATER 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	PREPBLKARL				@ICP-I01	SOLID		
6	SERDIL	S95T003683	0	W	@ICP-I01	SOLID		
7	SAMPLE	S95T003683	0	W	@ICP-I01	SOLID	95000180	BY104 ROTARY
	Analytes Requested:	AG-I-01 , AL-I-01 , AS-I-01 , B-I-01 , BA-I-01 , BE-I-01 , BI-I-01 , CA-I-01 , CD-I-01 , CE-I-01 , CO-I-01 , CR-I-01 , CU-I-01 , FE-I-01 , K-I-01 , LA-I-01 , LI-I-01 , MG-I-01 , MN-I-01 , MO-I-01 , NA-I-01 , ND-I-01 , NI-I-01 , P-I-01 , PB-I-01 , S-I-01 , SB-I-01 , SE-I-01 , SI-I-01 , SM-I-01 , SR-I-01 , TI-I-01 , TL-I-01 , U-I-01 , V-I-01 , ZN-I-01 , ZR-I-01						
8	DUP	S95T003683	0	W	@ICP-I01	SOLID		
9	SPK	S95T003683	0	W	@ICP-I01	SOLID		
10	CCV				@ICP-QC	QC		
11	CCB				@ICP-QC	QC		
12	SERDIL	S95T003798	0	W	@ICP-I01	SOLID		
13	SAMPLE	S95T003798	0	W	@ICP-I01	SOLID	95000200	BY104 ROTARY
	Analytes Requested:	AG-I-01 , AL-I-01 , AS-I-01 , B-I-01 , BA-I-01 , BE-I-01 , BI-I-01 , CA-I-01 , CD-I-01 , CE-I-01 , CO-I-01 , CR-I-01 , CU-I-01 , FE-I-01 , K-I-01 , LA-I-01 , LI-I-01 , MG-I-01 , MN-I-01 , MO-I-01 , NA-I-01 , ND-I-01 , NI-I-01 , P-I-01 , PB-I-01 , S-I-01 , SB-I-01 , SE-I-01 , SI-I-01 ,						

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 6544

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
					SM-I-01 , SR-I-01 , TI-I-01 , TL-I-01 , U-I-01 , V-I-01 , ZN-I-01 , ZR-I-01			
14	DUP	S95T003798	0	W	@ICP-I01	SOLID		
15	SPK	S95T003798	0	W	@ICP-I01	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 # 6544

Analyst Signature: [signature] Date: 4-4-96

Reviewed by: Analyst Signature: [signature] Date: 4/4/96

		D.F.
PREPBLKALL	DIRECT	1
S95T003683-L	1-L-4-L-1-L-4-L	25
S95T003683	1-L-4-L	5
S95T003683-D	1-L-4-L	5
S95T003683-A	1-L-1-L-3-L	5
S95T003758-L	1-L-4-L-1-L-4-L	25
S95T003758	1-L-4-L	5
S95T003758-D	1-L-4-L	5
S95T003758-A	1-L-1-L-3-L	5

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Identity 1: ICV Identity 2: Quality Control 10:01 AM April 4, 1996
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	4.984	5.024	5.072	4.792	5.010	5.214	5.055	5.051
S.D.	0.013	0.016	0.015	0.011	0.014	0.011	0.018	0.024
% R.S.D.	0.256	0.324	0.294	0.222	0.272	0.206	0.353	0.466

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.219	5.106	4.993	5.022	5.002	5.159	4.937	9.445
S.D.	0.005	0.018	0.016	0.034	0.014	0.017	0.040	0.026
% R.S.D.	0.087	0.353	0.320	0.670	0.271	0.333	0.818	0.270

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.167	5.021	5.020	5.163	5.130	5.054	5.190	5.018
S.D.	0.013	0.012	0.017	0.069	0.030	0.009	0.022	0.021
% R.S.D.	0.244	0.234	0.347	1.340	0.580	0.175	0.423	0.409

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.193	5.059	5.000	5.125	4.984	5.112	5.078	5.050
S.D.	0.005	0.030	0.007	0.025	0.013	0.013	0.013	0.026
% R.S.D.	0.092	0.585	0.145	0.479	0.271	0.261	0.257	0.512

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.093	4.686	5.142	5.223	4.864
S.D.	0.009	0.043	0.013	0.016	0.015
% R.S.D.	0.180	0.916	0.252	0.313	0.318

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 986 TO 1003

[signature]
4-4-96
BY-104 HNO Digest
SSSTCO 3683
SSSTCO 3798 [signature]
FILE # 960404A.DAT

Identity 1: ICB Identity 2: Quality Control 10:04 AM April 4, 1996
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	0.007	0.002	0.015	0.012	-0.002	-0.001	0.000	0.001
S.D.	0.001	0.000	0.011	0.002	0.005	0.000	0.000	0.000
% R.S.D.	12.565	8.327	72.323	21.164	224.153	0.592	67.564	13.637

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.003	0.007	0.000	0.007	0.002	-0.023	0.211
S.D.	0.001	0.002	0.002	0.001	0.001	0.000	0.010	0.045
% R.S.D.	58.281	70.422	23.056	318.698	12.355	7.717	41.294	21.344

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.015	0.017	0.001	0.000	-0.004	0.008	0.004	-0.003
S.D.	0.015	0.009	0.000	0.013	0.002	0.001	0.002	0.006
% R.S.D.	97.855	52.368	3.666	8110.716	48.911	11.550	54.525	188.717

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.005	-0.027	0.001	-0.009	0.002	0.002	0.009	0.053
S.D.	0.001	0.010	0.000	0.003	0.001	0.001	0.000	0.010
% R.S.D.	11.565	37.778	12.645	35.187	23.109	32.013	5.313	18.028

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.001	-0.000	0.000	0.002	0.005
S.D.	0.000	0.025	0.000	0.000	0.021
% R.S.D.	22.454	117758.600	229.358	19.286	441.109

Identity 1: ICSA Identity 2: Quality Control 10:07 AM Apr 4, 1996
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	0.005	0.002	-0.007	0.008	199.701	-0.007	0.000	-0.000
S.D.	0.001	0.000	0.010	0.002	0.140	0.002	0.000	0.000
% R.S.D.	17.582	2.830	137.195	19.990	0.070	24.776	320.753	295.183

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.005	0.006	0.003	95.554	103.583	0.004	-0.010	0.116
S.D.	0.000	0.001	0.001	0.171	0.065	0.002	0.006	0.023
% R.S.D.	5.898	14.209	25.389	0.179	0.063	43.901	60.303	19.520

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.019	0.024	0.003	0.044	0.011	99.803	0.023	188.867
S.D.	0.003	0.005	0.000	0.008	0.006	0.193	0.004	0.322
% R.S.D.	17.846	21.010	5.440	19.358	50.901	0.194	17.471	0.171

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.000	-0.047	0.001	0.001	0.001	0.001	0.015	-0.018
S.D.	0.001	0.020	0.000	0.012	0.000	0.001	0.000	0.007
% R.S.D.	361.421	41.668	60.186	2000.572	11.377	87.463	1.577	41.255

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.002	0.065	-0.001	0.003	-0.019
S.D.	0.000	0.021	0.000	0.000	0.000
% R.S.D.	2.401	31.905	54.335	4.458	0.445

Identity 1: ICSAB Identity 2: Quality Control 10:09 AM April 4, 1996
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	0.004	0.003	-0.015	0.006	197.552	0.498	0.500	0.940
S.D.	0.001	0.000	0.014	0.001	0.568	0.005	0.002	0.007
% R.S.D.	31.778	5.511	93.413	19.894	0.287	0.988	0.368	0.699

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	1.004	0.984	0.004	96.050	103.179	0.508	0.008	0.239
S.D.	0.002	0.005	0.001	0.211	0.285	0.003	0.012	0.045
% R.S.D.	0.222	0.473	36.547	0.220	0.276	0.561	160.244	18.650

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.030	0.038	0.510	0.020	0.032	98.804	0.044	193.252
S.D.	0.018	0.011	0.002	0.004	0.005	0.279	0.006	1.355
% R.S.D.	58.339	29.779	0.327	22.863	16.351	0.282	14.606	0.701

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.002	-0.007	1.017	0.989	0.002	1.004	0.017	0.036
S.D.	0.000	0.005	0.002	0.001	0.000	0.005	0.001	0.018
% R.S.D.	21.872	78.169	0.163	0.145	21.622	0.517	4.582	49.550

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.503	-0.018	0.498	0.506	-0.055
S.D.	0.001	0.018	0.000	0.002	0.033
% R.S.D.	0.150	100.560	0.094	0.384	60.484

Identity 1: PREPBLK Identity 2: Quality Control 10:12 AM April 4, 1996
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	0.006	0.001	0.007	0.013	0.025	0.003	-0.000	0.001
S.D.	0.002	0.000	0.013	0.002	0.017	0.003	0.000	0.000
% R.S.D.	32.347	15.802	185.788	17.784	68.934	116.381	91.467	22.883

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.007	0.007	0.013	0.037	0.001	0.006	0.154
S.D.	0.000	0.001	0.002	0.013	0.010	0.001	0.004	0.056
% R.S.D.	29.454	14.761	32.029	94.345	27.988	53.662	72.706	36.357

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.012	0.014	0.001	-0.009	-0.003	0.019	0.001	0.184
S.D.	0.015	0.013	0.000	0.010	0.004	0.011	0.003	0.018
% R.S.D.	126.558	88.382	12.877	112.247	110.020	56.887	345.377	9.916

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	-0.000	-0.037	-0.001	-0.032	0.002	0.001	0.005	0.182
S.D.	0.001	0.006	0.001	0.005	0.000	0.000	0.001	0.028
% R.S.D.	472.757	17.398	117.261	15.944	14.969	25.319	20.256	15.487

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.000	0.017	0.000	0.000	-0.012
S.D.	0.000	0.022	0.001	0.000	0.034
% R.S.D.	123.173	128.878	148.889	51.065	276.100

Identity 1: S95T003683_L Identity 2: 1ml-4ml-1ml-4ml 10:16 AM April 4, '996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 25.00
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	0.159	0.018	0.221	1.057	113.391	-0.190	-0.038	-0.008
S.D.	0.031	0.006	0.125	0.084	0.289	0.041	0.014	0.011
% R.S.D.	19.167	31.814	56.804	7.986	0.255	21.563	36.102	138.572

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.001	0.120	0.171	0.243	0.574	15.426	-0.782	6.577
S.D.	0.012	0.011	0.039	0.127	0.087	0.022	0.143	1.132
% R.S.D.	1032.975	8.860	22.960	52.001	15.107	0.143	18.244	17.206

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.938	0.302	-0.014	11.139	48.905	0.375	-0.055	1478.529
S.D.	0.360	0.288	0.008	0.509	0.776	0.090	0.129	9.217
% R.S.D.	38.335	95.489	57.895	4.568	1.587	24.064	236.157	0.623

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.182	-0.583	-0.045	-0.445	0.061	0.012	0.081	17.842
S.D.	0.028	0.160	0.016	0.155	0.018	0.009	0.013	0.292
% R.S.D.	15.623	27.414	35.227	34.842	30.139	75.285	16.244	1.637

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.003	0.761	-0.084	0.008	-1.112
S.D.	0.004	0.357	0.032	0.010	0.730
% R.S.D.	115.688	46.908	37.610	126.509	65.672

Identity 1: S95T003683 Identity 2: 1ml-4ml 10:20 AM April 4, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 5.00
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	-0.038	0.017	0.057	0.696	113.407	-0.009	-0.004	-0.002
S.D.	0.002	0.000	0.031	0.009	0.114	0.008	0.002	0.002
% R.S.D.	5.599	1.050	54.059	1.244	0.101	89.398	35.282	74.500

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.003	0.017	-0.010	0.006	0.229	15.352	0.010	-1.630
S.D.	0.001	0.006	0.016	0.016	0.006	0.021	0.031	0.210
% R.S.D.	30.996	36.853	160.183	273.607	2.486	0.137	309.274	12.857

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	-0.121	-0.008	-0.002	10.400	49.593	0.032	-0.046	1440.918
S.D.	0.051	0.054	0.001	0.345	0.274	0.006	0.019	5.628
% R.S.D.	42.198	697.610	70.008	3.314	0.553	18.774	41.517	0.391

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.159	0.159	-0.003	-0.140	-0.017	0.005	0.070	16.957
S.D.	0.010	0.068	0.004	0.053	0.001	0.003	0.002	0.032
% R.S.D.	6.253	42.981	169.975	37.688	6.688	69.926	2.547	0.188

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.003	-0.060	0.008	0.001	0.045
S.D.	0.000	0.071	0.001	0.001	0.096
% R.S.D.	0.916	118.484	17.063	44.126	211.954

Identity 1: S95T003683_0 Identity 2: 1ml-4ml 10:22 AM April 4, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 5.00
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	0.020	0.017	0.051	0.787	118.301	0.000	-0.000	-0.001
S.D.	0.011	0.001	0.061	0.024	0.649	0.016	0.003	0.002
% R.S.D.	58.344	4.689	119.845	2.985	0.549	51808.148	2461.671	217.380

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	-0.001	0.034	0.007	0.014	0.249	16.185	-0.050	0.685
S.D.	0.002	0.007	0.017	0.016	0.013	0.079	0.009	0.355
% R.S.D.	205.295	21.428	242.608	115.474	5.035	0.488	17.649	51.856

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.046	0.057	0.001	10.276	48.486	0.033	-0.025	1374.295
S.D.	0.099	0.081	0.002	0.083	0.284	0.014	0.004	13.595
% R.S.D.	213.912	142.343	229.619	0.811	0.586	43.505	16.589	0.989

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.165	0.241	0.003	0.029	0.004	0.008	0.089	18.323
S.D.	0.001	0.053	0.008	0.034	0.004	0.004	0.005	0.160
% R.S.D.	0.693	22.019	215.988	116.281	108.300	45.769	6.000	0.874

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	-0.002	0.041	0.009	0.002	0.162
S.D.	0.002	0.062	0.003	0.002	0.159
% R.S.D.	138.964	149.138	34.633	100.912	98.417

Identity 1: S95T003683_A Identity 2: 1ml-1ml-3ml 10:26 AM April 4, 1996
Task name : OPTIMA
Sample Weight : 1.0000 Solution Volume : 5.00
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	5.035	5.053	5.047	5.957	118.403	5.165	5.053	4.822
S.D.	0.008	0.017	0.015	0.003	0.338	0.016	0.017	0.036
% R.S.D.	0.156	0.343	0.296	0.049	0.286	0.319	0.329	0.743

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.199	5.148	5.088	5.075	5.176	20.591	5.039	10.366
S.D.	0.006	0.013	0.017	0.033	0.018	0.057	0.044	0.265
% R.S.D.	0.118	0.254	0.332	0.650	0.338	0.274	0.867	2.552

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	4.997	5.123	5.026	15.284	54.133	4.993	5.192	1433.111
S.D.	0.056	0.051	0.017	0.148	0.295	0.010	0.041	8.376
% R.S.D.	1.122	1.000	0.345	0.965	0.545	0.208	0.784	0.584

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.293	5.477	3.727	5.010	4.986	5.084	5.091	22.310
S.D.	0.020	0.006	0.030	0.055	0.015	0.009	0.018	0.097
% R.S.D.	0.378	0.118	0.799	1.097	0.304	0.171	0.362	0.433

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.102	4.834	5.168	5.177	4.876
S.D.	0.012	0.073	0.008	0.011	0.093
% R.S.D.	0.233	1.500	0.156	0.215	1.908

Identity 1: CCV Identity 2: Quality Control 10:29 AM April 4, 1996
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	5.096	5.153	5.132	4.830	5.094	5.244	5.196	5.151
S.D.	0.007	0.006	0.006	0.006	0.011	0.007	0.011	0.003
% R.S.D.	0.143	0.122	0.123	0.120	0.217	0.125	0.210	0.061

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	5.213	5.165	5.144	5.140	5.143	5.200	5.165	9.738
S.D.	0.010	0.018	0.014	0.014	0.013	0.009	0.023	0.039
% R.S.D.	0.186	0.341	0.271	0.268	0.249	0.173	0.444	0.396

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	5.254	5.220	5.168	5.262	5.167	5.081	5.225	5.150
S.D.	0.009	0.009	0.009	0.099	0.052	0.007	0.013	0.010
% R.S.D.	0.171	0.179	0.171	1.877	0.999	0.129	0.258	0.190

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	5.233	5.183	5.023	5.151	5.076	5.172	5.168	5.011
S.D.	0.011	0.033	0.012	0.030	0.009	0.005	0.011	0.010
% R.S.D.	0.209	0.646	0.238	0.585	0.184	0.105	0.210	0.204

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	5.136	4.776	5.219	5.342	4.918
S.D.	0.009	0.053	0.013	0.014	0.021
% R.S.D.	0.174	1.109	0.246	0.256	0.431

Identity 1: CCB Identity 2: Quality Control 10:33 AM April 4, 1996
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	0.001	0.017	0.002	0.006	-0.004	0.000	0.001
S.D.	0.001	0.001	0.004	0.003	0.003	0.003	0.001	0.001
% R.S.D.	71.817	89.488	25.202	169.909	46.658	74.838	428.968	110.557

	Zn (ppm)	Ni (ppm)	La (ppm)	Fe (ppm)	Ca (ppm)	Cr (ppm)	Nd (ppm)	U (ppm)
Mean	0.002	0.004	0.002	0.001	0.005	0.002	0.002	0.049
S.D.	0.001	0.003	0.002	0.004	0.001	0.002	0.004	0.011
% R.S.D.	83.873	82.094	90.878	705.291	24.889	81.324	182.825	23.428

	Ce (ppm)	Sm (ppm)	Ba (ppm)	P (ppm)	S (ppm)	Mg (ppm)	As (ppm)	Na (ppm)
Mean	0.011	-0.018	0.001	0.013	0.002	0.005	0.002	0.026
S.D.	0.003	0.004	0.001	0.007	0.004	0.001	0.003	0.002
% R.S.D.	29.782	23.083	96.317	50.263	257.704	25.240	166.898	9.092

	Mo (ppm)	Se (ppm)	Ag (ppm)	Pb (ppm)	Ti (ppm)	Cd (ppm)	B (ppm)	K (ppm)
Mean	0.004	-0.079	0.001	-0.022	0.001	0.003	0.007	0.028
S.D.	0.001	0.003	0.001	0.010	0.001	0.002	0.001	0.015
% R.S.D.	37.562	3.421	106.759	47.737	166.629	58.294	21.192	54.796

	Mn (ppm)	Sb (ppm)	V (ppm)	Be (ppm)	Tl (ppm)
Mean	0.001	0.017	0.001	0.001	-0.011
S.D.	0.001	0.006	0.001	0.001	0.009
% R.S.D.	109.902	35.498	107.459	106.674	78.506