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Quality Assurance for Environmental Analytical Chemistry: 1980

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QUALITY ASSURANCE FOR ENVIRONMENTAL ANALYTICAL CHEMISTRY: 1980

by

Ernest S. Gladney, William E. Goode, Daniel R. Perrin, and Colleen E. Burns

ABSTRACT

The continuing quality assurance effort by the Environmental Surveillance Group is presented. Included are all standard materials now in use, their consensus or certified concentrations, quality control charts, and all quality assurance measurements made by H-8 during 1980.

INTRODUCTION AND DEFINITIONS

This is the second in an annual series of analytical quality assurance documents presenting quality assurance data for environmental analyses performed by the Environmental Surveillance Group (H-8) during CY 1980. The philosophy, methodology, and computer support programs utilized have been described previously.¹ There have been no important changes in these areas this year.

Most terms, acronyms, and abbreviations used in this document have been defined previously.¹ Part of this list is repeated below and includes a few updates.

ASTM. American Society for Testing Materials.

Average (Mean). The sum of a series of results divided by the number of results. Symbol is $\bar{x}$.

CCRMP. Canadian Certified Reference Materials Program.

CGS. Canadian Geological Survey.

CRPG. Centre de Recherches Petrographiques et Geochimiques de Nancy.

EML. Environmental Measurements Laboratory, New York, USA.

EMSL. Environmental Monitoring and Support Laboratory, EPA, Cincinnati, Ohio.

EMSL-LV. Environmental Monitoring and Support Laboratory, EPA, Las Vegas, Nevada.

EPA. Environmental Protection Agency, USA.

JDEN. Junta de Energia Nuclear, Madrid, Spain.

H-8. Environmental Surveillance Group, Los Alamos National Laboratory.

IAEA. International Atomic Energy Agency.

NBS. National Bureau of Standards, USA.

Primary Standards. A class of single elements or compounds that are well-characterized, stable, homogeneous, and produced in quantity. Their physical or chemical properties have been determined within specified measurement uncertainties by a recognized national standards laboratory such as NBS or NPL. NBS SRM 83c (As_2O_3) and NBS SRM 950a (U_3O_8) are examples.

Quality Assurance (QA). Planned and systematic actions necessary to provide confidence in each analytical result reported by a laboratory.

Quality Control (QC). Actions taken within a quality assurance program to ensure validity of results. Quality control as used in this document means calibration of equipment and, when possible, control of a method through use of secondary standards to develop control charts.

Quality Control Charts. A control chart consists of a graph with the ordinate scaled in units of the test result and the abscissa scaled in units of time or sequence of results. Upper and lower control limits on the chart are used as criteria for action or for judging the significance of variations between duplicate samples. The centerline represents the average or standard value of the statistical measure being plotted.

Range (R). The absolute value of the difference between the highest and the lowest values in a set of results

Secondary Standards. Materials produced by commercial organizations, individual laboratories, or governmental agencies that are well-characterized, stable, and homogeneous. They are produced in quantity and have one or more physical or chemical properties experimentally determined within stated measurement uncertainties. The important distinction between primary and secondary standards is that the latter may be complex natural materials (rocks, vegetation, etc.) as well as high purity compounds or elements.

We differentiate Secondary Standards into two classes.

Class I: Complex materials whose composition or physical properties have been determined and certified within specified measurement uncertainties by a recognized national standards laboratory. The NBS Standard Reference Materials program has produced a large number of such materials for use in environmental analysis.

Class II: Complex materials whose preparation has been similar to that of Class I materials, but whose composition has not been certified by a national standards laboratory. Certain elements in NBS

SRMs, and all materials from the USGS, CCRMP, IAEA, or EPA fall in this category. Mean elemental concentrations in these materials are frequently established by consensus.¹⁻¹⁵

SRM. Standard Reference Material.

Standard Deviation. A statistical measure of data variability. Symbol is *s*.

Traceability. A hierarchical system, used largely for regulatory purposes, wherein transfer of accuracy among various components of a measurement system is established. For example, a working standard should be demonstrated to be traceable to a secondary standard, Class II secondary standards to Class I secondary standards, and secondary standards to primary standards. See Uriano and Gravatt for more details.¹⁶

Working Standards. Materials produced by commercial organizations or by individual laboratories for direct use in instrument calibration. These are generally single elements in solution. A good suggested list of materials for working standards can be found in Gladney et al.¹⁷

QUALITY ASSURANCE DATA FOR 1980

The current selection of Class I and Class II secondary standards available to H-8 is shown in Table I. Our Laboratory has adopted a sample numbering scheme that uses a number of the structure AA.xxxxx where AA are the last two digits of the calendar year (e.g., 80) and xxxxx is a five-digit number serially assigned in blocks to various customers. A certain block of serial numbers is reserved for the QA samples (AA.00500—AA.00799) and reused yearly changing only the calendar year designator AA. The abbreviations A, B, M, S, V, and W, stand for air, biological, metal, rock (usually silicate), vegetation, and water, respectively. Current certified values and "best" consensus values for elemental concentrations in each secondary standard are listed in Appendix A. Since matrix independence is difficult or impossible for many analytical techniques, a large set of secondary standards is maintained. We draw upon NBS, EPA, USGS, CCRMP, and IAEA for secondary reference materials.

TABLE 1

QUALITY ASSURANCE MATERIALS IN H-8 LIBRARY

Sample Number	Sample Type	Date Received	Sample Name
80.00500	W	80/03/20	H-8 TDS
80.00501	W	80/03/20	H-8 Conductivity
80.00502	S	80/04/16	NBS 4350 Environmental Radioactivity Sediment
80.00503	W	80/04/25	EPA Nitrate/Fluoride-1
80.00504	W	80/04/25	EPA Nitrate/Fluoride-2
80.00505	W	80/04/14	NBS 1643A Water
80.00506	S	80/01/01	USGS BIR-1
80.00507	S	80/01/01	USGS DNC-1
80.00508	S	80/01/01	USGS W-2
80.00509	B	80/03/23	NBS 1566 Oyster Tissue
80.00510	W	80/01/01	NBS 4926C Tritium in Water
80.00511	W	80/01/01	NBS 4926C Tritium in Water
80.00512	W	80/01/01	NBS 4926C Tritium in Water
80.00513	W	80/01/01	NBS 4926C Tritium in Water
80.00514	W	80/01/01	NBS 4926C Tritium in Water
80.00515	S	78/02/15	CCRMP SY2 Rock
80.00516	S	78/02/15	CCRMP SY3 Rock
80.00517	S	78/02/15	CCRMP MRG1 Rock
80.00518	S	78/02/15	CCRMP BL1 Ore
80.00519	S	78/02/15	CCRMP BL2 Ore
80.00520	S	78/02/15	CCRMP BL3 Ore
80.00521	S	78/02/15	CCRMP BL4 Ore
80.00522	S	78/02/15	CCRMP DH1 Ore
80.00523	S	78/02/15	CCRMP DL1 Ore
80.00524	S	78/02/15	IAEA S2 Uranium Ore
80.00525	S	78/02/15	IAEA S4 Uranium Ore
80.00526	S	78/02/15	JDEN 467 Uranium Ore
80.00527	S	78/02/15	JDEN 25 Uranium Ore
80.00528	S	78/02/15	JDEN 33 Uranium Ore
80.00529	S	78/02/15	JDEN 463 Uranium Ore
80.00530	S	78/02/15	IAEA S3 Uranium Ore
80.00531	V	78/02/15	NBS 1570 Spinach
80.00532	V	78/02/15	NBS 1571 Orchard Leaves
80.00533	V	78/02/15	NBS 1573 Tomato Leaves
80.00534	V	78/02/15	NBS 1575 Pine Needles
80.00535	B	78/02/15	NBS 1577 Bovine Liver
80.00536	S	78/02/15	NBS 1632 Coal
80.00537	S	78/02/15	NBS 1633 Fly Ash
80.00538	W	78/02/15	NBS 1641 Hg in Water
80.00539	W	78/02/15	NBS 1642 Hg in Water
80.00540	W	78/02/15	NBS 1642A Hg in Water

TABLE 1 (cont)

Sample Number	Sample Type	Date Received	Sample Name
80.00541	M	79/02/15	NBS 950A U_3O_8
80.00542	M	78/02/15	NBS 83C As_2O_3
80.00543	M	78/02/15	NBS 193 KNO_3
80.00544	M	78/02/15	NBS 194 $NH_4H_2PO_4$
80.00545	W	78/02/15	NBS 2671 F in Urine—Low Level
80.00546	S	78/02/15	NBS 79A Fluorspar
80.00547	S	78/02/15	NBS 120B Phosphate Rock
80.00548	S	78/02/15	NBS 91 Opal Glass
80.00549	S	78/02/15	NBS 633 Red Cap Cement
80.00550	S	78/02/15	NBS 635 Blue Cap Cement
80.00551	M	78/02/15	NBS 610 Glass
80.00552	M	78/02/15	NBS 113A Zinc Concentrate
80.00553	M	78/02/15	NBS 53E Pb
80.00554	M	78/02/15	NBS 348 Steel
80.00555	M	78/02/15	NBS 86C Al
80.00556	M	78/02/15	NBS 133A Steel
80.00557	M	78/02/15	NBS 168 Co-Ni-Cr-Alloy
80.00558	M	78/02/15	NBS 629 Zn Alloy
80.00559	M	78/02/15	NBS 1197 Alloy
80.00561	M	78/02/15	NBS 1091 Steel
80.00562	M	78/02/15	NBS 1093 Steel
80.00563	M	78/02/15	NBS 644 Steel
80.00564	M	78/02/15	NBS 1135 Steel
80.00565	M	78/02/15	NBS 1262 Steel
80.00566	M	78/02/15	NBS 1264 Steel
80.00567	B	78/02/15	Kodak TEG 50A
80.00568	B	78/02/15	Kodak TEG 50B
80.00569	B	78/02/15	Kodak TEG 50C
80.00570	S	78/02/15	USGS AVG-1
80.00571	S	78/02/15	USGS G-2
80.00572	S	78/02/15	USGS BCR-1
80.00573	S	78/02/15	USGS PCC-1
80.00574	S	78/02/15	USGS GSP-1
80.00575	S	78/02/15	USGS GXR-1
80.00577	S	78/02/15	USGS GXR-2
80.00579	S	78/02/15	USGS GXR-3
80.00581	S	78/02/15	USGS GXR-4
80.00583	S	78/02/15	USGS GXR-5
80.00585	S	78/02/15	USGS GXR-6
80.00587	S	78/02/15	CCRMP BL5 Ore
80.00588	W	78/01/01	NBS 4958 ^{226}Ra in Water
80.00589	W	78/02/15	EPA No. 1 Trace Metals in Water
80.00590	W	78/02/15	EPA No. 2 Trace Metals in Water

TABLE I (cont)

Sample Number	Sample Type	Date Received	Sample Name
80.00591	W	78/02/15	EPA No. 3 Trace Metals in Water
80.00592	W	78/05/15	EPA No. 4 Mineral Analyses in Water
80.00593	W	78/05/15	EPA No. 5 Mineral Analyses in Water
80.00594	S	78/07/17	CCRMP Regosolic Soil SO1
80.00596	S	78/07/17	CCRMP Podzolic Soil SO2
80.00598	S	78/07/17	CCRMP Calcereous C Horizon Soil SO3
80.00600	S	78/07/17	CCRMP Chernozemic A Horizon Soil SO4
80.00602	W	78/10/12	H8 U in Water
80.00603	W	78/08/15	H8 TDS
80.00604	W	79/02/03	H8 U in Water
80.00605	S	79/01/15	NBS 1632A Bituminous Coal
80.00606	S	79/02/15	NBS 1635 Subbituminous Coal
80.00607	A	79/03/01	NBS 1648 Air Particulate
80.00608	S	79/03/01	NBS 1645 River Sediment
80.00609	S	79/03/01	CCRMP DL-1a Ore
80.00610	S	79/05/01	USGS BHVO-1
80.00611	S	79/05/01	USGS MAG-1
80.00612	S	79/05/01	USGS QLO-1
80.00613	S	79/05/01	USGS RGM-1
80.00614	S	79/05/01	USGS SCo-1
80.00615	S	79/05/01	USGS SDC-1
80.00616	S	79/05/01	USGS SGR-1
80.00617	S	79/05/01	USGS STM-1
80.00618	W	78/02/01	NBS 2671 F in Urine—High Level
80.00619	W	78/10/01	H8 U in Water
80.00620	W	78/01/01	NBS 4921C ²² Na in Water
80.00621	W	78/01/01	NBS 4921C ²² Na in Water
80.00622	W	78/01/01	H8 Deep Well (PM-1) Water Blank
80.00623	S	78/01/01	NBS 4921C ²² Na on Soil GTP-3
80.00624	S	78/01/01	NBS 4921C ²² Na on Soil GTP-3
80.00625	S	78/01/01	NBS 4921C ²² Na on Soil GTP-3
80.00626	S	78/01/01	NBS 4921C ²² Na on Soil GTP-3
80.00627	S	78/01/01	NBS 4921C ²² Na on Chamita Sediment
80.00628	S	78/01/01	NBS 4921C ²² Na on Chamita Sediment
80.00629	S	78/01/01	NBS 4921C ²² Na on Chamita Sediment
80.00630	B	79/07/01	NBS 1567 Wheat Flour
80.00631	B	79/07/01	NBS 1568 Rice Flour
80.00632	V	79/07/01	NBS 1569 Brewer's Yeast
80.00633	S	79/07/01	NBS 1633A Coal Fly Ash
80.00634	S	78/02/15	NBS 1631A S in Coal
80.00635	S	78/02/15	NBS 1631B S in Coal
80.00636	S	78/02/15	NBS 1631 S in Coal
80.00637	W	80/04/01	EML ¹³⁷ Cs

TABLE 1 (cont)

Sample Number	Sample Type	Date Received	Sample Name
80.00638	W	80/04/01	EML ^{137}Cs
80.00639	W	80/04/01	EML ^{137}Cs
80.00640	S	80/04/01	EML ^{137}Cs
80.00641	S	80/04/01	EML ^{137}Cs
80.00642	S	80/04/01	EML ^{137}Cs
80.00643	W	80/04/25	EPA Trace Metals-1
80.00644	W	80/04/25	EPA Trace Metals-2
80.00645	W	80/04/25	EPA Nutrients-1
80.00646	W	80/04/25	EPA Nutrients-2
80.00647	W	80/04/25	EPA Nutrients-5
80.00648	W	80/04/25	EPA Nutrients-6
80.00649	W	80/04/25	EPA Trace Metals-1
80.00650	W	80/04/25	EPA Trace Metals-2
80.00651	W	80/04/25	EPA Trace Metals-3
80.00652	W	80/04/25	EPA Mineral Analyses-1
80.00653	W	80/04/25	EPA Mineral Analyses-2
80.00654	W	80/04/25	EPA Trace Metals-1
80.00655	W	80/04/25	EPA Trace Metals-10
80.00656	W	80/11/11	H8 U in Water
80.00657	S	80/10/01	CCRMP DH-1A Ore
80.00660	A	80/05/20	EPA As Filter Strips—0
80.00661	A	80/05/20	EPA As Filter Strips—1
80.00662	A	80/05/20	EPA As Filter Strips—2
80.00663	A	80/05/20	EPA As Filter Strips—3
80.00664	A	80/05/20	EPA As Filter Strips—4
80.00665	A	80/05/20	EPA As Filter Strips—5
80.00666	A	80/05/20	EPA As Filter Strips—6
80.00667	A	80/05/20	EPA As Filter Strips—7
80.00668	A	80/05/20	EPA As Filter Strips—8
80.00669	A	80/05/20	EPA As Filter Strips—9
80.00670	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—0
80.00671	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—1
80.00672	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—2
80.00673	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—3
80.00674	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—4
80.00675	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—5
80.00676	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—6
80.00677	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—7
80.00678	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—8
80.00679	A	80/05/20	EPA $\text{SO}_4\text{--NO}_3$ Filter Strips—9
80.00680	A	80/05/20	EPA Pb Filter Strip—0
80.00681	A	80/05/20	EPA Pb Filter Strip—1
80.00682	A	80/05/20	EPA Pb Filter Strip—2

TABLE I (cont)

Sample Number	Sample Type	Date Received	Sample Name
80.00683	A	80/05/20	EPA Pb Filter Strip--3
80.00684	A	80/05/20	EPA Pb Filter Strip--4
80.00685	A	80/05/20	EPA Pb Filter Strip--5
80.00686	A	80/05/20	EPA Pb Filter Strip--6
80.00687	A	80/05/20	EPA Pb Filter Strip--7
80.00688	A	80/05/20	EPA Pb Filter Strip--8
80.00689	A	80/05/20	EPA Pb Filter Strip--9
80.00690	S	80/05/22	CRPG Feldspath FK--N
80.00691	S	80/05/22	CRPG Granite GH
80.00692	S	80/05/22	CRPG Verre Synthetique VS--N
80.00693	S	80/05/22	CRPG Granite GA
80.00694	S	80/05/22	CRPG Anorthosite AN--G
80.00695	S	80/05/22	CRPG Disthene DT--N
80.00696	S	80/05/22	CRPG Basalte BR
80.00697	S	80/05/22	CRPG Mica--Mg
80.00698	S	80/05/22	CRPG Glauconite GL--O (grains)
80.00699	S	80/05/22	CRPG Granite MA--N
80.00700	S	80/05/22	CRPG Bauxite BX--N
80.00701	S	80/05/22	CRPG Diorite DR--N
80.00702	S	80/05/22	CRPG Serpentine UB--N
80.00703	S	80/05/22	CRPG Mica--Fe
80.00704	S	80/05/22	CRPG Basalte BE--N
80.00705	S	80/05/22	CRPG Glauconite GL--O (powder)
80.00706	S	80/05/22	CRPG Granite GS--N

Stable Element Quality Assurance

To evaluate the quality assurance data for the year, one can generate quality control charts and/or the data can be summarized as a mean ($\bar{x}$) $\pm$ one standard deviation(s) of the ratio of the H-8 value to the certified or consensus value (CV). Since the H-8 laboratory operates on a demand basis, most analyses are performed on an irregular, infrequent basis. The scheme of control charts does not address this mode of operation well. Results of the mean of the H-8/CV ratio approach are shown in Table II, and control charts are presented in Appendix B. Silicate QA materials deposited on blank (unexposed) air filters were used as the air particulate QA this year and are combined under the silicate category in Table II. All QA raw data are given in Appendix C. Table III con-

tains the summary of elemental and isotopic analyses completed by H-8 as a function of matrix type, and Table IV gives this summary as a function of analytical technique employed. The abbreviations used in Table IV are defined in Fig. 1. The symbols in Fig. 1 are used in the control charts presented in Appendix B.

Examination of the data in Table II reveals that only Lu in silicates and hardness in water are grossly out of control (beyond the $\pm 20\%$ limits set in Ref. 1 for data rejection). The single standard deviations for the rest of the analyses overlap the 1.00 ratio value, indicating overall control. The relative size of the standard deviation of the ratios in Table II gives a good indication of how good our overall agreement is with the certified or consensus values. The following percentages of entries in Table II fall within given ranges.

TABLE II
SUMMARY OF H-8/CV RATIO FOR STABLE ELEMENT
AND SELECTED RADIOCHEMICAL ANALYSES BY MATRIX

Analysis	Silicate		Water		Biological	
	$\bar{x} \pm s$	No. Reports	$\bar{x} \pm s$	No. Reports	$\bar{x} \pm s$	No. Reports
Ag	1.00 ± 0.05	12	0.88 ± 0.18	4		
Al	0.99 ± 0.04	46				
As	1.01 ± 0.13	42	1.00 ± 0.11	73		
B	1.00 ± 0.10	27			1.03 ± 0.08	13
Ba	1.07 ± 0.12	58	1.17 ± 0.11	5		
Be			1.00 ± 0.09	18		
Br	0.90 ± 0.14	5				
Ca	0.96 ± 0.14	3	1.09 ± 0.20	12	0.85 ± 0.19	3
Cd	0.90 ± 0.39	8	0.97 ± 0.20	90		
Ce	0.99 ± 0.06	57				
Cl	1.10 ± 0.11	14	1.02 ± 0.07	56	0.99 ± 0.08	8
Co	1.01 ± 0.07	84	1.00	1		
Conductivity			0.99 ± 0.08	5		
Cr	1.00 ± 0.09	79	1.02 ± 0.18	24		
Cs	1.02 ± 0.14	49				
¹³⁷ Cs	1.13 ± 0.12	9	1.00 ± 0.06	19		
Cu			1.03 ± 0.09	5		
Dy	1.07 ± 0.17	6				
Eu	0.97 ± 0.08	59				
F			1.03 ± 0.32	49		
Fe	0.99 ± 0.05	94				
Ga	0.96 ± 0.11	9				
Hardness			1.75 ± 0.88	6		
Hf	0.98 ± 0.12	46				
Hg	0.93 ± 0.10	9	0.98 ± 0.05	4	1.06 ± 0.04	3
³ H			1.16 ± 0.19	100		
K	1.02 ± 0.10	26	1.03 ± 0.20	12	0.98 ± 0.13	4
La	1.06 ± 0.13	53				
Li	0.91 ± 0.28	8				
Lu	1.64	2				
Mg			1.03 ± 0.25	12		
Mn	1.07 ± 0.19	43	1.03	2	0.99 ± 0.04	6
Mo	1.08 ± 0.08	3	1.16	1		
Na	1.01 ± 0.09	54	1.04 ± 0.06	10	1.06 ± 0.07	4
²² Na	1.06 ± 0.10	12	1.15 ± 0.08	19		
Nd	0.94	2				
Ni	0.86 ± 0.02	3	1.08	2		
NO ₃			1.00 ± 0.01	3		
Pb			0.92 ± 0.25	12		
²²⁶ Ra	1.06 ± 0.07	10				

TABLE II (cont)

Analysis	Silicate		Water		Biological	
	$\bar{x} \pm s$	No. Reports	$\bar{x} \pm s$	No. Reports	$\bar{x} \pm s$	No. Reports
Rb	1.02 ± 0.10	72				
Sb	1.05 ± 0.05	25				
Sc	1.01 ± 0.08	52				
Se	0.97 ± 0.09	24	1.12 ± 0.11	10		
Sm	1.01 ± 0.13	49				
SO ₄			0.99 ± 0.10	29		
Sr	0.92 ± 0.06	11				
Ta	0.86 ± 0.15	45				
Tb	1.02 ± 0.17	9				
TDS			0.99 ± 0.04	6		
Th	1.01 ± 0.05	102				
Ti	1.01 ± 0.06	14				
U	1.00 ± 0.08	248	0.98 ± 0.04	45	1.02 ± 0.09	6
V	1.09 ± 0.21	40	1.02	1		
W	0.98 ± 0.11	11				
Yb	1.00 ± 0.22	19				
Zn	1.02 ± 0.23	6	1.06 ± 0.16	6		
Zr	0.95 ± 0.02	3				

No s (insufficient data points)	8%
$s \leq 0.10$	49%
$0.11 \leq s \leq 0.20$	33%
$s > 0.20$	10%

Radiochemical Quality Assurance

Our laboratory continues to participate in both the EML and EPA Class II secondary QA standards programs. The results of these analyses are given in Appendices D and E, respectively. We have developed several of our own internal Class II radioactive materials employing NBS, EPA, and EML "certified" radionuclide solution standards. Most of the EPA solutions were prepared and standardized by NBS. In the cases of ²²Na and ¹³⁷Cs, we have prepared doped soil samples as well. The summary of these results is included in Table II and the individual data are given in Appendix C. A summary of the radiochemical determinations completed as a function of matrix is included in Table III.

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Compared with the previous year's results, there has been a sharp decline in the first and fourth categories above, with about equal increase in the middle categories. This indicates improvement in our overall QA efforts over the previous year.

However, a number of analyses need attention as indicated by the large single standard deviation in Table II. Specifically, the control of Ag, Ba, Ca, Cd, F, K, ³H, ²²Na, Pb, and Se in water; Br, Ca, Cd, Li, Ni, Ta, V, Yb, and Zn in silicates; and Ca in biologicals needs improvement.

The QA program of EML has been expanded to include selected stable elements in various matrices. The results of our participation in this program are given in Appendix D and have not been included in Table II since the certified value is established by EML only, and not by either a recognized national standards laboratory or by interlaboratory consensus.

TABLE III
SUMMARY OF ANALYTICAL DETERMINATIONS
COMPLETED DURING CY 1980 BY MATRIX

Analysis	Silicate	Water	Biological	Air	Total
α - β	179	476	20	371	1046
γ	328	366	74	39	807
^3H	225	975	30	194	1424
^7Be	40	76		9	125
^{22}Na	40	76	9		125
^{40}K	2		3		5
^{51}Cr		9			9
^{60}Co	2	18			20
^{65}Zn		12			12
^{90}Sr	225	107	31	4	367
^{106}Ru		12			12
^{131}I			17	3	20
^{134}Cs		18			18
^{137}Cs	273	216	32	18	539
^{140}Ba	17				17
^{226}Ra	69	7			76
^{227}Ac	67				67
$^{238}\text{Pu}, ^{239}\text{Pu}, ^{240}\text{Pu}$	432	167	21	86	706
^{241}Am	108			86	194
Ag	69	38	110		217
Al	337	5	88	95	525
As	292	346	18	55	711
Au		35			35
B	144	192	108		444
Ba	405	29			434
Be		1	70		71
Br	48	32	112	91	283
Ca	201	150	44		395
Cd	153	215	88		456
Ce	261				261
Cl	336	243	200	4	783
Co	291	8		95	394
Cr	301	37	158	95	591
Cs	243	9			252
Cu	132	13		4	149
Dy	116				116
Eu	273				273
F	98	308	88		494
Fe	339	12	88	95	534
Ga	65	32			97
Hf	243				243
Hg	100	34	29		163

TABLE III (cont)

Analysis	Silicate	Water	Biological	Air	Total
K	180	148	44	91	463
La	162			91	253
Li	130	301	18		449
Lu	65				65
Mg	102	148		2	252
Mn	349	11	112	97	569
Mo	40	39			79
Na	340	147	24	97	608
Nd	9				9
Ni	51	3			54
Pb	30	29		2	61
Pd	65				65
Pt	65				65
Rb	277	5	88	91	461
Rh	65				65
Ru	65				65
Sb	173	5		4	182
Sc	252	5		4	261
Se	158	11			169
Si	81	125			206
Sm	162			79	241
Sn		3			3
Sr	74				74
Ta	214				214
Tb	74				74
Th	515	5			520
Ti	198			44	242
U	1285	383	93	122	1883
²³⁵ U	69				69
²³⁸ U	69				69
V	336	11		91	438
W	107	32			139
Yb	87				87
Zn	47	7		99	153
Zr	9				9
pH		106			106
Water Content	254				254
Conductivity		152			152
TDS		155			155
CO ₃		152			152
HCO ₃		152			152
Hardness		152			152
NO ₃	40	168	88	2	298
SO ₄	40	178	88	2	308
PO ₄	40	158	88		286

TABLE IV
SUMMARY OF ANALYTICAL DETERMINATIONS FOR CY1980
BY TECHNIQUE FOR STABLE ELEMENT LABORATORY

<u>Analysis</u>	<u>ITNA</u>	<u>IENA</u>	<u>AA</u>	<u>FAA</u>	<u>ICP</u>	<u>IC</u>	<u>Other^a</u>	<u>Total</u>
Ag	170	9		31	7			217
Al	525							525
As	110	117		449	7		28	711
Au	1	32	2					35
B			117		122		205	444
Ba	378	27		22	7			434
Be				71				71
Br	242	41						283
Ca	192	9	164	23	7			395
Cd			23	425	8			456
Ce	252	9						261
Cl	341					442		783
Co	385	9						394
Cr	404			180	7			591
Cs	239	9	4					252
	69		26	47	7			149
Eu	116							116
Eu	273							273
F						312	182	494
Fe	521	9	4					534
Ga		97						97
Hf	234	9						243
Hg							163	163
K	260	9	187		7			463
La	253							253
Li			112	337				449
Lu	65							65
Mg	95		127	23	7			252
Mn	555	9		5				569
Mo		45	34					79
Na	457		121	23	7			608
Nd		9						9
Ni	3	9		42				54
Pb			4	50	7			61
Pd				65				65
Pt				65				65
Rb	452	9						461
Rh				65				65
Ru				65				65
Sb	173	9						182
Sc	261							261

TABLE IV (cont)

Analysis	ITNA	IENA	AA	FAA	ICP	IC	Other ^a	Total
Se	32	1			7		129	169
Si		9	166	24	7			206
Sm	241							241
Sn			3					3
Sr		74						74
Ta	205	9						214
Tb	65	9						74
Th	443	42			35			520
Ti	177	65						242
U		666			35		1182	1883
²³⁵ U							69	69
²³⁸ U		69						69
V	429	9						438
W		97					42	139
Yb	87							87
Zn	100	9	33	4	7			153
Zr		9						9
pH							106	106
Water Content							254	254
Conductivity							152	152
TDS							155	155
CO ₃							152	152
HCO ₃							152	152
Hardness							152	152
NO ₃						298		298
SO ₄						308		308
PO ₄						286		286

^aOther: As = RENA, B = TCG, F = ISE, Hg = CVAA, Se = RTNA, U = DNA, ²³⁵U = DNA, W = RENA, pH = ISE, Water = EVAP, Cond = TITR, TDS = EVAP, CO₃ = TITR, HCO₃ = TITR, Hard = TITR (see Fig. 1 for abbreviation key).

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SYMBOL	PROCEDURE	ABBREV.
□	INSTRUMENTAL THERMAL NEUTRON ACTIVATION	ITNA
○	DELAYED NEUTRON ANALYSIS	DNA
△	ATOMIC ABSORPTION SPECTROSCOPY - FLAME	AA
+	ATOMIC ABSORPTION SPECTROSCOPY - FLAMELESS	FAA
×	ION CHROMATOGRAPHY	IC
◊	ION SELECTIVE ELECTRODE	ISE
▽	INSTRUMENTAL EPITHERMAL NEUTRON ACTIVATION	IENTA
⊠	RADIOCHEMICAL	RC
⋈	GAMMA SPECTROSCOPY	G
◆	LIQUID SCINTILLATION COUNTING	LS
⊞	PROPORTIONAL COUNTING	PC
⊠	THERMAL NEUTRON CAPTURE GAMMA	TCG
⊞	EVAPORATION	EVAP
⊠	CALCULATED	CALC
*	TITRIMETRIC	TITR
⊞	RADIOCHEMICAL THERMAL NEUTRON ACTIVATION	RTNA
ψ	RADIOCHEMICAL EPITHERMAL NEUTRON ACTIVATION	RENA
⊞	COLD VAPOR ATOMIC ABSORPTION	CVAA
\$	MISCELLANEOUS PROCEDURE	MISC

Fig. 1. Legend of procedure symbols and abbreviations.

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APPENDIX A

**CERTIFIED OR CONSENSUS VALUES FOR
SECONDARY REFERENCE MATERIALS**

TABLE A-I
REFERENCES FOR CERTIFIED OR CONSENSUS VALUES

<u>Reference Code</u>	<u>Description</u>
??EPA	Environmental Protection Agency, date and location unknown.
-A	Arsenic Glass Fiber Filter Strips
-B	Sulfate-Nitrate Glass Fiber Filter Strips
-C	Lead Glass Fiber Filter Strips
??NBS-A	National Bureau of Standards, SRM 86c, Aluminum Alloy, Analyses taken from bottle label, date unknown.
31 NBS-A	National Bureau of Standards, Certificate of Analysis, SRM 91, Opal Glass, June 15, 1931.
56 NBS	National Bureau of Standards, Certificates of Analysis
-A	SRM 133A, Steel, June 8, 1956.
-B	SRM 168, Heat Resisting Alloy, January 12, 1956.
60 NBS-A	National Bureau of Standards, Certificate of Analysis, SRMs 644-646, Spectroscopic Titanium-Base Standards, Jan. 26, 1960.
64 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM 629, Spectrographic Zinc-Base Die-Casting Alloy, April 24, 1964.
-B	SRM 4921-C, Sodium-22, Aug. 6, 1964; dilution of stock by H-8.
66 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM U-100, Uranium Isotopic Standard, June 23, 1966.
-B	SRM U-150, Uranium Isotopic Standard, Aug. 5, 1966.
-C	SRM U-200, Uranium Isotopic Standard, June 1, 1966.
-D	SRM U-350, Uranium Isotopic Standard, May 23, 1966.
-E	SRM U-500, Uranium Isotopic Standard, May 24, 1966.
-F	SRM U-750, Uranium Isotopic Standard, Feb. 11, 1966.
-G	SRM U-800, Uranium Isotopic Standard, Feb. 11, 1966.
-H	SRM U-850, Uranium Isotopic Standard, Feb. 11, 1966.
-I	SRM U-900, Uranium Isotopic Standard, Feb. 11, 1966.
-J	SRM U-930, Uranium Isotopic Standard, Feb. 11, 1966.
-K	SRM 348, High Temperature Steel Alloy, Jan. 17, 1966.
67 IAE	International Atomic Energy Agency, Certificates.
-A	Reference Sample S-2, Low Grade Uranium Ore, Torbenite, May 1967.
-B	Reference Sample S-4, Low Grade Uranium Ore, Uraninite, May 1967.
-C	Reference Sample S-3, Low Grade Uranium Ore, Carnotite, May 1967.
68 NBS-A	National Bureau of Standards, Certificate of Analysis, SRM 4958, Gamma Ray Standard, Radium-226, March 1, 1968.

TABLE A-I (cont)

Reference Code	Description
69 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM U-010, Uranium Isotopic Standards, April 21, 1969.
-B	SRM U-015, Uranium Isotopic Standards, April 21, 1969.
-C	SRM U-020, Uranium Isotopic Standards, April 21, 1969.
-D	SRM 950a, Uranium Oxide, Oct. 27, 1969.
-E	SRM 1090-1092, Oxygen in Ferrous Materials, April 2, 1969.
-F	SRM 1093, Oxygen in Valve Steel, March 4, 1969.
70 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM U-0002, Uranium Isotopic Standard, July 30, 1970.
-B	SRM U-970, Uranium Isotopic Standard, July 9, 1970.
-C	SRM 83c, Arsenic Trioxide, April 16, 1970.
-D	SRM 53e, Lead-Base Bearing Metal, Jan. 20, 1970.
71 NBS-A	National Bureau of Standards, Certificate of Analysis, SRM 79a, Fluorspar, Dec. 6, 1971.
72 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM 610, Trace Elements in Glass, Aug. 8, 1972.
-B	SRM 612, Trace Elements in Glass, Aug. 8, 1972.
-C	SRM 614, Trace Elements in Glass, Aug. 8, 1972.
-D	SRM 616, Trace Elements in Glass, Aug. 8, 1972.
-E	SRM 1577, Bovine Liver, April 15, 1972.
-F	SRM 120b, Phosphate Rock, July 31, 1972.
-G	SRM 1135, High Silicon Steel, July 27, 1972.
73 FLA-A	F. J. Flanagan, "1972 Values for International Geochemical Reference Samples," <i>Geochim. Cosmochim. Acta</i> , 37: 1189-1200 (1973).
74 EPA-A	Environmental Protection Agency, "EPA Quality Control Samples for Mineral Analyses," Quality Assurance Branch, EMSL, 1974.
74 JEN-A	Junta de Energia Nuclear, Certificado de Analisis, Madrid, Spain, Nov. 1974.
74 NBS	National Bureau of Standards, Certificates of Analyses.
-A	SRM 1632, Trace Elements in Coal, Oct. 1, 1974.
-B	SRM 1642, Mercury in Water-Trace, Aug. 16, 1974.
-C	SRM 193, Potassium Nitrate, Nov. 14, 1974.
-D	SRM 194, Ammonium Dihydrogen Phosphate, Jan. 8, 1974.
-E	SRM 113a and 329, Zinc Concentrates, May 6, 1974.
-F	SRM 1197-1201, High Temperature Alloys, Aug. 17, 1974.
-G	SRM 1631, Sulfur in Coal, Dec. 6, 1974.
75 EPA-A	Environmental Protection Agency, "EPA Quality Control Samples for Trace Metals Analyses," Quality Assurance Branch, EMSL, 1975.

TABLE A-I (cont)

Reference Code	Description
75 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM 1633, Trace Elements in Coal Fly Ash, March 7, 1975.
-B	SRM 1641, Mercury in Water-Concentrate, March 5, 1975.
-C	SRM 2671, Freeze Dried Urine Certified for Fluoride, Oct. 1, 1975.
-D	SRM 633-639, Portland Cements, Feb. 1975.
-E	SRM 1261-1265, Steel, Feb. 24, 1975.
76 AND-A	D. H. Anderson, J. J. Murphey, W. W. White, "Gelatin Multicomponent Trace Element Reference Material," <i>Anal. Chem.</i> 48 , 116-117 (1976).
76 EPA-A	Environmental Protection Agency, Quality Control Check Samples for Trace Metals, Quality Assurance Branch, EMSL, April 1976.
76 MIL-A	H. T. Millard, "Determination of Uranium and Thorium in USGS Standard Rocks by the Delayed Neutron Technique: USGS Professional Paper 840, pp. 61-65, 1976.
76 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM 1570, Trace Elements in Spinach, Sept. 1, 1976.
-B	SRM 1573, Tomato Leaves, Oct. 18, 1976.
-C	SRM 1575, Pine Needles, Oct. 18, 1976.
-D	SRM 1569, Brewer's Yeast, Sept. 7, 1976.
77 ING-A	J. C. Ingles, R. Sutarno, W. S. Bowman, and G. H. Faye, "Radioactive Ores DH-1, DL-1, BL-1, BL-2, BL-3, and BL-4—Certified Reference Materials," CANMET report 77-64, 1977.
77 EPA-A	Environmental Protection Agency, Water Supply Quality Control Check Samples for Nitrate/Fluoride, Quality Assurance Branch, EMSL, June 1977.
77 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM 1571, Orchard Leaves, Aug. 31, 1977.
-B	SRM 1642A, Mercury in Water—ng/ml, Aug. 24, 1977.
78 EPA	Environmental Protection Agency, Quality Assurance Branch, EMSL.
-A	Quality Control Samples for Nutrients, May 1978.
-B	Quality Control Samples for Mineral Analyses, April 1978.
-C	Water Supply Quality Control Check Samples for Trace Metals, March 1978.

TABLE A-1 (cont)

Reference Code	Description
78 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM 1632A, Trace Elements in Coal (Bituminous), Jan. 23, 1978.
-B	SRM 1635, Trace Elements in Coal (Subbituminous), Jan. 23, 1978.
-C	SRM 1648, Urban Particulate Matter, Nov. 15, 1978.
-D	SRM 1645, River Sediment, Nov. 16, 1978.
-E	SRM 1567, Wheat Flour, Jan. 3, 1978.
-F	SRM 1568, Rice Flour, Jan. 3, 1978.
78 BOW-A	W. S. Bowman, G. H. Faye, R. Sutarno, J. A. McKeague, and H. Kodama, "New CCRMP Reference Soils SO-1 to SO-4," Geostandards Newsletter 3: 109-113 (1979).
79 EPA-A	Environmental Protection Agency, Quality Control Check Samples for Trace Metals, Quality Assurance Branch, EMSL, Mar. 1979.
79 FAY-A	G. H. Faye, W. S. Bowman, and R. Sutarno, "Uranium Ore BL-5—A Certified Reference Material," CANMET report 79-4, Feb. 1979.
79 GLA-A	E. S. Gladney, D. R. Perrin, J. W. Owens, and D. Knab, "Elemental Concentrations in the United States Geological Survey's Geochemical Exploration Reference Samples—A Review," Anal. Chem. 51: 1557-1569 (1979).
79 H-8	In House Quality Control, Environmental Surveillance Group, 1979.
79 NBS	National Bureau of Standards, Certificates of Analysis.
-A	SRM 4926-C, Hydrogen-3, Jan. 1979; Dilution of Master Solution by H-8.
-B	SRM 1633a, Trace Elements in Coal Fly Ash, April 18, 1979.
-C	SRM 1566, Oyster Tissue, Dec. 12, 1979.
79 SPE-A	R. R. Spencer and D. E. Erdmann, "Azomethine H Colorimetric Method for Determining Dissolved Boron in Water," Environ. Sci. Technol. 13: 954-956 (1979).
80 EML-A	Environmental Measurements Laboratory, 1980.
80 EPA-A	Environmental Protection Agency, Quality Assurance Division, EMSL-LV, "Calibration Certificate, Beryllium-8," May 28, 1980.
80 GLA-A	E. S. Gladney, "Elemental Concentrations in NBS Biological and Environmental Standard Reference Materials," Anal. Chim. Acta 118: 385-396 (1980), "Compilation of Elemental Concentration Data for NBS Biological and Environmental Standard Reference Materials," Los Alamos Scientific Laboratory report LA-8438-MS, July 1980.

TABLE A-I (cont)

Reference Code	Description
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-C	E. S. Gladney, D. R. Perrin, W. K. Hensley, "Determination of Uranium in NBS Biological Standard Reference Materials by Delayed Neutron Assay," J. Radioanal. Chem. 59: 249-251 (1980).
-D	E. S. Gladney, D. R. Perrin, J. P. Bologna, and C. L. Warner, "Evaluation of a Boron-Filtered Epithermal Neutron Irradiation Facility," Anal. Chem. 52: 2128-2132 (1980).
80 H-8	In House Quality Control, Environmental Surveillance Group, 1980.
80 NBS-A	National Bureau of Standards, Certificate of Analysis, SRM 1643a, Trace Elements in Water, March 3, 1980.
80 STE-A	H. F. Steger and W. S. Bowman, "DL-1A: A Certified Uranium-Thorium Reference Ore," CANMET report 80-10E, May 1980.
81 GLA-A	E. S. Gladney and W. E. Goode, "Elemental Concentrations in Eight New United States Geological Survey Rock Standards—A Review," Geostandards Newsletter 5: 31-64 (1981).
-B	E. S. Gladney, "Comparison of Methods for Calculation of Recommended Elemental Concentration Values for Canadian Certified Reference Materials Project Rock Standards SY-2, SY-3, and MRG-1," Los Alamos National Laboratory report LA-8770-MS, 1981.

TABLE A-II

**CERTIFIED OR CONSENSUS VALUES FOR
SECONDARY REFERENCE MATERIALS**

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00500	TDS	500.	20.	PPM	80H-8
80.00501	COND	1000.	100.	UMHO*	80H-8
80.00503	F	.36		PPM	77EPA-A
	N03	.97		PPM	77EPA-A
80.00504	F	2.3		PPM	77EPA-A
	N03	44.7		PPM	77EPA-A
80.00505	AG	2.8	.3	PPB	80NBS-A
	AS	76.	7.	PPB	80NBS-A
	BA	46.	2.	PPB	80NBS-A
	BE	19.	2.	PPB	80NBS-A
	CD	10.	1.	PPB	80NBS-A
	CO	19.	2.	PPB	80NBS-A
	CR	17.	2.	PPB	80NBS-A
	CU	18.	2.	PPB	80NBS-A
	FE	88.	4.	PPB	80NBS-A
	MN	31.	2.	PPB	80NBS-A
	MO	95.	6.	PPB	80NBS-A
	NI	55.	3.	PPB	80NBS-A
	PB	27.	1.	PPB	80NBS-A
	SE	11.	1.	PPB	80NBS-A
	SR	239.	5.	PPB	80NBS-A
	V	53.	3.	PPB	80NBS-A
	ZN	72.	4.	PPB	80NBS-A
80.00509	AG	.89	.09	PPM	79NBS-C
	AS	13.4	1.9	PPM	79NBS-C
	BR	55.		PPM	79NBS-C
	CA	1500.	200.	PPM	79NBS-C
	CD	3.5	.4	PPM	79NBS-C
	CL	1.		%	79NBS-C
	CO	.4		PPM	79NBS-C
	CR	.69	.27	PPM	79NBS-C
	CU	63.	3.5	PPM	79NBS-C
	F	5.2		PPM	79NBS-C
	FE	195.	34.	PPM	79NBS-C
	HG	.057	.015	PPM	79NBS-C
	I	2.8		PPM	79NBS-C
	K	9690.	50.	PPM	79NBS-C
	MG	1280.	90.	PPM	79NBS-C
	MN	17.5	1.2	PPM	79NBS-C
	NA	5100.	300.	PPM	79NBS-C
	NI	1.03	.19	PPM	79NBS-C
	P	8100.		PPM	79NBS-C

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00509	PB	.48	.04	PPM	79NBS-C
	RB	4.45	.09	PPM	79NBS-C
	S	7600.		PPM	79NBS-C
	SE	2.1	.5	PPM	79NBS-C
	SR	10.36	.56	PPM	79NBS-C
	TH	.1		PPM	79NBS-C
	U	.116	.006	PPM	79NBS-C
	V	2.8		PPM	79NBS-C
	ZN	852.	14.	PPM	79NBS-C
80.00510	H-3	800.		PCI/L	79NBS-A
80.00511	H-3	1600.		PCI/l.	79NBS-A
80.00512	H-3	3200.		PCI/L	79NBS-A
80.00513	H-3	8000.		PCI/L	79NBS-A
80.00514	H-3	16000.		PCI/L	79NBS-A
80.00515	AL	6.36	.11	%	81GLA-B
	AS	18.	2.	PPM	81GLA-B
	B	87.	15.	PPM	81GLA-B
	BA	470.	40.	PPM	81GLA-B
	BE	20.	6.	PPM	81GLA-B
	C	1600.	100.	PPM	81GLA-B
	CA	5.71	.11	%	81GLA-B
	CE	210.	60.	PPM	81GLA-B
	CL	140.	40.	PPM	81GLA-B
	CO	11.	4.	PPM	81GLA-B
	CR	10.	3.	PPM	81GLA-B
	CS	2.4	.4	PPM	81GLA-B
	CU	6.	3.	PPM	81GLA-B
	DY	20.	8.	PPM	81GLA-B
	ER	12.	1.	PPM	81GLA-B
	EU	2.4	.4	PPM	81GLA-B
	F	4800.	500.	PPM	81GLA-B
	FE	4.42	.12	%	81GLA-B
	GA	29.	4.	PPM	81GLA-B
	GD	11.	1.	PPM	81GLA-B
	HF	8.	1.	PPM	81GLA-B
	HO	5.	2.	PPM	81GLA-B
	K	3.71	.12	%	81GLA-B
	LA	79.	18.	PPM	81GLA-B
	LI	95.	8.	PPM	81GLA-B
	LU	2.8	.5	PPM	81GLA-B
	MG	1.63	.06	%	81GLA-B

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00515	MN	2500.	100.	PPM	81GLA-B
	NA	3.21	.1	%	81GLA-B
	NB	25.	7.	PPM	81GLA-B
	ND	76.	20.	PPM	81GLA-B
	NI	10.	4.	PPM	81GLA-B
	O	45.	1.2	%	81GLA-B
	P	1900.	100.	PPM	81GLA-B
	PB	83.	12.	PPM	81GLA-B
	PR	14.	4.	PPM	81GLA-B
	RB	217.	14.	PPM	81GLA-B
	S	190.	90.	PPM	81GLA-B
	SB	250.	80.	PPB	81GLA-B
	SC	7.3	1.1	PPM	81GLA-B
	SI	28.06	.19	%	81GLA-B
	SM	15.	2.	PPM	81GLA-B
	SN	3.3	.9	PPM	81GLA-B
	SR	271.	17.	PPM	81GLA-B
	TA	1.9	.2	PPM	81GLA-B
	TB	2.5	.8	PPM	81GLA-B
	TH	360.	70.	PPM	81GLA-B
	TI	900.	120.	PPM	81GLA-B
	TL	1.5	.4	PPM	81GLA-B
	TM	2.1	.4	PPM	81GLA-B
	U	280.	25.	PPM	81GLA-B
	V	50.	8.	PPM	81GLA-B
	Y	130.	20.	PPM	81GLA-B
	YB	17.	3.	PPM	81GLA-B
	ZN	250.	20.	PPM	81GLA-B
	ZR	280.	30.	PPM	81GLA-B
80.00516	AL	6.22	.15	%	81GLA-B
	AS	19.	3.	PPM	81GLA-B
	B	102.	13.	PPM	81GLA-B
	BA	460.	50.	PPM	81GLA-B
	BE	20.	6.	PPM	81GLA-B
	C	1300.	200.	PPM	81GLA-B
	CA	5.9	.12	%	81GLA-B
	CE	2110.	710.	PPM	81GLA-B
	CL	140.	30.	PPM	81GLA-B
	CO	11.	4.	PPM	81GLA-B
	CS	2.4	.5	PPM	81GLA-B
	CU	17.	4.	PPM	81GLA-B
	DY	89.	26.	PPM	81GLA-B
	ER	43.	6.	PPM	81GLA-B
	EU	14.	3.	PPM	81GLA-B
	F	7100.	600.	PPM	81GLA-B
	FE	4.53	.11	%	81GLA-B
	GA	28.	4.	PPM	81GLA-B
	GD	54.	2.	PPM	81GLA-B
	GE	1.3	.2	PPM	81GLA-B
	HF	10.	1.	PPM	81GLA-B
	HO	19.	8.	PPM	81GLA-B

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00516	K	3.5	.1	%	81GLA-B
	LA	1220.	360.	PPM	81GLA-B
	LI	92.	7.	PPM	81GLA-B
	LU	6.	3.	PPM	81GLA-B
	MG	1.62	.08	%	81GLA-B
	MN	2600.	100.	PPM	81GLA-B
	NA	3.06	.1	%	81GLA-B
	NB	150.	40.	PPM	81GLA-B
	ND	610.	220.	PPM	81GLA-B
	NI	11.	4.	PPM	81GLA-B
	O	45.	.4	%	81GLA-B
	P	2400.	100.	PPM	81GLA-B
	PB	130.	20.	PPM	81GLA-B
	PR	122.	4.	PPM	81GLA-B
	RB	206.	19.	PPM	81GLA-B
	S	500.	160.	PPM	81GLA-B
	SB	300.	80.	PPB	81GLA-B
	SC	8.	3.	PPM	81GLA-B
	SI	27.87	.17	%	81GLA-B
	SM	100.	30.	PPM	81GLA-B
	SN	5.	2.	PPM	81GLA-B
	SR	300.	22.	PPM	81GLA-B
	TB	13.	4.	PPM	81GLA-B
	TH	980.	80.	PPM	81GLA-B
	TI	900.	120.	PPM	81GLA-B
	TL	1.6	.6	PPM	81GLA-B
	TM	8.	3.	PPM	81GLA-B
	U	630.	60.	PPM	81GLA-B
	V	50.	9.	PPM	81GLA-B
	Y	730.	80.	PPM	81GLA-B
	YB	60.	19.	PPM	81GLA-B
	ZN	245.	17.	PPM	81GLA-B
	ZR	320.	40.	PPM	81GLA-B
80.00517	AL	4.5	.14	%	81GLA-B
	BA	68.	29.	PPM	81GLA-B
	C	3100.	100.	PPM	81GLA-B
	CA	10.48	.22	%	81GLA-B
	CE	28.	6.	PPM	81GLA-B
	CL	150.	40.	PPM	81GLA-B
	CO	86.	12.	PPM	81GLA-B
	CR	430.	80.	PPM	81GLA-B
	CS	600.	300.	PPB	81GLA-B
	CU	133.	12.	PPM	81GLA-B
	DY	3.4	.9	PPM	81GLA-B
	ER	1.	.1	PPM	81GLA-B
	EU	1.4	.1	PPM	81GLA-B
	F	240.	50.	PPM	81GLA-B
	FE	12.55	.27	%	81GLA-B
	GA	18.	3.	PPM	81GLA-B
	GD	4.	1.	PPM	81GLA-B
	HF	3.5	.5	PPM	81GLA-B

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00517	HO	520.	60.	PPB	81GLA-B
	K	1500.	200.	PPM	81GLA-B
	LA	9.7	.9	PPM	81GLA-B
	LI	4.	1.	PPM	81GLA-B
	MD	9.	3.	PPM	81GLA-B
	MG	8.14	.16	%	81GLA-B
	MN	1300.	100.	PPM	81GLA-B
	NA	5400.	400.	PPM	81GLA-B
	NB	18.	6.	PPM	81GLA-B
	ND	19.	3.	PPM	81GLA-B
	NI	200.	25.	PPM	81GLA-B
	O	42.	1.	%	81GLA-B
	P	300.	90.	PPM	81GLA-B
	PB	11.	4.	PPM	81GLA-B
	RB	8.7	2.3	PPM	81GLA-B
	S	630.	90.	PPM	81GLA-B
	SC	52.	7.	PPM	81GLA-B
	SI	18.3	.14	%	81GLA-B
	SM	5.	1.	PPM	81GLA-B
	SN	3.	.8	PPM	81GLA-B
	SR	264.	16.	PPM	81GLA-B
	TB	500.	40.	PPB	81GLA-B
	TH	.93	.19	PPM	81GLA-B
	TI	2.26	.08	%	81GLA-B
	TM	100.	40.	PPB	81GLA-B
	U	290.	80.	PPB	81GLA-B
	V	510.	50.	PPM	81GLA-B
	Y	16.	5.	PPM	81GLA-B
	ZN	190.	11.	PPM	81GLA-B
	ZR	110.	20.	PPM	81GLA-B
80.00518	AL	7.4		%	77ING-A
	BA	420.		PPM	77ING-A
	BI	20.		PPM	77ING-A
	CA	1.9		%	77ING-A
	CD	360.		PPB	77ING-A
	CO	26.		PPM	77ING-A
	CU	63.		PPM	77ING-A
	FE	4.8		%	77ING-A
	K	1.		%	77ING-A
	MG	1.2		%	77ING-A
	MO	34.		PPM	77ING-A
	NA	3.9		%	77ING-A
	PB	71.		PPM	77ING-A
	RA-226	75.	4.	PCI/G	77ING-A
	S	2700.		PPM	77ING-A
	SI	30.4		%	77ING-A
	SR	50.		PPM	77ING-A
	TH	15.	2.	PPM	77ING-A
	U	220.	10.	PPM	77ING-A
	V	210.		PPM	77ING-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00518					
80.00519	AL	7.3		%	77ING-A
	BA	350.		PPM	77ING-A
	BI	20.		PPM	77ING-A
	CA	2.8		%	77ING-A
	CD	250.		PPB	77ING-A
	CO	25.		PPM	77ING-A
	CU	78.		PPM	77ING-A
	FE	5.4		%	77ING-A
	K	6600.		PPM	77ING-A
	MG	1.4		%	77ING-A
	NA	4.2		%	77ING-A
	PB	922.		PPM	77ING-A
	RA-226	1490.	30.	PCI/G	77ING-A
	S	3300.		PPM	77ING-A
	SI	28.1		%	77ING-A
	SR	70.		PPM	77ING-A
	U	4530.005		PPM	77ING-A
	V	841.		PPM	77ING-A
80.00520	AL	7.3		%	77ING-A
	BA	370.		PPM	77ING-A
	BI	20.		PPM	77ING-A
	CA	2.9		%	77ING-A
	CD	310.		PPB	77ING-A
	CO	23.		PPM	77ING-A
	CU	91.		PPM	77ING-A
	FE	5.3		%	77ING-A
	K	6600.		PPM	77ING-A
	MG	1.4		%	77ING-A
	MO	41.		PPM	77ING-A
	NA	4.2		%	77ING-A
	PB	1710.		PPM	77ING-A
	RA-226	3330.	70.	PCI/G	77ING-A
	S	3600.		PPM	77ING-A
	SI	27.8		%	77ING-A
	SR	70.		PPM	77ING-A
	U	1.02	.01	%	77ING-A
	V	834.		PPM	77ING-A
80.00521	AL	7.1		%	77ING-A
	BA	410.		PPM	77ING-A
	BI	20.		PPM	77ING-A
	CA	2.5		%	77ING-A
	CD	1.2		PPM	77ING-A
	CO	18.		PPM	77ING-A
	CU	67.		PPM	77ING-A
	FE	5.		%	77ING-A
	K	6500.		PPM	77ING-A
	MG	1.3		%	77ING-A
	MO	35.		PPM	77ING-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00521	NA	4.2		%	77ING-A
	PB	346.		PPM	77ING-A
	RA-226	566.	12.	PCI/G	77ING-A
	S	1700.		PPM	77ING-A
	SI	28.7		%	77ING-A
	SR	60.		PPM	77ING-A
	U	1730.	40.	PPM	77ING-A
	V	720.		PPM	77ING-A
80.00522	AL	2.3		%	77ING-A
	BA	130.		PPM	77ING-A
	BI	40.		PPM	77ING-A
	CA	300.		PPM	77ING-A
	CD	270.		PPB	77ING-A
	CE	2400.		PPM	77ING-A
	CO	89.		PPM	77ING-A
	CU	73.		PPM	77ING-A
	DY	40.		PPM	77ING-A
	FE	6.1		%	77ING-A
	GD	90.		PPM	77ING-A
	K	1.1		%	77ING-A
	LA	1150.		PPM	77ING-A
	MG	300.		PPM	77ING-A
	MO	5.		PPM	77ING-A
	NA	400.		PPM	77ING-A
	ND	750.		PPM	77ING-A
	PB	523.		PPM	77ING-A
	PR	200.		PPM	77ING-A
	RA-226	578.	12.	PCI/G	77ING-A
	S	6.3		%	77ING-A
	SI	38.5		%	77ING-A
	SM	150.		PPM	77ING-A
	SR	5.		PPM	77ING-A
	TB	20.		PPM	77ING-A
	TH	1040.	50.	PPM	77ING-A
	TI	2000.		PPM	77ING-A
	U	1770.	30.	PPM	77ING-A
	V	14.		PPM	77ING-A
80.00523	AL	5.1		%	77ING-A
	BA	160.		PPM	77ING-A
	BI	10.		PPM	77ING-A
	CA	600.		PPM	77ING-A
	CD	200.		PPB	77ING-A
	CE	98.		PPM	77ING-A
	CO	11.		PPM	77ING-A
	CU	74.		PPM	77ING-A
	DY	2.1		PPM	77ING-A
	FE	8300.		PPM	77ING-A
	GD	3.3		PPM	77ING-A
	K	2.5		%	77ING-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00523	LA	52.		PPM	77ING-A
	MG	500.		PPM	77ING-A
	MO	4.		PPM	77ING-A
	NA	700.		PPM	77ING-A
	ND	38.		PPM	77ING-A
	PB	18.		PPM	77ING-A
	PR	9.6		PPM	77ING-A
	RA-226	13.2	.7	PCI/G	77ING-A
	S	3000.		PPM	77ING-A
	SI	37.1		%	77ING-A
	SM	6.9		PPM	77ING-A
	SR	4.		PPM	77ING-A
	TH	83.	6.	PPM	77ING-A
	TI	800.		PPM	77ING-A
	U	41.	2.	PPM	77ING-A
	V	24.		PPM	77ING-A
	Y	17.		PPM	77ING-A
	YB	1.3		PPM	77ING-A
80.00524	U	2660.		PPM	67IAE-A
80.00525	U	3180.		PPM	67IAE-B
80.00526	U	119.		PPM	74JEN-A
80.00527	U	1200.		PPM	74JEN-A
80.00528	U	4470.		PPM	74JEN-A
80.00529	U	339.		PPM	74JEN-A
80.00530	U	3540.		PPM	67IAE-C
80.00531	AL	870.	50.	PPM	76NBS-A
	AS	150.	50.	PPB	76NBS-A
	B	30.		PPM	76NBS-A
	BA	13.		PPM	80GLA-A
	BR	54.		PPM	76NBS-A
	C	40.82		%	80GLA-A
	CA	1.35	.03	%	76NBS-A
	CD	1.5		PPM	76NBS-A
	CL	6400.		PPM	80GLA-A
	CO	1.5		PPM	76NBS-A
	CR	4.6	.3	PPM	76NBS-A
	CS	48.		PPB	80GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00531	CU	12.	2.	PPM	76NBS-A
	EU	20.		PPB	76NBS-A
	FE	550.	20.	PPM	76NBS-A
	HG	30.	5.	PPB	75NBS-A
	K	3.56	.03	%	76NBS-A
	LA	370.		PPB	76NBS-A
	MG	8600.	1200.	PPM	80GLA-A
	MN	165.	6.	PPM	76NBS-A
	N	5.9		%	76NBS-A
	NA	1.44	.12	%	80GLA-A
	NI	6.		PPM	76NBS-A
	P	5500.	200.	PPM	76NBS-A
	PB	1.2	.2	PPM	76NBS-A
	RB	12.1	.2	PPM	76NBS-A
	SB	40.		PPB	76NBS-A
	SC	160.		PPB	76NBS-A
	SE	39.	15.	PPB	80GLA-A
	SR	87.	2.	PPM	76NBS-A
	TH	120.	30.	PPB	76NBS-A
	TL	30.	3.	PPB	76NBS-A
	U	46.	9.	PPB	76NBS-A
	V	1.27	.29	PPM	80GLA-A
	ZN	50.	2.	PPM	76NBS-A
80.00532	AL	310.	100.	PPM	80GLA-A
	AS	10.	2.	PPM	77NBS-A
	B	33.	3.	PPM	77NBS-A
	BA	44.		PPM	77NBS-A
	BE	27.	10.	PPB	77NBS-A
	BI	100.		PPB	77NBS-A
	BR	10.		PPM	77NBS-A
	C	46.3	.5	%	80GLA-A
	CA	2.09	.03	%	77NBS-A
	CD	110.	10.	PPB	77NBS-A
	CE	1.	.1	PPM	80GLA-A
	CL	690.		PPM	77NBS-A
	CO	200.		PPB	77NBS-A
	CR	2.6	.3	PPM	77NBS-A
	CS	32.	10.	PPB	80GLA-A
	CU	12.	1.	PPM	77NBS-A
	F	4.		PPM	77NBS-A
	FE	300.	20.	PPM	77NBS-A
	GA	80.		PPB	77NBS-A
	H	5.9	.3	%	80GLA-A
	HG	155.	15.	PPB	77NBS-A
	I	170.		PPB	77NBS-A
	IN	1.5	.3	PPB	80GLA-A
	K	1.47	.03	%	77NBS-A
	LA	1.2	.4	PPM	80GLA-A
	LI	600.		PPB	77NBS-A
	MG	6200.	200.	PPM	77NBS-A
	MN	91.	4.	PPM	77NBS-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00532	MO	.3	.1	PPM	77NBS-A
	N	2.76	.05	%	77NBS-A
	NA	82.	6.	PPM	77NBS-A
	NI	1.3	.2	PPM	77NBS-A
	P	2100.	100.	PPM	77NBS-A
	PB	45.	3.	PPM	77NBS-A
	RB	12.	1.	PPM	77NBS-A
	S	1900.		PPM	77NBS-A
	SB	2.9	.3	PPM	77NBS-A
	SE	80.	10.	PPB	77NBS-A
	SM	110.	20.	PPB	80GLA-A
	SR	37.	1.	PPM	77NBS-A
	TE	10.		PPB	77NBS-A
	TH	64.	6.	PPM	77NBS-A
	U	28.	3.	PPB	77NBS-A
	V	600.	150.	PPB	80GLA-A
	YB	27.	11.	PPB	80GLA-A
	ZN	25.	3.	PPM	77NBS-A
80.00533	AL	270.	50.	PPB	76NBS-B
	AS	.27	.05	PPM	76NBS-B
	B	30.		PPM	76NBS-B
	BA	56.	8.	PPM	80GLA-A
	BR	26.		PPM	76NBS-B
	CA	3.	.03	%	76NBS-B
	CD	3.		PPM	76NBS-B
	CE	1.6		PPM	76NBS-B
	CL	1.08	.02	%	80GLA-A
	CO	600.		PPB	76NBS-B
	CR	4.5	.5	PPM	76NBS-B
	CU	11.	1.	PPM	76NBS-B
	EU	40.		PPB	76NBS-B
	FE	690.	25.	PPM	76NBS-B
	HG	.1		PPM	76NBS-B
	K	4.46	.03	%	76NBS-B
	LA	.9		PPM	76NBS-B
	MG	7000.		PPM	76NBS-B
	MN	238.	7.	PPM	76NBS-B
	N	5.		%	76NBS-B
	NA	530.	60.	PPM	80GLA-A
	P	3400.	200.	PPM	76NBS-B
	PB	6.3	.3	PPM	76NBS-B
	RB	16.5	.1	PPM	76NBS-B
	SC	130.		PPB	76NBS-B
	SE	60.	20.	PPB	80GLA-A
	SR	44.9	.3	PPM	76NBS-B
	TH	170.	30.	PPB	76NBS-B
	TL	50.	5.	PPB	76NBS-B
	U	61.	3.	PPB	76NBS-B
	ZN	62.	6.	PPM	76NBS-B
80.00534					

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00534	AL	545.	30.	PPM	76NBS-C
	AS	210.	40.	PPB	76NBS-C
	B	17.		PPM	80GLA-A
	BR	6.9	.5	PPM	80GLA-A
	C	51.6	2.1	%	80GLA-A
	CA	4100.	200.	PPM	76NBS-C
	CE	400.		PPB	76NBS-C
	CO	100.		PPB	76NBS-C
	CR	2.6	.2	PPM	76NBS-C
	CU	3.	.3	PPM	76NBS-C
	EU	6.		PPB	76NBS-C
	FE	200.	10.	PPM	76NBS-C
	HG	150.	50.	PPB	76NBS-C
	K	3700.	200.	PPM	76NBS-C
	LA	200.		PPB	76NBS-C
	MN	675.	15.	PPM	76NBS-C
	N	1.2		%	76NBS-C
	NI	3.5		PPM	76NBS-C
	P	1200.	200.	PPM	76NBS-C
	PB	10.8	.5	PPM	76NBS-C
	RB	11.7	.1	PPM	76NBS-C
	SB	200.		PPB	76NBS-C
	SC	30.		PPB	76NBS-C
	SE	49.	4.	PPB	80GLA-A
	SR	4.8	.2	PPM	76NBS-C
	TH	37.	3.	PPB	76NBS-C
	TL	50.	5.	PPB	76NBS-C
	U	20.	4.	PPB	76NBS-C
	ZN	61.	10.	PPM	80GLA-A
80.00535	AG	60.		PPB	72NBS-E
	AL	30.	20.	PPM	80GLA-A
	AS	55.		PPB	72NBS-E
	B	3.2	.9	PPM	80GLA-A
	BR	8.7	1.7	PPM	80GLA-A
	C	50.6	1.1	%	80GLA-A
	CA	123.		PPM	72NBS-E
	CD	370.	40.	PPB	72NBS-E
	CL	2600.		PPM	72NBS-E
	CO	180.		PPB	72NBS-E
	CS	17.	7.	PPB	80GLA-A
	CU	193.	10.	PPM	72NBS-E
	FE	270.	20.	PPM	72NBS-E
	H	7.	.2	%	80GLA-A
	HG	16.	2.	PPB	72NBS-E
	K	.97	.06	%	72NBS-E
	MG	605.		PPM	72NBS-E
	MN	10.3	1.	PPM	72NBS-E
	MO	3.2		PPM	72NBS-E
	N	10.6	.6	%	72NBS-E
	NA	2430.	130.	PPM	72NBS-E
	P	1.05	.16	%	80GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00535	PB	340.	80.	PPB	72NBS-E
	RB	18.3	1.	PPM	72NBS-E
	S	7100.	100.	PPM	80GLA-A
	SE	1.1	.1	PPM	72NBS-E
	SR	140.		PPB	72NBS-E
	TL	50.		PPB	72NBS-E
	U	.8		PPB	72NBS-E
	ZN	130.	10.	PPM	72NBS-E
80.00536	AG	60.	15.	PPB	80GLA-A
	AL	1.74	.13	%	80GLA-A
	AS	5.9	.6	PPM	74NBS-A
	B	40.	9.	PPM	80GLA-A
	BA	344.	33.	PPM	80GLA-A
	BE	1.4	.2	PPM	80GLA-A
	BR	18.2	2.1	PPM	80GLA-A
	C	71.	2.	%	80GLA-A
	CA	4100.	460.	PPM	80GLA-A
	CD	190.	30.	PPB	74NBS-A
	CE	21.	3.	PPM	80GLA-A
	CL	880.	60.	PPM	80GLA-A
	CO	5.7	.5	PPM	80GLA-A
	CR	20.2	.5	PPM	74NBS-A
	CS	1.6	.5	PPM	80GLA-A
	CU	18.	2.	PPM	74NBS-A
	DY	1.2	.3	PPM	80GLA-A
	EU	340.	50.	PPB	80GLA-A
	FE	8700.	300.	PPM	74NBS-A
	GA	6.	1.4	PPM	80GLA-A
	GD	2.9	1.2	PPM	80GLA-A
	H	4.23	.18	%	80GLA-A
	HF	.98	.1	PPM	80GLA-A
	HG	120.	20.	PPB	74NBS-A
	I	3.4	1.2	PPM	80GLA-A
	K	2800.	120.	PPM	80GLA-A
	LA	10.3	1.2	PPM	80GLA-A
	LU	125.	17.	PPB	80GLA-A
	MG	1800.	440.	PPM	80GLA-A
	MN	40.	3.	PPM	74NBS-A
	N	1.1	.2	%	80GLA-A
	NA	376.	26.	PPM	80GLA-A
	ND	9.2	1.9	PPM	80GLA-A
	NI	15.	1.	PPM	74NBS-A
	PB	30.	9.	PPM	74NBS-A
	RB	21.	3.	PPM	80GLA-A
	S	1.5	.4	%	80GLA-A
	SB	3.6	.6	PPM	80GLA-A
	SC	3.8	.3	PPM	80GLA-A
	SE	2.9	.3	PPM	74NBS-A
	SI	3.2		%	74NBS-A
	SM	1.6	.2	PPM	80GLA-A
	SR	145.	22.	PPM	80GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00536	TA	260.	70.	PPB	80GLA-A
	TB	300.	100.	PPB	80GLA-A
	TH	3.	.7	PPM	80GLA-A
	TI	950.	120.	PPM	80GLA-A
	TL	590.	30.	PPB	74NBS-A
	U	1.4	.1	PPM	74NBS-A
	V	35.	3.	PPM	74NBS-A
	W	740.	70.	PPB	80GLA-A
	YB	780.	130.	PPB	60GLA-A
	ZN	37.	4.	PPM	74NBS-A
	ZR	36.	9.	PPM	80GLA-A
80.00537	AL	12.5	1.	%	80GLA-A
	AS	61.	6.	PPM	75NBS-A
	B	480.	40.	PPM	80GLA-A
	BA	2700.	170.	PPM	80GLA-A
	BE	12.	1.	PPM	80GLA-A
	BR	8.6	2.4	PPM	80GLA-A
	CA	4.6	.4	%	80GLA-A
	CD	1.45	.06	PPM	75NBS-A
	CE	152.	11.	PPM	80GLA-A
	CL	33.	13.	PPM	80GLA-A
	CO	40.	3.	PPM	80GLA-A
	CR	131.	2.	PPM	75NBS-A
	CS	8.6	1.8	PPM	80GLA-A
	CU	128.	5.	PPM	75NBS-A
	DY	8.8	2.3	PPM	80GLA-A
	EU	2.6	.2	PPM	80GLA-A
	FE	6.2	.4	%	80GLA-A
	GA	49.	14.	PPM	80GLA-A
	HF	7.8	1.1	PPM	80GLA-A
	HG	.14	.01	PPM	75NBS-A
	I	2.7	.4	PPM	80GLA-A
	K	1.7	.09	%	80GLA-A
	LA	79.	7.	PPM	80GLA-A
	MG	1.6	.3	%	80GLA-A
	MN	493.	7.	PPM	75NBS-A
	MO	29.	6.	PPM	80GLA-A
	NA	3200.	340.	PPM	80GLA-A
	ND	64.	8.	PPM	80GLA-A
	NI	98.	3.	PPM	75NBS-A
	PB	70.	4.	PPM	75NBS-A
	RB	112.		PPM	75NBS-A
	SB	6.9	.4	PPM	80GLA-A
	SC	26.	2.	PPM	80GLA-A
	SE	9.4	.5	PPM	75NBS-A
	SI	20.2	2.5	%	80GLA-A
	SM	12.4	1.1	PPM	80GLA-A
	SN	9.4	.3	PPM	80GLA-A
	SR	1380.		PPM	75NBS-A
	TA	2.2	.5	PPM	80GLA-A
	TB	2.1	.6	PPM	80GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00537	TH	24.		PPM	75NBS-A
	TI	7200.	720.	PPM	80GLA-A
	TL	4.		PPM	75NBS-A
	U	11.6	.2	PPM	75NBS-A
	V	214.	8.	PPM	75NBS-A
	W	5.5	2.6	PPM	80GLA-A
	Y	65.	3.	PPM	80GLA-A
	YB	6.4	1.1	PPM	80GLA-A
	ZN	210.	20.	PPM	75NBS-A
	ZR	300.	75.	PPM	80GLA-A
80.00538	HG	1.49	.05	PPM	75NBS-B
80.00539	HG	1.18	.05	PPB	74NBS-B
80.00540	HG	1.1	.06	PPB	77NBS-B
80.00541	U	84.8		%	69NBS-D
	U-235	.72		%	76MIL-A
	U-238	99.22		%	76MIL-A
80.00542	AS	99.99		%	70NBS-C
80.00543	K	38.66	.01	%	74NBS-C
	N	13.85		%	74NBS-C
80.00544	N	12.15	.01	%	74NBS-D
	P	26.9	.02	%	74NBS-D
80.00545	F	.835	.082	PPM	75NBS-C
80.00546	CA	49.99	.062	%	71NBS-A
	F	47.43	.062	%	71NBS-A
	SI	3100.		PPM	71NBS-A
80.00547	C	7600.		PPM	72NBS-F
	CA	35.32		%	72NBS-F
	CD	20.		PPM	72NBS-F
	F	3.84		%	72NBS-F
	MG	1700.		PPM	72NBS-F
	MN	250.		PPM	72NBS-F
	NA	2600.		PPM	72NBS-F
	P	15.1		%	72NBS-F

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00547	PB	900.		PPM	72NBS-F
	SI	2.19		%	72NBS-F
	TI	900.		PPM	72NBS-F
80.00548	AL	3.18		%	31NBS-A
	AS	690.		PPM	31NBS-A
	CA	7.49		%	31NBS-A
	CL	140.		PPM	31NBS-A
	F	5.72		%	31NBS-A
	FE	570.		PPM	31NBS-A
	K	2.7		%	31NBS-A
	NA	6.29		%	31NBS-A
	P	100.		PPM	31NBS-A
	SI	31.54		%	31NBS-A
	TI	110.		PPM	31NBS-A
	ZN	600.		PPM	31NBS-A
	ZR	70.		PPM	31NBS-A
80.00549	AL	2.		%	75NBS-D
	CA	46.1		%	75NBS-D
	F	800.		PPM	75NBS-D
	FE	2.9		%	75NBS-D
	K	1400.		PPM	75NBS-D
	MG	6300.		PPM	75NBS-D
	MN	300.		PPM	75NBS-D
	NA	4800.		PPM	75NBS-D
	P	1000.		PPM	75NBS-D
	S	8800.		PPM	75NBS-D
	SI	10.2		%	75NBS-D
	SR	2600.		PPM	75NBS-D
	TI	1400.		PPM	75NBS-D
80.00550	AL	3.3		%	75NBS-D
	CA	42.8		%	75NBS-D
	F	300.		PPM	75NBS-D
	FE	1.83		%	75NBS-D
	K	3700.		PPM	75NBS-D
	MG	7500.		PPM	75NBS-D
	MN	600.		PPM	75NBS-D
	NA	500.		PPM	75NBS-D
	P	740.		PPM	75NBS-D
	PB	426.		PPM	75NBS-D
	S	2.83		%	75NBS-D
	SI	8.6		%	75NBS-D
	SR	1800.		PPM	75NBS-D
	TI	1900.		PPM	75NBS-D
	ZN	80.		PPM	75NBS-D
80.00552	CA	.85		%	74NBS-E

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00552	CD	7800.		PPM	74NBS-E
	CO	1100.		PPM	74NBS-E
	CU	3100.		PPM	74NBS-E
	FE	2.08		%	74NBS-E
	MG	.45		%	74NBS-E
	NI	700.		PPM	74NBS-E
	PB	28000.		PPM	74NBS-E
	S	30.6		%	74NBS-E
	SI	.72		%	74NBS-E
	ZN	57.3		%	74NBS-E
80.00553	AS	570.		PPM	70NBS-D
	BI	520.		PPM	70NBS-D
	CU	540.		PPM	70NBS-D
	NI	30.		PPM	70NBS-D
	PB	84.		%	70NBS-D
	SB	10.26		%	70NBS-D
	SN	5.84		%	70NBS-D
80.00554	AL	.23		%	66NBS-K
	B	31.		PPM	66NBS-K
	C	440.		PPM	66NBS-K
	CR	14.54		%	66NBS-K
	CU	2200.		PPM	66NBS-K
	FE	53.5		%	66NBS-K
	MN	14800.		PPM	66NBS-K
	MO	13000.		PPM	66NBS-K
	NI	25.8		%	66NBS-K
	P	.015		%	66NBS-K
	S	.002		%	66NBS-K
	SI	.54		%	66NBS-K
	TI	2.24		%	66NBS-K
	V	2500.		PPM	66NBS-K
80.00555	CR	290.		PPM	??NBS-A
	CU	79200.		PPM	??NBS-A
	FE	.9		%	??NBS-A
	MG	.002		%	??NBS-A
	MN	410.		PPM	??NBS-A
	NI	300.		PPM	??NBS-A
	PB	310.		PPM	??NBS-A
	SI	.68		%	??NBS-A
	TI	.35		%	??NBS-A
	ZN	1.5		%	??NBS-A
80.00556	C	1200.		PPM	56NBS-A
	CR	12.89		%	56NBS-A
	CU	1180.		PPM	56NBS-A
	MN	10300.		PPM	56NBS-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00556	MO	2940.		PPM	56NBS-A
	N	.032		%	56NBS-A
	NI	2410.		PPM	56NBS-A
	P	.026		%	56NBS-A
	S	.329		%	56NBS-A
	SI	.412		%	56NBS-A
	V	260.		PPM	56NBS-A
80.00557	C	3700.		PPM	56NBS-B
	CO	41.2		%	56NBS-B
	CR	20.33		%	56NBS-B
	CU	350.		PPM	56NBS-B
	FE	3.43		%	56NBS-B
	MN	15000.		PPM	56NBS-B
	MO	39500.		PPM	56NBS-B
	NB	2.95		%	56NBS-B
	NI	20.25		%	56NBS-B
	P	.008		%	56NBS-B
	PB	135.		PPM	56NBS-B
	S	.005		%	56NBS-B
	SI	.8		%	56NBS-B
	TA	9500.		PPM	56NBS-B
	TI	.06		%	56NBS-B
	V	300.		PPM	56NBS-B
80.00558	AL	5.15		%	64NBS-A
	CD	155.		PPM	64NBS-A
	CR	8.		PPM	64NBS-A
	CU	15000.		PPM	64NBS-A
	FE	.017		%	64NBS-A
	MG	.094		%	64NBS-A
	MN	17.		PPM	64NBS-A
	NI	75.		PPM	64NBS-A
	SI	.078		%	64NBS-A
	SN	.012		%	64NBS-A
	W	3.95		%	64NBS-A
80.00559	AL	.41		%	74NBS-F
	B	59.		PPM	74NBS-F
	C	450.		PPM	74NBS-F
	CO	700.		PPM	74NBS-F
	CR	12.9		%	74NBS-F
	FE	41.9		%	74NBS-F
	MN	470.		PPM	74NBS-F
	MO	32500.		PPM	74NBS-F
	NI	32.6		%	74NBS-F
	P	.008		%	74NBS-F
	S	.002		%	74NBS-F
	SI	.13		%	74NBS-F
	TI	2.32		%	74NBS-F

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00559	W	6.08		%	74NBS-F
	ZR	.15		%	74NBS-F
80.00561	N	.0945		%	69NBS-E
	O	130.		PPM	69NBS-E
80.00562	O	60.		PPM	69NBS-F
80.00563	CR	10300.		PPM	60NBS-A
	FE	1.36		%	60NBS-A
	MO	36100.		PPM	60NBS-A
80.00564	AL	.0028		%	72NBS-G
	C	270.		PPM	72NBS-G
	CR	220.		PPM	72NBS-G
	CU	560.		PPM	72NBS-G
	MN	940.		PPM	72NBS-G
	MO	140.		PPM	72NBS-G
	NI	500.		PPM	72NBS-G
	P	.006		%	72NBS-G
	S	.026		%	72NBS-G
	SI	3.19		%	72NBS-G
	SN	.004		%	72NBS-G
80.00565	AG	11.		PPM	75NBS-E
	AL	.095		%	75NBS-E
	AS	920.		PPM	75NBS-E
	B	25.		PPM	75NBS-E
	BI	20.		PPM	75NBS-E
	C	1600.		PPM	75NBS-E
	CA	.0001		%	75NBS-E
	CE	15.		PPM	75NBS-E
	CO	3000.		PPM	75NBS-E
	CR	3000.		PPM	75NBS-E
	CU	5000.		PPM	75NBS-E
	FE	95.3		%	75NBS-E
	HF	3.		PPM	75NBS-E
	LA	4.		PPM	75NBS-E
	MG	.0006		%	75NBS-E
	MN	10400.		PPM	75NBS-E
	MO	680.		PPM	75NBS-E
	N	.004		%	75NBS-E
	NB	.29		%	75NBS-E
	ND	6.4		PPM	75NBS-E
	NI	5900.		PPM	75NBS-E
	O	10.7		PPM	75NBS-E
	P	.042		%	75NBS-E
	PB	4.3		PPM	75NBS-E

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00565	PR	1.2		PPM	75NBS-E
	S	.038		%	75NBS-E
	SB	.012		%	75NBS-E
	SE	12.		PPM	75NBS-E
	SI	.39		%	75NBS-E
	SN	.016		%	75NBS-E
	TA	2000.		PPM	75NBS-E
	TE	11.		PPM	75NBS-E
	TI	.084		%	75NBS-E
	V	410.		PPM	75NBS-E
	W	.2		%	75NBS-E
	ZN	.0005		%	75NBS-E
	ZR	.19		%	75NBS-E
80.00566	AG	.2		PPM	75NBS-E
	AL	.008		%	75NBS-E
	AS	520.		PPM	75NBS-E
	AU	1.		PPM	75NBS-E
	B	110.		PPM	75NBS-E
	BI	9.		PPM	75NBS-E
	C	8700.		PPM	75NBS-E
	CA	.4		PPM	75NBS-E
	CE	2.2		PPM	75NBS-E
	CO	1500.		PPM	75NBS-E
	CR	650.		PPM	75NBS-E
	CU	2490.		PPM	75NBS-E
	FE	96.7		%	75NBS-E
	HF	13.		PPM	75NBS-E
	LA	.7		PPM	75NBS-E
	MG	.0002		%	75NBS-E
	MN	2550.		PPM	75NBS-E
	MO	4900.		PPM	75NBS-E
	N	.0032		%	75NBS-E
	NB	.16		%	75NBS-E
	ND	.7		PPM	75NBS-E
	NI	1420.		PPM	75NBS-E
	O	10.		PPM	75NBS-E
	P	.018		%	75NBS-E
	PB	240.		PPM	75NBS-E
	PR	.3		PPM	75NBS-E
	S	.028		%	75NBS-E
	SB	.034		%	75NBS-E
	SE	2.1		PPM	75NBS-E
	SI	.067		%	75NBS-E
	SN	.008		%	75NBS-E
	TA	1100.		PPM	75NBS-E
	TE	1.8		PPM	75NBS-E
	TI	.24		%	75NBS-E
	V	1050.		PPM	75NBS-E
	W	.102		%	75NBS-E
	ZN	.001		%	75NBS-E
	ZR	.068		%	75NBS-E

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00567	AG	46.	5.	PPM	76AND-A
	AL	53.		PPM	76AND-A
	AS	48.	8.	PPM	76AND-A
	B	54.		PPM	76AND-A
	BA	55.		PPM	76AND-A
	BE	55.		PPM	76AND-A
	CD	54.	5.	PPM	76AND-A
	CR	56.	9.	PPM	76AND-A
	CU	49.	5.	PPM	76AND-A
	FE	62.	11.	PPM	76AND-A
	GA	57.		PPM	76AND-A
	HG	27.	6.	PPM	76AND-A
	IN	51.		PPM	76AND-A
	MN	52.	7.	PPM	76AND-A
	MO	55.	7.	PPM	76AND-A
	NI	52.	4.	PPM	76AND-A
	PB	49.	6.	PPM	76AND-A
	SB	53.	4.	PPM	76AND-A
	SE	38.	5.	PPM	76AND-A
	SN	46.		PPM	76AND-A
	TE	50.		PPM	76AND-A
	TL	57.		PPM	76AND-A
	U	49.		PPM	76AND-A
	V	50.		PPM	76AND-A
	ZN	53.	4.	PPM	76AND-A
80.00570	AG	.11		PPM	73FLA-A
	AL	9.13		%	73FLA-A
	AS	.8		PPM	73FLA-A
	AU	.6		PPB	73FLA-A
	B	5.		PPM	73FLA-A
	BA	1208.		PPM	73FLA-A
	BE	3.		PPM	73FLA-A
	BI	.057		PPM	73FLA-A
	BR	.5		PPM	73FLA-A
	CA	3.48		%	73FLA-A
	CD	.09		PPM	73FLA-A
	CE	63.		PPM	73FLA-A
	CL	110.		PPM	73FLA-A
	CO	14.1		PPM	73FLA-A
	CR	12.2		PPM	73FLA-A
	CS	1.4		PPM	73FLA-A
	CU	59.7		PPM	73FLA-A
	DY	3.5		PPM	73FLA-A
	ER	1.2		PPM	73FLA-A
	EU	1.7		PPM	73FLA-A
	F	435.		PPM	73FLA-A
	FE	4.73		%	73FLA-A
	GA	20.5		PPM	73FLA-A
	GD	5.5		PPM	73FLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00570	GE	1.3		PPM	73FLA-A
	HF	5.2		PPM	73FLA-A
	HG	15.		PPB	73FLA-A
	HO	.6		PPM	73FLA-A
	IN	.04		PPM	73FLA-A
	IR	.011		PPB	73FLA-A
	K	2.4		%	73FLA-A
	LA	35.		PPM	73FLA-A
	LI	12.		PPM	73FLA-A
	LU	.28		PPM	73FLA-A
	MG	.92		%	73FLA-A
	MN	763.		PPM	73FLA-A
	MO	2.3		PPM	73FLA-A
	N	44.		PPM	73FLA-A
	NA	3.16		%	73FLA-A
	NB	15.		PPM	73FLA-A
	ND	39.		PPM	73FLA-A
	NI	18.5		PPM	73FLA-A
	P	2200.		PPM	73FLA-A
	PB	35.1		PPM	73FLA-A
	PR	7.		PPM	73FLA-A
	PT	1.		PPB	73FLA-A
	RA	.69		PPB	73FLA-A
	RB	67.		PPM	73FLA-A
	SB	4.5		PPM	73FLA-A
	SC	13.4		PPM	73FLA-A
	SI	28.		%	73FLA-A
	SM	5.9		PPM	73FLA-A
	SN	4.2		PPM	73FLA-A
	SR	657.		PPM	73FLA-A
	TA	.9		PPM	73FLA-A
	TB	.7		PPM	73FLA-A
	TH	6.41		PPM	73FLA-A
	TI	6190.		PPM	73FLA-A
	TL	1.		PPM	73FLA-A
	TM	.4		PPM	73FLA-A
	U	1.88		PPM	73FLA-A
	V	125.		PPM	73FLA-A
	W	.55		PPM	73FLA-A
	Y	21.3		PPM	73FLA-A
	YB	1.7		PPM	73FLA-A
	ZN	84.		PPM	73FLA-A
	ZR	225.		PPM	73FLA-A
80.00571	AG	.049		PPM	73FLA-A
	AL	8.15		%	73FLA-A
	AS	.25		PPM	73FLA-A
	AU	1.		PPB	73FLA-A
	B	2.		PPM	73FLA-A
	BA	1870.		PPM	73FLA-A
	BE	2.6		PPM	73FLA-A
	BI	.043		PPM	73FLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00571					
	BR	.3		PPM	73FLA-A
	CA	1.38		%	73FLA-A
	CD	.039		PPM	73FLA-A
	CE	150.		PPM	73FLA-A
	CL	50.		PPM	73FLA-A
	CO	5.5		PPM	73FLA-A
	CR	7.		PPM	73FLA-A
	CS	1.4		PPM	73FLA-A
	CU	11.7		PPM	73FLA-A
	DY	2.6		PPM	73FLA-A
	ER	1.3		PPM	73FLA-A
	EU	1.5		PPM	73FLA-A
	F	1290.		PPM	73FLA-A
	FE	1.85		%	73FLA-A
	GA	22.9		PPM	73FLA-A
	GD	5.		PPM	73FLA-A
	GE	1.15		PPM	73FLA-A
	HF	7.35		PPM	73FLA-A
	HG	39.		PPB	73FLA-A
	HO	.4		PPM	73FLA-A
	IN	.034		PPM	73FLA-A
	IR	.002		PPB	73FLA-A
	K	3.74		%	73FLA-A
	LA	96.		PPM	73FLA-A
	LI	35.		PPM	73FLA-A
	LU	.11		PPM	73FLA-A
	MG	.46		%	73FLA-A
	MN	260.		PPM	73FLA-A
	MO	.36		PPM	73FLA-A
	N	56.		PPM	73FLA-A
	NA	3.01		%	73FLA-A
	NB	13.5		PPM	73FLA-A
	ND	60.		PPM	73FLA-A
	NI	5.1		PPM	73FLA-A
	P	620.		PPM	73FLA-A
	PB	31.2		PPM	73FLA-A
	PR	19.		PPM	73FLA-A
	RA	.71		PPB	73FLA-A
	RB	168.		PPM	73FLA-A
	S	24.		PPM	73FLA-A
	SB	.1		PPM	73FLA-A
	SC	3.7		PPM	73FLA-A
	SI	32.3		%	73FLA-A
	SM	7.3		PPM	73FLA-A
	SN	1.5		PPM	73FLA-A
	SR	479.		PPM	73FLA-A
	TA	.91		PPM	73FLA-A
	TB	.54		PPM	73FLA-A
	TH	24.2		PPM	73FLA-A
	TI	2780.		PPM	73FLA-A
	TL	1.		PPM	73FLA-A
	TM	.3		PPM	73FLA-A
	U	2.		PPM	73FLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00571	V	35.4		PPM	73FLA-A
	W	.1		PPM	73FLA-A
	Y	12.		PPM	73FLA-A
	YB	.88		PPM	73FLA-A
	ZN	85.		PPM	73FLA-A
	ZR	300.		PPM	73FLA-A
80.00572	AG	.036		PPM	73FLA-A
	AL	7.26		%	73FLA-A
	AS	700.		PPB	73FLA-A
	AU	.95		PPB	73FLA-A
	B	5.		PPM	73FLA-A
	BA	675.		PPM	73FLA-A
	BE	1.7		PPM	73FLA-A
	BI	.05		PPM	73FLA-A
	BR	.15		PPM	73FLA-A
	C	330.		PPM	73FLA-A
	CA	4.91		%	73FLA-A
	CD	.12		PPM	73FLA-A
	CE	53.9		PPM	73FLA-A
	CL	50.		PPM	73FLA-A
	CO	38.		PPM	73FLA-A
	CR	17.6		PPM	73FLA-A
	CS	.95		PPM	73FLA-A
	CU	18.4		PPM	73FLA-A
	DY	6.3		PPM	73FLA-A
	ER	3.59		PPM	73FLA-A
	EU	1.94		PPM	73FLA-A
	F	470.		PPM	73FLA-A
	FE	9.37		%	73FLA-A
	GA	20.		PPM	73FLA-A
	GD	6.6		PPM	73FLA-A
	GE	1.54		PPM	73FLA-A
	HF	4.7		PPM	73FLA-A
	HG	10.7		PPB	73FLA-A
	HO	1.2		PPM	73FLA-A
	IN	.095		PPM	73FLA-A
	IR	.004		PPB	73FLA-A
	K	4.59		%	73FLA-A
	LA	26.		PPM	73FLA-A
	LI	12.8		PPM	73FLA-A
	LU	.55		PPM	73FLA-A
	MG	2.08		%	73FLA-A
	MN	1406.		PPM	73FLA-A
	MO	1.1		PPM	73FLA-A
	N	30.		PPM	73FLA-A
	NA	2.08		%	73FLA-A
	NB	13.5		PPM	73FLA-A
	ND	29.		PPM	73FLA-A
	NI	15.8		PPM	73FLA-A
	OS	.1		PPB	73FLA-A
	P	620.		PPM	73FLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00572	PB	17.6		PPM	73FLA-A
	PD	12.		PPB	73FLA-A
	PR	7.		PPM	73FLA-A
	PT	2.		PPB	73FLA-A
	RA	.56		PPB	73FLA-A
	RB	46.6		PPM	73FLA-A
	RE	.8		PPB	73FLA-A
	RH	.2		PPB	73FLA-A
	RU	1.		PPB	73FLA-A
	S	392.		PPM	73FLA-A
	SB	.69		PPM	73FLA-A
	SC	33.		PPM	73FLA-A
	SE	.1		PPM	73FLA-A
	SI	24.5		%	73FLA-A
	SM	6.6		PPM	73FLA-A
	SN	2.6		PPM	73FLA-A
	SR	380.		PPM	73FLA-A
	TA	.91		PPM	73FLA-A
	TB	1.		PPM	73FLA-A
	TH	6.		PPM	73FLA-A
	TI	1.275		%	73FLA-A
	TL	.3		PPM	73FLA-A
	TM	.6		PPM	73FLA-A
	U	1.74		PPM	73FLA-A
	V	399.		PPM	73FLA-A
	W	.4		PPM	73FLA-A
	Y	37.1		PPM	73FLA-A
	YB	3.36		PPM	73FLA-A
	ZN	129.		PPM	73FLA-A
	ZR	190.		PPM	73FLA-A
80.00573	AG	.005		PPM	73FLA-A
	AL	.38		%	73FLA-A
	AS	.05		PPM	73FLA-A
	AU	1.6		PPB	73FLA-A
	B	6.		PPM	73FLA-A
	BA	1.2		PPM	73FLA-A
	BI	.013		PPM	73FLA-A
	BR	.6		PPM	73FLA-A
	CA	.362		%	73FLA-A
	CD	.1		PPM	73FLA-A
	CE	.09		PPM	73FLA-A
	CL	60.		PPM	73FLA-A
	CO	112.		PPM	73FLA-A
	CR	2730.		PPM	73FLA-A
	CS	.006		PPM	73FLA-A
	CU	11.3		PPM	73FLA-A
	EU	.002		PPM	73FLA-A
	F	15.		PPM	73FLA-A
	FE	5.84		%	73FLA-A
	GA	.4		PPM	73FLA-A
	GE	.93		PPM	73FLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00573	HF	.06		PPM	73FLA-A
	HG	7.2		PPB	73FLA-A
	IN	.003		PPM	73FLA-A
	IR	5.2		PPB	73FLA-A
	K	.0033		%	73FLA-A
	LA	.15		PPM	73FLA-A
	LI	2.		PPM	73FLA-A
	LU	.006		PPM	73FLA-A
	MG	25.9		%	73FLA-A
	MN	959.		PPM	73FLA-A
	MO	.2		PPM	73FLA-A
	N	43.		PPM	73FLA-A
	NA	.44		%	73FLA-A
	NI	2339.		PPM	73FLA-A
	OS	11.		PPB	73FLA-A
	P	.9		PPM	73FLA-A
	PB	13.3		PPM	73FLA-A
	PD	13.		PPB	73FLA-A
	PT	8.		PPB	73FLA-A
	RA	.0018		PPB	73FLA-A
	RB	.063		PPM	73FLA-A
	RE	.07		PPB	73FLA-A
	RH	1.		PPB	73FLA-A
	RU	9.5		PPB	73FLA-A
	SB	1.4		PPM	73FLA-A
	SC	6.9		PPM	73FLA-A
	SI	19.6		%	73FLA-A
	SM	.008		PPM	73FLA-A
	SN	1.		PPM	73FLA-A
	SR	.41		PPM	73FLA-A
	TB	.001		PPM	73FLA-A
	TH	.01		PPM	73FLA-A
	TI	10.		PPM	73FLA-A
	TL	.0008		PPM	73FLA-A
	U	.005		PPM	73FLA-A
	V	30.		PPM	73FLA-A
	W	.06		PPM	73FLA-A
	YB	.02		PPM	73FLA-A
	ZN	36.		PPM	73FLA-A
	ZR	7.		PPM	73FLA-A
80.00574	AG	.1		PPM	73FLA-A
	AL	8.07		%	73FLA-A
	AS	.09		PPM	73FLA-A
	AU	1.6		PPB	73FLA-A
	BA	1300.		PPM	73FLA-A
	BE	1.5		PPM	73FLA-A
	BI	.037		PPM	73FLA-A
	CA	1.43		%	73FLA-A
	CD	.06		PPM	73FLA-A
	CE	394.		PPM	73FLA-A
	CL	300.		PPM	73FLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00574					
	CO	6.4		PPM	73FLA-A
	CR	12.5		PPM	73FLA-A
	CS	1.		PPM	73FLA-A
	CU	33.3		PPM	73FLA-A
	DY	5.4		PPM	73FLA-A
	ER	3.		PPM	73FLA-A
	EU	2.4		PPM	73FLA-A
	F	3200.		PPM	73FLA-A
	FE	3.03		%	73FLA-A
	GA	22.		PPM	73FLA-A
	GD	15.		PPM	73FLA-A
	GE	1.3		PPM	73FLA-A
	HF	15.9		PPM	73FLA-A
	HG	15.5		PPB	73FLA-A
	IN	.05		PPM	73FLA-A
	IR	.012		PPB	73FLA-A
	K	4.6		%	73FLA-A
	LA	191.		PPM	73FLA-A
	LI	32.1		PPM	73FLA-A
	LU	.23		PPM	73FLA-A
	MG	.58		%	73FLA-A
	MN	331.		PPM	73FLA-A
	MO	.9		PPM	73FLA-A
	N	48.		PPM	73FLA-A
	NA	2.17		%	73FLA-A
	NB	29.		PPM	73FLA-A
	ND	188.		PPM	73FLA-A
	NI	12.5		PPM	73FLA-A
	P	1200.		PPM	73FLA-A
	PB	51.3		PPM	73FLA-A
	PR	50.		PPM	73FLA-A
	RA	.66		PPB	73FLA-A
	RB	254.		PPM	73FLA-A
	S	162.		PPM	73FLA-A
	SB	3.1		PPM	73FLA-A
	SC	7.1		PPM	73FLA-A
	SI	31.5		%	73FLA-A
	SM	27.1		PPM	73FLA-A
	SN	6.3		PPM	73FLA-A
	SR	233.		PPM	73FLA-A
	TA	1.		PPM	73FLA-A
	TB	1.3		PPM	73FLA-A
	TH	104.		PPM	73FLA-A
	TI	3990.		PPM	73FLA-A
	TL	1.3		PPM	73FLA-A
	U	1.96		PPM	73FLA-A
	V	52.9		PPM	73FLA-A
	W	.1		PPM	73FLA-A
	Y	30.4		PPM	73FLA-A
	YB	1.8		PPM	73FLA-A
	ZN	98.		PPM	73FLA-A
	ZR	500.		PPM	73FLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00574					
80.00575	AG	33.	2.	PPM	80GLA-B
	AL	3.54	.25	%	79GLA-A
	AS	460.	30.	PPM	79GLA-A
	B	15.3	.5	PPM	79GLA-A
	BA	560.	120.	PPM	79GLA-A
	BE	1.12	.17	PPM	79GLA-A
	BR	.39	.07	PPM	79GLA-A
	CA	8700.	800.	PPM	79GLA-A
	CD	4.	.3	PPM	80GLA-B
	CE	19.	4.	PPM	79GLA-A
	CO	9.3	1.1	PPM	79GLA-A
	CR	10.	2.	PPM	79GLA-A
	CS	4.	1.1	PPM	79GLA-A
	CU	1300.	100.	PPM	79GLA-A
	DY	3.1	.5	PPM	79GLA-A
	EU	.68	.07	PPM	79GLA-A
	FE	24.7	1.8	%	79GLA-A
	GA	12.	2.	PPM	79GLA-A
	HF	1.1	.3	PPM	79GLA-A
	HG	3.9	.1	PPM	79GLA-A
	K	530.	100.	PPM	79GLA-A
	LA	6.1	.3	PPM	79GLA-A
	LI	7.7	1.	PPM	80GLA-B
	MG	.21	.01	%	79GLA-A
	MO	10.	2.	PPM	79GLA-A
	NA	550.	110.	PPM	79GLA-A
	NI	42.	10.	PPM	79GLA-A
	PB	670.	20.	PPM	79GLA-A
	RB	29.	6.	PPM	79GLA-A
	SB	124.	6.	PPM	79GLA-A
	SC	1.7	.1	PPM	79GLA-A
	SE	18.6	.8	PPM	79GLA-A
	SI	23.	1.3	%	79GLA-A
	SN	55.	1.	PPM	80GLA-B
	SR	280.	60.	PPM	79GLA-A
	TA	.2	.1	PPM	79GLA-A
	TE	8.7	.1	PPM	80GLA-B
	TH	2.3	.4	PPM	79GLA-A
	TI	650.	50.	PPM	79GLA-A
	U	34.8	.4	PPM	79GLA-A
	V	88.	9.	PPM	79GLA-A
	YB	1.8	.5	PPM	79GLA-A
	ZN	740.	110.	PPM	79GLA-A
	ZR	66.	20.	PPM	79GLA-A
80.00577	AG	17.6	.6	PPM	80GLA-B
	AL	18.6	.4	%	79GLA-A
	AS	31.	5.	PPM	79GLA-A
	B	44.	1.	PPM	79GLA-A
	BA	2000.	400.	PPM	79GLA-A
	BE	1.64	.09	PPM	79GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00577	BR	3.	.1	PPM	79GLA-A
	CA	8200.	400.	PPM	79GLA-A
	CD	4.7	.3	PPM	80GLA-B
	CE	50.	2.	PPM	79GLA-A
	CO	9.	2.	PPM	79GLA-A
	CR	37.	10.	PPM	79GLA-A
	CS	5.	.9	PPM	79GLA-A
	CU	69.	2.	PPM	79GLA-A
	DY	3.3	.6	PPM	79GLA-A
	EU	800.	60.	PPB	79GLA-A
	FE	1.9	.23	%	79GLA-A
	GA	32.	3.	PPM	79GLA-A
	HF	9.6	.3	PPM	79GLA-A
	HG	3.2	.2	PPM	79GLA-A
	K	1.41	.23	%	79GLA-A
	LA	25.	1.	PPM	79GLA-A
	LI	54.	8.	PPM	80GLA-B
	MG	.88	.05	%	79GLA-A
	MN	960.	100.	PPM	79GLA-A
	MO	1.5	.5	PPM	79GLA-A
	NA	5540.	200.	PPM	79GLA-A
	NI	18.	3.	PPM	79GLA-A
	PB	615.	15.	PPM	79GLA-A
	RB	86.	5.	PPM	79GLA-A
	SB	48.	5.	PPM	79GLA-A
	SC	6.8	.2	PPM	79GLA-A
	SE	.74	.11	PPM	79GLA-A
	SI	23.	2.2	%	79GLA-A
	SM	3.3	.6	PPM	79GLA-A
	SR	160.	23.	PPM	79GLA-A
	TA	.76	.11	PPM	79GLA-A
	TE	.88	.01	PPM	80GLA-B
	TH	8.3	.5	PPM	79GLA-A
	TI	2800.	300.	PPM	79GLA-A
	U	2.95	.07	PPM	79GLA-A
	V	57.	20.	PPM	79GLA-A
	W	1.8	.2	PPM	79GLA-A
	YB	2.2	.2	PPM	79GLA-A
	ZN	500.	60.	PPM	79GLA-A
	ZR	200.	40.	PPM	79GLA-A
80.00579	AS	4000.	450.	PPM	79GLA-A
	B	180.	20.	PPM	79GLA-A
	BA	4700.	800.	PPM	79GLA-A
	BE	26.	1.	PPM	79GLA-A
	CA	14.16	.6	%	79GLA-A
	CD	1.6	.3	PPM	80GLA-B
	CE	16.	4.	PPM	79GLA-A
	CO	48.	5.	PPM	79GLA-A
	CR	19.	1.	PPM	79GLA-A
	CS	200.	50.	PPM	79GLA-A
	CU	10.8	.8	PPM	79GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00579	EU	.4	.1	PPM	79GLA-A
	FE	18.6	1.8	%	79GLA-A
	HF	2.4	.2	PPM	79GLA-A
	HG	380.	60.	PPB	79GLA-A
	LA	8.5	1.	PPM	79GLA-A
	LI	120.	20.	PPM	80GLA-B
	MG	.64	.05	%	79GLA-A
	MN	22300.	2000.	PPM	79GLA-A
	NA	7800.	400.	PPM	79GLA-A
	NI	55.	5.	PPM	79GLA-A
	PB	15.	2.	PPM	79GLA-A
	RB	116.	10.	PPM	79GLA-A
	SB	40.	3.	PPM	79GLA-A
	SC	18.	1.	PPM	79GLA-A
	SE	.22	.02	PPM	79GLA-A
	SI	6.1	1.4	%	79GLA-A
	SM	1.	.3	PPM	79GLA-A
	SR	1140.	100.	PPM	79GLA-A
	TA	.32	.11	PPM	79GLA-A
	TE	.009	.002	PPM	80GLA-B
	TH	2.9	.4	PPM	79GLA-A
	TI	1000.	200.	PPM	79GLA-A
	U	3.1	.1	PPM	79GLA-A
	V	39.	10.	PPM	79GLA-A
	W	10800.	600.	PPM	79GLA-A
	YB	.76	.31	PPM	79GLA-A
	ZN	220.	70.	PPM	79GLA-A
80.00581	AL	7.4	.2	%	79GLA-A
	AS	98.	10.	PPM	79GLA-A
	B	4.3	.4	PPM	79GLA-A
	BA	1350.	330.	PPM	79GLA-A
	BE	2.1	.2	PPM	79GLA-A
	BR	.5	.11	PPM	79GLA-A
	CA	9000.	500.	PPM	79GLA-A
	CD	500.	100.	PPB	80GLA-B
	CE	114.	8.	PPM	79GLA-A
	CO	16.	2.	PPM	79GLA-A
	CR	64.	10.	PPM	79GLA-A
	CS	3.	1.	PPM	79GLA-A
	CU	6500.	200.	PPM	79GLA-A
	DY	2.6	1.1	PPM	79GLA-A
	EU	1.6	.1	PPM	79GLA-A
	FE	2.97	.43	%	79GLA-A
	GA	15.	1.	PPM	79GLA-A
	HF	8.	.5	PPM	79GLA-A
	HG	.13	.01	PPM	79GLA-A
	K	4.3	.6	%	79GLA-A
	LA	64.	5.	PPM	79GLA-A
	LI	12.	3.	PPM	80GLA-B
	MG	1.65	.05	%	79GLA-A
	MN	140.	20.	PPM	79GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS.	REFERENCE
80.00581	MO	310.	25.	PPM	79GLA-A
	NA	5300.	300.	PPM	79GLA-A
	NI	38.	4.	PPM	79GLA-A
	RB	174.	7.	PPM	79GLA-A
	SB	4.4	.8	PPM	79GLA-A
	SC	8.3	.4	PPM	79GLA-A
	SE	6.	.5	PPM	79GLA-A
	SI	31.3	2.1	%	79GLA-A
	SM	6.	1.	PPM	79GLA-A
	SR	220.	30.	PPM	79GLA-A
	TA	.77	.07	PPM	79GLA-A
	TE	1.	.1	PPM	80GLA-B
	TH	22.	2.	PPM	79GLA-A
	TI	2600.	300.	PPM	79GLA-A
	U	6.42	.25	PPM	79GLA-A
	V	92.	15.	PPM	79GLA-A
	W	28.	5.	PPM	79GLA-A
	YB	1.8	.1	PPM	79GLA-A
	ZN	64.	10.	PPM	79GLA-A
	ZR	200.	40.	PPM	79GLA-A
80.00583	AL	20.8	1.6	%	79GLA-A
	AS	12.	3.	PPM	79GLA-A
	B	25.	2.	PPM	79GLA-A
	BA	1800.	500.	PPM	79GLA-A
	BE	1.19	.16	PPM	79GLA-A
	BR	7.8	.9	PPM	79GLA-A
	CA	7500.	600.	PPM	79GLA-A
	CE	40.	2.	PPM	79GLA-A
	CO	30.	5.	PPM	79GLA-A
	CR	100.	5.	PPM	79GLA-A
	CS	2.2	.8	PPM	79GLA-A
	CU	360.	20.	PPM	79GLA-A
	DY	2.	.4	PPM	79GLA-A
	EU	.94	.06	PPM	79GLA-A
	FE	3.19	.29	%	79GLA-A
	GA	34.	3.	PPM	79GLA-A
	HF	6.2	.4	PPM	79GLA-A
	HG	.17	.02	PPM	79GLA-A
	LA	18.	4.	PPM	79GLA-A
	MG	1.22	.05	%	79GLA-A
	MN	280.	20.	PPM	79GLA-A
	MO	30.	4.	PPM	79GLA-A
	NA	7700.	300.	PPM	79GLA-A
	NI	63.	7.	PPM	79GLA-A
	PB	22.	2.	PPM	79GLA-A
	RB	40.	4.	PPM	79GLA-A
	SC	7.8	.4	PPM	79GLA-A
	SE	1.1	.1	PPM	79GLA-A
	SI	19.7	1.2	%	79GLA-A
	SM	2.9	.7	PPM	79GLA-A
	SR	120.	20.	PPM	79GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00583	TA	460.	80.	PPB	79GLA-A
	TH	5.3	.5	PPM	79GLA-A
	TI	2100.	300.	PPM	79GLA-A
	U	2.13	.1	PPM	79GLA-A
	V	60.	20.	PPM	79GLA-A
	YB	2.	.2	PPM	79GLA-A
	ZN	50.	5.	PPM	79GLA-A
	ZR	140.	20.	PPM	79GLA-A
	8200.	.82	1100.	PPM	79GLA-A
80.00585	AL	16.6	.4	%	79GLA-A
	AS	340.	30.	PPM	79GLA-A
	B	11.	1.	PPM	79GLA-A
	BA	1100.	300.	PPM	79GLA-A
	BE	1.1	.1	PPM	79GLA-A
	BR	1.4	.3	PPM	79GLA-A
	CA	970.	100.	PPM	79GLA-A
	CE	38.	7.	PPM	79GLA-A
	CO	14.	3.	PPM	79GLA-A
	CR	96.	10.	PPM	79GLA-A
	CS	4.8	1.7	PPM	79GLA-A
	CU	105.	12.	PPM	79GLA-A
	DY	2.8	.4	PPM	79GLA-A
	EU	780.	400.	PPB	79GLA-A
	FE	5.58	.42	%	79GLA-A
	GA	30.	6.	PPM	79GLA-A
	HF	5.3	.3	PPM	79GLA-A
	HG	80.	10.	PPB	79GLA-A
	K	2.04	.25	%	79GLA-A
	LA	14.	2.	PPM	79GLA-A
	MG	.62	.04	%	79GLA-A
	MN	1000.	50.	PPM	79GLA-A
	MO	1.7	.4	PPM	79GLA-A
	NA	1040.	60.	PPM	79GLA-A
	NI	22.	4.	PPM	79GLA-A
	PB	110.	10.	PPM	79GLA-A
	RB	107.	7.	PPM	79GLA-A
	SB	3.8	.7	PPM	79GLA-A
	SC	31.	1.	PPM	79GLA-A
	SE	1.07	.13	PPM	79GLA-A
	SI	22.9	1.7	%	79GLA-A
	SM	2.4	.6	PPM	79GLA-A
	SR	42.	9.	PPM	79GLA-A
	TA	520.	80.	PPB	79GLA-A
	TE	.016		PPM	80GLA-B
	TH	5.2	.4	PPM	79GLA-A
	TI	5000.	400.	PPM	79GLA-A
	U	1.58	.08	PPM	79GLA-A
	V	180.	20.	PPM	79GLA-A
	W	.88	.18	PPM	79GLA-A
	YB	2.7	.3	PPM	79GLA-A
	ZN	120.	20.	PPM	79GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00585	ZR	106.	8.	PPM	79GLA-A
80.00587	PB-21	23200.		PCI/G	79FAY-A
	RA-226	24000.		PCI/G	79FAY-A
	TH-23	22600.		PCI/G	79FAY-A
	U	7.09	.03	%	79FAY-A
80.00588	RA-226	983.	18.	PCI/*	68NBS-A
80.00589	AL	79.	7.9	PPB	75EPA-A
	AS	26.	2.6	PPB	75EPA-A
	BE	16.	1.6	PPB	75EPA-A
	CD	5.2	.52	PPB	75EPA-A
	CO	17.	1.7	PPB	75EPA-A
	CR	16.	1.6	PPB	75EPA-A
	CU	16.	1.6	PPB	75EPA-A
	FE	26.	2.6	PPB	75EPA-A
	MN	26.	2.6	PPB	75EPA-A
	NI	26.	2.6	PPB	75EPA-A
	PB	22.	2.2	PPB	75EPA-A
	SE	5.2	.52	PPB	75EPA-A
	V	52.	5.2	PPB	75EPA-A
	ZN	11.	1.1	PPB	75EPA-A
80.00590	AL	496.	50.	PPB	75EPA-A
	AS	109.	11.	PPB	75EPA-A
	BE	78.	7.8	PPB	75EPA-A
	CD	23.	2.3	PPB	75EPA-A
	CO	74.	7.4	PPB	75EPA-A
	CR	154.	15.	PPB	75EPA-A
	CU	72.	7.2	PPB	75EPA-A
	FE	417.	42.	PPB	75EPA-A
	HG	4.5	.45	PPB	75EPA-A
	MN	45.	4.5	PPB	75EPA-A
	NI	45.	4.5	PPB	75EPA-A
	PB	298.	30.	PPB	75EPA-A
	SE	26.	2.6	PPB	75EPA-A
	V	104.	10.	PPB	75EPA-A
	ZN	30.	3.	PPB	75EPA-A
80.00591	AL	904.	90.	PPB	75EPA-A
	AS	154.	15.4	PPB	75EPA-A
	BE	398.	40.	PPB	75EPA-A
	CD	73.	7.3	PPB	75EPA-A
	CO	396.	40.	PPB	75EPA-A
	CR	209.	21.	PPB	75EPA-A
	CU	102.	10.2	PPB	75EPA-A
	FE	678.	68.	PPB	75EPA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00591	HG	9.4	.94	PPB	75EPA-A
	MN	397.	40.	PPB	75EPA-A
	NI	152.	15.2	PPB	75EPA-A
	PB	352.	35.	PPB	75EPA-A
	SE	44.	4.4	PPB	75EPA-A
	V	157.	15.7	PPB	75EPA-A
	ZN	174.	17.4	PPB	75EPA-A
80.00592	CA	14.5	1.5	PPM	74EPA-A
	CL	28.1	2.8	PPM	74EPA-A
	F	.2	.02	PPM	74EPA-A
	HARD	48.6	4.9	PPM *	74EPA-A
	K	2.7	.3	PPM	74EPA-A
	MG	3.	.3	PPM	74EPA-A
	NA	5.	.5	PPM	74EPA-A
	PH	7.9	.1	PH	74EPA-A
	SO4	12.	1.2	PPM	74EPA-A
	SP.C	157.	15.7	UMOHS	74EPA-A
	TDS	71.7	7.2	PPM	74EPA-A
	T.A.	10.4	1.	PPM *	74EPA-A
80.00593	CA	44.5	4.5	PPM	74EPA-A
	CL	86.4	8.6	PPM	74EPA-A
	F	1.1	.1	PPM	74EPA-A
	HARD	170.2	17.	PPM *	74EPA-A
	K	8.4	.8	PPM	74EPA-A
	MG	14.4	1.4	PPM	74EPA-A
	NA	39.7	4.	PPM	74EPA-A
	PH	8.4	.1	PH	74EPA-A
	SO4	102.4	10.2	PPM	74EPA-A
	SP.C.	603.	60.	UMOHS	74EPA-A
	TDS	318.3	31.8	PPM	74EPA-A
	T.A.	35.7	3.6	PPM *	74EPA-A
80.00594	AL	9.38	.18	%	79BOW-A
	CA	1.8	.08	%	79BOW-A
	CR	160.	9.	PPM	79BOW-A
	CU	61.	2.	PPM	79BOW-A
	FE	6.	.16	%	79BOW-A
	HG	22.	2.	PPB	79BOW-A
	K	2.68	.06	%	79BOW-A
	MG	2.31	.07	%	79BOW-A
	MN	890.	33.	PPM	79BOW-A
	NI	94.	5.	PPM	79BOW-A
	P	620.	56.	PPM	79BOW-A
	PB	21.	3.	PPM	79BOW-A
	SI	25.7	.2	%	79BOW-A
	TI	5300.	220.	PPM	79BOW-A
	U	1.6	.1	PPM	79BOW-A
	V	139.	12.	PPM	79BOW-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00594	ZN	146.	5.	PPM	79BOW-A
80.00596	AL	8.07	.24	%	79BOW-A
	CA	1.96	.08	%	79BOW-A
	CR	16.	2.	PPM	79BOW-A
	CU	7.	1.	PPM	79BOW-A
	FE	5.56	.14	%	79BOW-A
	HG	82.	6.	PPB	79BOW-A
	K	2.45	.06	%	79BOW-A
	MG	5400.	300.	PPM	79BOW-A
	MN	720.	22.	PPM	79BOW-A
	PB	21.	3.	PPM	79BOW-A
	SI	25.	.2	%	79BOW-A
	SR	340.	25.	PPM	79BOW-A
	TI	8600.	340.	PPM	79BOW-A
	U	1.2		PPM	79BOW-A
	V	64.	7.	PPM	79BOW-A
	ZN	124.	3.	PPM	79BOW-A
80.00598	AL	3.05	.15	%	79BOW-A
	CR	26.	3.	PPM	79BOW-A
	CU	17.	1.	PPM	79BOW-A
	FE	1.51	.06	%	79BOW-A
	HG	17.	4.	PPB	79BOW-A
	K	1.16	.03	%	79BOW-A
	MN	520.	17.	PPM	79BOW-A
	NA	7400.	200.	PPM	79BOW-A
	NI	16.	2.	PPM	79BOW-A
	PB	14.	2.	PPM	79BOW-A
	SI	15.9	.2	%	79BOW-A
	SR	217.	17.	PPM	79BOW-A
	U	1.1		PPM	79BOW-A
	ZN	52.	3.	PPM	79BOW-A
80.00600	AL	5.46	.1	%	79BOW-A
	CA	1.11	.03	%	79BOW-A
	CR	61.	6.	PPM	79BOW-A
	CU	22.	2.	PPM	79BOW-A
	FE	2.37	.05	%	79BOW-A
	K	1.73	.04	%	79BOW-A
	MG	5600.	300.	PPM	79BOW-A
	MN	600.	27.	PPM	79BOW-A
	NI	26.	2.	PPM	79BOW-A
	P	900.	70.	PPM	79BOW-A
	PB	16.	2.	PPM	79BOW-A
	SR	170.	10.	PPM	79BOW-A
	TI	3400.	160.	PPM	79BOW-A
	U	2.3	.3	PPM	79BOW-A
	V	90.	6.	PPM	79BOW-A
	ZN	94.	3.	PPM	79BOW-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00602	U	160.2	16.	PPB	79H-8
80.00603	TDS	509.	50.	PPM	79H-8
80.00604	U	1000.	50.	PPB	79H-8
80.00605	AL	3.07		%	78NBS-A
	AS	9.3	1.	PPM	78NBS-A
	B	53.		PPM	80GLA-A
	CD	170.	20.	PPB	78NBS-A
	CE	30.		PPM	78NBS-A
	CO	6.8		PPM	78NBS-A
	CR	34.4	1.5	PPM	78NBS-A
	CS	2.4		PPM	78NBS-A
	CU	16.5	1.	PPM	78NBS-A
	EU	540.		PPB	78NBS-A
	FE	1.11	.02	%	78NBS-A
	GA	8.49		PPM	78NBS-A
	HF	1.6		PPM	78NBS-A
	HG	130.	30.	PPB	78NBS-A
	MN	28.	2.	PPM	78NBS-A
	NI	19.4	1.	PPM	78NBS-A
	PB	12.4	.6	PPM	78NBS-A
	RB	31.		PPM	78NBS-A
	S	1.64		%	78NBS-A
	SB	580.		PPB	78NBS-A
	SC	6.3		PPM	78NBS-A
	SE	2.6	.7	PPM	78NBS-A
	TH	4.5	.1	PPM	78NBS-A
	TI	1750.		PPM	78NBS-A
	U	1.28	.02	PPM	78NBS-A
	V	44.	3.	PPM	78NBS-A
	7N	28.	2.	PPM	78NBS-A
80.00606	AL	3200.		PPM	78NBS-B
	AS	420.	150.	PPB	78NBS-B
	CD	30.	10.	PPB	78NBS-B
	CE	3.6		PPM	78NBS-B
	CO	650.		PPB	78NBS-B
	CR	2.5	.3	PPM	78NBS-B
	CU	3.6	.3	PPM	78NBS-B
	EU	64.		PPB	78NBS-B
	FE	2390.	50.	PPM	78NBS-B
	GA	1.05		PPM	78NBS-B
	HF	290.		PPB	78NBS-B
	MN	21.4	1.5	PPM	78NBS-B
	NI	1.74	.1	PPM	78NBS-B

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00606	PB	1.9	.2	PPM	78NBS-B
	S	3300.		PPM	78NBS-B
	SB	140.		PPB	78NBS-B
	SC	630.		PPB	78NBS-B
	SE	900.	300.	PPB	78NBS-B
	TH	620.	40.	PPB	78NBS-B
	TI	200.		PPM	78NBS-B
	U	240.	20.	PPB	78NBS-B
	V	5.2	.5	PPM	78NBS-B
	ZN	4.7	.5	PPM	78NBS-B
80.00607	AG	6.		PPM	78NBS-C
	AL	3.3		%	78NBS-C
	AS	115.	10.	PPM	78NBS-C
	BA	737.		PPM	78NBS-C
	BR	500.		PPM	78NBS-C
	CD	75.	7.	PPM	78NBS-C
	CE	55.		PPM	78NBS-C
	CL	4500.		PPM	78NBS-C
	CO	18.		PPM	78NBS-C
	CR	403.	12.	PPM	78NBS-C
	CS	3.		PPM	78NBS-C
	CU	609.	27.	PPM	78NBS-C
	EU	.8		PPM	78NBS-C
	FE	3.91	.1	%	78NBS-C
	HF	4.4		PPM	78NBS-C
	I	20.		PPM	78NBS-C
	IN	1.		PPM	78NBS-C
	K	1.		%	78NBS-C
	LA	42.		PPM	78NBS-C
	MG	8000.		PPM	78NBS-C
	MN	860.		PPM	78NBS-C
	NA	4000.		PPM	78NBS-C
	NI	82.	3.	PPM	78NBS-C
	PB	6550.	80.	PPM	78NBS-C
	SB	45.		PPM	78NBS-C
	SC	7.		PPM	78NBS-C
	SE	24.		PPM	78NBS-C
	SI	12.5	.2	%	78NBS-C
	SM	4.4		PPM	78NBS-C
	TH	7.4		PPM	78NBS-C
	TI	4000.		PPM	78NBS-C
	U	5.5	.1	PPM	78NBS-C
	V	130.		PPM	78NBS-C
	W	4.8		PPM	78NBS-C
	ZN	4760.	140.	PPM	78NBS-C
80.00608	AL	2.1		%	78NBS-D
	AS	66.		PPM	78NBS-D
	CA	2.9		%	78NBS-D
	CD	10.2	1.5	PPM	78NBS-D

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00608	CO	8.		PPM	78NBS-D
	CR	2.96	.28	%	78NBS-D
	CU	109.	19.	PPM	78NBS-D
	FE	11.3	1.2	%	78NBS-D
	HG	1.1	.5	PPM	78NBS-D
	K	1.2		%	78NBS-D
	LI	9.		PPM	78NBS-D
	MG	2.4		%	78NBS-D
	MN	785.	97.	PPM	78NBS-D
	N	797.	48.	PPM	78NBS-D
	NA	5500.		PPM	78NBS-D
	NI	45.8	2.9	PPM	78NBS-D
	P	510.	14.	PPM	78NBS-D
	PB	714.	28.	PPM	78NBS-D
	SB	51.		PPM	78NBS-D
	SC	2.		PPM	78NBS-D
	SI	24.		%	78NBS-D
	TH	1.62	.22	PPM	78NBS-D
	TL	1.44	.07	PPM	78NBS-D
	U	1.11	.05	PPM	78NBS-D
	V	23.5	6.9	PPM	78NBS-D
	ZN	1720.	169.	PPM	78NBS-D
80.00609	AL	5.25		%	80STE-A
	CA	.29		%	80STE-A
	FE	9000.		PPM	80STE-A
	H2O-	.18		%	80STE-A
	K	.23		%	80STE-A
	MG	.19		%	80STE-A
	NA	.09		%	80STE-A
	PB	6410.		PPM	80STE-A
	RA-226	35.		PCI/G	80STE-A
	S	4200.		PPM	80STE-A
	SI	39.95		PPM	80STE-A
	TH	76.	4.	PPM	80STE-A
	TI	.09		%	80STE-A
	U	116.	3.	PPM	80STE-A
80.00610	AL	7.3	.12	%	81GLA-A
	AU	1.5	.3	PPB	81GLA-A
	BA	142.	18.	PPM	81GLA-A
	BI	15.	4.	PPB	81GLA-A
	C	120.	60.	PPM	81GLA-A
	CA	8.18	.12	%	81GLA-A
	CE	41.	4.	PPM	81GLA-A
	CL	92.	4.	PPM	81GLA-A
	CO	45.	1.	PPM	81GLA-A
	CR	300.	30.	PPM	81GLA-A
	CU	137.	6.	PPM	81GLA-A
	DY	4.8	.2	PPM	81GLA-A
	ER	2.	.3	PPM	81GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00610	EU	2.	.4	PPM	81GLA-A
	FE	8.49	.18	%	81GLA-A
	GA	22.	3.	PPM	81GLA-A
	GD	7.	2.	PPM	81GLA-A
	HF	4.2	.2	PPM	81GLA-A
	K	4600.	700.	PPM	81GLA-A
	LA	16.7	.8	PPM	81GLA-A
	MG	4.3	.12	%	81GLA-A
	MN	1270.	40.	PPM	81GLA-A
	MO	.95	.05	PPM	81GLA-A
	NA	1.64	.06	%	81GLA-A
	NB	19.	2.	PPM	81GLA-A
	ND	24.	6.	PPM	81GLA-A
	NI	117.	18.	PPM	81GLA-A
	P	1220.	130.	PPM	81GLA-A
	RB	10.	2.	PPM	81GLA-A
	SB	170.	10.	PPB	81GLA-A
	SC	30.	2.	PPM	81GLA-A
	SI	23.3	.4	%	81GLA-A
	SM	6.1	.7	PPM	81GLA-A
	SR	440.	70.	PPM	81GLA-A
	TA	1.1	.2	PPM	81GLA-A
	TB	1.	.2	PPM	81GLA-A
	TH	1.1	.2	PPM	81GLA-A
	TI	1.6	.05	%	81GLA-A
	TM	310.	40.	PPB	81GLA-A
	U	420.	60.	PPB	81GLA-A
	V	314.	12.	PPM	81GLA-A
	Y	28.	2.	PPM	81GLA-A
	YB	2.1	.5	PPM	81GLA-A
	ZN	102.	7.	PPM	81GLA-A
	ZR	180.	30.	PPM	81GLA-A
80.00611	AL	8.65	.15	%	81GLA-A
	B	138.	15.	PPM	81GLA-A
	BA	490.	35.	PPM	81GLA-A
	BE	2.84	.13	PPM	81GLA-A
	C	2.34	.1	%	81GLA-A
	CA	1.04	.2	%	81GLA-A
	CE	94.	7.	PPM	81GLA-A
	CL	3.12	.04	%	81GLA-A
	CO	20.	2.	PPM	81GLA-A
	CR	105.	13.	PPM	81GLA-A
	CS	8.3	.5	PPM	81GLA-A
	CU	30.	3.	PPM	81GLA-A
	EU	1.6	.2	PPM	81GLA-A
	FE	4.86	.26	%	81GLA-A
	GA	21.4	.4	PPM	81GLA-A
	GD	7.	2.	PPM	81GLA-A
	HF	3.6	.7	PPM	81GLA-A
	K	3.	.2	%	81GLA-A
	LI	76.	4.	PPM	81GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00611	MG	1.86	.12	%	81GLA-A
	MN	810.	160.	PPM	81GLA-A
	NA	2.77	.19	%	81GLA-A
	NB	9.5	1.4	PPM	81GLA-A
	ND	44.	3.	PPM	81GLA-A
	NI	54.	8.	PPM	81GLA-A
	P	760.	65.	PPM	81GLA-A
	PB	25.	4.	PPM	81GLA-A
	RB	152.	3.	PPM	81GLA-A
	S	4600.	600.	PPM	81GLA-A
	SB	.91	.09	PPM	81GLA-A
	SC	17.	2.	PPM	81GLA-A
	SE	1.15	.16	PPM	81GLA-A
	SI	23.4	.5	%	81GLA-A
	SM	7.8	.9	PPM	81GLA-A
	SR	156.	19.	PPM	81GLA-A
	TA	1.	.2	PPM	81GLA-A
	TB	1.02	.05	PPM	81GLA-A
	TH	12.8	.5	PPM	81GLA-A
	TI	4300.	200.	PPM	81GLA-A
	U	2.85	.02	PPM	81GLA-A
	V	142.	3.	PPM	81GLA-A
	YB	3.	.3	PPM	81GLA-A
	ZN	126.	18.	PPM	81GLA-A
	ZR	130.	10.	PPM	81GLA-A
80.00612	AL	8.6	.08	%	81GLA-A
	B	38.	4.	PPM	81GLA-A
	BA	1400.	20.	PPM	81GLA-A
	BE	1.9	.2	PPM	81GLA-A
	C	29.	2.	PPM	81GLA-A
	CA	2.27	.06	%	81GLA-A
	CE	57.	3.	PPM	81GLA-A
	CL	214.	14.	PPM	81GLA-A
	CO	7.2	.4	PPM	81GLA-A
	CS	1.8	.2	PPM	81GLA-A
	CU	29.	3.	PPM	81GLA-A
	EU	1.55	.12	PPM	81GLA-A
	F	275.	22.	PPM	81GLA-A
	FE	3.02	.09	%	81GLA-A
	GA	18.	1.	PPM	81GLA-A
	GD	5.2	1.4	PPM	81GLA-A
	HF	4.4	.2	PPM	81GLA-A
	K	2.98	.09	%	81GLA-A
	MG	6100.	400.	PPM	81GLA-A
	MN	720.	70.	PPM	81GLA-A
	MO	2.6	.4	PPM	81GLA-A
	NA	3.09	.1	%	81GLA-A
	NB	11.	2.	PPM	81GLA-A
	ND	27.	7.	PPM	81GLA-A
	P	1100.	80.	PPM	81GLA-A
	PB	21.	1.	PPM	81GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00612	RB	77.	9.	PPM	81GLA-A
	SB	2.1	.4	PPM	81GLA-A
	SC	10.	1.	PPM	81GLA-A
	SI	30.6	.5	%	81GLA-A
	SM	4.9	.5	PPM	81GLA-A
	SR	348.	19.	PPM	81GLA-A
	TA	790.	130.	PPB	81GLA-A
	TB	820.	80.	PPB	81GLA-A
	TH	4.6	1.1	PPM	81GLA-A
	TI	3700.	170.	PPM	81GLA-A
	U	1.97	.03	PPM	81GLA-A
	V	60.	5.	PPM	81GLA-A
	W	610.	30.	PPB	81GLA-A
	YB	2.8	.7	PPM	81GLA-A
	ZN	61.	4.	PPM	81GLA-A
	ZR	190.	20.	PPM	81GLA-A
80.00613	AG	109.	9.	PPB	81GLA-A
	AL	7.29	.09	%	81GLA-A
	B	29.	2.	PPM	81GLA-A
	BA	820.	40.	PPM	81GLA-A
	BE	2.5	.4	PPM	81GLA-A
	C	39.	10.	PPM	81GLA-A
	CA	8100.	600.	PPM	81GLA-A
	CE	53.	6.	PPM	81GLA-A
	CL	490.	40.	PPM	81GLA-A
	CO	2.	.3	PPM	81GLA-A
	CR	2.5	.4	PPM	81GLA-A
	CS	9.9	.4	PPM	81GLA-A
	CU	10.7	.6	PPM	81GLA-A
	EU	770.	120.	PPB	81GLA-A
	F	360.	40.	PPM	81GLA-A
	FE	1.31	.03	%	81GLA-A
	GA	14.	2.	PPM	81GLA-A
	HF	6.1	.5	PPM	81GLA-A
	K	3.59	.08	%	81GLA-A
	LI	51.	9.	PPM	81GLA-A
	MG	1700.	120.	PPM	81GLA-A
	MN	282.	17.	PPM	81GLA-A
	MO	2.3	.6	PPM	81GLA-A
	NA	3.	.1	%	81GLA-A
	NB	9.	2.	PPM	81GLA-A
	ND	18.2	.8	PPM	81GLA-A
	P	205.	5.	PPM	81GLA-A
	PB	22.	1.	PPM	81GLA-A
	RB	156.	4.	PPM	81GLA-A
	SB	1.29	.14	PPM	81GLA-A
	SC	5.	.8	PPM	81GLA-A
	SI	34.	.6	%	81GLA-A
	SM	4.3	.4	PPM	81GLA-A
	SR	114.	13.	PPM	81GLA-A
	TA	.97	.11	PPM	81GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00613	TH	16.	2.	PPM	81GLA-A
	TI	1600.	200.	PPM	81GLA-A
	U	5.84	.07	PPM	81GLA-A
	V	14.	1.	PPM	81GLA-A
	W	1.6	.1	PPM	81GLA-A
	YB	2.9	.2	PPM	81GLA-A
	ZN	32.	7.	PPM	81GLA-A
	ZR	210.	10.	PPM	81GLA-A
80.00614	AL	7.21	.2	%	81GLA-A
	B	68.	4.	PPM	81GLA-A
	BA	580.	100.	PPM	81GLA-A
	BE	1.7	.2	PPM	81GLA-A
	C	8500.	1500.	PPM	81GLA-A
	CA	1.87	.14	%	81GLA-A
	CE	62.	6.	PPM	81GLA-A
	CL	48.	14.	PPM	81GLA-A
	CO	10.	1.	PPM	81GLA-A
	CR	67.	5.	PPM	81GLA-A
	CS	7.5	.5	PPM	81GLA-A
	CU	30.	2.	PPM	81GLA-A
	EU	1.2	.2	PPM	81GLA-A
	FE	3.59	.09	%	81GLA-A
	GA	12.	2.	PPM	81GLA-A
	GD	5.	1.	PPM	81GLA-A
	HF	4.26	.1	PPM	81GLA-A
	K	2.28	.08	%	81GLA-A
	LA	35.	10.	PPM	81GLA-A
	MG	1.61	.14	%	81GLA-A
	MN	420.	40.	PPM	81GLA-A
	MO	1.3	.1	PPM	81GLA-A
	NA	6400.	500.	PPM	81GLA-A
	NB	9.	1.	PPM	81GLA-A
	ND	26.	2.	PPM	81GLA-A
	NI	28.	2.	PPM	81GLA-A
	P	1000.	200.	PPM	81GLA-A
	PB	29.	2.	PPM	81GLA-A
	RB	118.	9.	PPM	81GLA-A
	SB	2.51	.06	PPM	81GLA-A
	SC	10.6	.9	PPM	81GLA-A
	SI	29.2	.4	%	81GLA-A
	SM	5.3	.4	PPM	81GLA-A
	SR	188.	26.	PPM	81GLA-A
	TA	.91	.08	PPM	81GLA-A
	TB	750.	40.	PPB	81GLA-A
	TH	10.1	.7	PPM	81GLA-A
	TI	4000.	700.	PPM	81GLA-A
	U	3.09	.14	PPM	81GLA-A
	V	122.	16.	PPM	81GLA-A
	YB	2.6	.3	PPM	81GLA-A
	ZN	106.	9.	PPM	81GLA-A
	ZR	160.	24.	PPM	81GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE	CERTIFIED VALUE	CERTIFIED VALUE	CERTIFIED VALUE	REFERENCE
80.00615	80.00616				
AL	8.5	.2	60.	ppm	816LA-A
BA	620.	3.	.6	ppm	816LA-A
BE	3.				816LA-A
C	270.	120.		ppm	816LA-A
CA	1.02	.03		%	816LA-A
CE	104.	12.		ppm	816LA-A
CL	30.	10.		ppm	816LA-A
CO	18.	2.		ppm	816LA-A
CR	69.	7.		ppm	816LA-A
CS	3.83	.02		ppm	816LA-A
CU	30.	2.		ppm	816LA-A
EU	1.8	.2		ppm	816LA-A
FE	4.91	.12		%	816LA-A
GA	25.	5.		ppm	816LA-A
HF	8.1	.1		ppm	816LA-A
K	2.72	.07		%	816LA-A
MG	1.01	.06		%	816LA-A
MN	900.	60.		ppm	816LA-A
NA	1.5	.06		%	816LA-A
NB	18.	3.		ppm	816LA-A
ND	41.	6.		ppm	816LA-A
NI	41.	10.		ppm	816LA-A
P	800.	200.		ppm	816LA-A
RB	128.	7.		ppm	816LA-A
SB	540.	10.		ppm	816LA-A
SC	17.	2.		ppm	816LA-A
SI	30.5	.6		%	816LA-A
SM	8.	2.		ppm	816LA-A
SR	200.	20.		ppm	816LA-A
TA	1.2	.2		ppm	816LA-A
TB	1.26	.08		ppm	816LA-A
TH	12.	.4		ppm	816LA-A
TI	6000.	250.		ppm	816LA-A
U	3.02	.1		ppm	816LA-A
V	110.	30.		ppm	816LA-A
YB	5.	1.		ppm	816LA-A
ZN	102.	8.		ppm	816LA-A
ZR	270.	30.		ppm	816LA-A
AL	3.53	.23		%	816LA-A
B	42.	15.		ppm	816LA-A
BA	320.	20.		ppm	816LA-A
CA	6.12	.23		%	816LA-A
CE	42.	10.		ppm	816LA-A
CL	29.	13.		ppm	816LA-A
CO	12.	1.		ppm	816LA-A
CR	32.	12.		ppm	816LA-A
CS	5.2	.4		ppm	816LA-A
CU	66.	4.		ppm	816LA-A
EU	600.	100.		ppm	816LA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00616	FE	2.07	.14	%	81GLA-A
	GA	11.	2.	PPM	81GLA-A
	HF	1.35	.04	PPM	81GLA-A
	K	1.43	.13	%	81GLA-A
	MD	35.6	.5	PPM	81GLA-A
	MG	2.8	.22	%	81GLA-A
	MN	290.	30.	PPM	81GLA-A
	NA	2.09	.14	%	81GLA-A
	NB	5.27	.06	PPM	81GLA-A
	ND	14.	3.	PPM	81GLA-A
	NI	32.	3.	PPM	81GLA-A
	P	1330.	140.	PPM	81GLA-A
	PB	38.	5.	PPM	81GLA-A
	RB	85.	7.	PPM	81GLA-A
	SB	3.3	.4	PPM	81GLA-A
	SC	4.7	.6	PPM	81GLA-A
	SE	3.4	.3	PPM	81GLA-A
	SI	13.1	.1	%	81GLA-A
	SM	2.7	.3	PPM	81GLA-A
	SR	390.	60.	PPM	81GLA-A
	TA	530.	30.	PPB	81GLA-A
	TB	370.	40.	PPB	81GLA-A
	TH	4.9	.02	PPM	81GLA-A
	TI	1700.	300.	PPM	81GLA-A
	U	5.57	.15	PPM	81GLA-A
	V	128.	8.	PPM	81GLA-A
	YB	1.1	.2	PPM	81GLA-A
	ZN	80.	9.	PPM	81GLA-A
	ZR	56.	5.	PPM	81GLA-A
80.00617	AL	9.79	.12	%	81GLA-A
	BA	590.	20.	PPM	81GLA-A
	BE	8.9	.2	PPM	81GLA-A
	C	80.	20.	PPM	81GLA-A
	CA	7900.	600.	PPM	81GLA-A
	CL	440.	30.	PPM	81GLA-A
	CR	2.6	1.1	PPM	81GLA-A
	CS	1.52	.08	PPM	81GLA-A
	CU	4.	2.	PPM	81GLA-A
	EU	3.6	.4	PPM	81GLA-A
	F	930.	60.	PPM	81GLA-A
	FE	3.64	.14	%	81GLA-A
	GA	37.	1.	PPM	81GLA-A
	GD	12.	3.	PPM	81GLA-A
	HF	27.	1.	PPM	81GLA-A
	K	3.57	.06	%	81GLA-A
	LA	170.	30.	PPM	81GLA-A
	LI	29.	7.	PPM	81GLA-A
	MD	5.3	.4	PPM	81GLA-A
	MG	550.	100.	PPM	81GLA-A
	MN	1720.	140.	PPM	81GLA-A
	NA	6.61	.14	%	81GLA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00617	NB	270.	20.	PPM	81GLA-A
	ND	82.	5.	PPM	81GLA-A
	NI	2.1	.6	PPM	81GLA-A
	P	710.	20.	PPM	81GLA-A
	PB	17.	1.	PPM	81GLA-A
	RB	120.	6.	PPM	81GLA-A
	SB	1.65	.03	PPM	81GLA-A
	SC	678.	2.	PPB	81GLA-A
	SI	27.8	.4	%	81GLA-A
	SM	15.	3.	PPM	81GLA-A
	SN	10.	3.	PPM	81GLA-A
	SR	730.	30.	PPM	81GLA-A
	TA	19.	2.	PPM	81GLA-A
	TB	1.7	.3	PPM	81GLA-A
	TH	33.	5.	PPM	81GLA-A
	TI	910.	60.	PPM	81GLA-A
	U	9.07	.07	PPM	81GLA-A
	W	3.9	.2	PPM	81GLA-A
	YB	4.4	.4	PPM	81GLA-A
	ZN	230.	30.	PPM	81GLA-A
	ZR	1260.	80.	PPM	81GLA-A
80.00618	F	7.14	.48	PPM	75NBS-C
80.00619	U	105.	5.	PPB	79H-8
80.00620	NA-22	289.	3.	NCI/L	64NBS-B
80.00621	NA-22	289.	3.	NCI/L	64NBS-B
80.00622	H-3		300.	PCI/L	79H-8
80.00623	NA-22	576.	6.	PCI/G	64NBS-B
80.00624	NA-22	576.	6.	PCI/G	64NBS-B
80.00625	NA-22	576.	6.	PCI/G	64NBS-B
80.00626	NA-22	576.	6.	PCI/G	64NBS-B
80.00627	NA-22	576.	6.	PCI/G	64NBS-B

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00628	NA-22	576.	6.	PCI/G	64NBS-B
80.00629	NA-22	576.	6.	PCI/G	64NBS-B
80.00630	AS	6.		PPB	78NBS-E
	BR	9.		PPM	78NBS-E
	CA	190.	10.	PPM	78NBS-E
	CD	32.	7.	PPB	78NBS-E
	CU	2.	.3	PPM	78NBS-E
	FE	18.3	1.	PPM	78NBS-E
	HG	1.	.8	PPB	78NBS-E
	K	1360.	40.	PPM	78NBS-E
	MN	8.5	.5	PPM	78NBS-E
	MO	400.		PPB	78NBS-E
	NA	8.	1.5	PPM	78NBS-E
	NI	180.		PPB	78NBS-E
	SE	1.1	.2	PPM	78NBS-E
	ZN	10.6	1.	PPM	78NBS-E
80.00631	AS	410.	50.	PPB	78NBS-F
	BR	1.		PPM	78NBS-F
	CA	140.	20.	PPM	78NBS-F
	CD	29.	4.	PPB	78NBS-F
	CO	20.	10.	PPB	78NBS-F
	CU	2.2	.3	PPM	78NBS-F
	FE	8.7	.6	PPM	78NBS-F
	HG	6.	.7	PPB	78NBS-F
	K	1120.	20.	PPM	78NBS-F
	MN	20.1	.4	PPM	78NBS-F
	MO	1.6		PPM	78NBS-F
	NA	6.	1.5	PPM	78NBS-F
	NI	160.		PPB	78NBS-F
	RB	7.		PPM	78NBS-F
	SE	400.	100.	PPB	78NBS-F
	ZN	19.4	1.	PPM	78NBS-F
80.00632	CR	2.12	.05	PPM	76NBS-D
	U	470.	30.	PPB	80GLA-C
80.00633	AL	14.		%	79NBS-B
	AS	145.	15.	PPM	79NBS-B
	B	39.2		PPM	80GLA-A
	BA	1500.		PPM	79NBS-B
	BE	12.		PPM	79NBS-B
	CA	1.11	.01	%	79NBS-B
	CD	1.	.15	PPM	79NBS-B
	CE	180.		PPM	79NBS-B
	CO	46.		PPM	79NBS-B

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00633	CR	196.	6.	PPM	79NBS-B
	CS	11.		PPM	79NBS-B
	CU	118.	3.	PPM	79NBS-B
	DY	14.		PPM	80GLA-D
	EU	4.		PPM	79NBS-B
	FE	9.4	.1	%	79NBS-B
	GA	58.		PPM	79NBS-B
	HF	7.6		PPM	79NBS-B
	HG	160.	10.	PPB	79NBS-B
	K	1.88	.06	%	79NBS-B
	LA	84.	6.	PPM	80GLA-D
	MG	4550.	100.	PPM	79NBS-B
	MN	190.		PPM	79NBS-B
	MO	29.		PPM	79NBS-B
	NA	1700.	100.	PPM	79NBS-B
	NI	127.	4.	PPM	79NBS-B
	PB	72.4	.4	PPM	79NBS-B
	RB	131.	2.	PPM	79NBS-B
	SB	7.		PPM	79NBS-B
	SC	40.		PPM	79NBS-B
	SE	10.3	.6	PPM	79NBS-B
	SI	22.8	.8	%	79NBS-B
	SM	16.		PPM	80GLA-A
	SR	830.	30.	PPM	79NBS-B
	TA	2.1	.2	PPM	80GLA-D
	TB	2.9	.1	PPM	80GLA-D
	TH	24.7	.3	PPM	79NBS-B
	TI	8000.		PPM	79NBS-B
	TL	5.7	.2	PPM	79NBS-B
	U	10.2	.1	PPM	79NBS-B
	V	300.		PPM	79NBS-B
	W	5.4	.4	PPM	80GLA-D
	YB	8.		PPM	80GLA-D
	ZN	220.	10.	PPM	79NBS-B
80.00634	S	5460.	30.	PPM	74NBS-G
80.00635	S	2.016	.014	%	74NBS-G
80.00636	S	3.02	.008	%	74NBS-G
80.00637	CS-137	1020.		PCI/L	80EML-A
80.00638	CS-137	1020.		PCI/L	80EML-A
80.00639	CS-137	1020.		PCI/L	80EML-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00640	CS-137	.72		PCI/G	80EML-A
80.00641	CS-137	.72		PCI/G	80EML-A
80.00642	CS-137	.72		PCI/G	80EML-A
80.00643	AG	1.2		PPB	79EPA-A
	SB	8.2		PPB	79EPA-A
	TL	25.2		PPB	79EPA-A
80.00644	AG	4.9		PPB	79EPA-A
	SB	97.5		PPB	79EPA-A
	TL	6.3		PPB	79EPA-A
80.00645	NH4	.19		PPM	78EPA-A
	N03	.31		PPM	78EPA-A
	P04	.031		PPM	78EPA-A
80.00646	NH4	1.3		PPM	78EPA-A
	N03	1.59		PPM	78EPA-A
	P04	.154		PPM	78EPA-A
80.00647	N	.52		PPM	78EPA-A
	P04	.14		PPM	78EPA-A
80.00648	N	4.12		PPM	78EPA-A
	P04	.93		PPM	78EPA-A
80.00649	AL	61.		PPB	76EPA-A
	AS	24.		PPB	76EPA-A
	BE	24.		PPB	76EPA-A
	CD	6.5		PPB	76EPA-A
	CO	30.		PPB	76EPA-A
	CR	4.4		PPB	76EPA-A
	CU	8.7		PPB	76EPA-A
	FE	16.		PPB	76EPA-A
	HG	.4		PPB	76EPA-A
	MN	7.9		PPB	76EPA-A
	NI	8.7		PPB	76EPA-A
	PB	30.		PPB	76EPA-A
	SE	8.7		PPB	76EPA-A
	V	78.		PPB	76EPA-A
	ZN	6.1		PPB	76EPA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00650	AL	852.		PPB	76EPA-A
	AS	182.		PPB	76EPA-A
	BE	261.		PPB	76EPA-A
	CD	59.		PPB	76EPA-A
	CO	348.		PPB	76EPA-A
	CR	304.		PPB	76EPA-A
	CU	374.		PPB	76EPA-A
	FE	796.		PPB	76EPA-A
	HG	7.6		PPB	76EPA-A
	MN	478.		PPB	76EPA-A
	NI	165.		PPB	76EPA-A
	PB	383.		PPB	76EPA-A
	SE	48.		PPB	76EPA-A
	V	848.		PPB	76EPA-A
	ZN	478.		PPB	76EPA-A
80.00651	AL	435.		PPB	76EPA-A
	AS	61.		PPB	76EPA-A
	BE	183.		PPB	76EPA-A
	CD	27.		PPB	76EPA-A
	CO	96.		PPB	76EPA-A
	CR	65.		PPB	76EPA-A
	CU	37.		PPB	76EPA-A
	FE	78.		PPB	76EPA-A
	HG	4.4		PPB	76EPA-A
	MN	47.		PPB	76EPA-A
	NI	96.		PPB	76EPA-A
	PB	113.		PPB	76EPA-A
	SE	16.		PPB	76EPA-A
	V	470.		PPB	76EPA-A
	ZN	26.		PPB	76EPA-A
80.00652	CA	40.6		PPM	78EPA-B
	CL	87.9		PPM	78EPA-B
	COND	572.		UMHO*	78EPA-B
	F	1.3		PPM	78EPA-B
	HARD	136.		MG/L	78EPA-B
	K	9.8		PPM	78EPA-B
	MG	8.4		PPM	78EPA-B
	NA	46.6		PPM	78EPA-B
	SO4	93.6		PPM	78EPA-B
	TDS	338.		PPM	78EPA-B
80.00653	CA	5.3		PPM	78EPA-B
	CL	18.4		PPM	78EPA-B
	COND	113.		UMHO*	78EPA-B
	F	.43		PPM	78EPA-B
	HARD	20.7		MG/L	78EPA-B

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00653	K	2.1		PPM	78EPA-B
	MG	1.8		PPM	78EPA-B
	NA	8.2		PPM	78EPA-B
	SO4	7.2		PPM	78EPA-B
	TDS	54.		PPM	78EPA-B
80.00654	AG	24.		PPB	78EPA-B
	AS	22.		PPB	78EPA-B
	BA	142.		PPB	78EPA-B
	CD	2.9		PPB	78EPA-B
	CR	11.		PPB	78EPA-B
	HG	1.4		PPB	78EPA-B
	PB	22.		PPB	78EPA-B
	SE	6.		PPB	78EPA-B
80.00655	AG	24.		PPB	78EPA-B
	AS	40.		PPB	78EPA-B
	BA	335.		PPB	78EPA-B
	CD	4.3		PPB	78EPA-B
	CR	42.		PPB	78EPA-B
	HG	4.		PPB	78EPA-B
	PB	38.		PPB	78EPA-B
	SE	7.3		PPB	78EPA-B
80.00656	U	150.	15.	PPB	80H-8
80.00660	AS	4.		UG/S	??EPA-A
80.00661	AS	112.		UG/S	??EPA-A
80.00662	AS	23.		UG/S	??EPA-A
80.00663	AS	62.		UG/S	??EPA-A
80.00664	AS	38.		UG/S	??EPA-A
80.00665	AS	79.		UG/S	??EPA-A
80.00666	AS	18.		UG/S	??EPA-A
80.00667	AS	9.		UG/S	??EPA-A

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00668	AS	145.		UG/S	??EPA-A
80.00669	AS			UG/S	??EPA-A
80.00670	N03	200.		UG/S	??EPA-B
	S04	150.		UG/S	??EPA-B
80.00671	N03	100.		UG/S	??EPA-B
	S04	300.		UG/S	??EPA-B
80.00672	N03	300.		UG/S	??EPA-B
	S04	450.		UG/S	??EPA-B
80.00673	N03			UG/S	??EPA-B
	S04			UG/S	??EPA-B
80.00674	N03	900.		UG/S	??EPA-B
	S04	2000.		UG/S	??EPA-B
80.00675	N03	1300.		UG/S	??EPA-B
	S04	2500.		UG/S	??EPA-B
80.00676	N03	1100.		UG/S	??EPA-B
	S04	3000.		UG/S	??EPA-B
80.00677	N03	2000.		UG/S	??EPA-B
	S04	4000.		UG/S	??EPA-B
80.00678	N03	1800.		UG/S	??EPA-B
	S04	5000.		UG/S	??EPA-B
80.00679	N03	1600.		UG/S	??EPA-B
	S04	6000.		UG/S	??EPA-B
80.00680	PB	100.		UG/S	??EPA-C
80.00681	PB	250.		UG/S	??EPA-C

TABLE A-II (cont)

SAMPLE NUMBER	CERTIFIED VALUE NAME	CERTIFIED VALUE	CERTIFIED VALUE UNCERTAINTY	CERTIFIED VALUE UNITS	REFERENCE
80.00682	PB	400.		UG/S	??EPA-C
80.00683	PB	800.		UG/S	??EPA-C
80.00684	PB	1000.		UG/S	??EPA-C
80.00685	PB	1200.		UG/S	??EPA-C
80.00686	PB			UG/S	??EPA-C
80.00687	PB	1800.		UG/S	??EPA-C
80.00688	PB	2000.		UG/S	??EPA-C
80.00689	PB	2400.		UG/S	??EPA-C

APPENDIX B

CONTROL CHARTS FOR STABLE ELEMENT QA PROGRAM

ANALYSIS=AG
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=AG
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=AL
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=AS
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=AS
 MATRIX=W
 80/01/01 TO 80/12/31

ANALYSIS=B
 MATRIX=S
 80/01/01 TO 80/12/31

ANALYSIS=B
MATRIX=V
80/01/01 TO 80/12/31

ANALYSIS=BA
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=BA
 MATRIX=W
 80/01/01 TO 80/12/31

ANALYSIS=BE
 MATRIX=W
 80/01/01 TO 80/12/31

ANALYSIS=BR
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CA
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=CD
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CD
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=CE
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CL
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CL
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=CL
MATRIX=V
80/01/01 TO 80/12/31

ANALYSIS=CO
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CR
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CR
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=CS
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CS-137
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=CU
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=DY
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=EU
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=F
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=FE
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=GA
MATRIX=S
80/01/01 TO 80/12/31

80/01/01.
(DAY 1)

80/12/31.
(DAY 365)

80/01/01.
(DAY 1)

DAY

80/12/31.
(DAY 365)

ANALYSIS=H-3
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=K
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=K
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=LA
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=LI
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=MG
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=MN
 MATRIX=S
 80/01/01 TO 80/12/31

ANALYSIS=MN
 MATRIX=V
 80/01/01 TO 80/12/31

ANALYSIS=NA
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=NA
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=NA-22
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=NA-22
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=PB
 MATRIX=W
 80/01/01 TO 80/12/31

ANALYSIS=RA-226
 MATRIX=S
 80/01/01 TO 80/12/31

ANALYSIS=RB
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=SB
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=SC
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=SE
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=SE
 MATRIX=W
 80/01/01 TO 80/12/31

ANALYSIS=SM
 MATRIX=S
 80/01/01 TO 80/12/31

ANALYSIS=SO4
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=SR
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=TA
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=TB
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=TDS
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=TH
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=TI
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=U
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=U
MATRIX=W
80/01/01 TO 80/12/31

ANALYSIS=U
MATRIX=V
80/01/01 TO 80/12/31

ANALYSIS=V
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=W
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=YB
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=ZN
MATRIX=S
80/01/01 TO 80/12/31

ANALYSIS=ZN
MATRIX=W
80/01/01 TO 80/12/31

APPENDIX C
QA DATA FOR 1980

TABLE C-1

**SUMMARY OF ELEMENTAL DETERMINATIONS ON NBS,
USGS, AND CCRMP SECONDARY REFERENCE MATERIALS**

<u>H-8 No.</u>	<u>Agency ID</u>	<u>Element</u>	<u>Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)</u>	<u>No. of Determinations</u>	<u>Element</u>	<u>Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)</u>	<u>No. of Determinations</u>
80.00505	NBS 1643a	Ag	2.7 ppb	2	K	2.3	1
		As	78 ± 9 ppb	26	Mg	8.1	1
		Ba	52 ± 6 ppb	3	Mo	110 ppb	1
		Be	21 ppb	1	Na	9.3	1
		Ca	19.8	1	Ni	60 ppb	2
		Cd	8.0 ± 1.6 ppb	28	Pb	26 ± 3 ppb	3
		Co	19 ± 2 ppb	1	Se	12 ± 1 ppb	3
		Cr	18 ± 5 ppb	4	Zn	60 ppb	1
		Cu	17 ppb	1			
80.00515	CCRMP SY-2	B	86	1	Th	350 ± 7	15
80.00517	CCRMP MRG-1	Cl	150	2	Sr	250	1
80.00518	CCRMP BL-1	²²⁶ Ra	73 ± 2 pCi/g	3	U	218 ± 8	35
80.00519	CCRMP BL-2	²²⁶ Ra	1580 pCi/g	1	U	4490 ± 56	6
80.00520	CCRMP BL-3	²²⁶ Ra	3420 pCi/g	1			
80.00521	CCRMP BL-4	²²⁶ Ra	608 ± 13 pCi/g	3			
80.00522	CCRMP DH-1	²²⁶ Ra	670 pCi/g	2	U	1763 ± 106	15
		Th	1125 ± 25	3			

TABLE C-I (cont)

H-8 No.	Agency ID	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations
80.00522	CCRMP DL-1	Th	82 ± 6	6	U	40.3 ± 2.1	107
80.00531	NBS 1570	Ca	1.21 %	2	Mn	160	2
		Cl	6000	2	Na	1.48 %	2
80.00532	NBS 1571	Ca	1.58 %	1	Mn	92 ± 4	3
		Cl	700 ± 60	5	Na	92	1
		Hg	165 ± 5 ppb	3	U	30 ppb	2
		K	1.4 ± 0.2%	3			
80.00533	NBS 1573	B	32 ± 3	7			
80.00534	NBS 1575	B	17 ± 1	6			
80.00535	NBS 1577	Cl	2460	1	Mn	10	1
		K	1.06 %	1	Na	2550	1
80.00537	NBS 1633	As	59 ± 2	3	Nd	60	2
		Ba	2840 ± 180	28	Ni	84 ± 2	3
		Br	6.9 ± 0.3	3	Rb	118 ± 7	25
		Ce	149 ± 7	25	Sb	7.2 ± 0.3	25
		Co	40 ± 2	28	Sc	28.3 ± 0.7	22
		Cr	128 ± 5	20	Se	9.1 ± 0.3	18
		Cs	8.7 ± 0.7	26	Sr	1300	2
		Dy	10.2	1	Ta	1.74 ± 0.12	28
		Eu	2.50 ± 0.16	22	Tb	2.0 ± 0.1	3
		Fe	6.1 ± 0.3%	33	Th	25.0 ± 0.9	25
		Ga	41 ± 1	3	W	5.8 ± 0.3	3
		Hf	8.0 ± 0.4	25	Zn	221 ± 16	3
		K	1.97%	1	Zr	286 ± 8	3

TABLE C-I (cont)

<u>H-8 No.</u>	<u>Agency ID</u>	<u>Element</u>	<u>Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)</u>	<u>No. of Determinations</u>	<u>Element</u>	<u>Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)</u>	<u>No. of Determinations</u>
80.00540	NBS 1642A	Hg	1.1 ± 0.1 ppb	4			
80.00570	USGS AGV-1	Al	8.94%	2	Mn	748	2
		As	1.2	1	Na	3.12 ± 0.04%	3
		Ba	1295	2	Rb	72	2
		Ce	67	1	Sc	12.3	2
		Co	15.3	2	Sm	5.2 ± 0.2	3
		Cr	12	2	Sr	660	1
		Cs	1.4	2	Ta	0.89	1
		Eu	1.7	2	Tb	0.92	1
		Fe	4.80%	2	Th	6.4	1
		Ga	19.3	1	Ti	6040	1
		Hf	5.8	2	U	1.95 ± 0.06	4
		La	40 ± 2	3	V	122	2
		Lu	0.41	1	Yb	2.8	1
80.00571	USGS G-2	U	2.2 ± 0.1	3			
80.00572	USGS BCR-1	Al	7.19%	2	Mn	1400	2
		As	0.5	1	Na	2.45 ± 0.14%	3
		Ba	850	2	Rb	49	2
		Ce	45	1	Sc	34	2
		Co	36	2	Sm	5.9 ± 0.4	3
		Cr	17	2	Sr	330	1
		Cs	1.4	2	Ta	1.14	1
		Eu	2.1	2	Tb	1.2	1
		Fe	9.61%	2	Th	6.1	1
		Ga	20.6	1	Ti	1.27%	1
		Hf	5.9	2	U	1.8 ± 0.1	3

TABLE C-I (cont)

H-8 No.	Agency ID	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations
		La	26 ± 2	3	V	400	2
		Lu	1	1	Yb	4.3	1
80.00574	USGS GSP-1	U	2.6 ± 0.1	3			
80.00575	USGS GXR-1	Al	3.4%	1	La	8.5 ± 0.2	4
		As	430 ± 60	5	Li	10	2
		Cd	3.8	2	Na	610 ± 10	4
		Co	10.0 ± 0.8	3	Se	12	1
		Cr	16	1	U	37 ± 4	22
		Fe	26.3 ± 0.1%	3	V	82	1
		K	600 ± 70	4	Zn	785	1
80.00577	USGS GXR-2	Ag	17.6 ± 0.8	12	La	28	1
		Al	18.5%	2	Li	38	2
		As	37	2	Mn	960	2
		Cd	4.6	2	Na	5500	2
		Ce	50	2	Rb	67	2
		Cr	34	2	Sm	3.5	1
		Cs	5.4	2	Th	8.6 ± 0.3	5
		Dy	3.0	2	U	3.0 ± 0.1	3
		Eu	0.74	2	V	65	1
		Fe	1.83%	2	W	1.4	2
		Hf	8.7	2	Yb	1.8	2
80.00579	USGS GXR-3	As	4300	2	Hg	0.34 ± 0.03	5
		Cd	0.53	2	Li	122	2

TABLE C-I (cont)

H-8 No.	Agency ID	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations
80.00581	USGS GXR-4	As	107	2	Th	21.4 ± 0.5	3
		Cd	0.67	2	U	6.1 ± 0.1	3
		Li	8	2	W	30	2
80.00583	USGS GXR-5	Al	19.7 ± 0.6	9	Mo	32 ± 2	3
		As	12 ± 1	5	Na	7400 ± 600	12
		Ba	1880 ± 160	10	Rb	41 ± 3	10
		Br	8.2	2	Sc	7.4 ± 0.5	10
		Ce	40 ± 2	12	Se	1.1	1
		Co	29 ± 2	13	Sm	3.2 ± 0.2	13
		Cr	100 ± 4	16	Sr	104	2
		Cs	2.4 ± 0.2	6	Ta	0.46 ± 0.04	6
		Dy	2.7	1	Th	5.3 ± 0.2	12
		Eu	0.96 ± 0.07	12	Ti	2280	2
		Fe	3.21 ± 0.17%	17	U	2.0 ± 0.1	4
		Hf	5.0 ± 0.4	6	V	76 ± 22	9
		K	8100 ± 900	4	Yb	1.9 ± 0.3	8
		La	20 ± 2	11	Zn	31	1
		Mn	290 ± 30	7			
80.00585	USGS GXR-6	Al	16.5 ± 0.8%	11	Mn	1080 ± 60	9
		As	340 ± 20	9	Na	1010 ± 90	13
		Ba	1300 ± 180	10	Rb	104 ± 9	7
		Ce	38 ± 2	10	Sc	28 ± 1	10
		Co	14 ± 1	12	Sm	2.7 ± 0.3	12
		Cr	100 ± 13	12	Sr	37	2
		Cs	4.4 ± 0.4	4	Ta	0.46 ± 0.15	6
		Eu	0.74 ± 0.09	10	Th	5.3 ± 0.4	10
		Fe	5.5 ± 0.3%	12	Ti	4900 ± 200	5

TABLE C-I (cont)

H-8 No.	Agency ID	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations
		Ga	33	2	U	1.5 ± 0.1	3
		Hf	4.2 ± 0.4	4	V	198 ± 12	13
		Hg	0.08 ± 0.01	4	Yb	2.6 ± 0.3	6
		K	1.99 ± 0.17%	7	Zn	158	1
		La	15 ± 1	12			
80.00594	CCRMP SO-1	B	17 ± 2	5	Ti	5000	2
		Sr	330	1	U	1.7 ± 0.1	3
80.00596	CCRMP SO-2	U	1.0 ± 0.1	3			
80.00598	CCRMP SO-3	B	24 ± 2	6	U	1.1 ± 0.1	3
80.00600	CCRMP SO-4	B	42 ± 3	4	U	2.4 ± 0.1	15
80.00605	NBS 1632A	B	55 ± 4	8	U	1.3 ± 0.1	3
80.00611	USGS MAG-1	Cl	3.08%	1			
80.00613	USGS RGM-1	Cl	530 ± 50	11			
80.00632	NBS 1569	U	0.47 ± 0.05	4			
80.00633	NBA 1633A	Al	14.2 ± 0.4%	19	Mn	210 ± 50	21
		As	145 ± 8	12	Na	1740 ± 100	17
		B	39 ± 3	3	Rb	134 ± 16	24
		Ba	1450 ± 110	6	Sc	41 ± 2	6
		Ca	1.1 ± 0.1%	3	Se	10.7 ± 0.8	4
		Ce	180 ± 5	6	Sm	14.5 ± 1.3	17

TABLE C-I (cont)

H-8 No.	Agency ID	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations	Element	Mean Concentration ± Standard Deviation (ppm unless otherwise indicated)	No. of Determinations
		Co	47 ± 4	24	Sr	770	2
		Cr	197 ± 18	25	Ta	1.8 ± 0.2	4
		Cs	10.5 ± 0.3	7	Tb	2.8 ± 0.5	4
		Dy	14.5	2	Th	24.6 ± 0.9	21
		Eu	3.7 ± 0.2	9	Ti	8000 ± 600	7
		Fe	9.36 ± 0.49%	23	U	10.6 ± 0.4	10
		Ga	56	2	V	294 ± 28	12
		Hf	7.6 ± 0.2	5	W	5.4 ± 0.4	4
		K	1.88 ± 0.10%	10	Yb	8.2	1
		La	83 ± 4	19			

TABLE C-II

ELEMENTAL CONCENTRATIONS IN QUALITY ASSURANCE

MATERIALS MEASURED BY H-8 DURING 1980

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00500	TDS	504.	50.	PPM	04/07/80
	TDS	480.	48.	PPM	04/07/80
	TDS	472.	47.	PPM	04/07/80
	TDS	486.	49.	PPM	04/07/80
	TDS	526.	52.	PPM	04/07/80
	TDS	520.	52.	PPM	04/07/80
80.00501	COND	1120.	112.	UMHO*	08/25/80
80.00503	F	.4	.04	PPM	06/02/80
	F	.4	.04	PPM	06/02/80
	F	.33	.03	PPM	07/01/80
	F	.31	.03	PPM	07/01/80
	NO3	.97	.1	PPM	06/02/80
80.00504	F	2.3	.2	PPM	06/02/80
	F	2.3	.2	PPM	06/02/80
	F	2.3	.2	PPM	06/11/80
	F	2.	.2	PPM	07/01/80
	F	2.1	.2	PPM	07/29/80
	F	2.1	.2	PPM	07/30/80
	F	2.1	.2	PPM	07/31/80
	NO3	44.4	4.4	PPM	06/02/80
	NO3	44.9	4.5	PPM	06/11/80
80.00505	AG	2.2	.3	PPB	06/12/80
	AG	3.2	.3	PPB	06/12/80
	AS	77.		PPB	05/27/80
	AS	76.		PPB	05/27/80
	AS	73.	3.	PPB	05/27/80
	AS	84.	3.	PPB	05/27/80
	AS	67.	3.	PPB	05/27/80
	AS	79.	3.	PPB	05/27/80
	AS	110.	.8	PPB	05/28/80
	AS	72.	.8	PPB	05/28/80
	AS	72.	7.	PPB	06/02/80
	AS	81.	8.	PPB	06/02/80
	AS	79.	8.	PPB	06/02/80
	AS	68.	3.	PPB	06/02/80
	AS	69.	7.	PPB	06/02/80
	AS	79.	8.	PPB	06/02/80
	AS	69.	7.	PPB	06/02/80
	AS	68.	3.	PPB	06/02/80
	AS	79.	8.	PPB	06/02/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00505	AS	79.	8.	PPB	06/02/80
	AS	84.	8.	PPB	06/04/80
	AS	87.	9.	PPB	06/04/80
	AS	87.	9.	PPB	06/04/80
	AS	84.	8.	PPB	06/04/80
	AS	72.	7.	PPB	06/13/80
	AS	69.	7.	PPB	06/13/80
	AS	84.	10.	PPB	07/14/80
	AS	69.	10.	PPB	07/14/80
	BA	57.	6.	PPB	06/12/80
	BA	53.	6.	PPB	06/12/80
	BA	46.	5.	PPB	12/16/80
	BE	21.	2.	PPB	11/04/80
	CA	19.8	.4	PPM	12/16/80
	CD	8.	3.	PPB	06/04/80
	CD	5.	3.	PPB	06/04/80
	CD	8.	3.	PPB	06/04/80
	CD	10.	3.	PPB	06/04/80
	CD	10.	3.	PPB	06/04/80
	CD	9.	3.	PPB	06/04/80
	CD	10.	3.	PPB	06/04/80
	CD	6.	3.	PPB	06/04/80
	CD	7.	3.	PPB	06/04/80
	CD	6.	3.	PPB	06/04/80
	CD	5.	3.	PPB	06/04/80
	CD	7.	3.	PPB	06/04/80
	CD	8.	3.	PPB	06/04/80
	CD	9.	3.	PPB	06/04/80
	CD	8.	3.	PPB	06/04/80
	CD	6.	3.	PPB	06/04/80
	CD	6.	3.	PPB	06/04/80
	CD	10.	3.	PPB	06/04/80
	CD	10.	3.	PPB	06/04/80
	CD	10.	3.	PPB	06/04/80
	CD	8.	3.	PPB	06/04/80
	CD	8.	3.	PPB	06/04/80
	CD	8.	3.	PPB	06/04/80
	CD	8.	3.	PPB	06/04/80
	CD	7.	.1	PPB	06/11/80
	CD	8.4	.1	PPB	06/11/80
	CD	10.	3.	PPB	11/04/80
	CD	10.	1.	PPB	12/16/80
	CO	19.	2.	PPB	07/18/80
	CR	20.	2.	PPB	06/12/80
	CR	23.	2.	PPB	06/12/80
	CR	16.	3.	PPB	11/04/80
	CR	11.	2.	PPB	12/16/80
	CU	17.	3.	PPB	12/16/80
	K	2.3	.3	PPM	12/16/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00505					
	MG	8.1	.8	PPM	12/16/80
	MO	110.	20.	PPB	07/14/80
	NA	9.3	.3	PPM	12/16/80
	NI	52.	11.	PPB	07/18/80
	NI	67.	12.	PPB	07/18/80
	PB	23.	2.	PPB	06/13/80
	PB	27.	2.	PPB	06/13/80
	PB	28.	5.	PPB	12/16/80
	SE	11.	5.	PPB	06/13/80
	SE	12.	5.	PPB	06/13/80
	SE	13.	3.	PPB	08/20/80
	ZN	60.	3.	PPB	12/16/80
80.00510					
	H-3	1100.	300.	PCI/L	03/10/80
	H-3	900.	300.	PCI/L	03/18/80
	H-3	500.	300.	PCI/L	04/03/80
	H-3	900.	300.	PCI/L	04/15/80
	H-3	700.	300.	PCI/L	04/18/80
	H-3	800.	300.	PCI/L	05/02/80
	H-3	800.	300.	PCI/L	05/19/80
	H-3	1100.	300.	PCI/L	06/10/80
	H-3	1200.	300.	PCI/L	10/17/80
	H-3	1000.	300.	PCI/L	11/04/80
	H-3	1500.	300.	PCI/L	11/19/80
	H-3	1700.	300.	PCI/L	12/03/80
	H-3	1700.	300.	PCI/L	12/23/80
80.00511					
	H-3	1800.	400.	PCI/L	01/15/80
	H-3	1800.	400.	PCI/L	01/15/80
	H-3	2000.	400.	PCI/L	01/15/80
	H-3	1800.	400.	PCI/L	01/15/80
	H-3	2300.	400.	PCI/L	01/15/80
	H-3	1800.	400.	PCI/L	01/15/80
	H-3	1900.	400.	PCI/L	01/28/80
	H-3	1500.	400.	PCI/L	02/04/80
	H-3	2000.	400.	PCI/L	02/20/80
	H-3	1900.	400.	PCI/L	02/28/80
	H-3	2000.	400.	PCI/L	03/10/80
	H-3	1500.	300.	PCI/L	03/18/80
	H-3	1600.	400.	PCI/L	04/03/80
	H-3	1700.	400.	PCI/L	04/15/80
	H-3	2300.	400.	PCI/L	04/18/80
	H-3	1700.	300.	PCI/L	05/02/80
	H-3	1400.	300.	PCI/L	05/19/80
	H-3	1800.	300.	PCI/L	06/10/80
	H-3	2500.	300.	PCI/L	10/17/80
	H-3	1800.	300.	PCI/L	11/04/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00511	H-3	1300.	300.	PCI/L	11/19/80
	H-3	1900.	300.	PCI/L	12/03/80
	H-3	1900.	300.	PCI/L	12/23/80
80.00512	H-3	4300.	400.	PCI/L	01/15/80
	H-3	3400.	400.	PCI/L	01/15/80
	H-3	4000.	400.	PCI/L	01/15/80
	H-3	3700.	400.	PCI/L	01/15/80
	H-3	3600.	400.	PCI/L	01/15/80
	H-3	3400.	400.	PCI/L	01/15/80
	H-3	3600.	400.	PCI/L	01/28/80
	H-3	3600.	400.	PCI/L	02/04/80
	H-3	3900.	400.	PCI/L	02/20/80
	H-3	4000.	400.	PCI/L	02/28/80
	H-3	3900.	400.	PCI/L	03/10/80
	H-3	4000.	400.	PCI/L	03/18/80
	H-3	3300.	400.	PCI/L	04/03/80
	H-3	3400.	400.	PCI/L	04/15/80
	H-3	3800.	400.	PCI/L	04/18/80
	H-3	3100.	300.	PCI/L	05/02/80
	H-3	2800.	300.	PCI/L	05/19/80
	H-3	3100.	300.	PCI/L	06/10/80
	H-3	3600.	300.	PCI/L	10/17/80
	H-3	3500.	300.	PCI/L	11/04/80
	H-3	3600.	300.	PCI/L	11/19/80
	H-3	3600.	300.	PCI/L	12/03/80
	H-3	3400.	300.	PCI/L	12/23/80
80.00513	H-3	9800.	400.	PCI/L	01/15/80
	H-3	9700.	400.	PCI/L	01/15/80
	H-3	9900.	400.	PCI/L	01/15/80
	H-3	10100.	400.	PCI/L	01/15/80
	H-3	10000.	400.	PCI/L	01/15/80
	H-3	9800.	400.	PCI/L	01/15/80
	H-3	9900.	400.	PCI/L	01/28/80
	H-3	9500.	400.	PCI/L	02/04/80
	H-3	8900.	400.	PCI/L	02/20/80
	H-3	9100.	400.	PCI/L	02/28/80
	H-3	9100.	400.	PCI/L	03/10/80
	H-3	9500.	400.	PCI/L	03/18/80
	H-3	8700.	400.	PCI/L	04/03/80
	H-3	9500.	400.	PCI/L	04/15/80
	H-3	9900.	400.	PCI/L	04/18/80
	H-3	8400.	400.	PCI/L	05/02/80
	H-3	8500.	400.	PCI/L	05/19/80
	H-3	7600.	400.	PCI/L	06/10/80
	H-3	8400.	400.	PCI/L	10/17/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00513					
	H-3	8100.	400.	PCI/L	11/04/80
	H-3	8500.	400.	PCI/L	11/19/80
	H-3	8300.	400.	PCI/L	12/03/80
	H-3	9000.	400.	PCI/L	12/23/80
80.00514					
	H-3	20100.	600.	PCI/L	01/15/80
	H-3	18900.	600.	PCI/L	01/15/80
	H-3	19000.	600.	PCI/L	01/15/80
	H-3	19300.	600.	PCI/L	01/15/80
	H-3	18500.	600.	PCI/L	01/15/80
	H-3	20100.	600.	PCI/L	01/15/80
	H-3	19000.	600.	PCI/L	01/28/80
	H-3	18500.	600.	PCI/L	02/04/80
	H-3	18600.	600.	PCI/L	02/20/80
	H-3	19500.	400.	PCI/L	02/28/80
	H-3	18400.	500.	PCI/L	03/10/80
	H-3	17700.	500.	PCI/L	03/18/80
	H-3	17500.	500.	PCI/L	04/03/80
	H-3	18300.	500.	PCI/L	04/15/80
	H-3	18400.	600.	PCI/L	04/18/80
	H-3	16500.	500.	PCI/L	05/02/80
	H-3	16000.	500.	PCI/L	05/19/80
	H-3	16600.	500.	PCI/L	06/10/80
80.00515					
	B	86.	9.	PPM	12/23/80
	TH	353.	15.	PPM	02/01/80
	TH	345.	15.	PPM	02/01/80
	TH	349.	15.	PPM	02/01/80
	TH	364.	15.	PPM	02/10/80
	TH	360.	15.	PPM	02/10/80
	TH	362.	15.	PPM	02/10/80
	TH	351.	15.	PPM	02/20/80
	TH	344.	15.	PPM	02/20/80
	TH	344.	15.	PPM	02/20/80
	TH	353.	15.	PPM	03/01/80
	TH	341.	15.	PPM	03/01/80
	TH	346.	15.	PPM	03/01/80
	TH	342.	15.	PPM	03/10/80
	TH	348.	15.	PPM	03/10/80
	TH	347.	15.	PPM	03/10/80
80.00517					
	CL	140.	30.	PPM	01/22/80
	CL	160.	30.	PPM	01/22/80
	SR	250.	30.	PPM	12/24/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
-----	-----	-----	-----	-----	-----
80.00518	RA-226	73.	2.	PCI/G	03/01/80
	RA-226	75.	2.	PCI/G	03/01/80
	RA-226	72.	3.	PCI/G	06/15/80
	U	215.	20.	PPM	01/02/80
	U	211.	20.	PPM	01/02/80
	U	220.	20.	PPM	01/17/80
	U	230.	20.	PPM	01/17/80
	U	230.	20.	PPM	01/18/80
	U	220.	20.	PPM	01/18/80
	U	220.	20.	PPM	01/18/80
	U	212.	20.	PPM	05/19/80
	U	212.	20.	PPM	05/19/80
	U	212.	20.	PPM	05/19/80
	U	212.	20.	PPM	05/19/80
	U	210.	20.	PPM	05/19/80
	U	217.	20.	PPM	05/22/80
	U	211.	20.	PPM	05/22/80
	U	221.	10.	PPM	06/19/80
	U	218.	10.	PPM	06/19/80
	U	220.	10.	PPM	06/19/80
	U	219.	10.	PPM	06/19/80
	U	219.	10.	PPM	06/19/80
	U	219.	10.	PPM	06/19/80
	U	214.5	10.	PPM	07/08/80
	U	215.	10.	PPM	07/08/80
	U	217.7	10.	PPM	07/08/80
	U	223.	25.	PPM	07/14/80
	U	250.	25.	PPM	07/14/80
	U	214.	25.	PPM	07/14/80
	U	234.	25.	PPM	07/14/80
	U	217.	20.	PPM	08/18/80
	U	219.	20.	PPM	08/18/80
	U	210.	20.	PPM	10/08/80
	U	215.	20.	PPM	10/08/80
	U	219.	20.	PPM	10/15/80
	U	217.	20.	PPM	11/19/80
	U	215.	20.	PPM	12/09/80
	U	220.	20.	PPM	12/09/80
80.00519	RA-226	1580.	50.	PCI/G	06/15/80
	U	4402.	220.	PPM	12/04/80
	U	4530.	230.	PPM	12/04/80
	U	4440.	230.	PPM	12/04/80
	U	4527.	220.	PPM	12/05/80
	U	4516.	220.	PPM	12/05/80
	U	4529.	220.	PPM	12/05/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00520	RA-226	3420.	110.	PCI/G	06/15/80
80.00521	RA-226	616.	22.	PCI/G	03/01/80
	RA-226	614.	31.	PCI/G	03/01/80
	RA-226	593.	19.	PCI/G	06/15/80
80.00522	RA-226	650.	40.	PCI/G	03/01/80
	RA-226	690.	30.	PCI/G	03/01/80
	TH	1098.	60.	PPM	12/20/80
	TH	1130.	65.	PPM	12/24/80
	TH	1149.	65.	PPM	12/30/80
	U	1580.	170.	PPM	02/20/80
	U	1780.	170.	PPM	02/20/80
	U	1680.	170.	PPM	02/20/80
	U	1710.	170.	PPM	02/25/80
	U	1880.	170.	PPM	02/25/80
	U	1750.	170.	PPM	02/25/80
	U	1750.	170.	PPM	03/01/80
	U	1880.	170.	PPM	03/01/80
	U	1550.	170.	PPM	03/01/80
	U	1710.	170.	PPM	03/05/80
	U	1820.	170.	PPM	03/05/80
	U	1880.	170.	PPM	03/05/80
	U	1840.	170.	PPM	03/10/80
	U	1750.	170.	PPM	03/10/80
	U	1890.	170.	PPM	03/10/80
80.00523	TH	72.2	4.4	PPM	12/20/80
	TH	83.5	5.4	PPM	12/20/80
	TH	89.7	5.2	PPM	12/24/80
	TH	87.1	5.2	PPM	12/24/80
	TH	82.6	4.9	PPM	12/30/80
	TH	79.5	4.3	PPM	12/30/80
	U	40.	4.	PPM	01/02/80
	U	40.	4.	PPM	01/02/80
	U	40.8	2.	PPM	01/12/80
	U	41.7	2.	PPM	01/12/80
	U	40.5	2.	PPM	01/12/80
	U	40.	4.	PPM	01/17/80
	U	40.	4.	PPM	01/17/80
	U	40.	2.	PPM	01/18/80
	U	40.	.4	PPM	01/18/80
	U	41.	.4	PPM	01/18/80
	U	41.	.4	PPM	01/18/80
	U	41.	.4	PPM	01/18/80
	U	40.	2.	PPM	01/18/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00523					
	U	42.3	2.	PPM	01/18/80
	U	41.2	2.	PPM	01/18/80
	U	40.6	4.	PPM	02/25/80
	U	36.2	4.	PPM	02/25/80
	U	46.8	4.	PPM	02/25/80
	U	44.7	4.	PPM	03/01/80
	U	41.3	4.	PPM	03/01/80
	U	42.3	4.	PPM	03/01/80
	U	38.	4.	PPM	03/05/80
	U	41.5	4.	PPM	03/05/80
	U	43.1	4.	PPM	03/05/80
	U	48.2	4.	PPM	03/10/80
	U	39.2	4.	PPM	03/10/80
	U	38.3	4.	PPM	03/10/80
	U	40.4	4.	PPM	03/31/80
	U	41.7	4.	PPM	03/31/80
	U	40.4	4.	PPM	03/31/80
	U	41.7	4.	PPM	03/31/80
	U	40.4	4.	PPM	03/31/80
	U	41.7	4.	PPM	03/31/80
	U	39.9	4.	PPM	04/01/80
	U	40.1	4.	PPM	04/01/80
	U	30.5	4.	PPM	04/01/80
	U	41.6	4.	PPM	04/05/80
	U	37.8	4.	PPM	04/05/80
	U	38.4	4.	PPM	04/05/80
	U	38.3	4.	PPM	04/10/80
	U	39.	4.	PPM	04/10/80
	U	40.1	4.	PPM	04/10/80
	U	40.6	4.	PPM	04/10/80
	U	38.2	4.	PPM	04/15/80
	U	41.3	4.	PPM	04/15/80
	U	40.3	4.	PPM	04/15/80
	U	43.3	4.	PPM	04/20/80
	U	39.3	4.	PPM	04/20/80
	U	38.6	4.	PPM	04/20/80
	U	40.8	4.	PPM	04/25/80
	U	35.9	4.	PPM	04/25/80
	U	41.8	4.	PPM	04/25/80
	U	40.6	4.	PPM	04/25/80
	U	42.2	4.	PPM	04/25/80
	U	37.4	4.	PPM	04/25/80
	U	38.	4.	PPM	04/30/80
	U	42.1	4.	PPM	04/30/80
	U	38.4	4.	PPM	04/30/80
	U	34.1	4.	PPM	04/30/80
	U	40.8	4.	PPM	04/30/80
	U	39.	4.	PPM	05/19/80
	U	39.	4.	PPM	05/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00523					
	U	40.	4.	PPM	05/19/80
	U	40.	4.	PPM	05/19/80
	U	39.	4.	PPM	05/19/80
	U	39.	4.	PPM	05/19/80
	U	41.1	4.	PPM	05/29/80
	U	40.4	4.	PPM	05/29/80
	U	38.8	4.	PPM	05/29/80
	U	41.6	4.	PPM	05/29/80
	U	38.6	4.	PPM	05/29/80
	U	40.7	4.	PPM	05/29/80
	U	40.	10.	PPM	06/19/80
	U	41.	10.	PPM	06/19/80
	U	41.	10.	PPM	06/19/80
	U	40.	10.	PPM	06/19/80
	U	41.	10.	PPM	06/19/80
	U	41.	10.	PPM	06/19/80
	U	41.	10.	PPM	06/19/80
	U	40.	10.	PPM	06/19/80
	U	40.6	3.	PPM	07/08/80
	U	41.3	3.	PPM	07/08/80
	U	39.	3.	PPM	07/08/80
	U	38.8	3.	PPM	07/08/80
	U	39.	3.	PPM	07/08/80
	U	41.2	4.	PPM	08/18/80
	U	40.6	4.	PPM	08/18/80
	U	41.2	4.	PPM	08/18/80
	U	41.5	4.	PPM	08/18/80
	U	41.	4.	PPB	09/16/80
	U	38.	4.	PPB	09/16/80
	U	36.	4.	PPB	09/16/80
	U	40.4	4.	PPM	09/26/80
	U	40.5	4.	PPM	10/15/80
	U	41.	4.	PPM	11/19/80
	U	40.2	4.	PPM	11/19/80
	U	41.3	4.	PPM	11/19/80
	U	40.5	2.	PPM	12/04/80
	U	44.8	2.	PPM	12/04/80
	U	42.	2.	PPM	12/04/80
	U	40.8	2.5	PPM	12/05/80
	U	42.5	2.5	PPM	12/05/80
	U	42.5	2.5	PPM	12/05/80
	U	39.	4.	PPM	12/09/80
	U	41.	4.	PPM	12/15/80
	U	41.	4.	PPM	12/15/80
	U	41.	4.	PPM	12/15/80
80.00531					
	CA	1.44	.3	%	01/09/80
	CA	.97	.3	%	01/09/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00531	CL	6300.	600.	PPM	01/09/80
	CL	5800.	600.	PPM	01/09/80
	MN	153.	15.	PPM	01/09/80
	MN	166.	17.	PPM	01/09/80
	NA	1.59	.16	%	01/09/80
	NA	1.38	.14	%	01/09/80
80.00532	CA	1.58	.16	%	01/09/80
	CL	700.	80.	PPM	01/09/80
	CL	620.	90.	PPM	01/09/80
	CL	790.	100.	PPM	01/09/80
	CL	700.	80.	PPM	01/22/80
	CL	700.	75.	PPM	01/22/80
	HG	170.	20.	PPB	08/21/80
	HG	165.	20.	PPB	08/21/80
	HG	160.	20.	PPB	08/21/80
	K	1.2	.12	%	01/09/80
	K	1.6	.16	%	01/09/80
	K	1.36	.14	%	01/09/80
	MN	89.	9.	PPM	01/09/80
	MN	90.	9.	PPM	01/09/80
	MN	96.	10.	PPM	01/09/80
	NA	92.	9.	PPM	01/09/80
	U	31.1	3.	PPB	01/02/80
	U	28.1	3.	PPB	01/02/80
80.00533	B	35.	5.	PPM	12/05/80
	B	34.	5.	PPM	12/05/80
	B	32.	5.	PPM	12/05/80
	B	31.	5.	PPM	12/05/80
	B	33.	5.	PPM	12/05/80
	B	27.	5.	PPM	12/05/80
	B	33.	5.	PPM	12/23/80
80.00534	B	17.	5.	PPM	12/05/80
	B	17.	5.	PPM	12/05/80
	B	16.	5.	PPM	12/05/80
	B	16.	5.	PPM	12/05/80
	B	17.	5.	PPM	12/05/80
	B	18.	5.	PPM	12/05/80
80.00535	CL	2460.	250.	PPM	01/09/80
	K	1.06	.11	%	01/09/80
	MN	10.	1.	PPM	01/09/80
	NA	2550.	250.	PPM	01/09/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00537					
	AS	59.	.6	PPM	08/18/80
	AS	57.	.6	PPM	08/18/80
	AS	60.	.6	PPM	08/18/80
	BA	3050.	300.	PPM	01/05/80
	BA	2950.	300.	PPM	01/05/80
	BA	3220.	300.	PPM	01/05/80
	BA	2870.	300.	PPM	01/10/80
	BA	3230.	300.	PPM	01/10/80
	BA	2950.	300.	PPM	01/10/80
	BA	2960.	200.	PPM	01/15/80
	BA	2900.	200.	PPM	01/15/80
	BA	2920.	200.	PPM	01/15/80
	BA	2760.	200.	PPM	02/01/80
	BA	2760.	200.	PPM	02/01/80
	BA	2570.	200.	PPM	02/01/80
	BA	2700.	300.	PPM	03/01/80
	BA	2510.	300.	PPM	03/01/80
	BA	2760.	300.	PPM	03/01/80
	BA	2700.	300.	PPM	03/01/80
	BA	2960.	300.	PPM	03/10/80
	BA	2610.	300.	PPM	03/10/80
	BA	2920.	300.	PPM	03/10/80
	BA	2900.	300.	PPM	03/10/80
	BA	3030.	300.	PPM	03/20/80
	BA	2570.	300.	PPM	03/20/80
	BA	2760.	300.	PPM	03/20/80
	BA	3000.	300.	PPM	03/20/80
	BA	2930.	300.	PPM	03/30/80
	BA	2810.	300.	PPM	03/30/80
	BA	2700.	300.	PPM	03/30/80
	BA	2680.	300.	PPM	03/30/80
	BR	6.6	.8	PPM	08/18/80
	BR	7.	.9	PPM	08/18/80
	BR	7.2	.9	PPM	08/18/80
	CE	146.	15.	PPM	01/10/80
	CE	154.	15.	PPM	01/10/80
	CE	163.	16.	PPM	01/10/80
	CE	145.	15.	PPM	01/15/80
	CE	151.	15.	PPM	01/15/80
	CE	153.	15.	PPM	01/15/80
	CE	137.	15.	PPM	02/01/80
	CE	144.	15.	PPM	02/01/80
	CE	154.	15.	PPM	02/01/80
	CE	140.	15.	PPM	03/01/80
	CE	153.	15.	PPM	03/01/80
	CE	156.	15.	PPM	03/01/80
	CE	154.	15.	PPM	03/01/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00537					
	CE	153.	15.	PPM	03/10/80
	CE	137.	15.	PPM	03/10/80
	CE	141.	15.	PPM	03/10/80
	CE	151.	15.	PPM	03/10/80
	CE	144.	15.	PPM	03/20/80
	CE	157.	15.	PPM	03/20/80
	CE	145.	15.	PPM	03/20/80
	CE	156.	15.	PPM	03/20/80
	CE	144.	15.	PPM	03/30/80
	CE	148.	15.	PPM	03/30/80
	CE	155.	15.	PPM	03/30/80
	CE	141.	15.	PPM	03/30/80
	CO	34.	4.	PPM	01/10/80
	CO	40.	4.	PPM	01/10/80
	CO	34.	4.	PPM	01/10/80
	CO	37.	4.	PPM	01/10/80
	CO	38.	4.	PPM	01/10/80
	CO	37.	4.	PPM	01/10/80
	CO	42.	4.	PPM	01/15/80
	CO	43.	4.	PPM	01/15/80
	CO	38.	4.	PPM	01/15/80
	CO	40.6	4.	PPM	02/01/80
	CO	42.	4.	PPM	02/01/80
	CO	41.	4.	PPM	02/01/80
	CO	42.	2.	PPM	03/01/80
	CO	41.4	2.	PPM	03/01/80
	CO	39.6	2.	PPM	03/01/80
	CO	41.3	2.	PPM	03/01/80
	CO	40.7	2.	PPM	03/10/80
	CO	42.	2.	PPM	03/10/80
	CO	41.	2.	PPM	03/10/80
	CO	43.	2.	PPM	03/10/80
	CO	41.7	2.	PPM	03/20/80
	CO	42.2	2.	PPM	03/20/80
	CO	38.	2.	PPM	03/20/80
	CO	41.	2.	PPM	03/20/80
	CO	40.9	2.	PPM	03/30/80
	CO	40.2	2.	PPM	03/30/80
	CO	42.5	2.	PPM	03/30/80
	CO	41.1	2.	PPM	03/30/80
	CR	124.	13.	PPM	01/15/80
	CR	131.	13.	PPM	01/15/80
	CR	136.	13.	PPM	02/01/80
	CR	129.	13.	PPM	02/01/80
	CR	122.	13.	PPM	02/01/80
	CR	126.	8.	PPM	03/01/80
	CR	125.	8.	PPM	03/01/80
	CR	136.	8.	PPM	03/01/80
	CR	130.	8.	PPM	03/01/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00537					
	CR	128.	8.	PPM	03/10/80
	CR	123.	8.	PPM	03/10/80
	CR	131.	8.	PPM	03/10/80
	CR	124.	8.	PPM	03/10/80
	CR	129.	8.	PPM	03/20/80
	CR	122.	8.	PPM	03/20/80
	CR	129.	8.	PPM	03/20/80
	CR	121.	8.	PPM	03/20/80
	CR	132.	8.	PPM	03/30/80
	CR	136.	8.	PPM	03/30/80
	CR	126.	8.	PPM	03/30/80
	CS	9.	.9	PPM	01/10/80
	CS	8.5	.9	PPM	01/10/80
	CS	8.6	.9	PPM	01/10/80
	CS	10.2	1.	PPM	01/15/80
	CS	10.2	1.	PPM	01/15/80
	CS	8.8	1.	PPM	01/15/80
	CS	9.3	1.	PPM	02/01/80
	CS	9.7	1.	PPM	02/01/80
	CS	9.3	1.	PPM	02/01/80
	CS	7.79	.8	PPM	03/01/80
	CS	8.77	.8	PPM	03/01/80
	CS	8.11	.8	PPM	03/01/80
	CS	8.4	.8	PPM	03/01/80
	CS	8.5	.8	PPM	03/10/80
	CS	8.77	.8	PPM	03/10/80
	CS	8.34	.8	PPM	03/10/80
	CS	8.	.8	PPM	03/10/80
	CS	7.57	.8	PPM	03/20/80
	CS	8.39	.8	PPM	03/20/80
	CS	8.94	.8	PPM	03/20/80
	CS	8.	.8	PPM	03/20/80
	CS	8.86	.8	PPM	03/30/80
	CS	7.94	.8	PPM	03/30/80
	CS	8.06	.8	PPM	03/30/80
	CS	8.14	.8	PPM	03/30/80
	CS	9.1	1.	PPM	11/18/80
	DY	10.2	1.5	PPM	10/23/80
	EU	2.58	.2	PPM	01/15/80
	EU	2.6	.2	PPM	01/15/80
	EU	2.43	.2	PPM	01/15/80
	EU	2.26	.2	PPM	02/01/80
	EU	2.51	.2	PPM	02/01/80
	EU	2.83	.2	PPM	02/01/80
	EU	2.46	.15	PPM	03/01/80
	EU	2.5	.15	PPM	03/01/80
	EU	2.43	.15	PPM	03/01/80
	EU	2.51	.15	PPM	03/01/80
	EU	2.58	.15	PPM	03/10/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00537					
	EU	2.6	.15	PPM	03/10/80
	EU	2.83	.15	PPM	03/10/80
	EU	2.47	.15	PPM	03/10/80
	EU	2.49	.15	PPM	03/20/80
	EU	2.26	.15	PPM	03/20/80
	EU	2.43	.15	PPM	03/20/80
	EU	2.77	.15	PPM	03/20/80
	EU	2.43	.15	PPM	03/30/80
	EU	2.37	.15	PPM	03/30/80
	EU	2.4	.15	PPM	03/30/80
	EU	2.3	.15	PPM	03/30/80
	FE	5.8	.6	%	01/01/80
	FE	5.8	.6	%	01/01/80
	FE	6.2	.6	%	01/01/80
	FE	5.6	.6	%	01/05/80
	FE	5.8	.6	%	01/05/80
	FE	6.1	.6	%	01/05/80
	FE	5.9	.6	%	01/10/80
	FE	5.6	.6	%	01/10/80
	FE	5.7	.6	%	01/10/80
	FE	5.81	.6	%	01/15/80
	FE	6.4	.6	%	01/15/80
	FE	6.1	.6	%	01/15/80
	FE	6.29	.6	%	02/01/80
	FE	5.66	.6	%	02/01/80
	FE	5.69	.6	%	02/01/80
	FE	6.22	.3	%	03/01/80
	FE	6.4	.3	%	03/01/80
	FE	6.31	.3	%	03/01/80
	FE	6.06	.3	%	03/01/80
	FE	6.27	.3	%	03/10/80
	FE	6.17	.3	%	03/10/80
	FE	6.11	.3	%	03/10/80
	FE	6.15	.3	%	03/10/80
	FE	6.1	.3	%	03/20/80
	FE	6.19	.3	%	03/20/80
	FE	6.29	.3	%	03/20/80
	FE	6.03	.3	%	03/20/80
	FE	6.35	.3	%	03/30/80
	FE	6.27	.3	%	03/30/80
	FE	6.21	.3	%	03/30/80
	FE	6.59	.3	%	03/30/80
	FE	6.57	.34	%	11/18/80
	FE	6.54	.34	%	11/18/80
	GA	40.	4.	PPM	08/21/80
	GA	41.	5.	PPM	08/21/80
	GA	42.	4.	PPM	08/21/80
	HF	8.1	.8	PPM	01/10/80
	HF	8.2	.8	PPM	01/10/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00537					
	HF	8.1	.8	PPM	01/10/80
	HF	8.1	.8	PPM	01/15/80
	HF	7.9	.8	PPM	01/15/80
	HF	8.7	.8	PPM	01/15/80
	HF	7.3	.7	PPM	02/01/80
	HF	7.3	.7	PPM	02/01/80
	HF	8.3	.8	PPM	02/01/80
	HF	8.25	.8	PPM	03/01/80
	HF	8.3	.8	PPM	03/01/80
	HF	7.41	.8	PPM	03/01/80
	HF	8.09	.8	PPM	03/01/80
	HF	8.7	.8	PPM	03/10/80
	HF	7.97	.8	PPM	03/10/80
	HF	8.1	.8	PPM	03/10/80
	HF	7.9	.8	PPM	03/10/80
	HF	7.83	.8	PPM	03/20/80
	HF	8.26	.8	PPM	03/20/80
	HF	7.3	.8	PPM	03/20/80
	HF	7.3	.8	PPM	03/20/80
	HF	7.71	.8	PPM	03/30/80
	HF	7.62	.8	PPM	03/30/80
	HF	8.11	.8	PPM	03/30/80
	HF	8.35	.8	PPM	03/30/80
	K	1.97	.04	%	09/22/80
	ND	59.5	6.	PPM	01/10/80
	ND	60.7	6.	PPM	01/10/80
	NI	87.	8.	PPM	01/10/80
	NI	83.	8.	PPM	01/10/80
	NI	83.	8.	PPM	01/10/80
	RB	124.	12.	PPM	01/10/80
	RB	116.	11.	PPM	01/10/80
	RB	112.	11.	PPM	01/10/80
	RB	118.	10.	PPM	01/15/80
	RB	112.	10.	PPM	01/15/80
	RB	119.	10.	PPM	01/15/80
	RB	125.	10.	PPM	02/01/80
	RB	115.	10.	PPM	02/01/80
	RB	111.	10.	PPM	02/01/80
	RB	119.	10.	PPM	03/01/80
	RB	117.	10.	PPM	03/01/80
	RB	112.	10.	PPM	03/01/80
	RB	118.	10.	PPM	03/01/80
	RB	125.	10.	PPM	03/10/80
	RB	112.	10.	PPM	03/10/80
	RB	122.	10.	PPM	03/10/80
	RB	115.	10.	PPM	03/10/80
	RB	122.	10.	PPM	03/20/80
	RB	135.	10.	PPM	03/20/80
	RB	119.	10.	PPM	03/20/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00537					
	RB	111.	10.	PPM	03/20/80
	RB	111.	10.	PPM	03/30/80
	RB	115.	10.	PPM	03/30/80
	RB	135.	10.	PPM	03/30/80
	RB	119.	10.	PPM	03/30/80
	SB	7.6	.8	PPM	01/10/80
	SB	7.6	.8	PPM	01/10/80
	SB	8.	.8	PPM	01/10/80
	SB	7.	.7	PPM	01/15/80
	SB	7.	.7	PPM	01/15/80
	SB	7.5	.7	PPM	01/15/80
	SB	7.2	.7	PPM	02/01/80
	SB	7.3	.7	PPM	02/01/80
	SB	7.4	.7	PPM	02/01/80
	SB	6.7	.7	PPM	03/01/80
	SB	7.	.7	PPM	03/01/80
	SB	7.	.7	PPM	03/01/80
	SB	7.5	.7	PPM	03/01/80
	SB	7.	.7	PPM	03/10/80
	SB	7.3	.7	PPM	03/10/80
	SB	7.4	.7	PPM	03/10/80
	SB	7.2	.7	PPM	03/10/80
	SB	7.4	.7	PPM	03/20/80
	SB	7.2	.7	PPM	03/20/80
	SB	7.	.7	PPM	03/20/80
	SB	7.	.7	PPM	03/20/80
	SB	7.	.7	PPM	03/30/80
	SB	6.9	.7	PPM	03/30/80
	SB	7.3	.7	PPM	03/30/80
	SB	7.7	.7	PPM	03/30/80
	SC	27.6	3.	PPM	01/15/80
	SC	28.4	3.	PPM	01/15/80
	SC	28.7	3.	PPM	01/15/80
	SC	29.5	3.	PPM	02/01/80
	SC	28.2	3.	PPM	02/01/80
	SC	28.7	3.	PPM	02/01/80
	SC	28.7	2.	PPM	03/01/80
	SC	28.2	2.	PPM	03/01/80
	SC	28.5	2.	PPM	03/01/80
	SC	27.	2.	PPM	03/01/80
	SC	29.5	2.	PPM	03/10/80
	SC	28.2	2.	PPM	03/10/80
	SC	28.7	2.	PPM	03/10/80
	SC	27.4	2.	PPM	03/10/80
	SC	27.5	2.	PPM	03/20/80
	SC	27.6	2.	PPM	03/20/80
	SC	27.3	2.	PPM	03/20/80
	SC	28.4	2.	PPM	03/20/80
	SC	28.5	2.	PPM	03/30/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00537					
	SC	29.4	2.	PPM	03/30/80
	SC	27.8	2.	PPM	03/30/80
	SC	28.4	2.	PPM	03/30/80
	SE	9.2	.6	PPM	05/01/80
	SE	9.4	.6	PPM	05/01/80
	SE	9.4	.6	PPM	05/01/80
	SE	8.3	.5	PPM	05/10/80
	SE	9.2	.6	PPM	05/10/80
	SE	9.3	.6	PPM	05/10/80
	SE	9.2	.6	PPM	05/20/80
	SE	8.7	.5	PPM	05/20/80
	SE	9.	.5	PPM	05/20/80
	SE	9.	.6	PPM	05/30/80
	SE	9.	.5	PPM	05/30/80
	SE	9.6	.6	PPM	05/30/80
	SE	9.	.5	PPM	06/10/80
	SE	9.1	.6	PPM	06/10/80
	SE	9.3	.6	PPM	06/10/80
	SE	9.4	.6	PPM	06/20/80
	SE	8.9	.5	PPM	06/20/80
	SE	9.1	.6	PPM	06/20/80
	SR	1320.	130.	PPM	08/14/80
	SR	1290.	130.	PPM	08/14/80
	TA	1.9	.2	PPM	01/05/80
	TA	2.	.2	PPM	01/05/80
	TA	1.8	.2	PPM	01/05/80
	TA	1.9	.2	PPM	01/10/80
	TA	1.5	.2	PPM	01/10/80
	TA	1.6	.2	PPM	01/10/80
	TA	1.84	.2	PPM	01/15/80
	TA	1.73	.2	PPM	01/15/80
	TA	1.5	.2	PPM	01/15/80
	TA	1.72	.2	PPM	02/01/80
	TA	1.68	.2	PPM	02/01/80
	TA	1.7	.2	PPM	02/01/80
	TA	1.7	.2	PPM	03/01/80
	TA	1.8	.2	PPM	03/01/80
	TA	1.73	.2	PPM	03/01/80
	TA	1.86	.2	PPM	03/01/80
	TA	1.84	.2	PPM	03/10/80
	TA	1.73	.2	PPM	03/10/80
	TA	1.5	.2	PPM	03/10/80
	TA	1.68	.2	PPM	03/10/80
	TA	1.68	.2	PPM	03/20/80
	TA	1.9	.2	PPM	03/20/80
	TA	1.68	.2	PPM	03/20/80
	TA	1.72	.2	PPM	03/20/80
	TA	1.74	.2	PPM	03/30/80
	TA	1.73	.2	PPM	03/30/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
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80.00537	TA	1.66	.2	PPM	03/30/80
	TA	1.82	.2	PPM	03/30/80
	TB	2.	.2	PPM	01/10/80
	TB	1.9	.2	PPM	01/10/80
	TB	2.1	.2	PPM	01/10/80
	TH	25.4	2.	PPM	01/10/80
	TH	24.2	2.	PPM	01/10/80
	TH	23.5	2.	PPM	01/10/80
	TH	25.6	2.	PPM	01/15/80
	TH	25.8	2.	PPM	01/15/80
	TH	25.4	2.	PPM	01/15/80
	TH	25.2	2.	PPM	02/01/80
	TH	25.4	2.	PPM	02/01/80
	TH	23.2	2.	PPM	02/01/80
	TH	25.4	1.	PPM	03/01/80
	TH	24.2	1.	PPM	03/01/80
	TH	25.3	1.	PPM	03/01/80
	TH	26.1	1.	PPM	03/01/80
	TH	23.2	1.	PPM	03/10/80
	TH	25.4	1.	PPM	03/10/80
	TH	23.7	1.	PPM	03/10/80
	TH	25.2	1.	PPM	03/10/80
	TH	25.9	1.	PPM	03/20/80
	TH	26.3	1.	PPM	03/20/80
	TH	25.8	1.	PPM	03/20/80
	TH	25.6	1.	PPM	03/20/80
	TH	25.7	1.	PPM	03/30/80
	TH	24.3	1.	PPM	03/30/80
	TH	24.3	1.	PPM	03/30/80
	TH	24.9	1.	PPM	03/30/80
	W	6.	1.4	PPM	08/18/80
	W	5.9	1.4	PPM	08/18/80
	W	5.5	1.3	PPM	08/18/80
	ZN	213.	20.	PPM	01/10/80
	ZN	210.	20.	PPM	01/10/80
	ZN	240.	20.	PPM	01/10/80
	ZR	281.	40.	PPM	01/10/80
	ZR	295.	40.	PPM	01/10/80
	ZR	281.	40.	PPM	01/10/80
80.00540	HG	1.1	.1	PPB	04/04/80
	HG	1.	.1	PPB	04/04/80
	HG	1.1	.1	PPB	04/04/80
	HG	1.1	.1	PPB	04/14/80
80.00570	AL	8.95		%	07/08/80
	AL	8.92	.46	%	09/08/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00570					
	AS	1.2	.4	PPM	08/18/80
	BA	1230.		PPM	07/08/80
	BA	1360.	150.	PPM	09/30/80
	CE	67.		PPM	07/08/80
	CO	15.		PPM	07/08/80
	CO	15.6	.9	PPM	09/30/80
	CR	10.		PPM	07/08/80
	CR	14.	2.	PPM	09/30/80
	CS	1.6		PPM	07/08/80
	CS	1.2	.2	PPM	09/30/80
	EU	1.7		PPM	07/08/80
	EU	1.71	.1	PPM	09/30/80
	FE	4.81		%	07/08/80
	FE	4.78	.25	%	09/30/80
	GA	19.3	2.4	PPM	08/21/80
	HF	5.7		PPM	07/08/80
	HF	5.8	.6	PPM	09/30/80
	LA	42.		PPM	07/08/80
	LA	39.	4.	PPM	09/08/80
	LA	39.	4.	PPM	09/08/80
	LU	.41		PPM	07/08/80
	MN	743.		PPM	07/08/80
	MN	752.	39.	PPM	09/08/80
	NA	3.12		%	07/08/80
	NA	3.16	.16	%	09/08/80
	NA	3.07	.16	%	09/08/80
	RB	67.		PPM	07/08/80
	RB	77.	9.	PPM	09/30/80
	SC	12.8		PPM	07/08/80
	SC	11.8	.6	PPM	09/30/80
	SM	5.		PPM	07/08/80
	SM	5.2	.5	PPM	09/08/80
	SM	5.4	.5	PPM	09/08/80
	SR	660.	70.	PPM	08/14/80
	TA	.89		PPM	07/08/80
	TB	.92		PPM	07/08/80
	TH	6.4		PPM	07/08/80
	TI	6040.	300.	PPM	08/20/80
	U	2.		PPM	07/08/80
	U	1.9	.2	PPM	07/08/80
	U	1.9	.2	PPM	07/08/80
	U	2.	.2	PPM	07/08/80
	V	130.		PPM	07/08/80
	V	115.	13.	PPM	09/08/80
	YB	2.8		PPM	07/08/80
80.00571					
	U	2.2	.2	PPM	07/08/80
	U	2.1	.2	PPM	07/08/80

TABLE C-II (cont)					
SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00571	U	2.3	.2	PPM	07/08/80
80.00572	AL	7.18		%	07/08/80
	AL	7.2	.37	%	09/08/80
	AS	500.	200.	PPB	08/18/80
	BA	970.		PPM	07/08/80
	BA	740.	100.	PPM	09/30/80
	CE	45.		PPM	07/08/80
	CO	36.		PPM	07/08/80
	CO	37.	2.	PPM	09/30/80
	CR	19.		PPM	07/08/80
	CR	15.	3.	PPM	09/30/80
	CS	1.6		PPM	07/08/80
	CS	1.3	.4	PPM	09/30/80
	EU	2.2		PPM	07/08/80
	EU	1.97	.13	PPM	09/30/80
	FE	9.6		%	07/08/80
	FE	9.62	.49	%	09/30/80
	GA	20.6	2.6	PPM	08/21/80
	HF	6.3		PPM	07/08/80
	HF	5.5	.6	PPM	09/30/80
	LA	24.		PPM	07/08/80
	LA	27.	3.	PPM	09/08/80
	LA	27.	3.	PPM	09/08/80
	LU	1.		PPM	07/08/80
	MN	1400.		PPM	07/08/80
	MN	1405.	72.	PPM	09/08/80
	NA	2.29		%	07/08/80
	NA	2.54	.13	%	09/08/80
	NA	2.51	.13	%	09/08/80
	RB	54.		PPM	07/08/80
	RB	44.	7.	PPM	09/30/80
	SC	35.3		PPM	07/08/80
	SC	32.5	1.6	PPM	09/30/80
	SM	5.4		PPM	07/08/80
	SM	6.2	.6	PPM	09/08/80
	SM	6.1	.6	PPM	09/08/80
	SR	330.	40.	PPM	08/14/80
	TA	1.14		PPM	07/08/80
	TB	1.2		PPM	07/08/80
	TH	6.1		PPM	07/08/80
	TI	1.27	.06	%	08/20/80
	U	1.7	.2	PPM	07/08/80
	U	1.8	.2	PPM	07/08/80
	U	1.8		PPM	07/08/80
	V	395.		PPM	07/08/80
	V	403.	42.	PPM	09/08/80
	YB	4.3		PPM	07/08/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00574					
	U	2.6	.3	PPM	07/08/80
	U	2.5	.3	PPM	07/08/80
	U	2.7	.3	PPM	07/08/80
80.00575					
	AL	3.4	.34	%	07/28/80
	AS	339.	34.	PPM	05/19/80
	AS	405.	41.	PPM	05/19/80
	AS	461.	40.	PPM	07/14/80
	AS	476.	20.	PPM	07/14/80
	AS	480.	20.	PPM	07/14/80
	CD	3.7	.4	PPM	05/19/80
	CD	3.8	.4	PPM	05/19/80
	CO	9.3	1.3	PPM	07/18/80
	CO	10.8	1.1	PPM	07/28/80
	CO	9.9	1.	PPM	07/28/80
	CR	16.	6.	PPM	07/28/80
	FE	26.3	2.7	%	07/18/80
	FE	26.4	3.	%	07/28/80
	FE	26.2	3.	%	07/28/80
	K	590.	100.	PPM	09/23/80
	K	660.	100.	PPM	09/23/80
	K	650.	100.	PPM	09/23/80
	K	510.	100.	PPM	09/23/80
	LA	8.5	2.5	PPM	09/23/80
	LA	8.4	2.5	PPM	09/23/80
	LA	8.3	2.5	PPM	09/23/80
	LA	8.7	2.5	PPM	09/23/80
	LI	8.	2.	PPM	05/19/80
	LI	11.	2.	PPM	05/19/80
	NA	600.	100.	PPM	09/23/80
	NA	620.	100.	PPM	09/23/80
	NA	600.	100.	PPM	09/23/80
	NA	615.	100.	PPM	09/23/80
	SE	12.	6.	PPM	08/20/80
	U	36.6	4.	PPM	04/01/80
	U	36.5	4.	PPM	04/01/80
	U	38.3	4.	PPM	04/01/80
	U	37.	4.	PPM	04/10/80
	U	35.6	4.	PPM	04/10/80
	U	41.6	4.	PPM	04/10/80
	U	39.8	4.	PPM	04/18/80
	U	42.5	4.	PPM	04/20/80
	U	38.7	4.	PPM	04/20/80
	U	40.7	4.	PPM	04/20/80
	U	39.	3.	PPM	05/29/80
	U	30.	3.	PPM	05/29/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00575					
	U	34.	3.	PPM	05/29/80
	U	31.	3.	PPM	05/29/80
	U	37.	3.	PPM	05/29/80
	U	30.	3.	PPM	05/29/80
	U	33.5	3.	PPM	07/08/80
	U	33.5	3.	PPM	07/08/80
	U	33.7	3.	PPM	07/08/80
	U	44.6	10.	PPM	07/14/80
	U	33.	4.	PPM	07/14/80
	U	40.7	10.	PPM	07/14/80
	V	82.	10.	PPM	07/28/80
	ZN	785.	80.	PPM	07/28/80
80.00577					
	AG	18.3	2.	PPM	01/02/80
	AG	18.1	2.	PPM	01/02/80
	AG	17.1	2.	PPM	01/02/80
	AG	17.2	1.9	PPM	01/10/80
	AG	17.3	1.9	PPM	01/10/80
	AG	17.1	1.8	PPM	01/10/80
	AG	18.8	2.	PPM	01/15/80
	AG	18.6	2.	PPM	01/15/80
	AG	17.2	1.8	PPM	01/15/80
	AG	18.3	1.9	PPM	01/20/80
	AG	15.8	1.7	PPM	01/20/80
	AG	17.5	1.9	PPM	01/20/80
	AL	18.7	1.9	%	10/23/80
	AL	18.3	1.8	%	10/28/80
	AS	42.	4.	PPM	05/19/80
	AS	32.	3.	PPM	05/19/80
	CD	4.4	.4	PPM	05/19/80
	CD	4.9	.5	PPM	05/19/80
	CE	49.	5.	PPM	11/18/80
	CE	52.	5.	PPM	11/18/80
	CR	33.	4.	PPM	11/18/80
	CR	35.	4.	PPM	11/18/80
	CS	5.1	.6	PPM	11/18/80
	CS	5.6	.6	PPM	11/18/80
	DY	2.8	.4	PPM	10/23/80
	DY	3.2	.6	PPM	10/28/80
	EU	740.	110.	PPB	11/18/80
	EU	740.	110.	PPB	11/18/80
	FE	1.82	.1	%	11/18/80
	FE	1.83	.1	%	11/18/80
	HF	8.6	.9	PPM	11/18/80
	HF	8.3	.9	PPM	11/18/80
	LA	28.	3.	PPM	11/18/80
	LI	35.	2.	PPM	05/19/80
	LI	42.	2.	PPM	05/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00577					
	MN	980.	50.	PPM	10/23/80
	MN	930.	100.	PPM	10/28/80
	NA	5240.	500.	PPM	10/28/80
	NA	5770.	300.	PPM	11/18/80
	RB	65.	8.	PPM	11/18/80
	RB	69.	8.	PPM	11/18/80
	SM	3.5	.4	PPM	11/18/80
	TH	8.6	.9	PPM	06/06/80
	TH	8.9	.9	PPM	06/06/80
	TH	8.9	.9	PPM	06/06/80
	TH	8.1	.8	PPM	11/18/80
	TH	8.4	.8	PPM	11/18/80
	U	2.9	.3	PPM	07/08/80
	U	3.	.3	PPM	07/08/80
	U	3.	.3	PPM	07/08/80
	V	65.	10.	PPM	10/28/80
	W	1.4	.2	PPM	10/20/80
	W	1.4	.2	PPM	10/20/80
	YB	1.8	.4	PPM	11/18/80
	YB	1.8	.3	PPM	11/18/80
80.00579					
	AS	4710.	471.	PPM	05/19/80
	AS	3870.	390.	PPM	05/19/80
	CD	.59	.05	PPB	05/19/80
	CD	.47	.05	PPB	05/19/80
	HG	350.	70.	PPB	05/02/80
	HG	320.	70.	PPB	05/02/80
	HG	320.	70.	PPB	05/02/80
	HG	400.	70.	PPB	05/02/80
	HG	330.	70.	PPB	05/02/80
	LI	125.	5.	PPM	05/19/80
	LI	120.	6.	PPM	05/19/80
80.00581					
	AS	104.	10.	PPM	05/19/80
	AS	110.	11.	PPM	05/19/80
	CD	630.	50.	PPB	05/19/80
	CD	710.	50.	PPB	05/19/80
	LI	7.	2.	PPM	05/19/80
	LI	9.	2.	PPM	05/19/80
	TH	21.3	2.1	PPM	06/06/80
	TH	20.9	2.1	PPM	06/06/80
	TH	21.9	2.2	PPM	06/06/80
	U	6.1	.6	PPM	07/08/80
	U	6.1	.6	PPM	07/08/80
	U	6.1	.6	PPM	07/08/80
	W	29.	4.	PPM	10/20/80
	W	30.	4.	PPM	10/20/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00583					
	AL	19.1	1.	%	03/15/80
	AL	19.6	1.	%	03/15/80
	AL	19.6	1.	%	03/18/80
	AL	19.1	1.	%	03/18/80
	AL	19.7	1.	%	03/20/80
	AL	19.8	1.	%	03/20/80
	AL	21.1	2.1	%	07/25/80
	AL	19.	1.9	%	07/28/80
	AL	20.1	2.	%	10/28/80
	AS	10.7	1.1	PPM	01/18/80
	AS	11.	1.1	PPM	01/18/80
	AS	12.	3.	PPM	07/14/80
	AS	12.6	1.3	PPM	09/22/80
	AS	13.9	1.4	PPM	09/22/80
	BA	2000.	200.	PPM	04/25/80
	BA	1850.	190.	PPM	04/30/80
	BA	1700.	170.	PPM	05/05/80
	BA	1810.	180.	PPM	05/10/80
	BA	1620.	200.	PPM	09/19/80
	BA	1810.	200.	PPM	09/19/80
	BA	2100.	200.	PPM	09/19/80
	BA	2060.	200.	PPM	09/19/80
	BA	2040.	200.	PPM	10/06/80
	BA	1830.	180.	PPM	10/06/80
	BR	8.1	1.	PPM	09/22/80
	BR	8.3	1.	PPM	09/22/80
	CE	44.	6.	PPM	04/25/80
	CE	43.	6.	PPM	04/30/80
	CE	42.	6.	PPM	05/05/80
	CE	43.	6.	PPM	05/10/80
	CE	40.	4.	PPM	09/19/80
	CE	38.	4.	PPM	09/19/80
	CE	38.	4.	PPM	09/19/80
	CE	42.	4.	PPM	09/19/80
	CE	39.	4.	PPM	10/06/80
	CE	41.	4.	PPM	10/06/80
	CE	38.	4.	PPM	11/18/80
	CE	36.	4.	PPM	11/18/80
	CO	28.	3.	PPM	04/25/80
	CO	29.	3.	PPM	04/30/80
	CO	30.	3.	PPM	05/05/80
	CO	30.	3.	PPM	05/10/80
	CO	30.	3.	PPM	07/18/80
	CO	27.4	3.	PPM	07/28/80
	CO	27.	3.	PPM	07/28/80
	CO	28.	3.	PPM	09/19/80
	CO	33.	3.	PPM	09/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00583					
	CO	30.	3.	PPM	09/19/80
	CO	28.	3.	PPM	09/19/80
	CO	30.	3.	PPM	09/22/80
	CO	32.	3.	PPM	09/22/80
	CR	99.	.9	PPM	01/30/80
	CR	99.	.9	PPM	01/30/80
	CR	104.	10.	PPM	04/25/80
	CR	100.	10.	PPM	04/30/80
	CR	100.	10.	PPM	05/05/80
	CR	101.	10.	PPM	05/10/80
	CR	100.	11.	PPM	07/28/80
	CR	105.	11.	PPM	07/28/80
	CR	95.	10.	PPM	09/19/80
	CR	95.	10.	PPM	09/19/80
	CR	97.	10.	PPM	09/19/80
	CR	94.	10.	PPM	09/19/80
	CR	100.	10.	PPM	09/22/80
	CR	110.	10.	PPM	09/22/80
	CR	101.	10.	PPM	11/18/80
	CR	92.	9.	PPM	11/18/80
	CS	2.2	.4	PPM	04/25/80
	CS	2.3	.4	PPM	04/30/80
	CS	2.4	.4	PPM	05/05/80
	CS	2.2	.4	PPM	05/10/80
	CS	2.3	.3	PPM	11/18/80
	CS	2.7	.4	PPM	11/18/80
	DY	2.7	.6	PPM	10/28/80
	EU	.89	.09	PPM	04/25/80
	EU	.99	.09	PPM	04/30/80
	EU	.96	.09	PPM	05/05/80
	EU	.93	.09	PPM	05/10/80
	EU	1.08	.1	PPM	09/19/80
	EU	.93	.1	PPM	09/19/80
	EU	.95	.1	PPM	09/19/80
	EU	1.	.1	PPM	09/19/80
	EU	1.	.1	PPM	10/06/80
	EU	.8	.1	PPM	10/06/80
	EU	.99	.12	PPM	11/18/80
	EU	.95	.11	PPM	11/18/80
	FE	3.3	.3	%	01/30/80
	FE	3.3	.3	%	01/30/80
	FE	3.38	.16	%	04/25/80
	FE	3.43	.17	%	04/30/80
	FE	3.33	.15	%	05/05/80
	FE	3.41	.16	%	05/10/80
	FE	3.3	.3	%	07/18/80
	FE	3.14	.4	%	07/28/80
	FE	3.12	.4	%	07/28/80
	FE	3.	.3	%	09/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00583	FE	3.1	.3	%	09/19/80
	FE	2.9	.3	%	09/19/80
	FE	2.9	.3	%	09/19/80
	FE	3.2	.3	%	09/22/80
	FE	3.2	.3	%	09/22/80
	FE	3.34	.17	%	11/18/80
	FE	3.27	.17	%	11/18/80
	HF	4.6	.5	PPM	04/25/80
	HF	4.9	.8	PPM	04/30/80
	HF	4.8	.5	PPM	05/05/80
	HF	5.2	.5	PPM	05/10/80
	HF	5.1	.6	PPM	11/18/80
	HF	5.7	.6	PPM	11/18/80
	K	6900.	1000.	PPM	09/23/80
	K	8700.	1000.	PPM	09/23/80
	K	9000.	1000.	PPM	09/23/80
	K	7900.	1000.	PPM	09/23/80
	LA	18.8	2.	PPM	04/10/80
	LA	20.5	2.	PPM	04/10/80
	LA	22.4	2.	PPM	04/30/80
	LA	19.8	2.	PPM	04/30/80
	LA	19.	2.	PPM	09/22/80
	LA	19.	2.	PPM	09/22/80
	LA	19.	2.	PPM	09/22/80
	LA	17.	2.	PPM	09/23/80
	LA	18.	2.	PPM	09/23/80
	LA	19.	2.	PPM	09/23/80
	LA	20.	2.	PPM	09/23/80
	LA	22.	2.	PPM	11/18/80
	MN	309.	16.	PPM	03/20/80
	MN	285.	23.	PPM	03/20/80
	MN	288.	24.	PPM	03/20/80
	MN	324.	17.	PPM	03/20/80
	MN	325.	36.	PPM	07/25/80
	MN	234.	26.	PPM	07/28/80
	MN	290.	30.	PPM	10/28/80
	MO	32.3	3.5	PPM	01/18/80
	MO	30.3	3.2	PPM	01/18/80
	MO	35.	5.	PPM	07/14/80
	NA	7760.	400.	PPM	04/10/80
	NA	7640.	400.	PPM	04/10/80
	NA	8220.	400.	PPM	04/15/80
	NA	7880.	400.	PPM	04/15/80
	NA	7440.	800.	PPM	09/22/80
	NA	7670.	800.	PPM	09/22/80
	NA	7200.	1000.	PPM	09/23/80
	NA	6300.	1000.	PPM	09/23/80
	NA	6400.	1000.	PPM	09/23/80
	NA	7300.	1000.	PPM	09/23/80
	NA	7300.	700.	PPM	10/28/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00583					
	NA	7940.	400.	PPM	11/18/80
	RB	40.	7.	PPM	04/25/80
	RB	42.	6.	PPM	04/30/80
	RB	44.	8.	PPM	05/05/80
	RB	42.	7.	PPM	05/10/80
	RB	43.	5.	PPM	07/28/80
	RB	44.	5.	PPM	07/28/80
	RB	37.	4.	PPM	09/22/80
	RB	40.	4.	PPM	09/22/80
	RB	39.	9.	PPM	11/18/80
	RB	36.	6.	PPM	11/18/80
	SC	7.9	.8	PPM	04/25/80
	SC	8.1	.8	PPM	04/30/80
	SC	7.7	.8	PPM	05/05/80
	SC	7.6	.8	PPM	05/10/80
	SC	6.7	.7	PPM	09/19/80
	SC	7.1	.7	PPM	09/19/80
	SC	6.7	.7	PPM	09/19/80
	SC	6.8	.7	PPM	09/19/80
	SC	7.9	.8	PPM	10/06/80
	SC	7.5	.8	PPM	10/06/80
	SE	1.1	.5	PPM	08/20/80
	SM	3.19	.6	PPM	04/10/80
	SM	3.5	.6	PPM	04/10/80
	SM	3.32	.6	PPM	04/15/80
	SM	3.31	.6	PPM	04/15/80
	SM	2.9	.3	PPM	08/19/80
	SM	3.1	.3	PPM	08/19/80
	SM	3.1	.3	PPM	09/22/80
	SM	3.1	.3	PPM	09/22/80
	SM	3.1	.6	PPM	09/23/80
	SM	3.5	.6	PPM	09/23/80
	SM	3.2	.6	PPM	09/23/80
	SM	3.3	.6	PPM	09/23/80
	SM	3.2	.3	PPM	11/18/80
	SR	99.	11.	PPM	08/14/80
	SR	108.	12.	PPM	08/14/80
	TA	470.	70.	PPB	04/25/80
	TA	510.	70.	PPB	04/30/80
	TA	460.	70.	PPB	05/05/80
	TA	440.	70.	PPB	05/10/80
	TA	500.	100.	PPB	10/06/80
	TA	400.	100.	PPB	10/06/80
	TH	5.4	.5	PPM	04/25/80
	TH	5.5	.5	PPM	04/30/80
	TH	5.7	.5	PPM	05/05/80
	TH	5.4	.5	PPM	05/10/80
	TH	5.1	.5	PPM	09/19/80
	TH	4.9	.5	PPM	09/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00583					
	TH	4.9	.5	PPM	09/19/80
	TH	5.2	.5	PPM	09/19/80
	TH	5.2	.5	PPM	10/06/80
	TH	5.3	.5	PPM	10/06/80
	TH	5.5	.6	PPM	11/18/80
	TH	5.4	.6	PPM	11/18/80
	TI	2280.	130.	PPM	08/20/80
	TI	2290.	130.	PPM	08/20/80
	U	2.	.2	PPM	07/08/80
	U	2.	.2	PPM	07/08/80
	U	2.	.2	PPM	07/08/80
	U	1.9	.3	PPM	07/14/80
	V	61.	19.	PPM	03/15/80
	V	71.	19.	PPM	03/15/80
	V	61.	17.	PPM	03/18/80
	V	91.	19.	PPM	03/18/80
	V	56.	18.	PPM	03/20/80
	V	110.	24.	PPM	03/20/80
	V	65.	12.	PPM	07/25/80
	V	61.	12.	PPM	07/28/80
	V	110.	35.	PPM	10/28/80
	YB	2.1	.4	PPM	04/25/80
	YB	2.	.4	PPM	04/30/80
	YB	1.6	.4	PPM	05/05/80
	YB	1.7	.4	PPM	05/10/80
	YB	2.4	.2	PPM	10/06/80
	YB	2.1	.2	PPM	10/06/80
	YB	1.4	.3	PPM	11/18/80
	YB	1.6	.3	PPM	11/18/80
	ZN	31.	15.	PPM	07/28/80
80.00585					
	AL	16.3	.8	%	02/05/80
	AL	16.2	.8	%	02/05/80
	AL	16.3	.8	%	02/05/80
	AL	16.2	.8	%	03/15/80
	AL	16.1	.8	%	03/15/80
	AL	16.2	.8	%	03/18/80
	AL	16.1	.8	%	03/18/80
	AL	17.	.9	%	03/20/80
	AL	16.5	.8	%	03/20/80
	AL	15.9	1.6	%	07/25/80
	AL	18.7	1.9	%	07/28/80
	AS	340.	15.	PPM	07/14/80
	AS	335.	15.	PPM	07/14/80
	AS	326.	32.	PPM	08/18/80
	AS	320.	32.	PPM	08/18/80
	AS	330.	40.	PPM	08/19/80
	AS	360.	40.	PPM	08/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00585					
	AS	390.	50.	PPM	08/19/80
	AS	320.	30.	PPM	09/22/80
	AS	320.	30.	PPM	09/22/80
	BA	1180.	200.	PPM	05/15/80
	BA	1290.	190.	PPM	05/20/80
	BA	1170.	200.	PPM	05/25/80
	BA	1210.	200.	PPM	05/30/80
	BA	1380.	150.	PPM	09/19/80
	BA	1090.	150.	PPM	09/19/80
	BA	1580.	150.	PPM	09/19/80
	BA	1640.	150.	PPM	09/19/80
	BA	1190.	120.	PPM	10/06/80
	BA	1260.	130.	PPM	10/06/80
	CE	41.	6.	PPM	05/15/80
	CE	32.	5.	PPM	05/20/80
	CE	35.	5.	PPM	05/25/80
	CE	39.	6.	PPM	05/30/80
	CE	39.	4.	PPM	09/19/80
	CE	39.	4.	PPM	09/19/80
	CE	38.	4.	PPM	09/19/80
	CE	39.	4.	PPM	09/19/80
	CE	38.	4.	PPM	10/06/80
	CE	39.	4.	PPM	10/06/80
	CO	12.	1.	PPM	05/15/80
	CO	13.	1.	PPM	05/20/80
	CO	13.	1.	PPM	05/25/80
	CO	14.	1.	PPM	05/30/80
	CO	14.2	1.4	PPM	07/28/80
	CO	14.1	1.4	PPM	07/28/80
	CO	14.	2.	PPM	09/19/80
	CO	15.	2.	PPM	09/19/80
	CO	14.	2.	PPM	09/19/80
	CO	15.	2.	PPM	09/19/80
	CO	15.	2.	PPM	09/22/80
	CO	14.	2.	PPM	09/22/80
	CR	88.	9.	PPM	05/15/80
	CR	90.	9.	PPM	05/20/80
	CR	91.	9.	PPM	05/25/80
	CR	84.	9.	PPM	05/30/80
	CR	93.	10.	PPM	07/28/80
	CR	94.	10.	PPM	07/28/80
	CR	118.	12.	PPM	09/19/80
	CR	118.	12.	PPM	09/19/80
	CR	115.	12.	PPM	09/19/80
	CR	116.	12.	PPM	09/19/80
	CR	99.	10.	PPM	09/22/80
	CR	99.	10.	PPM	09/22/80
	CS	4.7	.6	PPM	05/15/80
	CS	4.6	.6	PPM	05/20/80

SAMPLE NUMBER	TABLE C-II (cont)				COMPLETION DATE
	ANALYSIS	RESULT	UNCERTAINTY	UNITS	
80.00585					
	CS	4.6	.6	PPM	05/25/80
	CS	3.9	.5	PPM	05/30/80
	EU	650.	60.	PPB	05/15/80
	EU	750.	70.	PPB	05/20/80
	EU	690.	70.	PPB	05/25/80
	EU	630.	60.	PPB	05/30/80
	EU	680.	100.	PPB	09/19/80
	EU	880.	100.	PPB	09/19/80
	EU	840.	100.	PPB	09/19/80
	EU	830.	100.	PPB	09/19/80
	EU	700.	100.	PPB	10/06/80
	EU	700.	100.	PPB	10/06/80
	FE	5.41	.26	%	05/15/80
	FE	5.39	.26	%	05/20/80
	FE	5.79	.27	%	05/25/80
	FE	5.67	.27	%	05/30/80
	FE	5.01	.6	%	07/28/80
	FE	5.04	.6	%	07/28/80
	FE	5.7	.6	%	09/19/80
	FE	5.7	.6	%	09/19/80
	FE	5.7	.6	%	09/19/80
	FE	6.1	.6	%	09/19/80
	FE	5.3	.5	%	09/22/80
	FE	5.6	.5	%	09/22/80
	GA	34.	4.	PPM	08/21/80
	GA	32.	3.	PPM	08/21/80
	HF	3.8	.4	PPM	05/15/80
	HF	4.5	.4	PPM	05/20/80
	HF	4.	.4	PPM	05/25/80
	HF	4.7	.4	PPM	05/30/80
	HG	70.	10.	PPB	05/02/80
	HG	90.	10.	PPB	05/02/80
	HG	80.	10.	PPB	05/02/80
	HG	70.	10.	PPB	05/02/80
	K	1.84	.2	%	08/19/80
	K	2.3	.2	%	08/19/80
	K	2.11	.2	%	08/19/80
	K	2.	.03	%	09/23/80
	K	1.82	.03	%	09/23/80
	K	1.91	.03	%	09/23/80
	K	1.93	.03	%	09/23/80
	LA	13.8	1.	PPM	04/05/80
	LA	14.4	1.	PPM	04/05/80
	LA	15.5	1.	PPM	04/05/80
	LA	14.	1.	PPM	04/30/80
	LA	15.	2.	PPM	08/19/80
	LA	18.	3.	PPM	08/19/80
	LA	14.	1.	PPM	09/22/80
	LA	13.	1.	PPM	09/22/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00585					
	LA	14.	2.	PPM	09/23/80
	LA	16.	2.	PPM	09/23/80
	LA	14.	2.	PPM	09/23/80
	LA	15.	2.	PPM	09/23/80
	MN	1100.	100.	PPM	02/05/80
	MN	1090.	100.	PPM	02/05/80
	MN	1070.	100.	PPM	02/05/80
	MN	1021.	82.	PPM	03/20/80
	MN	1020.	82.	PPM	03/20/80
	MN	1082.	55.	PPM	03/20/80
	MN	1125.	58.	PPM	03/20/80
	MN	1010.	100.	PPM	07/25/80
	MN	1180.	120.	PPM	07/28/80
	NA	1170.	100.	PPM	02/05/80
	NA	960.	100.	PPM	02/05/80
	NA	1120.	100.	PPM	02/05/80
	NA	922.	45.	PPM	04/20/80
	NA	920.	45.	PPM	04/20/80
	NA	980.	45.	PPM	04/25/80
	NA	940.	45.	PPM	04/25/80
	NA	940.	100.	PPM	09/22/80
	NA	920.	100.	PPM	09/22/80
	NA	1140.	200.	PPM	09/23/80
	NA	1070.	200.	PPM	09/23/80
	NA	1030.	200.	PPM	09/23/80
	NA	1000.	200.	PPM	09/23/80
	RB	101.	14.	PPM	05/15/80
	RB	104.	14.	PPM	05/20/80
	RB	93.	12.	PPM	05/25/80
	RB	105.	14.	PPM	05/30/80
	RB	96.	10.	PPM	07/28/80
	RB	111.	10.	PPM	07/28/80
	RB	119.	20.	PPM	09/22/80
	SC	27.	1.	PPM	05/15/80
	SC	29.	1.	PPM	05/20/80
	SC	26.	1.	PPM	05/25/80
	SC	28.	1.	PPM	05/30/80
	SC	28.	3.	PPM	09/19/80
	SC	30.	3.	PPM	09/19/80
	SC	28.	3.	PPM	09/19/80
	SC	29.	3.	PPM	09/19/80
	SC	29.	3.	PPM	10/06/80
	SC	29.	3.	PPM	10/06/80
	SM	2.42	.5	PPM	04/20/80
	SM	2.64	.5	PPM	04/20/80
	SM	2.71	.5	PPM	04/25/80
	SM	2.57	.5	PPM	04/25/80
	SM	2.8	.3	PPM	08/19/80
	SM	3.3	.3	PPM	08/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00585					
	SM	2.3	.2	PPM	09/22/80
	SM	2.3	.2	PPM	09/22/80
	SM	2.8	.6	PPM	09/23/80
	SM	2.9	.6	PPM	09/23/80
	SM	2.6	.6	PPM	09/23/80
	SM	2.8	.6	PPM	09/23/80
	SR	34.	7.	PPM	08/14/80
	SR	40.	8.	PPM	08/14/80
	TA	390.	70.	PPB	05/15/80
	TA	380.	70.	PPB	05/20/80
	TA	360.	70.	PPB	05/25/80
	TA	330.	70.	PPB	05/30/80
	TA	600.	100.	PPB	10/06/80
	TA	700.	100.	PPB	10/06/80
	TH	4.8	.5	PPM	05/15/80
	TH	5.7	.5	PPM	05/20/80
	TH	5.2	.5	PPM	05/25/80
	TH	5.1	.5	PPM	05/30/80
	TH	5.5	.6	PPM	09/19/80
	TH	5.6	.6	PPM	09/19/80
	TH	5.6	.6	PPM	09/19/80
	TH	5.9	.6	PPM	09/19/80
	TH	5.	.5	PPM	10/06/80
	TH	5.	.5	PPM	10/06/80
	TI	5200.	.05	PPM	02/05/80
	TI	4800.	.05	PPM	02/05/80
	TI	4900.	.05	PPM	02/05/80
	TI	4730.	250.	PPM	08/20/80
	TI	4910.	260.	PPM	08/20/80
	U	1.6	.2	PPM	07/08/80
	U	1.5	.2	PPM	07/08/80
	U	1.5	.2	PPM	07/08/80
	V	210.	30.	PPM	01/22/80
	V	210.	30.	PPM	01/22/80
	V	206.	20.	PPM	02/05/80
	V	199.	20.	PPM	02/05/80
	V	188.	20.	PPM	02/05/80
	V	179.	25.	PPM	03/15/80
	V	199.	27.	PPM	03/15/80
	V	179.	25.	PPM	03/18/80
	V	199.	27.	PPM	03/18/80
	V	208.	32.	PPM	03/20/80
	V	185.	23.	PPM	03/20/80
	V	200.	23.	PPM	07/25/80
	V	212.	27.	PPM	07/28/80
	YB	2.5	.5	PPM	05/15/80
	YB	2.8	.5	PPM	05/20/80
	YB	2.2	.5	PPM	05/25/80
	YB	2.8	.5	PPM	05/30/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00585					
	YB	2.6	.3	PPM	10/06/80
	YB	3.	.3	PPM	10/06/80
	ZN	158.	40.	PPM	07/28/80
80.00589					
	AS	20.	5.	PPB	01/29/80
	AS	20.	5.	PPB	01/29/80
	AS	28.	5.	PPB	01/30/80
	AS	28.	5.	PPB	01/30/80
	AS	29.	5.	PPB	01/30/80
	AS	32.	3.	PPB	06/13/80
	AS	29.	3.	PPB	06/13/80
	BE	18.	5.	PPB	01/29/80
	BE	18.	5.	PPB	01/29/80
	CD	7.	3.	PPB	01/30/80
	CD	7.	3.	PPB	01/30/80
	CD	7.	3.	PPB	01/30/80
	CD	6.	3.	PPB	01/30/80
	CD	6.4	.1	PPB	06/11/80
	CD	5.8	.1	PPB	06/11/80
	CR	14.	2.	PPB	06/12/80
	CR	18.	2.	PPB	06/12/80
	PB	21.	2.	PPB	06/13/80
	PB	20.	2.	PPB	06/13/80
	SE	7.	5.	PPB	06/13/80
	SE	6.	5.	PPB	06/13/80
80.00590					
	AS	103.	10.	PPB	01/29/80
	AS	103.	10.	PPB	01/29/80
	AS	108.	11.	PPB	01/30/80
	AS	111.	11.	PPB	01/30/80
	AS	109.	11.	PPB	01/30/80
	AS	104.		PPB	05/27/80
	AS	117.		PPB	05/27/80
	AS	130.	3.	PPB	05/27/80
	AS	109.	3.	PPB	05/27/80
	AS	113.	3.	PPB	05/27/80
	AS	115.	3.	PPB	05/27/80
	AS	78.	.8	PPB	05/28/80
	AS	97.	.8	PPB	05/28/80
	AS	99.	10.	PPB	06/02/80
	AS	100.	10.	PPB	06/02/80
	AS	108.	3.	PPB	06/02/80
	AS	112.	12.	PPB	06/02/80
	AS	116.	12.	PPB	06/02/80
	AS	96.	10.	PPB	06/02/80
	AS	100.	10.	PPB	06/02/80
	AS	108.	3.	PPB	06/02/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00590					
	AS	112.	12.	PPB	06/02/80
	AS	99.	10.	PPB	06/02/80
	AS	105.	10.	PPB	06/04/80
	AS	111.	10.	PPB	06/04/80
	AS	105.	10.	PPB	06/04/80
	AS	111.	10.	PPB	06/04/80
	AS	113.	11.	PPB	06/13/80
	AS	115.	12.	PPB	06/13/80
	BE	73.	7.	PPB	01/29/80
	BE	73.	7.	PPB	01/29/80
	CD	20.	2.	PPB	01/29/80
	CD	20.	2.	PPB	01/29/80
	CD	22.	3.	PPB	01/30/80
	CD	22.	3.	PPB	01/30/80
	CD	22.	3.	PPB	01/30/80
	CD	19.	3.	PPB	01/30/80
	CD	22.	3.	PPB	06/04/80
	CD	26.	3.	PPB	06/04/80
	CD	22.	3.	PPB	06/04/80
	CD	30.	3.	PPB	06/04/80
	CD	36.	3.	PPB	06/04/80
	CD	21.	3.	PPB	06/04/80
	CD	20.	3.	PPB	06/04/80
	CD	21.	3.	PPB	06/04/80
	CD	18.	3.	PPB	06/04/80
	CD	22.	3.	PPB	06/04/80
	CD	30.	3.	PPB	06/04/80
	CD	20.	3.	PPB	06/04/80
	CD	26.	3.	PPB	06/04/80
	CD	21.	3.	PPB	06/04/80
	CD	21.	3.	PPB	06/04/80
	CD	19.	3.	PPB	06/04/80
	CD	22.	3.	PPB	06/04/80
	CD	22.	3.	PPB	06/04/80
	CD	18.	3.	PPB	06/04/80
	CD	24.	3.	PPB	06/04/80
	CD	24.	3.	PPB	06/04/80
	CD	36.	3.	PPB	06/04/80
	CD	24.	3.	PPB	06/04/80
	CD	24.	3.	PPB	06/04/80
	CD	21.	2.	PPB	06/11/80
	CD	18.	2.	PPB	06/11/80
	CR	138.	15.	PPB	06/12/80
	CR	145.	15.	PPB	06/12/80
	PB	279.	30.	PPB	06/13/80
	PB	266.	30.	PPB	06/13/80
	SE	26.	5.	PPB	06/13/80
	SE	27.	5.	PPB	06/13/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00591	AS	141.	15.	PPB	01/29/80
	AS	141.	15.	PPB	01/29/80
	AS	155.	16.	PPB	01/30/80
	AS	158.	16.	PPB	01/30/80
	AS	170.	17.	PPB	01/30/80
	AS	180.	20.	PPB	02/01/80
	BE	423.	42.	PPB	01/29/80
	BE	423.	42.	PPB	01/29/80
	CD	70.	20.	PPB	01/29/80
	CD	70.	20.	PPB	01/29/80
	CD	83.	8.	PPB	01/30/80
	CD	78.	8.	PPB	01/30/80
	CD	83.	8.	PPB	01/30/80
	CD	72.	7.	PPB	01/30/80
	SE	48.	6.	PPB	08/20/80
	V	160.	16.	PPB	06/02/80
80.00592	CA	21.	2.1	PPM	04/09/80
	CL	29.1	2.9	PPM	03/17/80
	CL	28.5	2.8	PPM	03/17/80
	CL	28.7	2.9	PPM	03/17/80
	CL	28.7	2.9	PPM	03/20/80
	CL	28.9	2.9	PPM	03/21/80
	CL	28.8	2.9	PPM	03/21/80
	CL	27.8	2.8	PPM	04/02/80
	CL	28.	2.8	PPM	04/11/80
	CL	25.1	2.	PPM	04/23/80
	CL	22.9	2.	PPM	04/23/80
	CL	25.1	2.	PPM	04/23/80
	CL	22.9	2.	PPM	04/23/80
	CL	31.5	3.1	PPM	04/29/80
	CL	29.2	2.9	PPM	04/29/80
	CL	32.7	3.3	PPM	06/02/80
	CL	32.4	3.3	PPM	06/02/80
	CL	32.2	3.2	PPM	06/02/80
	CL	32.5	3.2	PPM	06/02/80
	CL	30.5	3.	PPM	06/11/80
	CL	28.2	3.	PPM	07/07/80
	CL	30.9	3.	PPM	07/07/80
	CL	32.4	3.2	PPM	08/04/80
	CL	30.5	3.	PPM	10/20/80
	CL	28.8	2.9	PPM	10/20/80
	CL	30.5	3.	PPM	11/07/80
	C03	16.	1.6	MG/L	11/07/80
	C03	16.	2.	MG/L	11/07/80
	F	.2	.1	PPM	01/11/80
	F	.2	.1	PPM	01/11/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00592					
	F	.2	.1	PPM	01/11/80
	F	.15	.01	PPM	03/17/80
	F	.26	.03	PPM	03/17/80
	F	.24	.02	PPM	03/17/80
	F	.21	.02	PPM	03/20/80
	F	.2	.02	PPM	03/21/80
	F	.1	.01	PPM	04/02/80
	F	.3	.03	PPM	04/11/80
	F	.2	.02	PPM	04/29/80
	F	.1	.01	PPM	04/29/80
	F	.3	.03	PPM	06/02/80
	F	.3	.03	PPM	06/02/80
	F	.3	.03	PPM	06/02/80
	F	.3	.03	PPM	06/02/80
	F	.2	.02	PPM	06/11/80
	F	.1	.02	PPM	07/01/80
	F	.2	.02	PPM	10/20/80
	F	.2	.02	PPM	10/20/80
	F	.28	.03	PPM	11/07/80
	HARD	140.	14.	PPM *	11/07/80
	HARD	140.	14.	PPM *	11/07/80
	K	3.1	.3	PPM	04/09/80
	MG	5.	.5	PPM	04/09/80
	NA	5.2	.5	PPM	04/09/80
	S04	11.1	1.1	PPM	03/17/80
	S04	11.2	1.1	PPM	03/17/80
	S04	11.1	1.1	PPM	03/17/80
	S04	11.1	1.1	PPM	03/20/80
	S04	11.2	1.1	PPM	03/21/80
	S04	10.8	1.1	PPM	04/02/80
	S04	11.1	1.1	PPM	04/29/80
	S04	11.1	1.1	PPM	04/29/80
	S04	11.1	1.1	PPM	06/02/80
	S04	11.2	1.1	PPM	06/02/80
	S04	10.8	1.1	PPM	06/02/80
	S04	11.2	1.1	PPM	06/02/80
	S04	11.9	1.2	PPM	06/11/80
	S04	13.1	1.3	PPM	10/20/80
	S04	12.8	1.3	PPM	10/20/80
	S04	12.5	1.2	PPM	11/07/80
80.00593					
	CA	68.	6.8	PPM	04/09/80
	CL	82.4	8.2	PPM	03/17/80
	CL	81.7	8.2	PPM	03/17/80
	CL	83.9	8.4	PPM	04/29/80
	CL	75.	7.5	PPM	04/29/80
	CL	85.2	8.5	PPM	05/13/80
	CL	85.5	8.5	PPM	05/13/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00593					
	CL	88.9	9.	PPM	05/27/80
	CL	92.	9.2	PPM	06/02/80
	CL	91.1	9.1	PPM	06/02/80
	CL	80.5	8.	PPM	07/07/80
	F	1.	.1	PPM	01/11/80
	F	1.5	.1	PPM	03/17/80
	F	1.3	.03	PPM	03/17/80
	F	1.3	.1	PPM	04/29/80
	F	1.4	.1	PPM	04/29/80
	F	1.3	.1	PPM	05/13/80
	F	1.3	.1	PPM	05/13/80
	F	1.4	.1	PPM	05/27/80
	F	1.8	.2	PPM	06/02/80
	F	1.8	.2	PPM	06/02/80
	F	.9	.1	PPM	07/01/80
	K	9.3	.9	PPM	04/09/80
	MG	10.	1.	PPM	04/09/80
	S04	100.5	10.	PPM	03/17/80
	S04	102.	10.2	PPM	04/29/80
	S04	93.2	9.3	PPM	04/29/80
	S04	101.7	10.2	PPM	05/13/80
	S04	102.9	10.3	PPM	05/13/80
	S04	98.5	9.8	PPM	06/02/80
	S04	98.	9.8	PPM	06/02/80
80.00594					
	B	17.	5.	PPM	12/23/80
	B	19.	5.	PPM	12/23/80
	B	18.	5.	PPM	12/23/80
	B	15.	5.	PPM	12/23/80
	B	18.	5.	PPM	12/23/80
	SR	330.	40.	PPM	12/24/80
	TI	4660.	270.	PPM	01/03/81
	TI	5280.	330.	PPM	01/03/81
	U	1.7	.2	PPM	07/08/80
	U	1.7	.2	PPM	07/08/80
	U	1.7	.2	PPM	07/08/80
80.00596					
	U	1.	.1	PPM	07/08/80
	U	1.	.1	PPM	07/08/80
	U	.9	.1	PPM	07/08/80
80.00598					
	B	23.	5.	PPM	12/23/80
	B	26.	5.	PPM	12/23/80
	B	24.	5.	PPM	12/23/80
	B	22.	5.	PPM	12/23/80
	B	25.	5.	PPM	12/23/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00598	B	22.	5.	PPM	12/23/80
	U	1.1	.1	PPM	07/08/80
	U	1.1	.1	PPM	07/08/80
	U	1.1	.1	PPM	07/08/80
80.00600	B	44.	5.	PPM	12/23/80
	B	40.	5.	PPM	12/23/80
	B	44.	5.	PPM	12/23/80
	B	39.	5.	PPM	12/23/80
	U	2.3	.2	PPM	01/18/80
	U	2.4	.2	PPM	01/18/80
	U	2.4	.2	PPM	01/18/80
	U	2.4	.2	PPM	03/31/80
	U	2.5	.3	PPM	03/31/80
	U	2.5	.3	PPM	03/31/80
	U	2.4	.2	PPM	03/31/80
	U	2.5	.3	PPM	03/31/80
	U	2.5	.3	PPM	03/31/80
	U	2.4	.2	PPM	03/31/80
	U	2.5	.3	PPM	03/31/80
	U	2.5	.3	PPM	03/31/80
	U	2.4	.2	PPM	07/08/80
	U	2.3	.2	PPM	07/08/80
	U	2.4	.2	PPM	07/08/80
80.00605	B	58.	5.	PPM	12/05/80
	B	57.	5.	PPM	12/05/80
	B	55.	5.	PPM	12/05/80
	B	59.	5.	PPM	12/05/80
	B	48.	5.	PPM	12/05/80
	B	50.	5.	PPM	12/23/80
	B	57.	5.	PPM	12/23/80
	B	55.	5.	PPM	12/23/80
	U	1.3	.1	PPM	07/08/80
	U	1.4	.1	PPM	07/08/80
	U	1.3	.1	PPM	07/08/80
80.00611	CL	3.08	.3	%	08/05/80
80.00613	CL	550.	60.	PPM	07/07/80
	CL	580.	100.	PPM	08/05/80
	CL	470.	100.	PPM	08/05/80
	CL	580.	100.	PPM	08/05/80
	CL	570.	100.	PPM	08/05/80
	CL	580.	100.	PPM	08/05/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00617	CL	460.	50.	PPM	07/07/80
	CL	460.	100.	PPM	08/05/80
	CL	590.	100.	PPM	08/05/80
	CL	520.	100.	PPM	08/05/80
	CL	480.	100.	PPM	08/05/80
80.00619	U	103.9	10.	PPB	01/02/80
	U	101.9	10.	PPB	01/02/80
	U	104.8	10.	PPB	01/02/80
	U	104.	10.	PPB	01/02/80
	U	108.	10.	PPB	03/31/80
	U	105.	10.	PPB	03/31/80
	U	102.4	10.	PPB	03/31/80
	U	102.9	10.	PPB	03/31/80
	U	108.	10.	PPB	03/31/80
	U	103.9	10.	PPB	03/31/80
	U	103.8	10.	PPB	03/31/80
	U	105.	10.	PPB	03/31/80
	U	106.	10.	PPB	03/31/80
	U	105.	10.	PPB	03/31/80
	U	103.8	10.	PPB	03/31/80
	U	106.	10.	PPB	03/31/80
	U	108.	10.	PPB	03/31/80
	U	105.	10.	PPB	03/31/80
	U	102.4	10.	PPB	03/31/80
	U	102.9	10.	PPB	03/31/80
	U	108.	10.	PPB	03/31/80
	U	103.9	10.	PPB	03/31/80
	U	99.9	10.	PPB	04/14/80
	U	101.	10.	PPB	06/30/80
	U	102.	10.	PPB	06/30/80
	U	102.	10.	PPB	06/30/80
	U	98.	10.	PPB	09/16/80
	U	94.	10.	PPB	09/16/80
	U	95.	10.	PPB	09/16/80
	U	98.	10.	PPB	09/16/80
	U	96.	10.	PPB	09/16/80
	U	98.	10.	PPB	09/16/80
	U	98.	10.	PPB	11/19/80
	U	95.	10.	PPB	11/19/80
	U	93.	10.	PPB	11/19/80
	U	97.	10.	PPB	11/19/80
80.00620	NA-22	334.	16.	NCI/L	02/01/80
	NA-22	318.	13.	NCI/L	03/17/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00620	NA-22	341.	20.	NCI/L	05/15/80
	NA-22	340.	30.	NCI/L	09/01/80
	NA-22	297.	20.	NCI/L	09/15/80
80.00621	NA-22	355.	21.	NCI/L	02/01/80
	NA-22	325.	27.	NCI/L	03/24/80
	NA-22	376.	13.	NCI/L	09/01/80
	NA-22	314.	22.	NCI/L	09/15/80
80.00622	H-3	300.	300.	PCI/L	04/15/80
	H-3	300.	300.	PCI/L	04/15/80
	H-3	200.	300.	PCI/L	05/19/80
	H-3	400.	300.	PCI/L	05/19/80
	H-3	600.	400.	PCI/L	06/10/80
	H-3		400.	PCI/L	06/10/80
	H-3	700.	300.	PCI/L	07/10/80
	H-3	1000.	300.	PCI/L	07/10/80
80.00623	NA-22	520.	60.	PCI/G	02/01/80
	NA-22	680.	40.	PCI/G	05/15/80
	NA-22	708.	29.	PCI/G	10/31/80
80.00624	NA-22	590.	70.	PCI/G	02/01/80
80.00625	NA-22	640.	70.	PCI/G	02/01/80
80.00627	NA-22	588.	35.	PCI/G	10/31/80
	NA-22	580.	30.	PCI/G	12/19/80
	NA-22	560.	30.	PCI/G	12/19/80
80.00628	NA-22	660.	40.	PCI/G	03/17/80
80.00629	NA-22	550.	60.	PCI/G	02/01/80
	NA-22	620.	30.	PCI/G	03/17/80
	NA-22	660.	30.	PCI/G	05/15/80
80.00632	U	408.	40.	PPB	01/02/80
	U	480.	40.	PPB	01/21/80
	U	500.	50.	PPB	09/26/80
	U	510.	50.	PPB	11/19/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00633					
	AL	14.1	.7	%	02/05/80
	AL	14.2	.7	%	02/05/80
	AL	14.2	.7	%	02/05/80
	AL	13.6	1.	%	03/04/80
	AL	15.1	1.	%	03/04/80
	AL	14.	1.	%	03/04/80
	AL	13.4	1.	%	03/04/80
	AL	14.2	1.	%	03/04/80
	AL	14.8	1.	%	03/04/80
	AL	14.1	.7	%	03/15/80
	AL	14.2	.7	%	03/15/80
	AL	14.2	.7	%	03/18/80
	AL	14.1	.7	%	03/18/80
	AL	14.2	.7	%	03/20/80
	AL	14.	.7	%	03/20/80
	AL	15.	1.5	%	06/02/80
	AL	13.8	1.4	%	07/25/80
	AL	14.3	.7	%	09/08/80
	AL	13.7	1.4	%	10/23/80
	AS	130.	20.	PPM	03/04/80
	AS	150.	20.	PPM	03/04/80
	AS	140.	20.	PPM	03/04/80
	AS	160.	20.	PPM	03/04/80
	AS	150.	20.	PPM	03/04/80
	AS	140.	20.	PPM	03/04/80
	AS	150.	20.	PPM	03/04/80
	AS	150.	20.	PPM	03/04/80
	AS	142.	14.	PPM	07/14/80
	AS	138.	14.	PPM	07/14/80
	AS	146.	15.	PPM	08/18/80
	AS	150.	15.	PPM	08/18/80
	B	42.	5.	PPM	12/05/80
	B	36.	5.	PPM	12/05/80
	B	38.	5.	PPM	12/05/80
	BA	1360.	180.	PPM	04/05/80
	BA	1360.	180.	PPM	04/10/80
	BA	1470.	200.	PPM	04/15/80
	BA	1360.	180.	PPM	04/20/80
	BA	1560.	180.	PPM	09/30/80
	BA	1610.	160.	PPM	10/06/80
	CA	1.1	.1	%	02/05/80
	CA	.9	.1	%	02/05/80
	CA	1.2	.1	%	02/05/80
	CE	176.	10.	PPM	04/05/80
	CE	177.	10.	PPM	04/10/80
	CE	188.	10.	PPM	04/15/80
	CE	183.	10.	PPM	04/20/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00633					
	CE	178.	18.	PPM	11/18/80
	CE	176.	18.	PPM	11/18/80
	CO	51.	5.	PPM	03/20/80
	CO	56.	5.	PPM	03/20/80
	CO	47.	5.	PPM	03/20/80
	CO	46.	5.	PPM	03/20/80
	CO	42.	5.	PPM	03/20/80
	CO	46.	5.	PPM	03/20/80
	CO	50.	5.	PPM	03/20/80
	CO	47.	5.	PPM	03/20/80
	CO	44.	5.	PPM	03/20/80
	CO	48.	5.	PPM	03/20/80
	CO	50.	5.	PPM	03/20/80
	CO	51.	5.	PPM	03/20/80
	CO	48.	5.	PPM	03/20/80
	CO	47.	5.	PPM	03/20/80
	CO	50.	5.	PPM	03/20/80
	CO	48.	5.	PPM	03/20/80
	CO	52.	5.	PPM	03/20/80
	CO	43.	4.	PPM	04/05/80
	CO	43.	4.	PPM	04/10/80
	CO	44.	4.	PPM	04/15/80
	CO	43.	4.	PPM	04/20/80
	CO	48.	5.	PPM	09/22/80
	CO	51.	5.	PPM	09/22/80
	CO	43.	2.	PPM	09/30/80
	CR	180.	20.	PPM	03/20/80
	CR	220.	20.	PPM	03/20/80
	CR	220.	20.	PPM	03/20/80
	CR	180.	20.	PPM	03/20/80
	CR	180.	20.	PPM	03/20/80
	CR	175.	20.	PPM	03/20/80
	CR	200.	20.	PPM	03/20/80
	CR	240.	20.	PPM	03/20/80
	CR	180.	20.	PPM	03/20/80
	CR	180.	20.	PPM	03/20/80
	CR	210.	20.	PPM	03/20/80
	CR	205.	20.	PPM	03/20/80
	CR	210.	20.	PPM	03/20/80
	CR	200.	20.	PPM	03/20/80
	CR	220.	20.	PPM	03/20/80
	CR	170.	20.	PPM	03/20/80
	CR	194.	20.	PPM	04/05/80
	CR	200.	20.	PPM	04/10/80
	CR	189.	20.	PPM	04/15/80
	CR	192.	20.	PPM	04/20/80
	CR	217.	21.	PPM	09/22/80
	CR	209.	21.	PPM	09/22/80
	CR	192.	10.	PPM	09/30/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00633					
	CR	179.	18.	PPM	11/18/80
	CR	191.	19.	PPM	11/18/80
	CS	11.	1.5	PPM	04/05/80
	CS	10.1	1.4	PPM	04/10/80
	CS	10.6	1.5	PPM	04/15/80
	CS	10.5	1.5	PPM	04/20/80
	CS	10.6	1.2	PPM	09/30/80
	CS	10.4	1.2	PPM	11/18/80
	CS	10.1	1.2	PPM	11/18/80
	DY	14.1	2.1	PPM	10/23/80
	DY	14.9	1.5	PPM	10/28/80
	EU	3.8	.4	PPM	04/05/80
	EU	3.9	.4	PPM	04/10/80
	EU	3.6	.4	PPM	04/15/80
	EU	3.4	.4	PPM	04/20/80
	EU	3.6	.4	PPM	09/30/80
	EU	4.	.4	PPM	10/06/80
	EU	3.9	.4	PPM	10/06/80
	EU	3.4	.4	PPM	11/18/80
	EU	4.	.4	PPM	11/18/80
	FE	9.3	.9	%	03/20/80
	FE	10.1	1.	%	03/20/80
	FE	9.2	.9	%	03/20/80
	FE	10.1	1.	%	03/20/80
	FE	8.6	.9	%	03/20/80
	FE	9.2	.9	%	03/20/80
	FE	9.	.9	%	03/20/80
	FE	9.2	.9	%	03/20/80
	FE	8.8	.9	%	03/20/80
	FE	8.9	.9	%	03/20/80
	FE	9.9	1.	%	03/20/80
	FE	10.2	1.	%	03/20/80
	FE	8.4	.8	%	03/20/80
	FE	9.9	1.	%	03/20/80
	FE	9.4	.9	%	03/20/80
	FE	10.	1.	%	03/20/80
	FE	9.53	.46	%	04/05/80
	FE	9.18	.45	%	04/10/80
	FE	9.34	.45	%	04/15/80
	FE	9.1	.45	%	04/20/80
	FE	9.6	.9	%	09/22/80
	FE	9.2	.9	%	09/22/80
	FE	9.16	.47	%	09/30/80
	GA	56.	6.	PPM	08/21/80
	GA	56.	6.	PPM	08/21/80
	HF	7.7	.7	PPM	04/05/80
	HF	7.5	.7	PPM	04/10/80
	HF	7.4	.7	PPM	04/15/80
	HF	7.7	.7	PPM	04/20/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00633					
	HF	7.8	.8	PPM	09/30/80
	K	1.87	.3	%	03/04/80
	K	1.79	.3	%	03/04/80
	K	1.76	.3	%	03/04/80
	K	2.	.3	%	03/04/80
	K	1.91	.3	%	03/04/80
	K	1.8	.3	%	03/04/80
	K	1.79	.3	%	03/04/80
	K	1.87	.3	%	03/04/80
	K	1.97	.4	%	09/22/80
	K	2.03	.4	%	09/22/80
	LA	73.	10.	PPM	03/04/80
	LA	84.	10.	PPM	03/04/80
	LA	79.	10.	PPM	03/04/80
	LA	78.	10.	PPM	03/04/80
	LA	81.	10.	PPM	03/04/80
	LA	84.	10.	PPM	03/04/80
	LA	90.	10.	PPM	03/04/80
	LA	81.	10.	PPM	03/04/80
	LA	84.	8.	PPM	04/15/80
	LA	81.	8.	PPM	04/15/80
	LA	82.	8.	PPM	04/20/80
	LA	83.	8.	PPM	04/20/80
	LA	80.	8.	PPM	04/25/80
	LA	87.	8.	PPM	04/25/80
	LA	86.	9.	PPM	09/08/80
	LA	85.	8.	PPM	09/08/80
	LA	81.	8.	PPM	09/22/80
	LA	83.	8.	PPM	09/22/80
	LA	88.	9.	PPM	11/18/80
	MN	190.	10.	PPM	02/05/80
	MN	187.	10.	PPM	02/05/80
	MN	185.	10.	PPM	02/05/80
	MN	300.	30.	PPM	03/04/80
	MN	280.	30.	PPM	03/04/80
	MN	270.	30.	PPM	03/04/80
	MN	290.	30.	PPM	03/04/80
	MN	166.	30.	PPM	03/04/80
	MN	191.	30.	PPM	03/04/80
	MN	163.	30.	PPM	03/04/80
	MN	270.	30.	PPM	03/04/80
	MN	160.	30.	PPM	03/04/80
	MN	164.	30.	PPM	03/04/80
	MN	280.	30.	PPM	03/04/80
	MN	180.	10.	PPM	03/20/80
	MN	185.	15.	PPM	03/20/80
	MN	180.	15.	PPM	03/20/80
	MN	178.	10.	PPM	03/20/80
	MN	187.	23.	PPM	07/25/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00633					
	MN	182.	10.	PPM	09/08/80
	MN	185.	20.	PPM	10/23/80
	NA	1900.	200.	PPM	03/04/80
	NA	1740.	200.	PPM	03/04/80
	NA	1680.	200.	PPM	03/04/80
	NA	1710.	200.	PPM	03/04/80
	NA	1640.	200.	PPM	03/04/80
	NA	1600.	200.	PPM	03/04/80
	NA	1670.	200.	PPM	03/04/80
	NA	1790.	200.	PPM	03/04/80
	NA	1750.	80.	PPM	04/01/80
	NA	1640.	80.	PPM	04/01/80
	NA	1680.	80.	PPM	04/05/80
	NA	1710.	80.	PPM	04/05/80
	NA	1710.	80.	PPM	09/08/80
	NA	1730.	90.	PPM	09/08/80
	NA	1940.	200.	PPM	09/22/80
	NA	1900.	200.	PPM	09/22/80
	NA	1730.	90.	PPM	11/18/80
	RB	130.	25.	PPM	03/20/80
	RB	110.	25.	PPM	03/20/80
	RB	130.	25.	PPM	03/20/80
	RB	130.	25.	PPM	03/20/80
	RB	150.	30.	PPM	03/20/80
	RB	130.	25.	PPM	03/20/80
	RB	105.	25.	PPM	03/20/80
	RB	130.	25.	PPM	03/20/80
	RB	110.	25.	PPM	03/20/80
	RB	140.	25.	PPM	03/20/80
	RB	145.	30.	PPM	03/20/80
	RB	140.	25.	PPM	03/20/80
	RB	160.	30.	PPM	03/20/80
	RB	120.	25.	PPM	03/20/80
	RB	115.	25.	PPM	03/20/80
	RB	160.	30.	PPM	03/20/80
	RB	131.	16.	PPM	04/05/80
	RB	132.	16.	PPM	04/10/80
	RB	144.	16.	PPM	04/15/80
	RB	172.	20.	PPM	04/20/80
	RB	131.	16.	PPM	09/22/80
	RB	145.	17.	PPM	09/30/80
	RB	133.	8.	PPM	11/18/80
	RB	129.	15.	PPM	11/18/80
	SC	42.	2.	PPM	04/05/80
	SC	41.	2.	PPM	04/10/80
	SC	42.	2.	PPM	04/15/80
	SC	40.	2.	PPM	04/20/80
	SC	37.5	1.9	PPM	09/30/80
	SC	43.	4.	PPM	10/06/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00633					
	SE	11.4	1.	PPM	01/30/80
	SE	10.	1.	PPM	01/30/80
	SE	11.4	1.	PPM	01/30/80
	SE	10.	1.	PPM	01/30/80
	SM	14.	2.	PPM	03/04/80
	SM	15.9	2.	PPM	03/04/80
	SM	16.5	2.	PPM	03/04/80
	SM	14.	2.	PPM	03/04/80
	SM	14.4	2.	PPM	03/04/80
	SM	14.4	2.	PPM	03/04/80
	SM	13.7	2.	PPM	03/04/80
	SM	13.	2.	PPM	03/04/80
	SM	12.1	2.	PPM	04/01/80
	SM	12.3	2.	PPM	04/01/80
	SM	15.5	2.	PPM	04/05/80
	SM	16.3	2.	PPM	04/05/80
	SM	15.4	1.6	PPM	09/08/80
	SM	15.1	1.5	PPM	09/08/80
	SM	14.6	1.5	PPM	09/22/80
	SM	14.5	1.5	PPM	09/22/80
	SM	14.7	1.5	PPM	11/18/80
	SR	790.	80.	PPM	08/14/80
	SR	750.	80.	PPM	08/14/80
	TA	1.9	.2	PPM	04/05/80
	TA	2.	.2	PPM	04/10/80
	TA	1.9	.2	PPM	04/15/80
	TA	1.6	.2	PPM	04/20/80
	TB	2.4	.3	PPM	04/05/80
	TB	2.3	.3	PPM	04/10/80
	TB	3.	.3	PPM	04/15/80
	TB	3.3	.4	PPM	04/26/80
	TH	25.2	1.	PPM	02/01/80
	TH	23.7	1.	PPM	02/01/80
	TH	25.2	1.	PPM	02/01/80
	TH	27.2	1.	PPM	02/10/80
	TH	24.5	1.	PPM	02/10/80
	TH	24.1	1.	PPM	02/10/80
	TH	24.2	1.	PPM	02/20/80
	TH	25.2	1.	PPM	02/20/80
	TH	23.8	1.	PPM	02/20/80
	TH	24.2	1.	PPM	03/01/80
	TH	22.7	1.	PPM	03/01/80
	TH	25.1	1.	PPM	03/01/80
	TH	25.	1.	PPM	04/05/80
	TH	25.	1.	PPM	04/10/80
	TH	24.	1.	PPM	04/15/80
	TH	24.	1.	PPM	04/20/80
	TH	24.6	2.5	PPM	10/06/80
	TH	24.1	2.4	PPM	11/18/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00633					
	TH	23.9	2.4	PPM	11/18/80
	TH	25.9	1.5	PPM	12/20/80
	TH	24.3	1.4	PPM	12/24/80
	TI	8900.	900.	PPM	02/05/80
	TI	7200.	900.	PPM	02/05/80
	TI	7500.	900.	PPM	02/05/80
	TI	8290.	430.	PPM	08/20/80
	TI	8540.	450.	PPM	08/20/80
	TI	7770.	450.	PPM	01/03/81
	TI	8030.	460.	PPM	01/03/81
	U	11.1	1.	PPM	03/31/80
	U	11.1	1.	PPM	03/31/80
	U	11.1	1.	PPM	03/31/80
	U	10.3	1.	PPM	07/08/80
	U	10.5	1.	PPM	07/08/80
	U	10.5	1.	PPM	07/08/80
	U	10.3	1.	PPM	07/08/80
	U	10.3	1.	PPM	07/08/80
	U	10.2	1.	PPM	09/26/80
	U	10.2	1.	PPM	11/19/80
	V	253.	25.	PPM	02/05/80
	V	255.	25.	PPM	02/05/80
	V	258.	25.	PPM	02/05/80
	V	304.	33.	PPM	03/15/80
	V	328.	38.	PPM	03/15/80
	V	328.	38.	PPM	03/18/80
	V	304.	33.	PPM	03/18/80
	V	287.	34.	PPM	03/20/80
	V	324.	37.	PPM	03/20/80
	V	320.	30.	PPM	06/02/80
	V	278.	30.	PPM	07/25/80
	V	290.	31.	PPM	09/08/80
	W	4.9	.8	PPM	08/18/80
	W	5.9	1.1	PPM	08/18/80
	W	5.6	.8	PPM	10/20/80
	W	5.2	.8	PPM	10/20/80
	YB	8.2	1.3	PPM	11/18/80
80.00637					
	CS-137	1020.	90.	PCI/L	05/01/80
	CS-137	990.	60.	PCI/L	05/01/80
	CS-137	994.	94.	PCI/L	11/20/80
	CS-137	1001.	57.	PCI/L	11/20/80
	CS-137	1077.	45.	PCI/L	11/20/80
	CS-137	1155.	50.	PCI/L	11/20/80
80.00638					
	CS-137	1000.	60.	PCI/L	05/01/80
	CS-137	1070.	100.	PCI/L	05/01/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00638	CS-137	1000.	40.	PCI/L	09/15/80
	CS-137	1024.	84.	PCI/L	11/20/80
	CS-137	1047.	87.	PCI/L	11/20/80
	CS-137	992.	85.	PCI/L	11/20/80
	CS-137	1188.	89.	PCI/L	12/18/80
	CS-137	1023.	90.	PCI/L	12/29/80
80.00639	CS-137	970.	90.	PCI/L	05/01/80
	CS-137	1050.	90.	PCI/L	09/15/80
	CS-137	996.	61.	PCI/L	11/20/80
	CS-137	929.	104.	PCI/L	12/18/80
	CS-137	935.	105.	PCI/L	12/29/80
80.00640	CS-137	.89	.09	PCI/G	08/01/80
	CS-137	.75	.09	PCI/G	08/01/80
	CS-137	.7	.06	PCI/G	09/01/80
80.00641	CS-137	.86	.08	PCI/G	08/01/80
	CS-137	.89	.07	PCI/G	08/01/80
	CS-137	.87	.07	PCI/G	09/01/80
80.00642	CS-137	.88	.09	PCI/G	08/01/80
	CS-137	.78	.05	PCI/G	08/01/80
	CS-137	.68	.05	PCI/G	09/01/80
80.00643	AS	72.	5.	PPB	10/30/80
	MO	91.	5.	PPB	10/30/80
	PB	25.	2.	PPB	10/30/80
	ZN	71.	1.5	PPB	10/30/80
80.00649	AS	25.	15.	PPB	10/22/80
	BE	20.	2.	PPB	11/04/80
	BE	22.	2.	PPB	11/04/80
	BE	21.	2.	PPB	11/04/80
	BE	26.	2.	PPB	11/04/80
	CD	7.7	2.	PPB	10/22/80
	CD	8.	3.	PPB	11/04/80
	CD	7.	3.	PPB	11/04/80
	CD	7.	3.	PPB	11/04/80
	CD	7.	3.	PPB	11/04/80
	CD	6.	1.	PPB	12/16/80
	CR	4.	3.	PPB	11/04/80
	CR	4.	3.	PPB	11/04/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00649					
	CR	6.	3.	PPB	11/04/80
	CR	4.	3.	PPB	11/04/80
	CR	5.	2.	PPB	12/16/80
	PB	39.	5.	PPB	12/16/80
	ZN	8.	2.	PPB	12/16/80
80.00650					
	AS	158.	15.	PPB	10/22/80
	AS	156.	30.	PPB	12/16/80
	BE	260.	10.	PPB	11/04/80
	BE	229.	10.	PPB	11/04/80
	BE	283.	10.	PPB	11/04/80
	CD	58.	2.	PPB	10/22/80
	CD	66.	3.	PPB	11/04/80
	CD	61.	3.	PPB	11/04/80
	CD	65.	3.	PPB	11/04/80
	CD	62.	3.	PPB	11/04/80
	CD	62.	1.	PPB	12/16/80
	CR	250.	10.	PPB	11/04/80
	CR	295.	10.	PPB	11/04/80
	CR	295.	10.	PPB	11/04/80
	CR	293.	10.	PPB	11/04/80
	CR	292.	10.	PPB	11/04/80
	CR	417.	41.	PPB	12/16/80
	CU	421.	30.	PPB	12/16/80
	CU	428.	48.	PPB	12/16/80
	MN	518.	50.	PPB	12/16/80
	PB	417.	30.	PPB	12/16/80
	PB	376.	35.	PPB	12/16/80
	SE	52.	10.	PPB	12/16/80
	ZN	516.	30.	PPB	12/16/80
	ZN	514.	45.	PPB	12/16/80
80.00651					
	AS	56.	15.	PPB	10/22/80
	AS	56.	10.	PPB	12/16/80
	BE	173.	10.	PPB	11/04/80
	BE	185.	10.	PPB	11/04/80
	BE	179.	10.	PPB	11/04/80
	BE	185.	10.	PPB	11/04/80
	CD	22.	2.	PPB	10/22/80
	CD	29.	3.	PPB	11/04/80
	CD	34.	3.	PPB	11/04/80
	CD	32.	3.	PPB	11/04/80
	CD	30.	3.	PPB	11/04/80
	CD	28.	10.	PPB	12/16/80
	CR	65.	3.	PPB	11/04/80
	CR	64.	3.	PPB	11/04/80
	CR	60.	3.	PPB	11/04/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
-----	-----	-----	-----	----	-----
80.00651	CR	62.	3.	PPB	11/04/80
	CR	85.	6.	PPB	12/16/80
	CU	36.	2.	PPB	12/16/80
	CU	36.	2.	PPB	12/16/80
	MN	46.	2.	PPB	12/16/80
	PB	27.	3.	PPB	12/16/80
	PB	99.	9.	PPB	12/16/80
	SE	19.	10.	PPB	12/16/80
	ZN	25.	2.	PPB	12/16/80
	ZN	28.	3.	PPB	12/16/80
80.00652	CA	41.9	4.2	PPM	08/29/80
	CA	41.	2.	PPM	10/30/80
	CA	41.	2.	PPM	10/30/80
	CA	39.	4.	PPM	11/18/80
	CA	39.8	.4	PPM	12/16/80
	HARD	136.	13.6	MG/L	10/20/80
	K	11.	1.1	PPM	08/29/80
	K	9.5	.7	PPM	10/30/80
	K	9.1	.7	PPM	10/30/80
	K	10.4	.5	PPM	11/18/80
	K	9.7	.3	PPM	12/16/80
	MG	8.7	.2	PPM	10/30/80
	MG	8.1	.2	PPM	10/30/80
	MG	7.1	1.	PPM	11/18/80
	MG	8.6	.5	PPM	12/16/80
	MG	9.6	.8	PPM	12/16/80
	NA	47.	1.	PPM	10/30/80
	NA	48.	1.	PPM	10/30/80
	NA	43.5	.5	PPM	11/18/80
	NA	48.3	2.	PPM	12/16/80
	NA	45.9	1.8	PPM	12/16/80
80.00653	CA	5.4	.5	PPM	08/29/80
	CA	5.	2.	PPM	10/30/80
	CA	6.	2.	PPM	10/30/80
	CA	5.7	.1	PPM	11/18/80
	CA	4.9	.4	PPM	12/16/80
	CL	19.1	2.	PPM	08/05/80
	CL	19.4	2.	PPM	08/05/80
	CL	19.2	2.	PPM	08/06/80
	CL	19.4	2.	PPM	08/07/80
	CL	19.4	2.	PPM	08/07/80
	CL	19.4	2.	PPM	08/08/80
	CL	19.2	2.	PPM	08/18/80
	CL	19.1	2.	PPM	08/19/80
	CL	19.2	2.	PPM	08/20/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00653					
	CL	19.3	2.	PPM	08/21/80
	CL	19.1	2.	PPM	08/22/80
	CL	18.2	2.	PPM	08/25/80
	CL	18.2	2.	PPM	08/26/80
	CL	18.9	2.	PPM	09/03/80
	CL	18.8	2.	PPM	09/03/80
	CL	18.4	1.8	PPM	10/18/80
	CL	18.8	1.9	PPM	10/20/80
	CL	18.3	1.8	PPM	11/07/80
	CL	18.3	1.8	PPM	11/07/80
	CL	18.5	2.	PPM	12/12/80
	CL	19.8	1.5	PPM	12/16/80
	COND	110.	11.	UMHO*	10/20/80
	COND	112.	11.	UMHO*	11/07/80
	COND	112.	11.	UMHO*	11/07/80
	COND	102.	10.	UMOH*	12/12/80
	CO3	24.	2.	MG/L	12/12/80
	F	.14	.01	PPM	08/25/80
	F	.15	.1	PPM	09/03/80
	F	.3	.03	PPM	10/20/80
	F	.34	.03	PPM	11/07/80
	F	.34	.03	PPM	11/07/80
	F	.3	.03	PPM	12/12/80
	HARD	28.	2.8	MG/L	11/07/80
	HARD	28.	2.8	MG/L	11/07/80
	HARD.	22.	2.	MG/L	12/12/80
	HC03	4.	.4	MG/L	12/12/80
	K	1.1	.1	PPM	08/29/80
	K	2.	.7	PPM	10/30/80
	K	2.1	.7	PPM	10/30/80
	K	2.6	.5	PPM	11/18/80
	K	2.7	.3	PPM	12/16/80
	MG	2.	.2	PPM	10/30/80
	MG	2.1	.2	PPM	10/30/80
	MG	1.8	.1	PPM	11/18/80
	MG	1.8	.3	PPM	12/16/80
	MG	1.3	.8	PPM	12/16/80
	NA	9.	1.	PPM	10/30/80
	NA	9.	1.	PPM	10/30/80
	NA	9.3	.9	PPM	12/16/80
	NA	8.4	.5	PPM	12/16/80
	PH	7.7	.8	PH	12/12/80
	S04	6.53	.65	PPM	08/25/80
	S04	9.2	.9	PPM	10/18/80
	S04	8.5	.8	PPM	10/20/80
	S04	8.3	.8	PPM	11/07/80
	S04	6.6	.7	PPM	11/07/80
	S04	8.	.8	PPM	12/12/80
	TOT.A*	28.	3.	MG/L	12/12/80

TABLE C-II (cont)

SAMPLE NUMBER	ANALYSIS	RESULT	UNCERTAINTY	UNITS	COMPLETION DATE
80.00654					
	AG	18.	5.	PPB	12/16/80
	BA	180.	50.	PPB	12/16/80
80.00655					
	AG	20.	5.	PPB	12/16/80
	BA	405.	50.	PPB	12/16/80
80.00656					
	U	150.	10.	PPB	11/19/80
	U	152.	10.	PPB	11/19/80
	U	150.	10.	PPB	11/19/80
	U	151.	10.	PPB	11/19/80
	U	152.	10.	PPB	11/19/80
	U	151.	10.	PPB	11/19/80
	U	155.	15.	PPB	12/30/80
	U	160.	15.	PPB	12/30/80
	U	156.	15.	PPB	12/30/80

APPENDIX D
QA DATA FROM EML QA PROGRAMS

TABLE D-I
H-8 STABLE ELEMENT DETERMINATIONS ON EML
QUALITY ASSURANCE SAMPLES

Element	Matrix	Date	H-8	EML	Units	
Cl	A	4/80	492	600 ± 12	µg/f	
			511			
		10/80	925 ± 80	846 ± 51		
			920 ± 80			
	W	4/80	3.7 ± 0.4	4.2 ± 0.2	ppm	
			4.1 ± 0.4			
			4.1 ± 0.4			
		10/80	16.8 ± 1.7	16.4 ± 0.2		
			17.0 ± 1.7			
			17.1 ± 1.7			
Cu	A	4/80	58 ± 3	60	µg/f	
			61 ± 3			
			61 ± 3			
		10/80	24.0 ± 1.5	22.8 ± 0.4		
		24.7 ± 1.5				
	W	10/80	2.02 ± 0.1	2.05	ppm	
			2.01 ± 0.1			
			1.98 ± 0.1			
	Mg	A	10/80	275 ± 15	258 ± 10	µg/f
				272 ± 15		
W		10/80	5.1 ± 0.3	4.99 ± 0.05	ppm	
			5.0 ± 0.3			
			5.2 ± 0.3			
Mn		A	10/80	25.6 ± 1.5	23.8 ± 0.7	µg/f
			26.7 ± 1.5			
	W	10/80	2.10 ± 0.1	2.05	ppm	
			2.11 ± 0.1			
			2.09 ± 0.1			
	Na	A	10/80	581 ± 30	561 ± 22	µg/f
			591 ± 30			
W		10/80	10.9 ± 0.5	10.7 ± 0.3	ppm	
			10.8 ± 0.5			
			11.0 ± 0.5			

TABLE D-I (cont)

Element	Matrix	Date	H-8	EML	Units
NO ₃	A	10/80	1480 ± 100	1340 ± 94	µg/f
			1440 ± 100		
	W	4/80 10/80	19 ± 2	20 ± 0.6	ppm
			27.5 ± 2.7	25.5 ± 0.3	
			28.3 ± 2.8		
			28.4 ± 2.8		
Pb	W	10/80	2.01 ± 0.1	2.05	ppm
			2.06 ± 0.1		
			2.06 ± 0.1		
	A	10/80	25.2 ± 1.5	23.0 ± 0.5	µg/f
			26.2 ± 1.5		
SO ₄	A	10/80	2890 ± 150	2670 ± 160	µg/f
			2845 ± 150		
	W	4/80 10/80	46 ± 5	50 ± 2	ppm
			43 ± 5	49.9 ± 0.5	
			43 ± 5		
			43 ± 5		
Zn	A	4/80	58 ± 3	60	µg/f
			62 ± 3		
			68 ± 3		
			66 ± 3		
			66 ± 3		
	W	10/80	25.8 ± 1.5	23.1 ± 0.9	
			26.4 ± 1.5		
			2.10 ± 0.1		
			2.11 ± 0.1		
	W	10/80	2.12 ± 0.1	2.05	ppm
			2.12 ± 0.1		

TABLE D-II
H-8 RADIOCHEMICAL DETERMINATION ON EML
QUALITY ASSURANCE SAMPLES

<u>Nuclide</u>	<u>Matrix</u>	<u>Date</u>	<u>H-8</u>	<u>EML</u>	<u>Units</u>
³ H	W	4/80	10 000 ± 500	10 300 ± 200	pCi/ℓ
		10/80	10 100 ± 300	14 900 ± 150	
			11 500 ± 300		
			11 800 ± 300		
⁴⁰ K	S	10/80	23 ± 2	20.7 ± 1.0	pCi/g
			21 ± 2		
⁶⁰ Co	W	10/80	1940 ± 100	1970 ± 100	pCi/ℓ
			1920 ± 100		
	S	10/80	0.2 ± 0.07	0.1 ± 0.007	pCi/g
			0.7 ± 0.06		
⁹⁰ Sr	V	4/80	27.4 ± 1.0	24.6 ± 0.5	pCi/g
		10/80	8.6 ± 0.2	13.8 ± 1.0	
			9.6 ± 0.4		
	B	4/80	13.9 ± 0.3	18.2 ± 0.1	pCi/g
		10/80	33.8 ± 1.3	38.7 ± 3.5	
			36.0 ± 1.4		
	S	4/80	0.68 ± 0.16	0.37 ± 0.01	pCi/g
		10/80	0.70 ± 0.23	0.46 ± 0.01	
¹³⁴ Cs	W	10/80	2590 ± 140	2440 ± 100	pCi/ℓ
			2640 ± 140		
¹³⁷ Cs	W	4/80	1040 ± 60	978 ± 20	pCi/ℓ
		10/80	2310 ± 120	2260 ± 90	
			2280 ± 120		
	V	4/80	21.3 ± 1.3	17.1 ± 0.2	pCi/g
	B	4/80	14.2 ± 1.0	12.2 ± 0.2	pCi/g
	S	4/80	7.8 ± 0.3	6.8 ± 0.1	pCi/g
		10/80	13.0 ± 0.5	11.0 ± 0.6	
			13.0 ± 0.5		

TABLE D-II (cont)

Nuclide	Matrix	Date	H-8	EML	Units
²²⁶ Ra	S	10/80	0.53 ± 0.06 0.56 ± 0.012	0.66 ± 0.07	pCi/g
²³⁸ Pu	W	10/80	<0.016	0	pCi/l
	S	10/80	0.004 ± 0.002 0.002 ± 0.001 0.001 ± 0.006	0.0038 ± 0.0003	pCi/g
	B	10/80	0.015 ± 0.002 0.016 ± 0.002	0.015 ± 0.002	pCi/g
²³⁹ Pu	W	4/80 10/80	0.08 ± 0.04 4.06 ± 0.17	none reported 5.77 ± 0.69	pCi/l
	S	4/80 10/80	0.056 ± 0.006 0.099 ± 0.008 0.125 ± 0.008 0.100 ± 0.005	0.056 ± 0.006 0.090 ± 0.009	pCi/g
	B	4/80 10/80	0.062 ± 0.005 0.154 ± 0.007 0.178 ± 0.008	0.0775 ± 0.0016 0.180 ± 0.031	pCi/g
	A	10/80	2.11 ± 0.09	2.46 ± 0.20	pCi/f
	V	10/80	0.061 ± 0.008 0.055 ± 0.006	0.063 ± 0.005	pCi/g
²⁴¹ Am	S	4/80 10/80	0.042 ± 0.005 0.054 ± 0.002 0.044 ± 0.002 0.040 ± 0.002	0.024 ± 0.002 0.0436 ± 0.0022	pCi/g
	V	4/80	0.045 ± 0.005	0.040 ± 0.004	pCi/g
	B	4/80	0.034 ± 0.004	0.0239 ± 0.0055	pCi/g
	W	4/80 10/80	7.0 ± 0.05 3.2 ± 1.5	7.9 ± 0.5 4.86 ± 0.58	pCi/l
Total U	W	4/80	30 ± 3	28.3 ± 4.0	ppb

APPENDIX E
QA DATA FROM EPA QA PROGRAMS

TABLE E-I

**RADIOCHEMICAL DETERMINATIONS ON EPA QUALITY
ASSURANCE WATER SAMPLES (pCi/l)**

Nuclide	Date	H-8	EPA	Nuclide	Date	H-8	EPA	
Gross Alpha	1/80	33 ± 7	30 ± 8	³ H	9/80	20 ± 2	21 ± 5	
		30 ± 6			21 ± 2			
		33 ± 7			25 ± 3			
	3/80	13 ± 3	13 ± 5		10/80	63 ± 6	60	
		22 ± 5			64 ± 7			
		19 ± 4			64 ± 7			
	4/80	500 ± 100	98 ± 24		11/80	14.7 ± 1.6	13 ± 5	
		460 ± 90			14.8 ± 1.6			
		450 ± 90			14.2 ± 1.6			
	5/80	26 ± 5	23 ± 5		2/80	1900 ± 300	1750 ± 341	
		26 ± 5			4/80	3300 ± 200		
		23 ± 5			3700 ± 200			
	7/80	39 ± 8	36 ± 9		6/80	2100 ± 200	2000 ± 345	
		46 ± 9			1700 ± 200			
		43 ± 9			1900 ± 200			
	9/80	26 ± 5	32 ± 8		8/80	900 ± 200	1210 ± 329	
		30 ± 6			1400 ± 200			
		28 ± 6			1200 ± 200			
	10/80	37 ± 8	39		10/80	1800 ± 200	3200 ± 360	
		51 ± 10			3000 ± 200			
		51 ± 10			3000 ± 200			
	11/80	11 ± 2	16 ± 5		12/80	1900 ± 200	2240 ± 350	
		16 ± 3			2200 ± 200			
		12 ± 3			2000 ± 200			
Gross Beta	1/80	50 ± 5	45 ± 5	⁵¹ Cr	2/80	<200	101 ± 5	
		46 ± 5			<200			
		43 ± 5			<500			
	3/80	27 ± 3	22 ± 5		6/80	<360	13 ± 5	
		31 ± 3			<390			
		31 ± 4			<450			
	4/80	300 ± 30	100 ± 5		10/80	<150	86 ± 5	
		310 ± 30			<150			
		300 ± 30			<150			
	5/80	18 ± 2	14 ± 5			<150		
		20 ± 2						
		18 ± 2						
	7/80	47 ± 5	38 ± 5		⁶⁰ Co	2/80	<30	11 ± 5
		50 ± 5				<11		
		48 ± 5				<30		

TABLE E-I (cont)

Nuclide	Date	H-8	EPA	Nuclide	Date	H-8	EPA
	6/80	<30 <36 <42	5 ± 5		10/80	<170 <170 <170	0
	10/80	<25 <25 <25	16 ± 5	¹³⁴ Cs	2/80	<30 <12 <20	10 ± 5
	10/80	50 ± 26 <23 <22	12		6/80	<33 <36 <42	11 ± 5
⁶³ Zn	2/80	<100 <40 <80	25 ± 5		10/80	57 ± 13 19 ± 14 25 ± 22	20 ± 5
	6/80	<90 <120 <120	23 ± 5		10/80	<22 <22 <22	12
	10/80	<50 <50 <50	25 ± 5	¹³⁷ Cs	2/80	80 ± 40 36 ± 12	30 ± 5
	10/80	<40 <4 <4	0		6/80	<30 <30 <33 <39	17 ± 5
⁹⁰ Sr	2/80	19 ± 1 20 ± 1 20 ± 1	20 ± 1.5		10/80	<30 <30 <30	12 ± 5
	9/80	12.4 ± 0.6 13.1 ± 0.8 16.2 ± 0.8	15 ± 1.5		10/80	5 ± 16 33 ± 21 45 ± 20	20
	10/80	0.8 ± 0.2 <0.3 0.4 ± 0.2	0	²²⁶ Ra	10/80	10.3 ± 1.0 11.0 ± 1.1 12.5 ± 1.2	12.8
¹⁰⁶ Ru	2/80	<300 290 ± 100 <200	51 ± 5	²³⁹ Pu	1/80	3.26 ± 0.14 3.14 ± 0.16	3.39 ± 0.34
	6/80	<270 <300 <360	37 ± 5		5/80	6.0 ± 0.2 5.8 ± 0.2 6.2 ± 0.2	8 ± 1
	10/80	<120 <120 <120	46 ± 5		7/80	3.22 ± 0.18 3.72 ± 0.17 3.46 ± 0.14	4.49 ± 0.45

TABLE E-1 (cont)

Nuclide	Date	H-8	EPA	Nuclide	Date	H-8	EPA
U	11/80	6.1 ± 0.2	9.1 ± 0.9		8/80	24 ± 3	27 ± 3
		6.0 ± 0.2				26 ± 3	
		6.4 ± 0.2				24 ± 3	
	2/80	33 ± 3	32 ± 4		10/80	5.3 ± 0.5	5 ± 1
		33 ± 3				4.0 ± 0.4	
		34 ± 3				3.8 ± 0.4	

TABLE E-II

**H-8 RADIOCHEMICAL DETERMINATIONS ON EPA QUALITY
ASSURANCE AIR FILTER SAMPLES (pCi/filter)**

Nuclide	Date	H-8	EPA
Gross Alpha	6/80	30 ± 7	24 ± 6
		28 ± 6	
		29 ± 6	
	9/80	26 ± 3	24 ± 5
		26 ± 3	
		27 ± 3	
	12/80	27 ± 6	21 ± 4
		23 ± 5	
		23 ± 5	
	6/80	33 ± 4	28 ± 5
		34 ± 4	
		38 ± 5	
Gross Beta	9/80	12.8 ± 1.4	10 ± 5
		13.8 ± 1.5	
		13.4 ± 1.5	
	12/80	25 ± 3	19 ± 3
		23 ± 3	
		22 ± 3	
	3/80	<0.2	10 ± 1.5
		1.0 ± 0.2	
		2.7 ± 0.2	

TABLE E-III

H-8 RADIOCHEMICAL DETERMINATIONS ON EPA QUALITY
ASSURANCE FOOD SAMPLES (pCi/kg)

Nuclide	Date	H-8	EPA
⁹⁰ Sr	7/80	14 ± 1	13 ± 1.5
		14 ± 1	
		15 ± 1	
	11/80	3.8 ± 0.4	0
		2.1 ± 0.2	
		<0.7	
		2.5 ± 0.5	
		1.9 ± 0.3	
		2.3 ± 0.4	
¹³¹ I	7/80	60 ± 8	54 ± 4
		44 ± 4	
		52 ± 11	
	11/80	18	34 ± 6
		21	
		35	
¹³⁷ Cs	7/80	22 ± 6	27 ± 5
		32 ± 4	
		34 ± 6	
	11/80	15 ± 3	12 ± 5
		26 ± 5	
		23 ± 4	
¹⁴⁰ Ba	11/80	<30	0
		<30	
		<30	
K (mg/kg)	11/80	2300 ± 200	2520 ± 120
		2300 ± 200	
		2300 ± 200	