

NBS SPECIAL PUBLICATION **260-88**

U.S. DEPARTMENT OF COMMERCE/National Bureau of Standards

*Standard Reference Materials:*

**1982 Compilation of  
Elemental Concentration Data  
for NBS Biological, Geological,  
and Environmental Standard  
Reference Materials**

*Standard Reference Materials:*

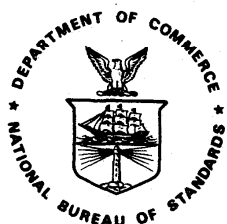
# **1982 Compilation of Elemental Concentration Data for NBS Biological, Geological, and Environmental Standard Reference Materials**

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Issued March 1984

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**Library of Congress Catalog Card Number: 84-601009**

**National Bureau of Standards Special Publication 260-88  
Natl. Bur. Stand. (U.S.), Spec. Publ. 260-88, 231 pages (Mar. 1984)  
CODEN: XNBSAV**

**U.S. Government Printing Office  
Washington: 1984**

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1982 COMPILATION OF ELEMENTAL CONCENTRATION  
DATA FOR NBS BIOLOGICAL, GEOLOGICAL, AND ENVIRONMENTAL  
STANDARD REFERENCE MATERIALS

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Concentration data on 88 constituents in 75 NBS Standard Reference Materials have been collected from over 850 journal articles and technical reports. These data are summarized into mean values with uncertainties expressed as  $\pm$  one standard deviation and compared with available certification data from NBS. Data are presented on the analytical procedures employed and all raw data are given in the Appendices.

Key words: Analytical methods, biological, certified, compilation, environmental, geological, information values, literature values, mean values, Standard Reference Materials.

DISCLAIMER

Certain commercial equipment, instruments, or materials are identified in this report in order to adequately specify the procedure used for data compilation. Such identification does not imply recommendation or endorsement by the National Bureau of Standards, nor does it imply that the materials or equipment identified are necessarily the best available for the purpose.

## 1. Introduction

This compilation is a revised, updated, and expanded version of the first edition which appeared in 1980 (1). The National Bureau of Standards (NBS) has produced over 60 Standard Reference Materials (SRM) for use in biological, geological, and environmental analytical chemistry. The basic goal of the SRM program is to provide homogeneous and stable materials of a variety of natural matrices, for use in technique development and in analytical quality assurance. The function of standard reference materials in the latter role has received recent attention in a series of articles by Taylor (2-4). These standard reference materials carry the full legal weight and authority of NBS and the U. S. Department of Commerce, as they have been specifically authorized by federal legislation.

The concentrations of as many as 39 constituents have been determined at one of two confidence levels in each SRM: certified values and non-certified or informational values. The former is the present best estimate of the true concentration of that constituent and is not expected to deviate from that concentration by more than the stated uncertainty. These certified concentrations are determined at NBS or with cooperating laboratories using either a definitive method, two or more independent methods, or reference methods. These methods and other certification criteria are carefully defined by Uriano and Gravatt (5). Constituent concentrations that are labeled as non-certified or informational are those that NBS has not measured by either a definitive or reference method.

A limitation of many of these standard reference materials has been the restricted number of constituents that NBS can afford to certify in each material. Numerous investigators outside NBS have published concentration data on constituents in these reference materials. Although several brief review articles on NBS standard reference materials have appeared in the literature, we believe that the user should have access to both the summarized mean concentrations and all the data on which they are based. This philosophy was the basis of the previous compilation effort (1). Since no abstracting service has a category "standard reference materials", the widely scattered data in reports, articles, books, and proceedings have been collected only with difficulty.

There has been continuing controversy among compilers concerning the determination and reporting of final compositional information on standard reference materials (6-12). Flanagan has used "recommended", "average", and "magnitude" to characterize his "estimates" for major components and trace elements (13). Abbey has coined the term "usable value" for some of his results and pioneered the "select laboratories" approach to arrive at overall compositional information (11,14). Gladney and Goode elected to report only "mean values" and associated standard deviations without further attempt to assess the varying quality of data determined by different analytical techniques (15). For the French geostandards (CRPG, ANRT), Roubault, et al. (16), have considered "recommended", "preferred", and "proposed" values depending on the degree of confidence one can attach to the data. Steele, et al. (17), have reported "recommended" values in the six NIMROC rock samples using some statistical methods. Gladney, et al. (18), chose the term "consensus values" to describe their mean values calculated for USGS rocks after judgmental elimination of initial outliers.

Approaches to value judgement of data quality can be debated endlessly. The responsibility for the informed end of these compiled data lies with the individual investigator. Each should read our methodology carefully so that he may decide for himself its limitations. The values in the tables must not be used uncritically. All data behind our mean values are presented in the appendices so that any investigator may recalculate them to reflect his own experience whenever desired.

## 2. Data Compilation

A key to the 75 standard reference materials included in this document is provided in Table 1, along with certification and revised certification dates. All NBS certified and informational values for these standard reference materials are reported in the individual mean value tables for ease of comparison. The certified values have uncertainties stated, while informational values do not.

The 54 major journals in analytical chemistry, geology, petrology, geochemistry, and environmental science that were surveyed are shown in Table 2. Less comprehensive coverage of books and institutional reports for 1972-1982 has been achieved. More than 850 different references containing original data on NBS materials were located. All individual data, their uncertainties (where provided), their references, and the analytical techniques used are given in Appendices A through GGG.

All individual data thus located were assembled using a PDP-11/34 minicomputer with an RSX-11M (version 4.0) operating system, an RA-80 121 Mb fixed-media disc drive, three RL-02 10 Mb cartridge disc drives, and a Datatrieve-11 software package (all are registered trademarks of the Digital Equipment Corporation, Manard, Massachusetts). Datatrieve-11 (version 2.0) is an interactive data storage and maintenance software system which provides facilities for selective data retrieval, updating, sorting, formatting, and report generation with a minimum of programming overhead. Data were hand entered into the system via terminal keyboard from copies of the original papers. Details of our Datatrieve-11 based data management system are being published elsewhere (19).

Data were first sorted by material, then constituent, and finally in ascending order of concentration for each constituent (this can be accomplished in a single operation within Datatrieve). Some subjective criteria, as discussed by Abbey (10), were used to eliminate data on either end of the reported concentration spectrum that we judged to be beyond the limits of acceptability. Following these subjective eliminations (less than 0.5% of the total data), an initial mean and standard deviation was computed using all remaining data for a given constituent in each SRM by passing the Datatrieve ASCII output file through a program which encoded numerical values and performed mean and standard deviation calculations.

All data points now outside  $\pm$  two standard deviations from the initial mean were dropped and a second mean and standard deviation recomputed. These final means and associated standard deviations are reported in Tables 3 to 24 for up to 88 constituents. The number in parentheses following each entry indicates the number of literature

values used to calculate the final mean. Where sufficient data exist, the median was also determined using all data other than "less-than" values.

The compiled data were then resorted first by material, then constituent, and finally by analytical method. An iterative mean and standard deviation (using  $\pm 2s$  for elimination) were again calculated for groups of analytical methods which had more than two data points (i.e., ITNA, IENA, RTNA, RENA, NAA, and DNA were all combined into NAA; WSRF, EXRF, and XRF into XRF, etc.). These analytical method means and standard deviations are also included in the tables when sufficient data exist. The key for analytical methods codes is given in Table 25.

Mean values in Tables 3 to 24 which are based upon less than three data points do not include standard deviations (e.g., B in 1566, Table 3). In a few cases the data reported had such a wide range as to render the mean  $\pm$  one standard deviation value meaningless. Such cases are reported as ranges only (no standard deviation specified). Additionally, there are a few elements where only upper limit data exist, and these are given as limit values in the tables (e.g., Be in 1570, Table 5).

### 3. Discussion

Our mean values for major and minor elements in standard reference materials can be subjected to two tests commonly used by rock analysts. "Whole rock" summations can be calculated from elemental data when oxygen data are available, or the elements can be converted to stoichiometric oxides and then summed. The latter approach is inappropriate for coals, oils, biologicals, and non-silicate rocks where many elements are not in oxide forms. "Iron-oxide compatibility" can also be determined when concentration data on the two forms of iron oxide have been established. Since we have not located any reports of oxygen determination in any of the biological standard reference materials, the summation test cannot yet be applied. Furthermore, the absence of reported iron oxide data render that test impossible. There is sufficient oxygen data on five coal and fly ash materials to attempt the "whole rock" summation. It is important that all concentration data used are on a "dry-weight" basis. The large water content of SRM 1635 makes its compiled data suspect in this regard. The results of this calculation are shown in Table 26. Summations of 99 to 101% are considered a good indication that the major and minor element data are reasonably accurate and internally consistent. Three of the five materials investigated fall within this range. The primary reason for the "high" values for 1632A and 1633 is the uncertainty in the carbon ( $\pm 4\%$ ) and silicon ( $\pm 1.1\%$ ) mean values, respectively. In light of these uncertainties, their summations are also quite acceptable. In the future it is hoped that good oxygen data will be available so that this approach can be applied to the biologicals. These calculations will be presented on other geological standard reference materials when the quantity of data is sufficient.

The growth of the body of standard reference material data is shown in Table 27. A summary of total numbers of elemental measurements reported in this compilation as a function of matrix is shown in Figs. 1 and 2 for biological and geological matrices. There are a total of 6088 reports for biological materials 1566 to 1577A, and a total of 5105 reports for geological and environmental materials 278, 610-617, 688, 1630-1635, and 1645-1646. A summary of these two groups of data by general analytical method is given in Table 28. As seen in the first compilation (1) neutron activation techniques continue to lead the field followed at some distance by atomic absorption.

The key to the analytical methods code (ANAL-METH) is given in Table 25. The key to the COMMENT code is given in Table 29. All data reported as oxides in the original references were converted to elemental form using the conversion factors shown in Table 30. The individual data (CONC), their uncertainties when provided (UNCER), analytical technique used (ANAL-METH), the exact data points eliminated during mean value calculations (\* under COMMENT), and the individual references are given in Tables A to GGG for each SRM. These tables were generated with the Datatrieve-11 report writing facilities and the DEC Keypad editor, and printed on a Twintrack Qume printer. Data which were reported as "greater-than" values have not been included, and "less-than" values are shown as a blank under concentration with the upper limit given as the uncertainty and with L\* under COMMENT. The data have been sorted in ascending order based upon material, constituent, and concentration using Datatrieve-11. All the references (REF-CODE and REF-NUM) have been coded and identified in Table HHH. The code consists of the last two digits of the year of publication plus the first three letters of the first author's last name. The two digit numerical suffix is provided to enable handling of multiple reports by the same first author in the same year. This particular reference coding system was adopted in preference to sequential numbering used in the first edition (1) to permit rapid searching of the reference file using Datatrieve-11 and to permit easy updating of both the reference and data files without the necessity of renumbering the references. Since over 3400 references with data on various NBS, USGS, and CCRMP materials are now in our system, these considerations are extremely important.

### 4. Conclusion

Although we have endeavored to achieve as wide a coverage of the literature as possible, we realize that this compilation is incomplete. We request that the users of this compilation call our attention to errors or omissions and they will be corrected or included in future editions. Any investigators with unpublished results on NBS, U. S. Geological Survey (USGS), or Canadian Certified Reference Materials Project (CCRMP) reference materials are urged to send their data to the first author and it will be placed in our computer data base with appropriate reference to the source.

We are indebted to all the compilers of reference materials data who have preceded us. We especially thank Sydney Abbey (Geological Survey of Canada) who has maintained a voluminous correspondence with the first author on various aspects of data compilation. Our effort has greatly benefited from his willingness to share his experience and his informed criticism. We also thank William Goode (DEC) who helped us establish our original data management framework and Kathy Derouin (Los Alamos Group HSE-8) who was instrumental in producing the large mean value tables.

This work was performed under the auspices of the U.S. Department of Energy and the U.S. National Bureau of Standards.

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TABLE 1

NATIONAL BUREAU OF STANDARDS BIOLOGICAL, ENVIRONMENTAL,  
AND GEOLOGICAL STANDARD REFERENCE MATERIALS

| SRM NUMBER | NAME                               | CERTIFICATION DATE |
|------------|------------------------------------|--------------------|
| 1A         | Argillaceous Limestone             | 1931               |
| 1b         | Argillaceous Limestone             | 1966               |
| 1c         | Argillaceous Limestone             | 1978               |
| 70         | Feldspar                           | 1926               |
| 70a        | Feldspar                           | 1981               |
| 76         | Burnt Refractory                   | 1927,1955          |
| 77         | Burnt Refractory                   | 1927,1955          |
| 88         | Dolomite                           | 1928               |
| 88A        | Dolomite Limestone                 | 1967,1982          |
| 91         | Opal Glass                         | 1931               |
| 97         | Flint Clay                         | 1931               |
| 97A        | Flint Clay                         | 1969               |
| 98         | Plastic Clay                       | 1931               |
| 98A        | Plastic Clay                       | 1969               |
| 99         | Soda Feldspar                      | 1931               |
| 99A        | Feldspar                           | 1981               |
| 120A       | Phosphate Rock (Florida)           | 1961               |
| 120B       | Phosphate Rock (Florida)           | 1972,1979          |
| 278        | Obsidian Rock                      | 1981               |
| 610        | Trace Elements in Glass (500 ppm)  | 1970,1972          |
| 612        | Trace Elements in Glass (50 ppm)   | 1970,1972,1982     |
| 614        | Trace Elements in Glass (1 ppm)    | 1970,1972,1982     |
| 616        | Trace Elements in Glass (0.02 ppm) | 1970,1972,1982     |
| 688        | Basalt Rock                        | 1981               |
| 950A       | Uranium Oxide                      | 1961               |
| 950B       | Uranium Oxide                      | 1981               |
| 1566       | Oyster Tissue                      | 1979,1983          |
| 1567       | Wheat Flour                        | 1978               |
| 1568       | Rice Flour                         | 1978               |
| 1569       | Brewer's Yeast                     | 1976               |
| 1570       | Trace Elements in Spinach          | 1976               |
| 1571       | Orchard Leaves                     | 1971,1976,1977     |
| 1572       | Citrus Leaves                      | 1982               |
| 1573       | Tomato Leaves                      | 1976               |
| 1575       | Pine Needles                       | 1976               |
| 1577       | Bovine Liver                       | 1972,1977          |
| 1577a      | Bovine Liver                       | 1982               |
| 1619       | Sulfur in Residual Fuel Oil        | 1981               |
| 1620a      | Sulfur in Residual Fuel Oil        | 1981               |
| 1621       | Sulfur in Residual Fuel Oil        | 1967               |
| 1621a      | Sulfur in Residual Fuel Oil        | 1980               |
| 1621b      | Sulfur in Residual Fuel Oil        | 1981               |
| 1622a      | Sulfur in Residual Fuel Oil        | 1979               |
| 1622b      | Sulfur in Residual Fuel Oil        | 1981               |
| 1623       | Sulfur in Residual Fuel Oil        | 1971               |
| 1623a      | Sulfur in Residual Fuel Oil        | 1981               |

TABLE 1 (Cont)

| SRM NUMBER | NAME                                   | CERTIFICATION DATE |
|------------|----------------------------------------|--------------------|
| 1624       | Sulfur in Distillate Fuel Oil          | 1971               |
| 1624a      | Sulfur in Distillate (Diesel) Fuel Oil | 1981               |
| 1630       | Trace Mercury in Coal                  | 1971               |
| 1631A      | Sulfur in Coal                         | 1973,1974          |
| 1631B      | Sulfur in Coal                         | 1973,1974          |
| 1631C      | Sulfur in Coal                         | 1973,1974          |
| 1632       | Trace Elements in Coal                 | 1974               |
| 1632A      | Trace Elements in Coal (Bituminous)    | 1983               |
| 1633       | Trace Elements in Coal Fly Ash         | 1975               |
| 1633A      | Trace Elements in Coal Fly Ash         | 1979               |
| 1634       | Trace Elements in Fuel Oil             | 1975               |
| 1634A      | Trace Elements in Fuel Oil             | 1982               |
| 1635       | Trace Elements in Coal (Subbituminous) | 1978               |
| 1641       | Mercury in Water - Concentrate         | 1975               |
| 1642       | Mercury in Water - Trace               | 1974               |
| 1642A      | Mercury in Water - ng/ml               | 1977               |
| 1643       | Trace Elements in Water                | 1977               |
| 1643A      | Trace Elements in Water                | 1980               |
| 1645       | River Sediment                         | 1978               |
| 1646       | Estuarine Sediment                     | 1982               |
| 1648       | Urban Particulate Matter               | 1978               |
| 1649       | Urban Dust/Organics                    | 1982               |
| 2682       | Sulfur in Coal                         | 1982,1983          |
| 2683       | Sulfur in Coal                         | 1982,1983          |
| 2684       | Sulfur in Coal                         | 1982,1983          |
| 2685       | Sulfur in Coal                         | 1982,1983          |
| 4350       | Environmental Radioactivity Standard:  |                    |
|            | River Sediment                         | 1975               |
| 4350B      | Environmental Radioactivity            | 1981               |
| 4353       | Environmental Radioactivity            | 1981               |

TABLE 2: LITERATURE SURVEYED

| JOURNAL                                                                                    | VOLUME NUMBERS |
|--------------------------------------------------------------------------------------------|----------------|
| Analysis                                                                                   | 1 - 10         |
| Analyst                                                                                    | 97 - 107       |
| Analytica Chimica Acta                                                                     | 53 - 143       |
| Analytical Chemistry                                                                       | 44 - 54        |
| Analytical Letters                                                                         | 1 - 15         |
| Analytical Proceedings Published by the Royal Society<br>of Chemistry (London)             | 17 - 19        |
| Annales de la Societe Geologique de Belgique                                               | 91 - 105       |
| Applied Spectroscopy                                                                       | 25 - 36        |
| Atomic Absorption Newsletter                                                               | 1 - 18         |
| Atomic Spectroscopy                                                                        | 1 - 3          |
| Biological Trace Element Research                                                          | 1 - 4          |
| Bulletin des Societes Chimiques Belges                                                     | 80 - 90        |
| Canadian Journal of Earth Sciences                                                         | 9 - 19         |
| Canadian Journal of Spectroscopy                                                           | 20 - 27        |
| Chemical Geology                                                                           | 13 - 37        |
| Comptes-Rendus Hebdomadaires des Seances de l'Academie<br>des Sciences (Paris)             | 272 - 292      |
| Contributions to Mineralogy and Petrology                                                  | 36 - 80        |
| Earth and Planetary Science Letters                                                        | 1 - 61         |
| Environmental Letters                                                                      | 1 - 10         |
| Environmental Pollution                                                                    | 1 - 29         |
| Environmental Research                                                                     | 1 - 28         |
| Environmental Science and Technology                                                       | 5 - 16         |
| Fresenius' Zeitschrift fur Analytische Chemie                                              | 244 - 313      |
| Geochemistry International (translations from Geokhimiya)                                  | 9 - 18         |
| Geophysical Research Letters                                                               | 1 - 9          |
| Geochimica et Cosmochimica Acta                                                            | 36 - 46        |
| Geostandards Newsletter                                                                    | 1 - 6          |
| Geochemical Journal                                                                        | 7 - 16         |
| International Journal of Applied Radiation and Isotopes                                    | 23 - 33        |
| International Journal of Environmental Analytical Chemistry                                | 1 - 12         |
| International Journal of Environmental Studies                                             | 1 - 19         |
| Journal of Analytical Chemistry of USSR (translations of<br>Zhurnal Analiticheskoi Khimii) | 26 - 36        |
| Journal of Environmental Quality                                                           | 1 - 11         |
| Journal of Environmental Science and Health                                                | 11 - 17        |
| Journal of Geochemical Exploration                                                         | 1 - 17         |
| Journal of Petrology                                                                       | 12 - 23        |
| Journal of Radioanalytical Chemistry                                                       | 10 - 72        |
| Journal of Research of the USGS                                                            | 1 - 6          |
| Journal of the Association of Official Analytical Chemists                                 | 55 - 65        |
| Journal of the Geological Society (London)                                                 | 127 - 138      |
| Journal of Volcanology and Geothermal Research                                             | 1 - 14         |
| Lithos                                                                                     | 4 - 15         |
| Marine Geology                                                                             | 12 - 44        |
| Microchemical Journal                                                                      | 17 - 27        |
| Mikrochimica Acta (Wien)                                                                   | 1972 - 1982    |
| Mineralogy Magazine                                                                        | 40 - 46        |
| Nuclear Instruments and Methods                                                            | 114 - 172      |
| Precambrian Research                                                                       | 1 - 18         |
| Proceedings of the Analytical Division of the Chemical<br>Society (London)                 | 11 - 16        |
| Radiochimica Acta                                                                          | 17 - 31        |
| Radiochemical and Radioanalytical Letters                                                  | 1 - 54         |
| Sedimentology                                                                              | 16 - 28        |
| Talanta                                                                                    | 19 - 29        |
| X-Ray Spectrometry                                                                         | 1 - 11         |

TABLE 3  
ELEMENTAL CONCENTRATIONS IN NBS OYSTER TISSUE, BREWERS YEAST,  
AND CITRUS LEAVES STANDARD REFERENCE MATERIALS

| Element   | Unit | 1566          |                                   |             | 1569          |                                   |              | 1572          |                                   |     |
|-----------|------|---------------|-----------------------------------|-------------|---------------|-----------------------------------|--------------|---------------|-----------------------------------|-----|
|           |      | NBS<br>(1979) | Literature<br>$\bar{x} \pm s$ (n) | Range       | NBS<br>(1976) | Literature<br>$\bar{x} \pm s$ (n) | Range        | NBS<br>(1982) | Literature<br>$\bar{x} \pm s$ (n) |     |
| Ag        | ppb  | 890 ± 90      | ---                               | ---         | ---           | ---                               | ---          | ---           | ---                               | --- |
| Al        | ppm  | ---           | ---                               | ---         | ---           | 2150 (2)                          | 2000 - 2300  | 92 ± 15       | ---                               | --- |
| As        | ppm  | 13.4 ± 1.9    | 12.6 ± 0.5 (4)                    | 12.2 ± 15.5 | ---           | 0.59 ± 0.07 (3)                   | 0.53 - 0.67  | 3.1 ± 0.3     | 3.10 (2)                          | --- |
| B         | ppm  | ---           | 7 (1)                             | ---         | ---           | 6.2 (1)                           | ---          | ---           | ---                               | --- |
| Ba        | ppm  | ---           | ---                               | ---         | ---           | ---                               | ---          | 21 ± 3        | ---                               | --- |
| Br        | ppm  | 55            | 112 (2)                           | 45 - 180    | ---           | 3.7 (2)                           | 0.65 - 6.7   | 8.2           | ---                               | --- |
| Ca        | ppm  | 1500 ± 200    | 2500 ± 1700 (3)                   | 880 - 4500  | ---           | 2400 ± 100 (4)                    | 2270 - 2490  | 31500 ± 1000  | ---                               | --- |
| Cd        | ppm  | 3.5 ± 0.4     | 3.38 ± 0.17 (6)                   | 3.20 - 3.61 | ---           | 0.17 ± 0.09 (4)                   | 0.08 - 0.29  | 0.03 ± 0.01   | ---                               | --- |
| Ce        | ppm  | ---           | ---                               | ---         | ---           | 2.3 (1)                           | ---          | 0.28          | ---                               | --- |
| Cl        | %    | 1.0           | ---                               | ---         | ---           | 0.046 (1)                         | ---          | 0.0414        | ---                               | --- |
| Co        | ppb  | 400           | 340 (1)                           | ---         | ---           | 280 (1)                           | ---          | 20            | ---                               | --- |
| Cr        | ppm  | 0.69 ± 0.27   | 0.55 ± 0.18 (3)                   | 0.34 - 0.70 | 2.12 ± 0.05   | 1.81 ± 0.46 (17)                  | 0.078 - 2.17 | 0.8 ± 0.2     | ---                               | --- |
| Cs        | ppb  | ---           | ---                               | ---         | ---           | <200 (1)                          | ---          | 98            | ---                               | --- |
| Cu        | ppm  | 63.0 ± 3.5    | 62 ± 1 (4)                        | 61.0 - 189  | ---           | 16 ± 3 (5)                        | 11.0 - 184   | 16.5 ± 1.0    | 16.5 (2)                          | --- |
| Eu        | ppb  | ---           | 20 (1)                            | ---         | ---           | 20 (1)                            | ---          | 10            | ---                               | --- |
| F         | ppm  | 5.2           | 5.2 (2)                           | 4.9 - 5.4   | ---           | 14.5 (2)                          | 14 - 15      | ---           | ---                               | --- |
| Fe        | ppm  | 195 ± 34      | 195 ± 11 (6)                      | 178 - 576   | ---           | 630 ± 80 (5)                      | 257 - 707    | 90 ± 10       | 96 (2)                            | --- |
| Ga        | ppm  | ---           | ---                               | ---         | ---           | 7.1 (1)                           | ---          | ---           | ---                               | --- |
| Hf        | ppb  | ---           | ---                               | ---         | ---           | 130 (1)                           | ---          | ---           | ---                               | --- |
| Hg        | ppb  | 57 ± 15       | 40 (1)                            | ---         | ---           | 22 (1)                            | ---          | 80 ± 20       | ---                               | --- |
| I         | ppm  | 2.8           | 3.1 ± 0.2 (4)                     | 2.3 - 3.2   | ---           | 0.06 (1)                          | ---          | ---           | ---                               | --- |
| K         | %    | 0.969 ± 0.005 | 0.95 ± 0.06 (4)                   | 0.87 - 1.89 | ---           | 1.52 ± 0.11 (6)                   | 1.40 - 1.71  | 1.82 ± 0.06   | 1.79 (2)                          | --- |
| La        | ppb  | ---           | ---                               | ---         | ---           | ---                               | ---          | 190           | ---                               | --- |
| Mg        | ppm  | 1280 ± 90     | 1370 ± 8 (3)                      | 1280 - 1430 | ---           | 1850 ± 100 (5)                    | 1730 - 1980  | 5800 ± 300    | 5600 (2)                          | --- |
| Mn        | ppm  | 17.5 ± 1.2    | 17.3 ± 1.3 (6)                    | 3.0 - 49    | ---           | 10.0 ± 0.7 (5)                    | 7.0 - 10.9   | 23 ± 2        | 24 (2)                            | --- |
| Mo        | ppm  | ≤0.2          | 0.1 (1)                           | ---         | ---           | 3.6 ± 0.3 (4)                     | 3.3 - 3.9    | 0.17 ± 0.09   | ---                               | --- |
| N         | %    | ---           | ---                               | ---         | ---           | ---                               | ---          | 2.86          | ---                               | --- |
| Na        | ppm  | 5100 ± 300    | 4800 (2)                          | 4600 - 4920 | ---           | 590 (2)                           | 510 - 670    | 160 ± 20      | ---                               | --- |
| Ni        | ppm  | 1.03 ± 0.19   | 0.94 (2)                          | 0.92 - 0.97 | ---           | 5.3 ± 0.7 (4)                     | 4.6 - 6.0    | 0.6 ± 0.3     | ---                               | --- |
| P         | %    | 0.81          | 0.778 ± 0.012 (4)                 | 0.76 - 0.79 | ---           | 1.04 ± 0.03 (4)                   | 1.00 - 1.08  | 0.13 ± 0.02   | ---                               | --- |
| Pb        | ppb  | 480 ± 40      | 478 ± 25 (10)                     | 440 - 510   | ---           | 350 (2)                           | 200 - 500    | 13.3 ± 2.4    | ---                               | --- |
| Rb        | ppm  | 4.45 ± 0.09   | 20 (1)                            | ---         | ---           | 16 (1)                            | ---          | 4.84 ± 0.06   | ---                               | --- |
| S         | ppm  | 7600          | ---                               | ---         | ---           | ---                               | ---          | 4070 ± 90     | ---                               | --- |
| Sb        | ppb  | ---           | 150 (1)                           | ---         | ---           | 150 (2)                           | 75 - 230     | 40            | ---                               | --- |
| Sc        | ppb  | ---           | 89 (1)                            | ---         | ---           | 200 (2)                           | 180 - 220    | 10            | ---                               | --- |
| Se        | ppm  | 2.1 ± 0.5     | 2.1 ± 0.3 (3)                     | 1.8 - 2.4   | ---           | 0.97 ± 0.05 (3)                   | 0.92 - 1.01  | 0.025         | ---                               | --- |
| Sm        | ppb  | ---           | ---                               | ---         | ---           | ---                               | ---          | 52            | ---                               | --- |
| Sn        | ppb  | ---           | ---                               | ---         | ---           | ---                               | ---          | ---           | ---                               | --- |
| Sr        | ppm  | 1036 ± 0.56   | 51 (2)                            | 9.9 - 92    | ---           | ---                               | ---          | 100 ± 2       | ---                               | --- |
| Te        | ppb  | ---           | ---                               | ---         | ---           | ---                               | ---          | 20            | ---                               | --- |
| Th        | ppm  | 0.1           | ---                               | ---         | ---           | 3.7 (1)                           | ---          | ---           | ---                               | --- |
| Ti        | ppm  | ---           | ---                               | ---         | ---           | 38 (1)                            | ---          | ---           | ---                               | --- |
| Tl        | ppb  | ≤5            | ---                               | ---         | ---           | ---                               | ---          | ≤10           | ---                               | --- |
| U         | ppb  | 116 ± 6       | 126 (1)                           | ---         | ---           | 467 ± 15 (7)                      | 441 - 490    | ≤150          | 41 (1)                            | --- |
| U-238/235 | ppm  | ---           | ---                               | ---         | ---           | 137.7 (1)                         | ---          | ---           | ---                               | --- |
| V         | ppm  | 2.8           | 2.4 (1)                           | ---         | ---           | 3.3 ± 1.6 (3)                     | 1.5 - 4.4    | ---           | ---                               | --- |
| Zn        | ppm  | 852 ± 14      | 863 ± 12 (6)                      | 750 - 2953  | ---           | 65 ± 3 (9)                        | 30 - 70      | 29 ± 2        | 30 (2)                            | --- |

TABLE 4

ELEMENTAL CONCENTRATIONS IN NBS WHEAT FLOUR, RYE FLOUR,  
AND NEW BOVINE LIVER STANDARD REFERENCE MATERIALS

| Element | Units | 1567           |                       |             | 1568           |                      |             | 1577a           |
|---------|-------|----------------|-----------------------|-------------|----------------|----------------------|-------------|-----------------|
|         |       | NBS<br>(1978)  | Literature            |             | NBS<br>(1978)  | Literature           |             | NBS<br>(1982)   |
|         |       |                | $\bar{x} \pm s$ (n)   | Range       |                | $\bar{x} \pm s$ (n)  | Range       |                 |
| Ag      | ppb   | ---            | ---                   | ---         | ---            | ---                  | ---         | 40 $\pm$ 10     |
| Al      | ppm   | ---            | ---                   | ---         | ---            | ---                  | ---         | 2               |
| As      | ppb   | 6              | 5.6 $\pm$ 0.3 (4)     | 5.4 - 30    | 410 $\pm$ 50   | 415 $\pm$ 26 (12)    | 90 - 460    | 47 $\pm$ 6      |
| B       | ppm   | ---            | 1.5 (1)               | ---         | ---            | <1 (1)               | ---         | ---             |
| Be      | ppb   | ---            | <30 (1)               | ---         | ---            | ---                  | ---         | ---             |
| Bi      | ppb   | ---            | <8 (1)                | ---         | ---            | <8 (1)               | ---         | ---             |
| Br      | ppm   | 9              | 9.9 (1)               | ---         | 1              | 1.23 (1)             | ---         | 9               |
| Ca      | ppm   | 190 $\pm$ 10   | 190 $\pm$ 9 (12)      | 173 - 199   | 140 $\pm$ 20   | 146 $\pm$ 3 (9)      | 142 - 151   | 120 $\pm$ 7     |
| Cd      | ppb   | 32 $\pm$ 7     | 33 $\pm$ 10 (7)       | 20 - 50     | 29 $\pm$ 4     | 36 $\pm$ 18 (4)      | 20 - 60     | 440 $\pm$ 60    |
| Cl      | ppm   | ---            | ---                   | ---         | ---            | ---                  | ---         | 2800 $\pm$ 100  |
| Co      | ppb   | ---            | 21 (1)                | ---         | 20 $\pm$ 10    | 18 (1)               | ---         | 210 $\pm$ 50    |
| Cr      | ppb   | ---            | 350 (2)               | 300 - 400   | ---            | 140 (2)              | 80 - 200    | ---             |
| Cs      | ppb   | ---            | <200 (1)              | ---         | ---            | <200 (1)             | ---         | ---             |
| Cu      | ppm   | 2.0 $\pm$ 0.3  | 1.98 $\pm$ 0.09 (8)   | 1.80 - 2.06 | 2.2 $\pm$ 0.3  | 2.02 $\pm$ 0.13 (5)  | 1.90 - 2.20 | 158 $\pm$ 7     |
| F       | ppb   | ---            | 40 (1)                | ---         | ---            | 190 (2)              | 180 - 200   | ---             |
| Fe      | ppm   | 18.3 $\pm$ 1.0 | 18.1 $\pm$ 0.9 (10)   | 17.0 - 19.6 | 8.7 $\pm$ 0.6  | 8.2 $\pm$ 0.9 (7)    | 7.1 - 9.4   | 194 $\pm$ 20    |
| Ga      | ppb   | ---            | <20 (1)               | ---         | ---            | <20 (1)              | ---         | ---             |
| Hg      | ppb   | 1.0 $\pm$ 0.8  | 1.0 (1)               | ---         | 6.0 $\pm$ 0.7  | 6.0 (2)              | 5.6 - 6.4   | 4 $\pm$ 2       |
| I       | ppb   | ---            | ---                   | ---         | ---            | 12 (2)               | 11 - 12     | ---             |
| K       | ppm   | 1360 $\pm$ 40  | 1316 $\pm$ 11 (5)     | 1300 - 1392 | 1120 $\pm$ 20  | 1100 $\pm$ 90 (4)    | 965 - 1150  | 9960 $\pm$ 70   |
| Mg      | ppm   | ---            | 414 $\pm$ 12 (5)      | 398 - 429   | ---            | 510 (2)              | 510         | 600 $\pm$ 15    |
| Mn      | ppm   | 8.5 $\pm$ 0.5  | 8.4 $\pm$ 0.2 (8)     | 6.7 - 9.9   | 20.1 $\pm$ 0.4 | 20.1 $\pm$ 0.7 (6)   | 19.1 - 21.4 | 9.9 $\pm$ 0.8   |
| Mo      | ppm   | 0.4            | 0.402 $\pm$ 0.018 (5) | 0.38 - 0.42 | 1.6            | 1.59 $\pm$ 0.01 (3)  | 1.59 - 1.60 | 3.5 $\pm$ 0.5   |
| N       | %     | ---            | ---                   | ---         | ---            | ---                  | ---         | 10.7            |
| Na      | ppm   | 8.0 $\pm$ 1.5  | 10.4 (1)              | ---         | 6.0 $\pm$ 1.5  | 6.9 (1)              | ---         | 2430 $\pm$ 130  |
| Ni      | ppb   | 180            | 180 (2)               | 160 - 200   | 160            | 155 (2)              | 150 - 160   | ---             |
| P       | ppm   | ---            | 1380 $\pm$ 30 (5)     | 1350 - 1420 | ---            | 1620 (2)             | 1600 - 1630 | 11100 $\pm$ 400 |
| Pb      | ppb   | ---            | 18 (1)                | ---         | ---            | 32 (2)               | 30 - 35     | 135 $\pm$ 15    |
| Rb      | ppm   | 1              | 0.99 (1)              | ---         | 7              | 7.3 (1)              | ---         | 12.5 $\pm$ 0.1  |
| S       | ppm   | ---            | ---                   | ---         | ---            | ---                  | ---         | 7800 $\pm$ 100  |
| Se      | ppb   | ---            | 38 (1)                | ---         | ---            | 5 (1)                | ---         | 3               |
| Si      | ppm   | 1.1 $\pm$ 0.2  | 0.99 $\pm$ 0.10 (20)  | 0.70 - 1.17 | 0.4 $\pm$ 0.1  | 0.38 $\pm$ 0.06 (21) | 0.28 - 0.48 | 0.71 $\pm$ 0.07 |
| Sn      | ppb   | ---            | <20 (1)               | ---         | ---            | <20 (1)              | ---         | ---             |
| Sr      | ppb   | ---            | ---                   | ---         | ---            | ---                  | ---         | 138 $\pm$ 3     |
| Te      | ppb   | ---            | ---                   | ---         | ---            | ---                  | ---         | ---             |
| Tl      | ppb   | ---            | ---                   | ---         | ---            | ---                  | ---         | 3               |
| U       | ppb   | ---            | 0.95 (1)              | ---         | ---            | 0.89 (1)             | ---         | 0.71 $\pm$ 0.03 |
| V       | ppb   | ---            | <50 (1)               | ---         | ---            | <50 (1)              | ---         | ---             |
| Zn      | ppm   | ---            | 10.8 $\pm$ 0.3 (9)    | 10.2 - 11.3 | 19.4 $\pm$ 1.0 | 19.8 $\pm$ 0.4 (6)   | 19.3 - 21.3 | 123 $\pm$ 8     |

TABLE 5  
ELEMENTAL CONCENTRATIONS IN NBS SRM 1570: SPINACH

| Element | Units | NBS<br>(1976)   | Literature                                         |      |               |                      |                     |                                |                     |                                |
|---------|-------|-----------------|----------------------------------------------------|------|---------------|----------------------|---------------------|--------------------------------|---------------------|--------------------------------|
|         |       |                 | Individual $\bar{x} \pm s$ by Analytical Technique |      |               |                      |                     | NAA                            | XRF                 |                                |
|         |       |                 | AA                                                 | ASV  | ICPES         | Range                | Median              |                                |                     |                                |
| Ag      | ppb   | ---             | 65 (2)                                             | ---  | 65            | ---                  | ---                 | ---                            | ---                 | ---                            |
| Al      | ppm   | 870 $\pm$ 50    | 830 $\pm$ 40 (5)                                   | 824  | 482 - 1190    | ---                  | ---                 | ---                            | 910 $\pm$ 160 (5)   | ---                            |
| As      | ppb   | 150 $\pm$ 50    | 163 $\pm$ 12 (12)                                  | 160  | 62 - 180      | 155 $\pm$ 19 (8)     | ---                 | ---                            | 166 $\pm$ 17 (3)    | ---                            |
| Au      | ppb   | ---             | 1.2 (2)                                            | ---  | 0.4 - 2.0     | ---                  | ---                 | ---                            | ---                 | ---                            |
| B       | ppm   | 30              | 24 (2)                                             | ---  | 20.9 - 28     | ---                  | ---                 | ---                            | ---                 | ---                            |
| Ba      | ppm   | ---             | 50 (2)                                             | ---  | 13.1 - 87     | ---                  | ---                 | ---                            | ---                 | ---                            |
| Be      | ppb   | ---             | <30 (4)                                            | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Bi      | ppb   | ---             | <8 (1)                                             | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Br      | ppm   | 54              | 48 $\pm$ 4 (12)                                    | 47.2 | 42 - 138      | ---                  | ---                 | ---                            | 48 $\pm$ 4 (12)     | ---                            |
| C       | %     | ---             | 40.8 (1)                                           | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Ca      | %     | 1.35 $\pm$ 0.03 | 1.37 $\pm$ 0.12 (16)                               | 1.36 | 0.82 - 2.45   | ---                  | ---                 | 1.38 $\pm$ 0.13 (9)            | 1.38 $\pm$ 0.13 (5) | 1.68 $\pm$ 0.68 (3)            |
| Cd      | ppm   | 1.5             | 1.5 $\pm$ 0.2 (20)                                 | 1.45 | 1.2 - 2.8     | 1.5 $\pm$ 0.3 (6)    | 1.25 $\pm$ 0.06 (3) | 1.8 $\pm$ 0.5 (8)              | 1.52 $\pm$ 0.14 (4) | ---                            |
| Ce      | ppb   | ---             | 240 (1)                                            | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Cl      | ppm   | ---             | 6500 $\pm$ 400 (5)                                 | 6650 | 6000 - 10 000 | ---                  | ---                 | ---                            | 6500 $\pm$ 400 (5)  | ---                            |
| Co      | ppm   | 1.5             | 1.58 $\pm$ 0.12 (10)                               | 1.55 | 0.9 - 3.2     | 2.1 $\pm$ 1.0 (3)    | ---                 | ---                            | 1.58 $\pm$ 0.12 (8) | ---                            |
| Cr      | ppm   | 4.6 $\pm$ 0.3   | 5.5 $\pm$ 4.3 (23)                                 | 4.7  | 3.06 - 24.8   | 4.3 $\pm$ 0.9 (6)    | ---                 | 4.3 $\pm$ 1.0 (6)              | 4.7 $\pm$ 0.3 (6)   | ---                            |
| Cs      | ppb   | ---             | 180 $\pm$ 140 (4)                                  | ---  | 48 - 320      | ---                  | ---                 | ---                            | 180 $\pm$ 140 (4)   | ---                            |
| Cu      | ppm   | 12 $\pm$ 2      | 11.8 $\pm$ 0.6 (25)                                | 11.9 | 9.1 - 13.2    | 12.4 $\pm$ 0.6 (6)   | ---                 | 11.6 $\pm$ 0.6 (9)             | 11.5 $\pm$ 0.3 (5)  | ---                            |
| Eu      | ppb   | 20              | 17 (2)                                             | ---  | 14 - 20       | ---                  | ---                 | ---                            | ---                 | ---                            |
| F       | ppm   | ---             | 4.4 (2)                                            | ---  | 4.3 - 4.4     | ---                  | ---                 | ---                            | ---                 | ---                            |
| Fe      | ppm   | 550 $\pm$ 20    | 536 $\pm$ 33 (25)                                  | 541  | 178 - 1200    | 540 $\pm$ 30 (4)     | ---                 | 520 $\pm$ 30 (10)              | 570 $\pm$ 50 (7)    | 770 $\pm$ 370 (3) <sup>a</sup> |
| Ge      | ppb   | ---             | <20 (1)                                            | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| H       | %     | ---             | 5.57 (2)                                           | ---  | 5.54 - 5.60   | ---                  | ---                 | ---                            | ---                 | ---                            |
| Hf      | ppb   | ---             | 40 (1)                                             | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Hg      | ppb   | 30 $\pm$ 5      | 30 $\pm$ 4 (5)                                     | 32   | 25 - 110      | 29 $\pm$ 4 (3)       | ---                 | ---                            | 57 $\pm$ 46 (3)     | ---                            |
| I       | ppm   | ---             | 1.22 $\pm$ 0.12 (5)                                | 1.27 | 1.08 - 1.32   | ---                  | ---                 | ---                            | 1.25 $\pm$ 0.12 (4) | ---                            |
| In      | ppb   | ---             | 1.2 (2)                                            | ---  | 1.2 - 1.3     | ---                  | ---                 | ---                            | ---                 | ---                            |
| K       | %     | 3.56 $\pm$ 0.03 | 3.58 $\pm$ 0.15 (18)                               | 3.60 | 3.26 - 7.95   | ---                  | ---                 | 3.60 $\pm$ 0.17 (9)            | 3.56 $\pm$ 0.17 (7) | 5.6 $\pm$ 2.1 (3) <sup>a</sup> |
| La      | ppb   | 370             | 310 $\pm$ 40 (3)                                   | ---  | 260 - 350     | ---                  | ---                 | ---                            | 310 $\pm$ 50 (3)    | ---                            |
| Lu      | ppb   | ---             | <5 (1)                                             | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Mg      | ppm   | ---             | 8700 $\pm$ 600 (12)                                | 8700 | 7000 - 9800   | ---                  | ---                 | ---                            | 8700 $\pm$ 1300 (3) | ---                            |
| Mn      | ppm   | 165 $\pm$ 6     | 165 $\pm$ 9 (25)                                   | 165  | 1.3 - 684     | 148 $\pm$ 24 (6)     | ---                 | 8740 $\pm$ 160 (8)             | 162 $\pm$ 23 (8)    | 340 $\pm$ 290 (3)              |
| Mo      | ppb   | ---             | 280 $\pm$ 80 (5)                                   | 300  | 200 - 400     | ---                  | ---                 | 165 $\pm$ 5 (9)                | ---                 | ---                            |
| N       | %     | 5.9             | 5.81 (2)                                           | ---  | 5.62 - 6.00   | ---                  | ---                 | 280 $\pm$ 100 (4) <sup>b</sup> | ---                 | ---                            |
| Na      | %     | ---             | 1.40 $\pm$ 0.14 (10)                               | 1.44 | 1.13 - 1.56   | ---                  | ---                 | ---                            | 1.37 $\pm$ 0.13 (8) | ---                            |
| Ni      | ppm   | 6               | 6.0 $\pm$ 1.1 (16)                                 | 5.46 | 1.3 - 8.1     | ---                  | ---                 | 5.5 $\pm$ 0.5 (7) <sup>a</sup> | 5.4 $\pm$ 2.1 (5)   | ---                            |
| P       | ppm   | 5500 $\pm$ 200  | 5420 $\pm$ 250 (12)                                | 5350 | 4500 - 6000   | ---                  | ---                 | 5400 $\pm$ 250 (10)            | ---                 | ---                            |
| Pb      | ppm   | 1.2 $\pm$ 0.2   | 1.13 $\pm$ 0.16 (22)                               | 1.10 | 0.8 - 2.0     | 1.20 $\pm$ 0.13 (14) | 1.11 $\pm$ 0.10 (4) | 0.87 $\pm$ 0.12 (3)            | ---                 | ---                            |
| Pd      | ppb   | ---             | <2 (1)                                             | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Pr      | ppb   | ---             | <60 (1)                                            | ---  | ---           | ---                  | ---                 | ---                            | ---                 | ---                            |
| Rb      | ppm   | 12.1 $\pm$ 0.2  | 12 $\pm$ 3 (5)                                     | 11.5 | 10 - 39       | ---                  | ---                 | ---                            | 12 $\pm$ 3 (5)      | ---                            |

<sup>a</sup>Only two analysts reporting.

<sup>b</sup>Only one analyst reporting.

TABLE 5 (cont)  
ELEMENTAL CONCENTRATIONS IN NBS SRM 1570: SPINACH

| Element | Units | NBS<br>(1976) | Literature          |        |             |                 |     |                |                   |                 |
|---------|-------|---------------|---------------------|--------|-------------|-----------------|-----|----------------|-------------------|-----------------|
|         |       |               | $\bar{x} \pm s$ (n) | Median | Range       | AA              | ASV | ICPES          | NAA               | XRF             |
| S       | ppm   | ---           | 2400 (1)            | ---    | ---         | ---             | --- | ---            | ---               | ---             |
| Sb      | ppb   | 40            | 40 $\pm$ 10 (6)     | 41     | 14 - 690    | ---             | --- | ---            | 40 $\pm$ 10 (6)   | ---             |
| Sc      | ppb   | 160           | 168 $\pm$ 11 (7)    | 170    | 150 - 470   | ---             | --- | ---            | 169 $\pm$ 11 (7)  | ---             |
| Se      | ppb   | ---           | 40 $\pm$ 14 (9)     | 38     | 24 - 510    | 34 (2)          | --- | ---            | 48 $\pm$ 19 (4)   | ---             |
| Sm      | ppb   | ---           | 104 $\pm$ 86 (3)    | ---    | 33 - 200    | ---             | --- | ---            | 100 $\pm$ 90 (3)  | ---             |
| Sn      | ppm   | ---           | 3.1 (1)             | ---    | ---         | ---             | --- | ---            | ---               | ---             |
| Sr      | ppm   | 87 $\pm$ 2    | 120 $\pm$ 70 (3)    | ---    | 79 - 208    | ---             | --- | ---            | ---               | ---             |
| Ta      | ppb   | ---           | 230 (1)             | ---    | ---         | ---             | --- | ---            | ---               | ---             |
| Th      | ppb   | 120 $\pm$ 30  | 130 (2)             | ---    | 110 - 150   | ---             | --- | ---            | ---               | ---             |
| Ti      | ppm   | ---           | 16 (1)              | ---    | ---         | ---             | --- | ---            | ---               | ---             |
| Tl      | ppb   | 30            | 31 (1)              | ---    | ---         | ---             | --- | ---            | ---               | ---             |
| U       | ppb   | 46 $\pm$ 9    | 44 (2)              | ---    | 42 - 45     | ---             | --- | ---            | ---               | ---             |
| V       | ppm   | ---           | 1.18 $\pm$ 0.11 (6) | 1.16   | 1.06 - 1.70 | ---             | --- | ---            | 1.3 $\pm$ 0.3 (4) | ---             |
| W       | ppb   | ---           | 140 (1)             | ---    | ---         | ---             | --- | ---            | ---               | ---             |
| Yb      | ppb   | ---           | 2.0 (1)             | ---    | ---         | ---             | --- | ---            | ---               | ---             |
| Zn      | ppm   | 50 $\pm$ 2    | 50 $\pm$ 4 (29)     | 50     | 42 - 119    | 57 $\pm$ 10 (5) | --- | 49 $\pm$ 3 (7) | 49 $\pm$ 5 (7)    | 77 $\pm$ 36 (3) |

TABLE 6  
ELEMENTAL CONCENTRATIONS IN NBS SRM 1571: ORCHARD LEAVES

| Element                       | Units | NBS<br>(1977)   | Literature           |        |              |                     |                               |                                |                      |                             |                     |                                                                         |
|-------------------------------|-------|-----------------|----------------------|--------|--------------|---------------------|-------------------------------|--------------------------------|----------------------|-----------------------------|---------------------|-------------------------------------------------------------------------|
|                               |       |                 | $\bar{x} \pm s$ (n)  | Median | Range        | AA                  | ICPES                         | NAA                            | OES                  | PAA                         | XRF                 | Others                                                                  |
| Ag                            | ppb   | ---             | 210 $\pm$ 350 (3)    | ---    | 13 - 620     | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Al                            | ppm   | ---             | 320 $\pm$ 110 (41)   | 347    | 99 - 824     | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| As                            | ppm   | 10 $\pm$ 2      | 10.7 $\pm$ 1.2 (125) | 10.5   | 1.10 - 38    | 10.7 $\pm$ 1.2 (34) | 10.4 $\pm$ 1.6 (8)            | 10.7 $\pm$ 1.2 (59)            | ---                  | 10.1 $\pm$ 1.2 (5)          | 12.1 $\pm$ 2.2 (8)  | 10.9 $\pm$ 1.7 (4) COLOR 12 $\pm$ 6 (4) CPXRF                           |
| As (III)                      | ppm   | ---             | 4.9 (1)              | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Au                            | ppb   | ---             | 1.4 $\pm$ 0.4 (13)   | 1.5    | 0.78 - 3.5   | ---                 | ---                           | 1.4 $\pm$ 0.4 (3)              | ---                  | ---                         | ---                 | ---                                                                     |
| B                             | ppm   | 33 $\pm$ 3      | 33 $\pm$ 4 (29)      | 32.9   | 16 - 40      | ---                 | 33 $\pm$ 5 (6)                | ---                            | 32 $\pm$ 5 (11)      | ---                         | ---                 | 35.3 $\pm$ 1.5 (4) CPAA 33.1 $\pm$ 0.3 (3) TCGS                         |
| Ba                            | ppm   | 44              | 43 $\pm$ 5 (29)      | 43     | 0.3 - 80     | ---                 | 45 $\pm$ 6 (3) <sup>a</sup>   | 42 $\pm$ 9 (21)                | 44 $\pm$ 5 (5)       | ---                         | ---                 | ---                                                                     |
| Bc                            | ppb   | 21 $\pm$ 10     | 24 $\pm$ 10 (2)      | 20     | 15.7 - 110   | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Bi                            | ppb   | 100             | 92 $\pm$ 36 (4)      | 110    | 4 - 64000    | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | 110 (3) <sup>b</sup> POL                                                |
| Br                            | ppm   | 10              | 9.5 $\pm$ 1.1 (46)   | 9.4    | 5.0 - 34     | ---                 | ---                           | 9.7 $\pm$ 1.1 (37)             | ---                  | ---                         | 8.2 $\pm$ 1.3 (9)   | ---                                                                     |
| C                             | %     | ---             | 46.2 $\pm$ 0.5 (5)   | 46.2   | 45.76 - 52.0 | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | 46.0 $\pm$ 0.3 (3) CB 46.5 (2) TCGS                                     |
| Ca                            | %     | 2.09 $\pm$ 0.03 | 2.04 $\pm$ 0.11 (72) | 2.04   | 1.58 - 5.01  | 2.04 $\pm$ 0.05 (7) | 2.04 $\pm$ 0.07 (10)          | 2.03 $\pm$ 0.13 (22)           | 2.01 $\pm$ 0.22 (12) | 2.06 $\pm$ 0.11 (4)         | 2.02 $\pm$ 0.09 (9) | 1.99 (2) CPXRF                                                          |
| Cd                            | ppb   | 110 $\pm$ 10    | 118 $\pm$ 24 (57)    | 110    | 70 - 2000    | 119 $\pm$ 30 (35)   | 162 $\pm$ 29 (5)              | 122 $\pm$ 31 (13)              | ---                  | ---                         | ---                 | 129 $\pm$ 35 (3) AF 100 (1) ASV                                         |
| Ce                            | ppm   | ---             | 0.94 $\pm$ 0.09 (11) | 0.97   | 0.75 - 1.2   | ---                 | ---                           | 0.92 $\pm$ 0.08 (10)           | ---                  | ---                         | ---                 | ---                                                                     |
| Cl                            | ppm   | 600             | 740 $\pm$ 40 (13)    | 710    | 53 - 950     | ---                 | ---                           | 730 $\pm$ 40 (19)              | ---                  | ---                         | ---                 | ---                                                                     |
| Co                            | ppm   | 200             | 160 $\pm$ 40 (38)    | 180    | 100 - 460    | 180 $\pm$ 70 (5)    | ---                           | 170 $\pm$ 50 (35)              | ---                  | 710 $\pm$ 20 (3)            | 780 $\pm$ 20 (3)    | ---                                                                     |
| Cr                            | ppm   | 2.6 $\pm$ 0.3   | 2.5 $\pm$ 0.3 (67)   | 2.6    | 1.07 - 5.81  | 2.5 $\pm$ 0.3 (15)  | 2.6 $\pm$ 0.6 (7)             | 2.6 $\pm$ 0.4 (38)             | ---                  | ---                         | ---                 | ---                                                                     |
| Cs                            | ppb   | 40              | 35 $\pm$ 8 (13)      | 38     | 20 - 150     | ---                 | ---                           | 38 $\pm$ 15 (13)               | ---                  | ---                         | ---                 | ---                                                                     |
| Cu                            | ppm   | 12 $\pm$ 1      | 12.1 $\pm$ 1.4 (113) | 12     | 3.6 - 35     | 11.9 $\pm$ 0.7 (30) | 11.8 $\pm$ 0.6 (12)           | 11.9 $\pm$ 1.6 (29)            | 14.8 $\pm$ 2.4 (12)  | ---                         | 11.7 $\pm$ 2.8 (14) | 11.9 (1) ASV 11.8 $\pm$ 0.8 (3) POL <sup>a</sup> 13.0 $\pm$ 3 (5) CPXRF |
| Dy                            | ppb   | ---             | 80 (2)               | ---    | 53 - 110     | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Er                            | ppb   | ---             | 30 (1)               | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Eu                            | ppb   | ---             | 2.5 $\pm$ 3 (13)     | 23     | 20 - 300     | ---                 | ---                           | 24 $\pm$ 3 (14)                | ---                  | ---                         | ---                 | ---                                                                     |
| F                             | ppm   | 4               | 3.9 $\pm$ 0.5 (9)    | 3.94   | 3.12 - 10    | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | 3.41 (2) COLOR 4.1 $\pm$ 0.02 (5) ISE                                   |
| Fe                            | ppm   | 300 $\pm$ 20    | 284 $\pm$ 28 (109)   | 289    | 121 - 884    | 270 $\pm$ 30 (17)   | 280 $\pm$ 20 (14)             | 290 $\pm$ 20 (37)              | 230 $\pm$ 50 (12)    | 320 $\pm$ 20 (3)            | 290 $\pm$ 30 (16)   | 280 $\pm$ 20 (5) COLOR 312 (3) POL <sup>a</sup> 300 $\pm$ 130 (4) CPXRF |
| Ga                            | ppb   | 80              | 88 $\pm$ 9 (4)       | ---    | 78 - 100     | ---                 | ---                           | 88 $\pm$ 9 (4)                 | ---                  | ---                         | ---                 | ---                                                                     |
| Gd                            | ppb   | ---             | 67 $\pm$ 56 (3)      | ---    | 1.6 - 100    | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| *Only two analysts reporting. |       |                 |                      |        |              |                     |                               |                                |                      |                             |                     |                                                                         |
| *Only one analyst reporting.  |       |                 |                      |        |              |                     |                               |                                |                      |                             |                     |                                                                         |
| Ge                            | ppb   | ---             | 150 (1)              | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| H                             | %     | ---             | 5.84 $\pm$ 0.26 (5)  | 5.91   | 5.54 - 6.10  | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Hf                            | ppb   | ---             | 26 $\pm$ 9 (5)       | 27     | 13 - 37      | ---                 | ---                           | 26 $\pm$ 9 (5)                 | ---                  | ---                         | ---                 | ---                                                                     |
| Hg                            | ppb   | 155 $\pm$ 15    | 155 $\pm$ 15 (72)    | 157    | 110 - 305    | 154 $\pm$ 13 (30)   | ---                           | 162 $\pm$ 22 (41)              | ---                  | ---                         | ---                 | 133 (2) IDMS                                                            |
| Ho                            | ppb   | ---             | 16 (2)               | ---    | 13 - 20      | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| I                             | ppb   | 170             | 165 $\pm$ 40 (9)     | 173    | 100 - 220    | ---                 | ---                           | 184 $\pm$ 21 (7)               | ---                  | ---                         | ---                 | ---                                                                     |
| I-129                         | ICU/g | ---             | 0.006 (1)            | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| In                            | ppb   | ---             | 1.5 $\pm$ 0.3 (3)    | ---    | 1.23 - 1.80  | ---                 | ---                           | 1.5 $\pm$ 0.3 (3)              | ---                  | ---                         | ---                 | ---                                                                     |
| Ir                            | ppb   | ---             | 15 (1)               | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| K                             | %     | 1.47 $\pm$ 0.03 | 1.45 $\pm$ 0.07 (67) | 1.45   | 1.05 - 3.89  | 1.41 $\pm$ 0.05 (7) | 1.48 $\pm$ 0.05 (6)           | 1.45 $\pm$ 0.05 (29)           | 1.38 $\pm$ 0.16 (12) | ---                         | 1.57 $\pm$ 0.14 (9) | ---                                                                     |
| La                            | ppm   | ---             | 1.11 $\pm$ 0.13 (21) | 1.15   | 0.70 - 1.96  | ---                 | ---                           | 1.07 $\pm$ 0.16 (19)           | ---                  | ---                         | ---                 | ---                                                                     |
| Li                            | ppb   | 600             | 710 $\pm$ 120 (3)    | 770    | 510 - 13700  | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Lu                            | ppb   | ---             | 4 $\pm$ 4 (5)        | 3.3    | 0.61 - 10    | ---                 | ---                           | 2.8 $\pm$ 2.2 (5)              | ---                  | ---                         | ---                 | ---                                                                     |
| Mg                            | ppm   | 6200 $\pm$ 200  | 6100 $\pm$ 400 (52)  | 6100   | 4900 - 7830  | 5800 $\pm$ 300 (8)  | 6000 $\pm$ 400 (17)           | 6400 $\pm$ 400 (12)            | 6120 $\pm$ 30 (4)    | ---                         | ---                 | ---                                                                     |
| Mn                            | ppm   | 91 $\pm$ 4      | 89 $\pm$ 6 (97)      | 89     | 23.1 - 242   | 88 $\pm$ 5 (16)     | 86 $\pm$ 3 (11)               | 89 $\pm$ 20 (11)               | 94 $\pm$ 3 (5)       | 85 $\pm$ 17 (16)            | ---                 | 91 $\pm$ 7 (4) CPXRF                                                    |
| Mo                            | ppb   | 300 $\pm$ 100   | 280 $\pm$ 70 (15)    | 320    | 110 - 15200  | ---                 | 200 $\pm$ 60 (5) <sup>a</sup> | 290 $\pm$ 40 (8)               | 7000 $\pm$ 5000 (6)  | ---                         | ---                 | ---                                                                     |
| N                             | %     | 2.76 $\pm$ 0.05 | 2.72 $\pm$ 0.05 (16) | 2.71   | 2.59 - 2.81  | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | 2.73 $\pm$ 0.02 (6) <sup>a</sup>                                        |
| N-15                          | A%    | ---             | 0.367 (1)            | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Na                            | ppm   | 82 $\pm$ 6      | 88 $\pm$ 14 (37)     | 86     | 40 - 524     | ---                 | ---                           | 87 $\pm$ 12 (26)               | 190 $\pm$ 170 (8)    | 84 $\pm$ 4 (3) <sup>a</sup> | ---                 | ---                                                                     |
| Nb                            | ppb   | ---             | < 300 (1)            | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Nd                            | ppb   | ---             | 460 $\pm$ 130 (3)    | ---    | 320 - 570    | ---                 | ---                           | 490 $\pm$ 140 (3) <sup>a</sup> | ---                  | ---                         | ---                 | ---                                                                     |
| Ni                            | ppm   | 1.3 $\pm$ 0.2   | 1.3 $\pm$ 0.2 (42)   | 1.31   | 0.7 - 4.3    | 1.6 $\pm$ 0.9 (10)  | 1.5 $\pm$ 0.4 (6)             | 1.4 $\pm$ 0.3 (10)             | ---                  | 1.4 $\pm$ 0.1 (3)           | 1.3 $\pm$ 0.1 (5)   | 1.3 $\pm$ 0.1 (3) COLOR 1.4 (3) POL 2.1 $\pm$ 1.2 (3) CPXRF             |
| P                             | ppm   | 2100 $\pm$ 100  | 2030 $\pm$ 140 (40)  | 2000   | 1400 - 3100  | 2040 $\pm$ 90 (6)   | 1980 $\pm$ 100 (10)           | 2050 $\pm$ 50 (5)              | 1900 $\pm$ 300 (10)  | ---                         | ---                 | 1900 $\pm$ 100 (3) COLOR 2120 $\pm$ 30 (4) NM                           |
| Pb                            | ppm   | 45 $\pm$ 3      | 45 $\pm$ 3 (84)      | 45     | 15 - 115     | 45 $\pm$ 3 (41)     | 44 $\pm$ 2 (9)                | 43 $\pm$ 2 (5)                 | ---                  | 46 $\pm$ 4 (5)              | 46 $\pm$ 4 (10)     | 46 $\pm$ 1 (4) ASV 44 $\pm$ 1 (6) POL                                   |
| Pd                            | ppb   | ---             | < 1 (1)              | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Pr                            | ppb   | ---             | 130 $\pm$ 90 (3)     | ---    | 60 - 230     | ---                 | ---                           | 190 $\pm$ 70 (3) <sup>a</sup>  | ---                  | ---                         | ---                 | ---                                                                     |
| Pl                            | ppb   | ---             | 650 (2)              | ---    | 89 - 1200    | ---                 | ---                           | 11.2 $\pm$ 0.8 (33)            | ---                  | 12.7 $\pm$ 0.3 (3)          | 11.0 $\pm$ 0.6 (10) | 12 $\pm$ 2 (4) CPXRF                                                    |
| Rb                            | ppm   | 12 $\pm$ 1      | 11.2 $\pm$ 0.9 (40)  | 11.28  | 5.0 - 30     | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| S                             | ppm   | 1900            | 2100 $\pm$ 300 (14)  | 2140   | 1400 - 7020  | ---                 | ---                           | ---                            | ---                  | ---                         | 2200 $\pm$ 300 (5)  | ---                                                                     |
| Sb                            | ppm   | 2.9 $\pm$ 0.3   | 2.9 $\pm$ 0.2 (54)   | 2.87   | 1.1 - 5.1    | 2.9 $\pm$ 0.4 (11)  | 2.6 $\pm$ 0.3 (3)             | 2.9 $\pm$ 0.3 (4)              | ---                  | 3.3 $\pm$ 0.2 (4)           | ---                 | ---                                                                     |
| Sc                            | ppb   | ---             | 61 $\pm$ 14 (22)     | 65     | 40 - 220     | ---                 | ---                           | 62 $\pm$ 14 (21)               | ---                  | ---                         | ---                 | ---                                                                     |
| Se                            | ppb   | 80 $\pm$ 10     | 81 $\pm$ 11 (76)     | 80     | 24 - 1100    | 79 $\pm$ 25 (17)    | ---                           | 84 $\pm$ 14 (43)               | ---                  | ---                         | ---                 | 84 $\pm$ 5 (9) FLUOR 77 $\pm$ 1 (3) QC <sup>a</sup>                     |
| Si                            | ppm   | ---             | 550 $\pm$ 110 (6)    | 550    | 476 - 2340   | ---                 | ---                           | 640 $\pm$ 230 (5)              | ---                  | ---                         | ---                 | ---                                                                     |
| Sm                            | ppb   | ---             | 113 $\pm$ 20 (16)    | 102    | 16 - 320     | ---                 | ---                           | 112 $\pm$ 18 (14)              | ---                  | ---                         | ---                 | ---                                                                     |
| Sn                            | ppb   | ---             | 300 $\pm$ 70 (6)     | 304    | 180 - 4100   | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Sr                            | ppm   | 37 $\pm$ 1      | 37 $\pm$ 4 (39)      | 36.5   | 14.5 - 118   | ---                 | 36 $\pm$ 1 (5)                | 38 $\pm$ 4 (13)                | 34 $\pm$ 11 (3)      | 34 $\pm$ 4 (4)              | 36 $\pm$ 3 (9)      | 35 $\pm$ 3 (3) CPXRF                                                    |
| Ta                            | ppb   | ---             | 8 $\pm$ 2 (4)        | ---    | ---          | ---                 | ---                           | 8 $\pm$ 2 (4)                  | ---                  | ---                         | ---                 | ---                                                                     |
| Tb                            | ppb   | ---             | 14 $\pm$ 3 (6)       | 13     | 1.23 - 80    | ---                 | ---                           | 13 $\pm$ 3 (7)                 | ---                  | ---                         | ---                 | ---                                                                     |
| Tc                            | ppb   | 10              | 11 (1)               | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Th                            | ppb   | 64 $\pm$ 6      | 55 $\pm$ 8 (9)       | 56     | 6.6 - 90     | ---                 | ---                           | 55 $\pm$ 8 (9)                 | ---                  | ---                         | ---                 | ---                                                                     |
| Ti                            | ppm   | ---             | 24 $\pm$ 9 (7)       | 26     | 2.4 - 191    | ---                 | ---                           | 70 $\pm$ 70 (5)                | ---                  | ---                         | ---                 | ---                                                                     |
| Tl                            | ppb   | ---             | 190 $\pm$ 110 (3)    | ---    | 74 - 300     | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Tm                            | ppb   | ---             | 7 (2)                | ---    | 3.7 - 10     | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| U                             | ppb   | 29 $\pm$ 5      | 29 $\pm$ 2 (17)      | 29     | 18 - 56      | ---                 | ---                           | 28 $\pm$ 4 (13)                | ---                  | 28 $\pm$ 3 (3) <sup>b</sup> | ---                 | 30 (1) IDMS                                                             |
| V                             | ppb   | ---             | 510 $\pm$ 110 (34)   | 530    | 140 - 2200   | ---                 | ---                           | 520 $\pm$ 120 (28)             | ---                  | ---                         | ---                 | ---                                                                     |
| W                             | ppb   | ---             | 18 (2)               | ---    | 16 - 20      | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Y                             | ppb   | ---             | 480 (1)              | ---    | ---          | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |
| Yb                            | ppb   | ---             | 25 $\pm$ 9 (7)       | 25     | 11 - 40      | ---                 | ---                           | 26 $\pm$ 9 (7)                 | ---                  | ---                         | ---                 | ---                                                                     |
| Zn                            | ppm   | 25 $\pm$ 3      | 25.7 $\pm$ 2.4 (135) | 25.9   | 12 - 81      | 26 $\pm$ 2 (32)     | 25 $\pm$ 2 (16)               | 26 $\pm$ 2 (42)                | 26 $\pm$ 7 (12)      | 28 $\pm$ 4 (7)              | 25 $\pm$ 7 (17)     | 30 $\pm$ 16 (5) CPXRF                                                   |
| Zr                            | ppm   | ---             | 2.4 $\pm$ 1.0 (5)    | 2.6    | 1.3 - 210    | ---                 | ---                           | ---                            | ---                  | ---                         | ---                 | ---                                                                     |

TABLE 7  
ELEMENTAL CONCENTRATIONS IN NBS SEM 1573: TOMATO LEAVES

| Element  | Units | NBS<br>(1976)   | Literature           |        |             |                    |                                  | Individual $\bar{x} \pm s$ by Analytical Techniques |                    |                                |                                     |
|----------|-------|-----------------|----------------------|--------|-------------|--------------------|----------------------------------|-----------------------------------------------------|--------------------|--------------------------------|-------------------------------------|
|          |       |                 | $\bar{x} \pm s$ (n)  | Median | Range       | AA                 | ICPES                            | NAA                                                 | OES                | XRF                            | Others                              |
| As       | ppb   | ...             | 180 (1)              | ...    | ...         | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| Al       | ppm   | 1200            | 620 $\pm$ 60 (14)    | 390    | 182-1300    | ...                | 1170 (1)                         | 1720 $\pm$ 40 (3)                                   | 320 $\pm$ 100 (5)  | ...                            | ...                                 |
| Al       | ppb   | 270 $\pm$ 50    | 260 $\pm$ 30 (17)    | 260    | 118-330     | 260 $\pm$ 40 (12)  | ...                              | 250 $\pm$ 30 (5)                                    | ...                | ...                            | ...                                 |
| Al       | ppb   | ...             | 0.8 (1)              | ...    | ...         | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| B        | ppm   | 30              | 32 $\pm$ 4 (13)      | 32     | 25-42       | ...                | 25.5 (1)                         | 63 $\pm$ 6 (3)                                      | 33 $\pm$ 5 (11)    | ...                            | 34 (2) TCGS                         |
| Ba       | ppm   | ...             | 55 $\pm$ 9 (6)       | 57     | 40-69       | ...                | ...                              | ...                                                 | 51 $\pm$ 8 (5)     | ...                            | ...                                 |
| Br       | ppm   | 26              | 21 $\pm$ 2 (6)       | 21     | 19-54       | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| C        | %     | ...             | 37.8 (2)             | ...    | 37.67-37.92 | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| Ca       | %     | 3.00 $\pm$ 0.03 | 2.83 $\pm$ 0.31 (23) | 2.88   | 2.22-5.82   | ...                | 3.12 $\pm$ 0.17 (9) <sup>a</sup> | 2.8 $\pm$ 0.5 (5)                                   | 2.7 $\pm$ 0.3 (11) | 3.8 $\pm$ 1.8 (3) <sup>a</sup> | ...                                 |
| Cd       | ppm   | 3               | 2.5 $\pm$ 0.2 (20)   | 2.5    | 1.6-3.3     | 2.5 $\pm$ 0.3 (10) | 2.7 $\pm$ 0.4 (9) <sup>a</sup>   | 2.70 (1)                                            | ...                | 2.65 $\pm$ 0.13 (3) ASV        | ...                                 |
| Ce       | ppm   | 1.6             | 1.0 (1)              | ...    | ...         | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| Cl       | %     | ...             | 1.07 $\pm$ 0.03 (4)  | ...    | 1.04-1.10   | ...                | ...                              | 1.07 $\pm$ 0.03 (4)                                 | ...                | ...                            | ...                                 |
| Co       | ppb   | 600             | 550 $\pm$ 50 (8)     | 520    | 400-690     | 520 $\pm$ 30 (3)   | ...                              | 540 $\pm$ 10 (5)                                    | ...                | ...                            | ...                                 |
| Cr       | ppm   | 4.3 $\pm$ 0.5   | 3.8 $\pm$ 0.5 (11)   | 3.9    | 2.5-5.5     | 4.0 $\pm$ 0.5 (6)  | 4.0 $\pm$ 1.8 (3) <sup>a</sup>   | 3.8 $\pm$ 0.5 (5)                                   | ...                | ...                            | ...                                 |
| Cr       | ppb   | ...             | 12 $\pm$ 2 (13)      | 11     | 43-140      | ...                | ...                              | 73 $\pm$ 45 (4)                                     | ...                | ...                            | ...                                 |
| Cu       | ppm   | 11 $\pm$ 1      | 12 $\pm$ 2 (13)      | 11     | 3.0-25      | 11.9 $\pm$ 0.8 (7) | 9.7 $\pm$ 0.9 (9) <sup>a</sup>   | 11.6 $\pm$ 2.3 (5)                                  | 14 $\pm$ 3 (11)    | ...                            | ...                                 |
| Ba       | ppb   | 40              | 32 $\pm$ 2 (3)       | ...    | 15-55       | ...                | ...                              | 32 $\pm$ 21 (3)                                     | ...                | ...                            | ...                                 |
| F        | ppm   | ...             | 5.6 $\pm$ 0.5 (2)    | ...    | 5.0-6.0     | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| Fe       | ppm   | 690 $\pm$ 25    | 550 $\pm$ 140 (31)   | 572    | 35-1170     | 490 $\pm$ 190 (5)  | 620 $\pm$ 60 (6)                 | 640 $\pm$ 100 (7)                                   | 340 $\pm$ 150 (11) | 880 $\pm$ 280 (3) <sup>a</sup> | 992 $\pm$ 15 (3) <sup>b</sup> COLOR |
| Fe (II)  | ppm   | ...             | 540 (1)              | ...    | ...         | ...                | ...                              | ...                                                 | ...                | ...                            | 698 (1) VOLT                        |
| Fe (III) | ppm   | ...             | 158 (1)              | ...    | ...         | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| Ga       | ppb   | ...             | 69 (1)               | ...    | ...         | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| H        | %     | ...             | 5.08 $\pm$ 0.07 (3)  | ...    | 5.0-5.14    | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| Hg       | ppb   | 100             | 103 $\pm$ 22 (3)     | ...    | 90-128      | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |
| I        | ppb   | ...             | 320 $\pm$ 60 (3)     | ...    | 280-390     | ...                | ...                              | ...                                                 | ...                | ...                            | ...                                 |

<sup>a</sup>Only two analysis reporting.  
<sup>b</sup>Only one analysis reporting.

TABLE 7 (cont)

| Element | Units | NBS<br>(1976)   | Literature           |        |           |                                 |                                  |                     |                     | Individual $\bar{x} \pm s$ by Analytical Techniques |        |     |     |
|---------|-------|-----------------|----------------------|--------|-----------|---------------------------------|----------------------------------|---------------------|---------------------|-----------------------------------------------------|--------|-----|-----|
|         |       |                 | $\bar{x} \pm s(n)$   | Median | Range     | AA                              | ICPES                            | NAA                 | GES                 | XRF                                                 | Others |     |     |
| In      | ppb   | ...             | 0.96 (1)             | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| K       | %     | 4.46 $\pm$ 0.03 | 4.38 $\pm$ 0.26 (24) | 4.47   | 3.00-9.24 | 4.35 $\pm$ 0.28 (4)             | 4.44 $\pm$ 0.11 (5) <sup>a</sup> | 4.38 $\pm$ 0.15 (4) | 4.3 $\pm$ 0.4 (10)  | 6.4 $\pm$ 2.5 (3) <sup>a</sup>                      | ...    | ... | ... |
| La      | ppb   | 900             | 640 $\pm$ 210 (4)    | ...    | 346-800   | ...                             | ...                              | 640 $\pm$ 210 (4)   | ...                 | ...                                                 | ...    | ... | ... |
| Li      | ppb   | ...             | 12 (1)               | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Mg      | ppm   | 7000            | 6800 $\pm$ 1400 (19) | 6900   | 6000-7800 | 5700 (3) <sup>b</sup>           | 6700 $\pm$ 400 <sup>a</sup>      | 6650 (2)            | 7000 $\pm$ 500 (11) | ...                                                 | ...    | ... | ... |
| Mn      | ppm   | 238 $\pm$ 7     | 218 $\pm$ 16 (27)    | 221    | 138-414   | 217 $\pm$ 4 (5)                 | 225 $\pm$ 7 (6)                  | 225 $\pm$ 25 (6)    | 215 $\pm$ 22 (10)   | 300 $\pm$ 100 (3) <sup>a</sup>                      | ...    | ... | ... |
| Mo      | ppb   | ...             | 530 $\pm$ 90 (6)     | 1700   | 400-17900 | ...                             | 480 $\pm$ 20 (1) <sup>b</sup>    | 635 (2)             | 9000 $\pm$ 6000 (6) | ...                                                 | ...    | ... | ... |
| N       | %     | 5.0             | 4.93 $\pm$ 0.03 (3)  | ...    | 4.80-4.95 | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Na      | ppm   | ...             | 580 $\pm$ 170 (14)   | 570    | 350-1600  | ...                             | ...                              | 490 $\pm$ 30 (4)    | 640 $\pm$ 210 (8)   | ...                                                 | ...    | ... | ... |
| Nd      | ppb   | ...             | 700 (1)              | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Ni      | ppm   | ...             | 1.17 $\pm$ 0.08 (5)  | 1.12   | 0.3-5.9   | ...                             | 2 $\pm$ 2 (5) <sup>a</sup>       | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| P       | ppm   | 3400 $\pm$ 200  | 3400 $\pm$ 200 (21)  | 3400   | 2400-5000 | 3350 $\pm$ 130 (4) <sup>a</sup> | 3470 $\pm$ 120 (7)               | 3420 (1)            | 3200 $\pm$ 400 (10) | ...                                                 | ...    | ... | ... |
| Pb      | ppm   | 6.3 $\pm$ 0.3   | 5.8 $\pm$ 0.7 (30)   | 5.85   | 3.2-15    | 5.9 $\pm$ 0.4 (21)              | 5.9 $\pm$ 2.1 (3) <sup>a</sup>   | ...                 | ...                 | 5.5 $\pm$ 1.1 (4) ASV                               | ...    | ... | ... |
| Pr      | ppb   | ...             | 190 (1)              | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Rb      | ppm   | 16.5 $\pm$ 0.1  | 17 $\pm$ 3 (5)       | 16.4   | 15.2-40   | ...                             | ...                              | 17 $\pm$ 3 (5)      | ...                 | ...                                                 | ...    | ... | ... |
| Sb      | ppb   | ...             | 34 $\pm$ 5 (4)       | 34     | 30-120    | ...                             | ...                              | 55 $\pm$ 44 (4)     | ...                 | ...                                                 | ...    | ... | ... |
| Sc      | ppb   | 130             | 180 $\pm$ 30 (5)     | 170    | 138-220   | ...                             | ...                              | 180 $\pm$ 30 (5)    | ...                 | ...                                                 | ...    | ... | ... |
| Se      | ppb   | ...             | 60 $\pm$ 14 (5)      | 57     | 49-84     | ...                             | ...                              | 61 $\pm$ 20 (3)     | ...                 | ...                                                 | ...    | ... | ... |
| Sm      | ppb   | ...             | 155 (2)              | ...    | 110-200   | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Sr      | ppm   | 44.9 $\pm$ 0.3  | 46 $\pm$ 12 (6)      | 45     | 36-102    | ...                             | ...                              | 55 (2)              | 43 $\pm$ 9 (3)      | ...                                                 | ...    | ... | ... |
| Ta      | ppb   | ...             | 430 (1)              | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Tb      | ppb   | ...             | 4 (1)                | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Th      | ppm   | 170 $\pm$ 30    | 205 (2)              | ...    | 190-220   | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Ti      | ppm   | 50              | 68 (1)               | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Tl      | ppm   | ...             | ...                  | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| U       | ppb   | 61 $\pm$ 3      | 56 $\pm$ 6 (3)       | 54     | 20-63     | ...                             | ...                              | 47 $\pm$ 19 (4)     | ...                 | ...                                                 | ...    | ... | ... |
| V       | ppm   | ...             | 1.30 $\pm$ 0.10 (4)  | ...    | 1.19-1.42 | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| W       | ppb   | ...             | <40 (1)              | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Yb      | ppb   | ...             | 80 (1)               | ...    | ...       | ...                             | ...                              | ...                 | ...                 | ...                                                 | ...    | ... | ... |
| Zn      | ppm   | 62 $\pm$ 6      | 61 $\pm$ 5 (30)      | 62     | 26-124    | 63 $\pm$ 3 (6)                  | 59 $\pm$ 4 (9) <sup>a</sup>      | 59 $\pm$ 4 (4)      | 62 $\pm$ 11 (10)    | 91 $\pm$ 28 (3) <sup>a</sup>                        | ...    | ... | ... |

TABLE 8  
ELEMENTAL CONCENTRATIONS IN NBS SRM 1575: PINE NEEDLES

| Element | Units | NBS<br>(1976) | Literature          |        |              |                            |                             |                |                 |                                 |
|---------|-------|---------------|---------------------|--------|--------------|----------------------------|-----------------------------|----------------|-----------------|---------------------------------|
|         |       |               | $\bar{x} \pm s$ (n) | Median | Range        | AA                         | ICPES                       | NAA            | OES             | Others                          |
| Ag      | ppb   | —             | 150 (1)             | —      | —            | —                          | —                           | —              | —               | —                               |
| Al      | ppm   | 545 ± 30      | 520 ± 70 (11)       | 521    | 255 - 1243   | —                          | —                           | 640 ± 100 (3)  | 420 ± 100 (8)   | —                               |
| As      | ppb   | 210 ± 40      | 200 ± 30 (15)       | 200    | 150 - 240    | 200 ± 30 (8)               | —                           | 200 ± 30 (6)   | —               | —                               |
| Au      | ppb   | —             | 0.6 (2)             | —      | 0.3 - 0.9    | —                          | —                           | —              | —               | —                               |
| B       | ppm   | —             | 17 ± 3 (14)         | 16.6   | 13 - 20      | —                          | —                           | —              | 17 ± 3 (10)     | 16.6 (2) TCGS                   |
| Ba      | ppm   | —             | 6.2 ± 1.7 (6)       | 6.6    | 3 - 8        | —                          | —                           | 6.1 (1)        | 6.2 ± 1.9 (5)   | —                               |
| Br      | ppm   | 9             | 6.6 ± 0.8 (8)       | 6.43   | 5.4 - 30     | —                          | —                           | 6.8 ± 0.7 (7)  | —               | —                               |
| C       | %     | —             | 51.4 ± 1.8 (4)      | —      | 50.37 - 54.0 | —                          | —                           | —              | —               | 50.49 ± 0.18 (3) <sup>a</sup>   |
| Ca      | ppm   | 4100 ± 200    | 4200 ± 400 (18)     | 4100   | 3100 - 13100 | —                          | 4100 ± 100 (5) <sup>a</sup> | 4000 ± 800 (3) | 4200 ± 600 (10) | —                               |
| Cd      | ppb   | <500          | 220 ± 60 (13)       | 210    | 140 - 310    | 250 ± 50 (6)               | 210 ± 70 (5) <sup>a</sup>   | 193. (2)       | —               | —                               |
| Ce      | ppb   | 400           | 150 (1)             | —      | —            | —                          | —                           | —              | —               | —                               |
| Cl      | ppm   | —             | 400 ± 160 (4)       | —      | 243 - 551    | —                          | —                           | 360 ± 170 (3)  | —               | —                               |
| Co      | ppb   | 100           | 121 ± 13 (4)        | 130    | 110 - 340    | —                          | —                           | 180 ± 110 (4)  | —               | —                               |
| Cr      | ppm   | 2.6 ± 0.2     | 2.6 ± 0.3 (9)       | 2.6    | 1.3 - 3.9    | 2.4 ± 0.3 (4) <sup>b</sup> | 2.5 ± 0.8 (4)               | 3.0 ± 0.8 (3)  | —               | —                               |
| Cs      | ppb   | —             | 120 ± 27 (4)        | —      | 101 - 160    | —                          | —                           | 120 ± 27 (4)   | —               | —                               |
| Cu      | ppm   | 3.0 ± 0.3     | 3.3 ± 0.8 (26)      | 3.2    | 0.7 - 53     | 3.3 ± 0.2 (6)              | 3.0 ± 0.6 (6)               | —              | 5.4 ± 2.8 (10)  | 2.91 ± 0.02 (3) COLOR           |
| Eu      | ppb   | 6             | 6.2 (2)             | —      | 6.0 - 6.5    | —                          | —                           | —              | —               | —                               |
| F       | ppm   | —             | 3.0 ± 0.6 (3)       | —      | 2.5 - 3.7    | —                          | —                           | —              | —               | —                               |
| Fe      | ppm   | 200 ± 10      | 180 ± 27 (25)       | 185    | 47 - 790     | 320 ± 240 (3) <sup>a</sup> | 189 ± 11 (7)                | 200 ± 40 (5)   | 160 ± 70 (10)   | 181 ± 12 (3) <sup>b</sup> COLOR |
| H       | %     | —             | 6.48 ± 0.08 (3)     | —      | 6.39 - 6.54  | —                          | —                           | —              | —               | —                               |
| Hf      | ppb   | —             | 10 (1)              | —      | —            | —                          | —                           | —              | —               | —                               |
| Hg      | ppb   | 150 ± 50      | 144 ± 16 (5)        | 147    | 121 - 160    | 146 ± 12 (3)               | —                           | 141 (2)        | —               | —                               |
| I       | ppb   | —             | 145 (2)             | —      | 140 - 150    | —                          | —                           | —              | —               | —                               |
| K       | ppm   | 3700 ± 200    | 3600 ± 300 (15)     | 3700   | 2700 - 9100  | —                          | 3600 ± 200 (3)              | 3800 ± 200 (3) | 4400 ± 1200 (9) | —                               |
| La      | ppb   | 200           | 160 ± 40 (3)        | —      | 130 - 210    | —                          | —                           | 160 ± 40 (3)   | —               | —                               |
| Lu      | ppb   | —             | 1.3 (1)             | —      | —            | —                          | —                           | —              | —               | —                               |
| Mg      | ppm   | —             | 1250 ± 170 (16)     | 1200   | 900 - 2200   | —                          | 1170 ± 40 (5) <sup>a</sup>  | 1350 (2)       | 1300 ± 200 (10) | —                               |

<sup>a</sup>Only two analysts reporting.

<sup>b</sup>Only one analyst reporting.

TABLE 8 (cont)

| Element | Units | NBS<br>(1976) | Literature          |        |             |                |                             |                | Individual Means by Analytical Technique |              |  |  |
|---------|-------|---------------|---------------------|--------|-------------|----------------|-----------------------------|----------------|------------------------------------------|--------------|--|--|
|         |       |               | $\bar{x} \pm s$ (n) | Median | Range       | AA             | ICPES                       | NAA            | OES                                      | Others       |  |  |
| Mn      | ppm   | 675 ± 15      | 668 ± 38 (19)       | 669    | 430 - 2200  | 680 ± 7 (6)    | 657 ± 7 (6)                 | 682 ± 20 (3)   | 610 ± 140 (9)                            | ---          |  |  |
| Mo      | ppb   | ---           | 0.8 ± 0.9 (8)       | 800    | 100 - 18500 | ---            | 160 ± 50 (4)                | 100 (1)        | 5600 ± 7300 (5)                          | ---          |  |  |
| N       | %     | 1.2           | 1.20 ± 0.10 (3)     | ---    | 1.11 - 1.30 | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Na      | ppm   | ---           | 55 ± 32 (10)        | 70     | 18 - 190    | ---            | ---                         | 46 ± 23 (3)    | 59 ± 36 (7)                              | ---          |  |  |
| Nd      | ppb   | ---           | 200 (1)             | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Ni      | ppm   | 3.5           | 2.3 ± 0.2 (9)       | 2.34   | 2.1 - 4.0   | ---            | 2.24 ± 0.12 <sup>5a</sup>   | 2.25 (2)       | ---                                      | ---          |  |  |
| P       | ppm   | 1200 ± 200    | 1220 ± 150 (17)     | 1190   | 1000 - 2100 | ---            | 1180 ± 50 (7)               | ---            | 1350 ± 250 (9)                           | ---          |  |  |
| Pb      | ppm   | 10.8 ± 0.5    | 10.7 ± 0.5 (19)     | 11     | 7.4 - 33    | 10.8 ± 0.4 (4) | 10.1 ± 0.8 (3) <sup>a</sup> | ---            | ---                                      | 10.7 (2) ASV |  |  |
| Pd      | ppb   | ---           | <2 (1)              | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Pr      | ppb   | ---           | <70 (1)             | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Rb      | ppm   | 11.7 ± 0.1    | 12.2 ± 0.9 (4)      | ---    | 11 - 35     | ---            | ---                         | 11.9 ± 0.8 (3) | ---                                      | ---          |  |  |
| S       | ppm   | ---           | 1040 (2)            | ---    | 580 - 1500  | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Sb      | ppb   | 200           | 195 ± 16 (8)        | 190    | 180 - 1140  | 184 (2)        | ---                         | 199 ± 17 (6)   | ---                                      | ---          |  |  |
| Sc      | ppb   | 30            | 41 ± 13 (3)         | ---    | 27 - 130    | ---            | ---                         | 63 ± 46 (4)    | ---                                      | ---          |  |  |
| Se      | ppb   | ---           | 47 ± 5 (5)          | 47     | 43 - 96     | ---            | ---                         | 61 ± 24 (4)    | ---                                      | ---          |  |  |
| Si      | ppm   | ---           | 248 (1)             | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Sm      | ppb   | ---           | 75 (2)              | ---    | 20 - 130    | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Sr      | ppm   | 4.8 ± 0.2     | 6 ± 2 (5)           | 5.2    | 4.7 - 20    | ---            | ---                         | ---            | 12 ± 8 (3)                               | ---          |  |  |
| Ta      | ppm   | ---           | 1.74 (1)            | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Tb      | ppb   | ---           | 60 (1)              | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Th      | ppb   | 37 ± 3        | 34 (2)              | ---    | 34 - 35     | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Tl      | ppb   | 50            | ---                 | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| U       | ppb   | 20 ± 4        | 15 ± 2 (4)          | 15     | 13 - 20     | ---            | ---                         | 15 ± 2 (4)     | ---                                      | ---          |  |  |
| V       | ppb   | ---           | 400 ± 50 (4)        | ---    | 346 - 470   | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| W       | ppb   | ---           | 50 (1)              | ---    | ---         | ---            | ---                         | ---            | ---                                      | ---          |  |  |
| Zn      | ppm   | ---           | 67 ± 9 (25)         | 66.5   | 5 - 141     | ---            | ---                         | 58 ± 6 (4)     | 74 ± 10 (10)                             | ---          |  |  |

TABLE 9

## ELEMENTAL CONCENTRATIONS IN NBS SRM 1577: BOVINE LIVER (OLDER)

| Element | Units | NBS<br>(1977) | $\bar{x} \pm s(n)$ | Median | Range        | Individual Means by Analytical Technique |               |                            |                            |                              |                               |
|---------|-------|---------------|--------------------|--------|--------------|------------------------------------------|---------------|----------------------------|----------------------------|------------------------------|-------------------------------|
|         |       |               |                    |        |              | Literature                               | AA            | CPXRF                      | ICPES                      | NAA                          | XRF                           |
| Ag      | ppb   | 60            | 51 ± 11 (11)       | 66     | 5 - 2000     |                                          | 66 (2)        |                            |                            | 64 ± 16 (9)                  | ...                           |
| Al      | ppm   | ...           | 17 ± 12 (14)       | 18     | 1.8 - 65     |                                          | ...           |                            | 6.8 ± 1.6 (4)              | 21 ± 15 (12)                 | ...                           |
| As      | ppb   | 55 ± 5        | 53 ± 40 (45)       | 55     | 23 - 600     |                                          | 47 ± 9 (11)   | 360 ± 210 (3) <sup>a</sup> | ...                        | 56 ± 8 (24)                  | 615 (2) ASV                   |
| Au      | ppb   | ...           | 4.9 ± 2.3 (4)      | 5.6    | 0.23 - 29    |                                          | ...           | ...                        | ...                        | 8 ± 11 (6)                   | ...                           |
| B       | ppm   | ...           | 2.9 ± 0.8 (4)      | ...    | 2.24 - 4.0   |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Ba      | ppm   | ...           | 1.0 ± 1.3 (5)      | ...    | 0.12 - 2.9   |                                          | ...           | ...                        | ...                        | 1.6 ± 1.4 (3)                | ...                           |
| Be      | ppb   | 17            | 8 ± 8 (3)          | ...    | 3 - 17       |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Br      | ppm   | ...           | 9.1 ± 1.2 (37)     | 9.0    | 4.3 - 22     |                                          | ...           | 8.7 ± 2.2 (8)              | ...                        | 9.2 ± 1.1 (25)               | 8.6 ± 0.8 (4)                 |
| C       | %     | ...           | 50.6 ± 1.1 (4)     | ...    | 49.6 - 52.0  |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Ca      | ppm   | 124 ± 6       | 117 ± 14 (39)      | 120    | 30 - 309     |                                          | 114 ± 12 (9)  | 118 ± 23 (6)               | 125 ± 8 (10)               | 116 ± 16 (12)                | ...                           |
| Cd      | ppb   | 270 ± 40      | 252 ± 20 (79)      | 288    | 210 - 560    |                                          | 280 ± 50 (42) | ...                        | 350 ± 50 (3) <sup>a</sup>  | 284 ± 18 (20)                | 270 ± 40 (5) ASV              |
| Ce      | ppb   | ...           | 24 ± 13 (5)        | 22     | 13 - 46      |                                          | ...           | ...                        | ...                        | 27 ± 13 (4)                  | ...                           |
| Cl      | ppm   | 2700          | 2690 ± 180 (27)    | 2640   | 1880 - 11663 |                                          | ...           | ...                        | ...                        | 2660 ± 128 (18)              | ...                           |
| Co      | ppb   | 180           | 250 ± 60 (61)      | 240    | 120 - 410    |                                          | 240 ± 40 (6)  | ...                        | 200 ± 190 (4) <sup>a</sup> | 230 ± 40 (40)                | ...                           |
| Cr      | ppb   | 88 ± 12       | 230 ± 370 (53)     | 150    | 5 - 61000    |                                          | 94 ± 50 (9)   | ...                        | ...                        | 140 ± 60 (27)                | ...                           |
| Cs      | ppb   | ...           | 14.8 ± 2.3 (12)    | 16     | 11 - 130     |                                          | ...           | ...                        | ...                        | 17 ± 7 (12)                  | ...                           |
| Cu      | ppm   | 193 ± 10      | 190 ± 10 (114)     | 190    | 93 - 394     |                                          | 189 ± 14 (34) | 197 ± 25 (13)              | 191 ± 9 (13)               | 188 ± 12 (38)                | 204 ± 13 (3) <sup>a</sup> ASV |
| Dy      | ppb   | ...           | 2.4 (1)            | ...    | ...          |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Er      | ppb   | ...           | 0.5 (1)            | ...    | ...          |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Eu      | ppb   | ...           | 0.28 ± 1.3 (4)     | ...    | 0.23 - 310   |                                          | ...           | ...                        | ...                        | 0.31 ± 0.07 (3) <sup>a</sup> | ...                           |
| F       | ppb   | ...           | 30 (2)             | ...    | 40 - 120     |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Fe      | ppm   | 268 ± 8       | 253 ± 16 (96)      | 265    | 110 - 1433   |                                          | 257 ± 22 (18) | 270 ± 16 (11)              | 260 ± 11 (17)              | 266 ± 19 (36)                | 262 ± 15 (4)                  |
| Ga      | ppb   | ...           | 590 (2)            | ...    | 4 - 1100     |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Gd      | ppb   | ...           | 2.1 (2)            | ...    | 1.8 - 24     |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| H       | %     | ...           | 6.77 ± 0.16 (3)    | ...    | 6.8 - 712    |                                          | ...           | ...                        | ...                        | ...                          | ...                           |
| Hf      | ppb   | ...           | 4 (2)              | ...    | 1.0 - 713    |                                          | ...           | ...                        | ...                        | ...                          | ...                           |

<sup>a</sup>Only two analysts reporting.<sup>b</sup>Only one analyst reporting.

TABLE 9 (cont)

| Element | Units | NBS<br>(1977) | $\bar{x} \pm t(n)$ | Median | Range       | Individual Means by Analytical Technique |                 |                           |                  |                 |                              |
|---------|-------|---------------|--------------------|--------|-------------|------------------------------------------|-----------------|---------------------------|------------------|-----------------|------------------------------|
|         |       |               |                    |        |             | AA                                       | CPXRF           | ETPS                      | NAA              | XRF             | Others                       |
| Hg      | ppb   | 15 ± 2        | 16.2 ± 1.5 (37)    | 16.1   | 137-200     | 16 ± 2 (16)                              | ---             | ---                       | 18 ± 7 (23)      | ---             | ---                          |
| Hg      | ppb   | ---           | 0.22 (2)           | ---    | 0.20-0.25   | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| I       | ppb   | 183           | 235 ± 32 (9)       | 346    | 180-200     | ---                                      | ---             | ---                       | 235 ± 32 (9)     | ---             | ---                          |
| In      | ppb   | 53            | 0.07 (2)           | ---    | 0.05-0.09   | ---                                      | ---             | ---                       | 0.08 ± 0.09 (23) | ---             | ---                          |
| K       | %     | ---           | 0.97 ± 0.06        | 0.964  | 0.95-1.18   | 0.993 ± 0.024 (4)                        | 0.93 ± 0.12 (8) | ---                       | 17 ± 4 (9)       | ---             | ---                          |
| La      | ppb   | ---           | 16 ± 3 (8)         | 17.2   | 10-72       | ---                                      | ---             | ---                       | 68 ± 5 (3)       | ---             | ---                          |
| Lu      | ppb   | ---           | 0.039 (2)          | ---    | 0.039       | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Mg      | ppm   | 604 ± 9       | 610 ± 40 (35)      | 601    | 289-1040    | 591 ± 16 (12)                            | ---             | 620 ± 50 (9)              | 670 ± 100 (11)   | ---             | ---                          |
| Min     | ppm   | 10.1 ± 1.0    | 10.1 ± 0.6 (96)    | 10.2   | 5.1-19      | 10.3 ± 0.6 (20)                          | 9.5 ± 1.1 (8)   | 9.9 ± 0.4 (11)            | 10.2 ± 0.5 (32)  | 12 ± 4 (5)      | ---                          |
| Mo      | ppm   | 1.4           | 3.2 ± 0.4 (45)     | 3.3    | 2.0-5.8     | 4.1 ± 1.5 (3)                            | 3.3 ± 0.6 (6)   | 3.1 ± 0.8 (4)             | 3.3 ± 0.3 (30)   | ---             | ---                          |
| N       | %     | 10.5 ± 0.6    | 10.5 ± 0.2 (5)     | 10.59  | 10.31-10.82 | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Ni      | ppm   | 2439 ± 150    | 2400 ± 200 (45)    | 2170   | 1011-3100   | 2430 ± 90 (4)                            | ---             | ---                       | 2320 ± 250 (27)  | ---             | ---                          |
| Nd      | ppb   | ---           | 16 ± 1 (3)         | ---    | 4-170       | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Ni      | ppb   | ---           | 160 ± 80 (3)       | 245    | 5-1300      | 320 ± 460 (4)                            | 870 ± 380 (3)   | ---                       | 370 ± 340 (6)    | ---             | ---                          |
| P       | %     | 1             | 1.07 ± 0.08 (12)   | 1.10   | 0.3-1.25    | ---                                      | ---             | 1.09 ± 0.10 (7)           | 1.0 ± 0.3 (4)    | ---             | ---                          |
| Pb      | ppb   | 340 ± 80      | 355 ± 52 (49)      | 360    | 246-63000   | 350 ± 60 (31)                            | ---             | 360 ± 50 (3) <sup>a</sup> | ---              | ---             | 331 (2) <sup>b</sup> IDMS    |
| Pr      | ppb   | ---           | 4.3 (2)            | ---    | 4.0-4.6     | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Rb      | ppm   | 18.1 ± 1.0    | 18.4 ± 1.0 (45)    | 18.7   | 9.1-29      | ---                                      | 17 ± 3 (9)      | ---                       | 18.3 ± 0.9 (32)  | 17.3 ± 1.6 (4)  | ---                          |
| S       | ppm   | ---           | 8000 ± 1300 (3)    | 7200   | 3300-16200  | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Sb      | ppb   | 5             | 10 ± 6 (19)        | 14     | 4.5-170     | 5 (1)                                    | ---             | ---                       | 9 ± 5 (16)       | ---             | ---                          |
| Se      | ppb   | ---           | 0.87 ± 0.29 (6)    | 1.0    | 0.4-20      | ---                                      | ---             | ---                       | 41 ± 18 (6)      | ---             | ---                          |
| Se      | ppm   | 1.1 ± 0.1     | 1.09 ± 0.08 (138)  | 1.1    | 0.21-13.4   | 1.04 ± 0.11 (33)                         | 1.12 ± 0.18 (5) | ---                       | 1.0 ± 0.2 (5)    | ---             | ---                          |
| Si      | ppm   | ---           | 0.30 (2)           | ---    | 0.30-0.31   | ---                                      | ---             | ---                       | 1.10 ± 0.07 (72) | 1.20 ± 0.17 (3) | 1.12 ± 0.07 (5) GC           |
| Si      | ppm   | 17            | 16.7 (2)           | ---    | 16.7-16.8   | ---                                      | ---             | ---                       | ---              | ---             | 1.08 ± 0.12 (7) FLUOR        |
| Sm      | ppb   | ---           | 1.5 ± 0.3 (5)      | 1.6    | 1.0-35      | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Sn      | ppb   | ---           | 84 ± 120 (2)       | ---    | 10-220      | ---                                      | ---             | ---                       | 1.7 ± 0.6 (6)    | ---             | ---                          |
| Sr      | ppm   | 140           | 190 ± 70 (4)       | 230    | 150-2200    | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Ta      | ppb   | ---           | 3 (1)              | ---    | ---         | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Tb      | ppb   | ---           | 0.8 ± 1.0 (3)      | ---    | 0.17-2.0    | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Te      | ppb   | ---           | 90 (1)             | ---    | ---         | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Th      | ppb   | ---           | 6.8 (1)            | ---    | ---         | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Ti      | ppm   | ---           | 1.9 ± 1.0 (4)      | ---    | 0.7-3.2     | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Tl      | ppb   | 50            | 48 (1)             | ---    | ---         | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Tm      | ppb   | ---           | 0.12 (2)           | ---    | 0.10-0.15   | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| U       | ppb   | 0.1           | 1.0 (2)            | ---    | 0.99-1.0    | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| V       | ppb   | ---           | 58 ± 8 (12)        | 61     | 15-600      | 55 (1)                                   | ---             | 250 ± 300 (3)             | 430 ± 100 (3)    | ---             | ---                          |
| W       | ppb   | ---           | 13 ± 10 (5)        | 14     | 5-700       | ---                                      | ---             | ---                       | 62 ± 3 (7)       | ---             | ---                          |
| Y       | ppm   | ---           | < 0.1 (1)          | ---    | ---         | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Yb      | ppb   | ---           | 0.35 ± 0.11 (3)    | ---    | 0.38-830    | ---                                      | ---             | ---                       | ---              | ---             | ---                          |
| Zn      | ppm   | 130 ± 13      | 130 ± 7 (145)      | 129    | 13-200      | 129 ± 7 (100)                            | 134 ± 16 (13)   | 132 ± 6 (15)              | 130 ± 6 (57)     | 127 ± 11 (5)    | 94 ± 55 (3) <sup>a</sup> ASV |
| Zr      | ppm   | ---           | 3.7 (2)            | ---    | 3.4-4.0     | ---                                      | ---             | ---                       | ---              | ---             | 120 ± 3 (3) <sup>b</sup> POL |

TABLE 10  
ELEMENTAL CONCENTRATIONS IN NBS SRMs 610-616: TRACE ELEMENTS IN GLASS

| Element | Units | 610           |                                   | 612           |                                   | 614           |                                   | 616           |                                   |
|---------|-------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|
|         |       | NBS<br>(1972) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1972) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982) | Literature<br>$\bar{x} \pm s$ (n) |
| Ag      | ppm   | 254 ± 10      | 180 (1)                           | 22.0 ± 0.3    | 31 (1)                            | 0.42 ± 0.04   | 0.52 (2)                          | ---           | ---                               |
| Al      | %     | 1.05          | ---                               | 1.05          | ---                               | 1.05          | ---                               | 1.05          | ---                               |
| As      | ppm   | ---           | 305 (1)                           | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Au      | ppm   | 25            | 20 (1)                            | 5             | 5 (1)                             | 0.5           | 0.64 (2)                          | 0.18 ± 0.01   | ---                               |
| B       | ppm   | 351           | 368 (1)                           | 32            | 40 (1)                            | 1.3 ± 0.2     | ---                               | 0.20 ± 0.02   | ---                               |
| Ba      | ppm   | ---           | 638 (1)                           | 41            | ---                               | ---           | ---                               | ---           | ---                               |
| Be      | ppm   | ---           | 450 (1)                           | ---           | 31 (1)                            | ---           | ---                               | ---           | ---                               |
| Bi      | ppm   | ---           | 405 (1)                           | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Ca      | %     | 8.6           | 7.64 (1)                          | 8.6           | ---                               | 8.6           | ---                               | 8.6           | ---                               |
| Cd      | ppm   | ---           | 187 (1)                           | ---           | ---                               | 0.55          | ---                               | ---           | ---                               |
| Ce      | ppm   | ---           | 318 (1)                           | 39            | 37 (1)                            | ---           | ---                               | ---           | ---                               |
| Co      | ppm   | 390           | 260 (2)                           | 35.5 ± 1.2    | 31 (1)                            | 0.73 ± 0.02   | 0.59 (1)                          | ---           | ---                               |
| Cr      | ppm   | ---           | 371 (1)                           | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Cu      | ppm   | 444 ± 4       | ---                               | 37.7 ± 0.9    | ---                               | 1.37 ± 0.07   | 1.61 (1)                          | 0.80 ± 0.09   | ---                               |
| Dy      | ppm   | ---           | ---                               | 35            | ---                               | ---           | ---                               | ---           | ---                               |
| Er      | ppm   | ---           | ---                               | 39            | ---                               | ---           | ---                               | ---           | ---                               |
| Eu      | ppm   | ---           | ---                               | 36            | 26 (1)                            | 0.99 ± 0.04   | 1.10 (1)                          | ---           | ---                               |
| Fe      | ppm   | 458 ± 9       | ---                               | 51 ± 2        | ---                               | 13.3 ± 1.0    | ---                               | 11 ± 2        | ---                               |
| Ga      | ppm   | ---           | 481 (1)                           | ---           | ---                               | 1.3           | ---                               | 0.23 ± 0.02   | ---                               |
| Gd      | ppm   | ---           | ---                               | 39            | ---                               | ---           | ---                               | ---           | ---                               |
| Ge      | ppm   | ---           | 496 (1)                           | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Hf      | ppm   | ---           | 220 (1)                           | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| In      | ppm   | ---           | 319 (1)                           | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| K       | ppm   | 461           | ---                               | 64            | ---                               | ---           | ---                               | ---           | ---                               |
| La      | ppm   | ---           | ---                               | 36            | 35 (1)                            | 30 ± 1        | ---                               | 29 ± 1        | ---                               |
| Li      | ppm   | ---           | 354 (1)                           | ---           | 44 (1)                            | 0.83 ± 0.02   | ---                               | 0.034 ± 0.007 | ---                               |
| Mg      | ppm   | ---           | 472 (1)                           | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Mn      | ppm   | 485 ± 10      | 391 (1)                           | 39.6 ± 0.8    | ---                               | ---           | ---                               | ---           | ---                               |

TABLE 10 (cont)

| Element  | Units | 610                 |                                   | 612                 |                                   | 614                 |                                   | 616                 |                                   |
|----------|-------|---------------------|-----------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|
|          |       | NBS<br>(1972)       | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1972)       | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982)       | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982)       | Literature<br>$\bar{x} \pm s$ (n) |
| Mo       | ppm   | ---                 | 307 (1)                           | ---                 | ---                               | ---                 | ---                               | ---                 | ---                               |
| Na       | %     | 10.4                | ---                               | 10.4                | ---                               | 10.4                | ---                               | 10.4                | ---                               |
| Nd       | ppm   | ---                 | ---                               | 36                  | ---                               | ---                 | ---                               | ---                 | ---                               |
| Ni       | ppm   | 458.7 $\pm$ 4.0     | 431 (1)                           | 38.8 $\pm$ 0.2      | ---                               | 0.35                | ---                               | ---                 | ---                               |
| Pb       | ppm   | 426 $\pm$ 1         | 392 (1)                           | 38.57 $\pm$ 0.2     | 38.56 (1)                         | 2.32 $\pm$ 0.04     | ---                               | 1.85 $\pm$ 0.04     | ---                               |
| Rb       | ppm   | 425.7 $\pm$ 0.8     | ---                               | 31.4 $\pm$ 0.4      | ---                               | 0.855 $\pm$ 0.005   | ---                               | 0.100 $\pm$ 0.007   | ---                               |
| Sb       | ppm   | ---                 | 387 (1)                           | ---                 | ---                               | 1.06                | 1.10 (1)                          | 0.078 $\pm$ 0.007   | 0.012 (1)                         |
| Sc       | ppm   | ---                 | ---                               | ---                 | ---                               | 0.59 $\pm$ 0.04     | 0.68 (1)                          | 0.026 $\pm$ 0.012   | 0.020 (1)                         |
| Si       | %     | 34                  | ---                               | 34                  | ---                               | 34                  | ---                               | 34                  | ---                               |
| Sm       | ppm   | ---                 | ---                               | 39                  | ---                               | ---                 | ---                               | ---                 | ---                               |
| Sr       | ppm   | 515.5 $\pm$ 0.5     | ---                               | 78.4 $\pm$ 0.2      | ---                               | 45.8 $\pm$ 0.1      | ---                               | 41.72 $\pm$ 0.05    | ---                               |
| Sr-87/86 | ppm   | 0.7094 $\pm$ 0.0002 | ---                               | 0.7089 $\pm$ 0.0002 | ---                               | 0.7083 $\pm$ 0.0002 | ---                               | 0.7080 $\pm$ 0.0002 | ---                               |
| Ta       | ppm   | ---                 | 206 (1)                           | ---                 | ---                               | ---                 | ---                               | ---                 | ---                               |
| Te       | ppm   | ---                 | 259 (1)                           | ---                 | ---                               | ---                 | ---                               | ---                 | ---                               |
| Th       | ppm   | 457.2 $\pm$ 1.2     | 469 (1)                           | 37.79 $\pm$ 0.08    | 31 (1)                            | 0.748 $\pm$ 0.006   | 0.58 (1)                          | 0.0252 $\pm$ 0.0007 | 0.018 (1)                         |
| Ti       | ppm   | 437                 | 361 (1)                           | 50.1 $\pm$ 0.8      | ---                               | 3.1 $\pm$ 0.3       | ---                               | 2.5 $\pm$ 0.7       | ---                               |
| Tl       | ppm   | 61.8 $\pm$ 2.5      | 52 (1)                            | 15.7 $\pm$ 0.3      | ---                               | 0.269 $\pm$ 0.005   | 0.29 (1)                          | 0.0082 $\pm$ 0.0005 | ---                               |
| U        | ppm   | 461.5 $\pm$ 1.1     | 450 $\pm$ 30 (4)                  | 37.38 $\pm$ 0.08    | 38 $\pm$ 2 (5)                    | 0.823 $\pm$ 0.002   | 0.74 (1)                          | 0.0721 $\pm$ 0.0013 | ---                               |
| U-235    | A%    | 0.2376              | 0.251 (1)                         | 0.2392              | 0.229 (1)                         | 0.2792              | ---                               | 0.616               | ---                               |
| V        | ppm   | ---                 | 206 (1)                           | ---                 | ---                               | ---                 | ---                               | ---                 | ---                               |
| Yb       | ppm   | ---                 | ---                               | 42                  | ---                               | ---                 | ---                               | ---                 | ---                               |
| Zn       | ppm   | 433                 | ---                               | ---                 | ---                               | ---                 | ---                               | ---                 | ---                               |

TABLE II  
ELEMENTAL CONCENTRATIONS IN NBS COAL STANDARD REFERENCE MATERIALS  
1630, 1632A, AND 1635

| Element                       | Units | 1630         |                     |     | 1632A           |                      |        | 1635            |                       |               |
|-------------------------------|-------|--------------|---------------------|-----|-----------------|----------------------|--------|-----------------|-----------------------|---------------|
|                               |       | NBS          | Literature          |     | NBS (1971)      | Literature           |        | NBS (1978)      | Literature            |               |
|                               |       |              | $\bar{x} \pm s$ (n) |     |                 | $\bar{x} \pm s$ (n)  | Median | Range           | $\bar{x} \pm s$ (n)   | Range         |
| Ag                            | ppb   | ---          | ---                 | --- | ---             | 300. (1)             | ---    | ---             | <38 (2)               | ---           |
| Al                            | %     | ---          | 0.53 (1)            | --- | 3.07            | 2.95 $\pm$ 0.08 (10) | ---    | 2.80 - 9.47     | 0.31 $\pm$ 0.02 (3)   | 0.30 - 0.34   |
| As                            | ppm   | ---          | 19 (1)              | --- | 9.3 $\pm$ 1.0   | 9.3 $\pm$ 0.4 (15)   | 9.3    | 6.4 - 11        | 0.35 $\pm$ 0.06 (5)   | 0.28 - 0.70   |
| Ash                           | %     | ---          | 2.2 (1)             | --- | ---             | 21.8 (2)             | ---    | 21.7 - 21.8     | 4.8 (1)               | ---           |
| Au                            | ppb   | ---          | ---                 | --- | ---             | 3. (1)               | ---    | ---             | ---                   | ---           |
| B                             | ppm   | ---          | 5 (1)               | --- | ---             | 53 $\pm$ 2 (5)       | 52.7   | 22 - 55         | 115 $\pm$ 17 (3)      | 104 - 135     |
| Ba                            | ppm   | ---          | ---                 | --- | ---             | 124 $\pm$ 16 (7)     | 122    | 100 - 150       | 73 $\pm$ 6 (5)        | 67 - 81       |
| Be                            | ppm   | ---          | 1 (1)               | --- | ---             | ---                  | ---    | ---             | ---                   | ---           |
| Bi                            | ppm   | ---          | ---                 | --- | ---             | ---                  | ---    | ---             | ---                   | ---           |
| Br                            | ppm   | ---          | 33 (2)              | --- | ---             | 42 $\pm$ 2 (9)       | 43     | 39.6 - 50       | <1 (1)                | ---           |
| C                             | %     | ---          | ---                 | --- | ---             | 66 $\pm$ 4 (3)       | ---    | 62.7 - 71       | 1.9 $\pm$ 0.8 (4)     | 1.1 - 3.0     |
| Ca                            | ppm   | ---          | 700 (1)             | --- | ---             | 2400 $\pm$ 200 (9)   | 2400   | 2100 - 46500    | 62.6 (2)              | 59 - 66.2     |
| Cd                            | ppb   | ---          | <200 (1)            | --- | 170 $\pm$ 20    | 190 $\pm$ 30 (3)     | ---    | ---             | 5500 $\pm$ 200 (3)    | 5400 - 5700   |
| Ce                            | ppm   | ---          | ---                 | --- | 30              | 29 $\pm$ 2 (9)       | 28.5   | 25.7 - 32       | 29 (1)                | ---           |
| Cl                            | ppm   | ---          | 2200 (1)            | --- | ---             | 760 $\pm$ 30 (8)     | 776    | 700 - 897       | 3.4 $\pm$ 0.1 (3)     | 3.3 - 8.0     |
| Co                            | ppm   | ---          | 4.8 (2)             | --- | 6.8             | 6.4 $\pm$ 0.3 (7)    | 6.55   | 5.86 - 7.5      | 29 $\pm$ 6 (3)        | 26 - 36       |
| Cr                            | ppm   | ---          | 7.6 (2)             | --- | 34.4 $\pm$ 1.5  | 34 $\pm$ 5 (9)       | 36     | 26 - 40         | 0.64 $\pm$ 0.06 (3)   | 0.59 - 0.70   |
| Cs                            | ppm   | ---          | ---                 | --- | 2.4             | 2.3 $\pm$ 0.2 (7)    | 2.4    | 1.9 - 2.5       | 2.38 $\pm$ 0.24 (5)   | 2.0 - 2.6     |
| Cu                            | ppm   | ---          | 16 (1)              | --- | 16.5 $\pm$ 1.0  | 16.5 $\pm$ 0.7 (4)   | ---    | 15.9 - 17.2     | 0.050 (2)             | 0.046 - 0.053 |
| Dy                            | ppm   | ---          | ---                 | --- | ---             | 2.1 $\pm$ 0.2 (6)    | 2.15   | 1.83 - 2.56     | 3.3 (2)               | 3.0 - 3.56    |
| Er                            | ppm   | ---          | ---                 | --- | ---             | 0.91 (1)             | ---    | ---             | 0.31 (1)              | ---           |
| Eu                            | ppb   | ---          | ---                 | --- | 340             | 527 $\pm$ 23 (7)     | 525    | 460 - 550       | <2 (1)                | ---           |
| F                             | ppm   | ---          | 25 (1)              | --- | ---             | 90 (2)               | ---    | 84 - 95         | 60 (2)                | 59 - 61       |
| Fe                            | %     | ---          | 0.78 (2)            | --- | 1.11 $\pm$ 0.02 | 1.12 $\pm$ 0.02 (10) | 1.12   | 1.07 - 6.78     | 20 (1)                | ---           |
| Ga                            | ppm   | ---          | 1.08 (2)            | --- | 8.49            | 7.9 $\pm$ 0.5 (5)    | 8.0    | 7.2 - 8.5       | 0.229 $\pm$ 0.006 (4) | 0.22 - 0.234  |
| Gd                            | ppm   | ---          | ---                 | --- | ---             | 2.4 $\pm$ 0.5 (5)    | 2.4    | 1.9 - 3.0       | 1.1 (1)               | ---           |
| Ge                            | ppm   | ---          | 1 (1)               | --- | ---             | 2.5 (1)              | ---    | ---             | 0.29 (2)              | 0.23 - 0.35   |
| H                             | %     | ---          | ---                 | --- | ---             | 3.85 $\pm$ 0.28 (3)  | ---    | 3.68 - 4.17     | 0.5 (1)               | ---           |
| H <sub>2</sub> O <sup>-</sup> | %     | ---          | 0.40 (1)            | --- | ---             | ---                  | ---    | ---             | 4.07 (2)              | 3.96 - 4.18   |
| H <sub>2</sub> O-T            | %     | ---          | ---                 | --- | ---             | 1.62 (1)             | ---    | ---             | ---                   | ---           |
| Hf                            | ppm   | ---          | ---                 | --- | 1.6             | 1.68 $\pm$ 0.19 (5)  | 1.70   | 1.44 - 1.90     | 14 (1)                | ---           |
| Hg                            | ppb   | 130 $\pm$ 10 | 126 $\pm$ 13 (19)   | --- | 130 $\pm$ 30    | 146 $\pm$ 33 (7)     | 134.1  | 118 - 210       | 0.27 $\pm$ 0.02 (3)   | 0.24 - 0.29   |
| Ho                            | ppm   | ---          | ---                 | --- | ---             | 380 (1)              | ---    | ---             | 20 (2)                | 5 - 35        |
| I                             | ppm   | ---          | ---                 | --- | ---             | 1.5 $\pm$ 0.5 (3)    | ---    | 0.9 - 1.3       | <1.5 (1)              | ---           |
| In                            | ppb   | ---          | ---                 | --- | ---             | 37 $\pm$ 2 (3)       | ---    | 36 - 40         | 5 (1)                 | ---           |
| K                             | ppm   | ---          | ---                 | --- | ---             | 4120 $\pm$ 150 (9)   | 4200   | 3700 - 14900    | 102 $\pm$ 16 (3)      | 90 - 120      |
| La                            | ppm   | ---          | 800 (1)             | --- | ---             | 15 $\pm$ 3 (8)       | 14.8   | 10.9 - 15       | 1.8 $\pm$ 0.4 (3)     | 1.38 - 2.1    |
| Li                            | ppm   | ---          | 4.4 (1)             | --- | ---             | 36 (1)               | ---    | ---             | ---                   | ---           |
| Lu                            | ppb   | ---          | ---                 | --- | ---             | 176 $\pm$ 30 (6)     | 180    | 134 - 220       | 32 (2)                | 27 - 36       |
| Mg                            | ppm   | ---          | 200 (1)             | --- | ---             | 1200 $\pm$ 200 (4)   | 1160   | 600 - 19900     | 970 (2)               | 940 - 1000    |
| Mn                            | ppm   | ---          | 6.0 (1)             | --- | 28 $\pm$ 2      | 30 $\pm$ 4 (10)      | 29     | 20 - 720        | 22 $\pm$ 2 (4)        | 19 - 24       |
| Mo                            | ppm   | ---          | 2 (1)               | --- | ---             | 2.0 (1)              | ---    | ---             | 0.27 (1)              | ---           |
| N                             | %     | ---          | ---                 | --- | ---             | 1.23 $\pm$ 0.04 (4)  | ---    | 1.19 $\pm$ 1.27 | 1.26 (2)              | 1.0 - 1.52    |

TABLE 11 (cont)

| Element | Units | 1630 |                     |       | 1632A           |                      |        | 1635            |                     |               |
|---------|-------|------|---------------------|-------|-----------------|----------------------|--------|-----------------|---------------------|---------------|
|         |       | NBS  | Literature          |       | NBS (1978)      | Literature           |        | NBS (1978)      | Literature          |               |
|         |       |      | $\bar{x} \pm s$ (n) | Range |                 | $\bar{x} \pm s$ (n)  | Median |                 | $\bar{x} \pm s$ (n) | Range         |
| Na      | ppm   | ---  | 405 (2)             | ---   | ---             | 830 $\pm$ 100 (11)   | 840    | ---             | 2400 $\pm$ 200 (5)  | 2200 - 2700   |
| Nb      | ppm   | ---  | ---                 | ---   | ---             | 4.0 (1)              | ---    | ---             | <1 (1)              | ---           |
| Nd      | ppm   | ---  | ---                 | ---   | ---             | 11.4 $\pm$ 1.3 (4)   | 11.8   | ---             | 1.4 (1)             | ---           |
| Ni      | ppm   | ---  | 10 (1)              | ---   | 19.4 $\pm$ 1.0  | 20 $\pm$ 2 (7)       | 19.9   | ---             | 2.2 $\pm$ 0.7 (3)   | 1.72 - 3.0    |
| O       | %     | ---  | ---                 | ---   | ---             | 18.8 $\pm$ 0.8 (3)   | ---    | ---             | 29.6 $\pm$ 7.7 (3)  | 20.79 - 34.99 |
| P       | ppm   | ---  | 17 (1)              | ---   | ---             | 260 $\pm$ 40 (4)     | 280    | ---             | 63 (1)              | ---           |
| Pb      | ppm   | ---  | 4 (1)               | ---   | 12.4 $\pm$ 0.6  | 11 $\pm$ 3 (5)       | 12.4   | ---             | 2.0 (2)             | 1.48 - 2.6    |
| Pb-210  | pCi/g | ---  | ---                 | ---   | ---             | 0.449 (1)            | ---    | ---             | 0.069 (1)           | ---           |
| Pr      | ppm   | ---  | ---                 | ---   | ---             | 3.2 (2)              | ---    | ---             | ---                 | ---           |
| Rb      | ppm   | ---  | ---                 | ---   | 31              | 29.0 $\pm$ 0.5 (8)   | 29     | ---             | 0.8 (2)             | 0.76 - 0.83   |
| S       | %     | ---  | ---                 | ---   | 1.58 $\pm$ 0.04 | 1.58 $\pm$ 0.06 (5)  | 1.59   | ---             | 0.32 (1)            | ---           |
| Sb      | ppm   | ---  | 1.15 (2)            | ---   | 0.58            | 0.60 $\pm$ 0.12 (7)  | 0.61   | ---             | 0.14 $\pm$ 0.02 (5) | 0.12 - 0.17   |
| Sc      | ppm   | ---  | 1.4 (1)             | ---   | 6.3             | 6.4 $\pm$ 0.3 (9)    | 6.3    | ---             | 0.71 $\pm$ 0.14 (4) | 0.56 - 0.90   |
| Se      | ppm   | ---  | 2.17 $\pm$ 0.21 (6) | ---   | 2.6 $\pm$ 0.7   | 2.6 $\pm$ 0.2 (7)    | 2.58   | ---             | 0.89 $\pm$ 0.08 (8) | 0.79 - 1.20   |
| Si      | %     | ---  | 0.72 (1)            | ---   | ---             | 6.01 $\pm$ 0.16 (5)  | 5.92   | ---             | 0.54 (2)            | 0.52 - 0.56   |
| Sm      | ppm   | ---  | ---                 | ---   | ---             | 2.4 $\pm$ 0.3 (10)   | 2.1    | ---             | 0.29 $\pm$ 0.04 (4) | 0.25 - 0.34   |
| Sn      | ppm   | ---  | 6 (1)               | ---   | ---             | 4.5 (2)              | ---    | ---             | <0.6 (1)            | ---           |
| Sr      | ppm   | ---  | ---                 | ---   | ---             | 89 $\pm$ 5 (5)       | 90     | ---             | 128 $\pm$ 9 (4)     | 118 - 140     |
| Ta      | ppb   | ---  | ---                 | ---   | ---             | 410 $\pm$ 30 (3)     | ---    | ---             | 45 (2)              | 44 - 46       |
| Tb      | ppb   | ---  | ---                 | ---   | ---             | 310 $\pm$ 20 (4)     | ---    | ---             | 35 (1)              | ---           |
| Te      | ppb   | ---  | ---                 | ---   | ---             | 500 (1)              | ---    | ---             | 600 (1)             | ---           |
| Th      | ppm   | ---  | ---                 | ---   | 4.5 $\pm$ 0.1   | 4.5 $\pm$ 0.3 (8)    | 4.3    | 0.62 $\pm$ 0.04 | 0.62 $\pm$ 0.03 (4) | 0.58 - 0.64   |
| Th-223  | pCi/g | ---  | ---                 | ---   | ---             | 0.449 (1)            | ---    | ---             | 0.0648 (1)          | ---           |
| Th-230  | pCi/g | ---  | ---                 | ---   | ---             | 0.452 (1)            | ---    | ---             | 0.0765 (1)          | ---           |
| Th-232  | pCi/g | ---  | ---                 | ---   | ---             | 0.484 (1)            | ---    | ---             | 0.0619 (1)          | ---           |
| Ti      | ppm   | ---  | 500 (1)             | ---   | 1750            | 1650 $\pm$ 100 (10)  | 1620   | 200             | 202 $\pm$ 10 (4)    | 190 - 210     |
| Tl      | ppm   | ---  | ---                 | ---   | ---             | <1 (1)               | ---    | ---             | <1 (1)              | ---           |
| Tm      | ppb   | ---  | ---                 | ---   | ---             | 400 (1)              | ---    | ---             | <1000 (1)           | ---           |
| U       | ppm   | ---  | ---                 | ---   | 1.28 $\pm$ 0.02 | 1.22 $\pm$ 0.07 (11) | 1.24   | 0.24 $\pm$ 0.02 | 0.25 $\pm$ 0.06 (3) | 0.20 - 0.32   |
| U-234   | pCi/g | ---  | ---                 | ---   | ---             | 0.448 (1)            | ---    | ---             | 0.0719 (1)          | ---           |
| U-235   | fCi/g | ---  | ---                 | ---   | ---             | 22.8 (1)             | ---    | ---             | 4.9 (1)             | ---           |
| U-238   | pCi/g | ---  | ---                 | ---   | ---             | 0.444 (1)            | ---    | ---             | 0.073 (1)           | ---           |
| V       | ppm   | ---  | 24 (1)              | ---   | 44 $\pm$ 3      | 45 $\pm$ 2 (9)       | 45     | ---             | 4.26 $\pm$ 0.25 (3) | 4.0 - 4.5     |
| W       | ppb   | ---  | ---                 | ---   | ---             | 820 $\pm$ 170 (4)    | ---    | ---             | 173 (1)             | ---           |
| Y       | ppm   | ---  | ---                 | ---   | ---             | 7.9 $\pm$ 1.9 (3)    | ---    | ---             | 1.9 (1)             | ---           |
| Yb      | ppm   | ---  | ---                 | ---   | ---             | 1.03 $\pm$ 0.12 (5)  | 0.98   | ---             | 0.16 $\pm$ 0.02 (3) | 0.14 - 0.175  |
| Zn      | ppm   | ---  | 6 (1)               | ---   | 28 $\pm$ 2      | 28 $\pm$ 2 (6)       | 28     | ---             | 6.9 $\pm$ 1.0 (4)   | 5.6 - 7.8     |
| Zr      | ppm   | ---  | 21 (1)              | ---   | ---             | 53 $\pm$ 5 (3)       | ---    | ---             | 15.6 $\pm$ 0.5 (3)  | 15 - 19.4     |

TABLE 12  
ELEMENTAL CONCENTRATIONS IN NBS SRM 1632: TRACE ELEMENTS IN COAL

| Element                                   | Units | NBS<br>(1974) | Literature          |        |            |                |                              |                                          |                              |                       |                                     |                                         |
|-------------------------------------------|-------|---------------|---------------------|--------|------------|----------------|------------------------------|------------------------------------------|------------------------------|-----------------------|-------------------------------------|-----------------------------------------|
|                                           |       |               | $\bar{x} \pm s$ (n) | Median | Range      | AA             | ICPES                        | Individual Means by Analytical Technique |                              |                       | Others                              |                                         |
|                                           |       |               |                     |        |            |                |                              | NAA                                      | PAA                          | XRF                   |                                     |                                         |
| Ag                                        | ppb   | ≤100          | 63 ± 13 (5)         | 65     | 45-1050    | ---            | ---                          | 55 ± 9 (3)                               | ---                          | ---                   | ---                                 | ---                                     |
| Al                                        | %     | ---           | 1.73 ± 0.11 (28)    | 1.74   | 1.51-3.00  | 1.71 (2)       | 1.72 ± 0.12 (5)              | 1.76 ± 0.15 (21)                         | ---                          | ---                   | ---                                 | ---                                     |
| As                                        | ppm   | 5.9 ± 0.6     | 5.8 ± 0.5 (48)      | 5.8    | 3.0-8.9    | 5.9 ± 0.6 (5)  | 5.9 (2)                      | 5.7 ± 0.6 (29)                           | 6.0 ± 0.3 (6)                | 4.8 ± 1.8 (3)         | 5.4 (1) COLOR                       | ---                                     |
| ASH                                       | %     | ---           | 13.2 (1)            | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Au                                        | ppb   | ---           | 58 ± 90 (6)         | ---    | 0.85-200   | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| B                                         | ppm   | ---           | 41 ± 8 (7)          | 43     | 29-118     | ---            | ---                          | ---                                      | ---                          | ---                   | 45 ± 3 (5) TCGS                     | ---                                     |
| Ba                                        | ppm   | ---           | 330 ± 37 (31)       | 314    | 87-410     | ---            | ---                          | 331 ± 32 (25)                            | ---                          | ---                   | ---                                 | ---                                     |
| Be                                        | ppm   | 1.5           | 1.62 ± 0.11 (10)    | 1.64   | 1.2-1.85   | 1.6 ± 0.1 (6)  | 1.8 ± 0.1 (3) <sup>a</sup>   | 1.7 (1)                                  | ---                          | ---                   | 1.5 (1) FLUOR                       | ---                                     |
| Bi                                        | ppm   | ---           | 1.05 (1)            | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Br                                        | ppm   | ---           | 17.7 ± 1.8 (27)     | 18     | 7.8-38     | ---            | ---                          | 18 ± 2 (24)                              | ---                          | 20 ± 3 (3)            | ---                                 | ---                                     |
| C                                         | %     | ---           | 70.4 ± 1.8 (4)      | 70     | 68.93-73.0 | ---            | ---                          | ---                                      | ---                          | ---                   | 71.0 ± 1.7 (3) TCGS                 | ---                                     |
| Ca                                        | ppm   | ---           | 4200 ± 500 (26)     | 4200   | 2400-7000  | ---            | 4400 ± 400 (5) <sup>a</sup>  | 4000 ± 600 (16)                          | ---                          | ---                   | ---                                 | ---                                     |
| Cd                                        | ppb   | 190 ± 30      | 220 ± 40 (24)       | 210    | 170-700    | 230 ± 15 (7)   | ---                          | 215 (2)                                  | 205 ± 24 (6)                 | ---                   | 310 (1) IDMS                        | 270 ± 120 (3) SSMS<br>187 ± 12 (3) TCGS |
| Ce                                        | ppm   | ---           | 21 ± 2 (22)         | 20     | 17.3-30    | ---            | ---                          | 20 ± 2 (17)                              | ---                          | ---                   | ---                                 | ---                                     |
| Cl                                        | ppm   | ---           | 880 ± 70 (26)       | 890    | 80-1177    | ---            | ---                          | 880 ± 70 (2)                             | ---                          | ---                   | 895 (2) TCGS                        | ---                                     |
| Co                                        | ppm   | 6             | 5.6 ± 0.5 (33)      | 5.7    | 3.9-11     | 4.1 ± 0.8 (3)  | 4.9 ± 0.9 (3) <sup>a</sup>   | 5.8 ± 0.5 (28)                           | ---                          | ---                   | ---                                 | ---                                     |
| Cr                                        | ppm   | 20.2 ± 0.5    | 19.9 ± 1.3 (37)     | 20     | 8-35       | 20.3 ± 1.4 (6) | 18 ± 3 (3) <sup>a</sup>      | 20.2 ± 1.8 (26)                          | ---                          | ---                   | ---                                 | ---                                     |
| Cs                                        | ppm   | ---           | 1.52 ± 0.19 (24)    | 1.46   | 0.35-3.5   | ---            | ---                          | 1.6 ± 0.4 (24)                           | ---                          | ---                   | ---                                 | ---                                     |
| Cu                                        | ppm   | 18 ± 2        | 18 ± 2 (28)         | 17.8   | 13-30      | 18.3 ± 1.8 (7) | 18.1 ± 0.9 (3) <sup>a</sup>  | 15.8 ± 1.5 (6)                           | 28 ± 4 (3) <sup>b</sup>      | 18 ± 3 (6)            | 16.7 ± 1.7 (3) SSMS                 | ---                                     |
| Dy                                        | ppm   | ---           | 1.25 ± 0.22 (10)    | 1.3    | 0.57-2.4   | ---            | ---                          | 1.1 ± 0.3 (9)                            | ---                          | ---                   | ---                                 | ---                                     |
| Er                                        | ppm   | ---           | 0.7 (1)             | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Eu                                        | ppb   | ---           | 355 ± 44 (23)       | 365    | 210-500    | ---            | ---                          | 350 ± 50 (20)                            | ---                          | ---                   | ---                                 | ---                                     |
| F                                         | ppm   | ---           | 76 ± 16 (7)         | 80     | 51-100     | ---            | ---                          | ---                                      | ---                          | ---                   | 76 ± 10 (4) ISE                     | ---                                     |
| Fe                                        | ppm   | 8700 ± 300    | 8600 ± 400 (38)     | 8600   | 6500-11300 | 8700 ± 400 (4) | 8400 ± 400 (5)               | 8600 ± 600 (25)                          | ---                          | 7700 ± 700 (4)        | ---                                 | ---                                     |
| Ga                                        | ppm   | ---           | 5.8 ± 1.1 (16)      | 5.8    | 4.5-9.0    | ---            | ---                          | 5.5 ± 0.9 (11)                           | ---                          | ---                   | ---                                 | ---                                     |
| <sup>a</sup> Only two analysts reporting. |       |               |                     |        |            |                |                              |                                          |                              |                       |                                     |                                         |
| <sup>b</sup> Only one analyst reporting.  |       |               |                     |        |            |                |                              |                                          |                              |                       |                                     |                                         |
| Gd                                        | ppm   | ---           | 2.3 ± 1.0 (8)       | 2.35   | 1.2-3.6    | ---            | ---                          | 3.2 ± 0.6 (3) <sup>a</sup>               | ---                          | ---                   | ---                                 | ---                                     |
| Ge                                        | ppm   | ---           | 2.6 ± 0.4 (4)       | 2.9    | 2-70       | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| H                                         | %     | ---           | 4.20 ± 0.16 (3)     | ---    | 4.02-4.30  | ---            | ---                          | ---                                      | ---                          | ---                   | 4.11 ± 0.16 (3) TCGS                | ---                                     |
| H <sub>2</sub> O-T                        | %     | ---           | 2.6 (1)             | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Hf                                        | ppm   | ---           | 0.98 ± 0.10 (19)    | 0.96   | 0.72-1.53  | ---            | ---                          | 0.96 ± 0.11 (19)                         | ---                          | ---                   | ---                                 | ---                                     |
| Hg                                        | ppb   | 130 ± 30      | 120 ± 23 (19)       | 120    | 88-950     | 117 ± 15 (7)   | ---                          | 160 ± 50 (11)                            | 100 (3) <sup>a</sup>         | ---                   | ---                                 | ---                                     |
| Ho                                        | ppb   | ---           | 243 ± 6 (3)         | ---    | 240-250    | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| I                                         | ppm   | ---           | 3.1 ± 0.3 (11)      | 3.3    | 2.68-6.63  | ---            | ---                          | 3.8 ± 1.5 (10)                           | ---                          | ---                   | ---                                 | ---                                     |
| In                                        | ppb   | ---           | 110 ± 90 (12)       | 63     | 17-230     | ---            | ---                          | 37 ± 33 (7)                              | ---                          | ---                   | ---                                 | ---                                     |
| Ir                                        | ppb   | ---           | 2.8 ± 0.6 (3)       | ---    | 2.48-3.53  | ---            | ---                          | 210 (2)                                  | ---                          | ---                   | ---                                 | ---                                     |
| K                                         | ppm   | ---           | 2810 ± 140 (32)     | 2800   | 2500-4000  | ---            | 2800 ± 200 (5)               | 2900 ± 200 (23)                          | ---                          | ---                   | ---                                 | ---                                     |
| La                                        | ppm   | ---           | 10.4 ± 0.8 (26)     | 10.5   | 6.0-11.5   | ---            | ---                          | 10.5 ± 0.9 (21)                          | ---                          | ---                   | ---                                 | ---                                     |
| Li                                        | ppm   | ---           | 26 ± 2 (3)          | ---    | 24-29      | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Lu                                        | ppb   | ---           | 128 ± 17 (13)       | 130    | 100-416    | ---            | ---                          | 137 ± 28 (12)                            | ---                          | ---                   | ---                                 | ---                                     |
| Mg                                        | ppm   | ---           | 1600 ± 400 (24)     | 1600   | 980-8200   | ---            | 1400 ± 200 (5)               | 1800 ± 500 (16)                          | ---                          | ---                   | ---                                 | ---                                     |
| Mn                                        | ppm   | 40 ± 3        | 41 ± 3 (41)         | 41.1   | 28-47      | 39 ± 2 (5)     | 44 ± 2 (3) <sup>a</sup>      | 42 ± 2 (25)                              | ---                          | 38 ± 1 (4)            | ---                                 | ---                                     |
| Mo                                        | ppm   | ---           | 0.29 ± 0.08 (6)     | 0.30   | 0.20-5.0   | ---            | 4.0 (2) <sup>b</sup>         | 3.3 ± 1.7 (6)                            | 0.26 ± 0.05 (5) <sup>a</sup> | ---                   | ---                                 | ---                                     |
| N                                         | %     | ---           | 3.8 ± 0.8 (10)      | 3.5    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Nb                                        | ppm   | ---           | 1.27 ± 0.06 (3)     | ---    | 1.2-1.3    | ---            | ---                          | ---                                      | ---                          | ---                   | 1.27 ± 0.06 (3) TCGS                | ---                                     |
| Na                                        | ppm   | ---           | 377 ± 26 (32)       | 380    | 325-1200   | ---            | 380 ± 30 (5) <sup>a</sup>    | 380 ± 30 (23)                            | ---                          | ---                   | ---                                 | ---                                     |
| Nb                                        | ppm   | ---           | 5 (1)               | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Nd                                        | ppm   | ---           | 8.8 ± 1.8 (7)       | 9.5    | 6.4-17.8   | ---            | ---                          | 12 ± 5 (5)                               | ---                          | ---                   | ---                                 | ---                                     |
| Ni                                        | ppm   | 15 ± 1        | 15 ± 2 (37)         | 15     | 10-20.4    | 15.1 ± 1.4 (4) | 17 ± 2 (3) <sup>a</sup>      | 16.2 ± 3.3 (12)                          | 13.9 ± 0.2 (5)               | 14 ± 3 (5)            | 14.7 ± 0.1 (3) IDMS<br>14.8 (1) POL | 15.3 (2) SSMS                           |
| O                                         | %     | ---           | 15.05 (1)           | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Os                                        | ppm   | ---           | <1 (1)              | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| P                                         | ppm   | ---           | 150 ± 70 (9)        | 138    | 71-270     | ---            | 126 ± 32 (4) <sup>a</sup>    | ---                                      | ---                          | ---                   | 260 (2) COLOR                       | ---                                     |
| Pb                                        | ppm   | 30 ± 9        | 28 ± 4 (28)         | 28     | 12-33      | 28 ± 3 (8)     | 21 ± 6 (4) <sup>a</sup>      | ---                                      | 30 ± 2 (7)                   | 25 ± 8 (4)            | 28.7 (2) IDMS<br>28.4 (1) POL       | 30 ± 3 (3) SSMS                         |
| Pd                                        | ppb   | ---           | <5 (1)              | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Pr                                        | ppm   | ---           | 3.4 ± 1.3 (3)       | ---    | 2.0-4.6    | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Pt                                        | ppb   | ---           | 230 (2)             | ---    | 186-270    | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Rb                                        | ppm   | ---           | 20 ± 3 (29)         | 20     | 10-30      | ---            | ---                          | 20 ± 3 (22)                              | ---                          | 23 ± 5 (4)            | ---                                 | ---                                     |
| Rh                                        | ppm   | ---           | <5 (1)              | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Ru                                        | ppb   | ---           | 18 (1)              | ---    | ---        | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| S                                         | %     | ---           | 1.19 ± 0.20 (7)     | 1.29   | 0.17-2.02  | ---            | ---                          | ---                                      | ---                          | 1.32 (2) <sup>b</sup> | 1.30 ± 0.02 (3) TCGS                | ---                                     |
| Sb                                        | ppm   | ---           | 3.5 ± 0.5 (31)      | 3.3    | 0.61-6.4   | ---            | ---                          | 3.4 ± 0.6 (26)                           | 3.6 ± 0.5 (3) <sup>a</sup>   | ---                   | ---                                 | ---                                     |
| Sc                                        | ppm   | ---           | 3.78 ± 0.22 (25)    | 3.8    | 3.4-5.4    | ---            | ---                          | 3.8 ± 0.3 (21)                           | ---                          | ---                   | ---                                 | ---                                     |
| Se                                        | ppm   | ---           | 3.0 ± 0.3 (41)      | 3.0    | 1.1-5.5    | 2.3 (2)        | ---                          | 3.1 ± 0.4 (28)                           | 3.00 ± 0.01 (5) <sup>a</sup> | 3.6 ± 1.3 (4)         | 3.05 (1) ASV                        | ---                                     |
| Si                                        | %     | 2.9 ± 0.3     | 3.17 ± 0.16 (8)     | 3.14   | 2.1-3.92   | ---            | 3.18 ± 0.03 (4) <sup>b</sup> | ---                                      | ---                          | ---                   | 2.95 (2) TCGS                       | ---                                     |
| Sm                                        | ppm   | ---           | 1.58 ± 0.19 (22)    | 1.6    | 1.3-2.9    | ---            | ---                          | 1.6 ± 0.2 (18)                           | ---                          | ---                   | ---                                 | ---                                     |
| Sa                                        | ppm   | ---           | 8.8 ± 2.4 (10)      | 10     | 2.0-125    | ---            | 7.2 ± 2.9 (3) <sup>a</sup>   | ---                                      | 10.2 ± 0.4 (5) <sup>a</sup>  | ---                   | ---                                 | ---                                     |
| Sr                                        | ppm   | ---           | 145 ± 24 (30)       | 148    | 1.0-280    | ---            | 140 (1)                      | 144 ± 29 (23)                            | ---                          | 150 ± 5 (4)           | ---                                 | ---                                     |
| Ta                                        | ppb   | ---           | 250 ± 40 (17)       | 250    | 170-460    | ---            | ---                          | 260 ± 50 (17)                            | ---                          | ---                   | ---                                 | ---                                     |
| Tb                                        | ppb   | ---           | 270 ± 80 (9)        | 245    | 30-500     | ---            | ---                          | 270 ± 80 (9)                             | ---                          | ---                   | ---                                 | ---                                     |
| Te                                        | ppb   | <100          | 710 ± 280 (3)       | ---    | 500-1020   | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Th                                        | ppm   | 3.0           | 3.2 ± 0.2 (22)      | 3.2    | 1.3-4.7    | ---            | ---                          | 3.2 ± 0.5 (20)                           | ---                          | ---                   | ---                                 | ---                                     |
| Ti                                        | ppm   | 800           | 940 ± 110 (35)      | 938    | 680-1550   | 840 ± 170 (3)  | 954 ± 16 (5)                 | 1000 ± 140 (19)                          | 920 ± 40 (3) <sup>a</sup>    | ---                   | ---                                 | ---                                     |
| Tl                                        | ppb   | 590 ± 30      | 550 ± 50 (8)        | 555    | 500-610    | ---            | ---                          | 530 ± 40 (5) <sup>a</sup>                | ---                          | ---                   | 600 ± 10 (3) SSMS                   | ---                                     |
| Tm                                        | ppb   | ---           | 240 ± 110 (3)       | ---    | 110-300    | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| U                                         | ppm   | 1.4 ± 0.1     | 1.37 ± 0.13 (29)    | 1.4    | 0.98-6.0   | ---            | ---                          | 1.37 ± 0.13 (20)                         | 1.42 ± 0.13 (5) <sup>b</sup> | ---                   | 1.41 (2) GAMMA                      | 1.21 (2) IDMS                           |
| V                                         | ppm   | 35 ± 3        | 35 ± 2 (32)         | 35     | 24-50      | 37 ± 4 (5)     | 35 ± 3 (3) <sup>a</sup>      | 35 ± 3 (22)                              | ---                          | ---                   | ---                                 | ---                                     |
| W                                         | ppb   | ---           | 740 ± 60 (11)       | 750    | 450-1900   | ---            | ---                          | 700 ± 100 (11)                           | ---                          | ---                   | ---                                 | ---                                     |
| Y                                         | ppm   | ---           | 7.6 ± 0.4 (5)       | 7.6    | 7.0-8.0    | ---            | ---                          | ---                                      | ---                          | ---                   | ---                                 | ---                                     |
| Yb                                        | ppb   | ---           | 790 ± 140 (21)      | 790    | 550-1200   | ---            | ---                          | 800 ± 140 (17)                           | ---                          | ---                   | ---                                 | ---                                     |
| Zn                                        | ppm   | 37 ± 4        | 37 ± 3 (45)         | 37.5   | 30-58      | 38.4 ± 0.7 (6) | 38 ± 2 (3) <sup>a</sup>      | 38 ± 6 (20)                              | 37.6 ± 1.2 (6)               | 36 ± 2 (6)            | ---                                 | ---                                     |
| Zr                                        | ppm   | ---           | 34 ± 10 (10)        | 38     | 1.56-90    | ---            | 25 (1)                       | 55 ± 26 (6)                              | ---                          | 36 (2)                | ---                                 | ---                                     |

TABLE 13  
ELEMENTAL CONCENTRATIONS IN NBS SRM 1633: COAL FLY ASH (OLDER)

| Element                         | Units | NBS<br>(1975)   | Literature           |        |             |                                          |                                  |                      |                                  |                        |                                   |                                   |
|---------------------------------|-------|-----------------|----------------------|--------|-------------|------------------------------------------|----------------------------------|----------------------|----------------------------------|------------------------|-----------------------------------|-----------------------------------|
|                                 |       |                 | $\bar{x} \pm s$ (n)  | Median | Range       | Individual Means by Analytical Technique |                                  |                      |                                  |                        |                                   |                                   |
|                                 |       |                 |                      |        |             | AA                                       | ICPES                            | NAA                  | PAA                              | XRF                    | Others                            |                                   |
| Ag                              | ppb   | ---             | 640 $\pm$ 590 (3)    | ---    | 258 - 1320  | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Al                              | %     | ---             | 12.6 $\pm$ 0.5 (33)  | 12.6   | 10.4 - 14.3 | 13.0 $\pm$ 0.7 (4)                       | 12.5 $\pm$ 0.6 (4)               | 12.6 $\pm$ 0.8 (22)  | ---                              | 11.7 (1)               | 13.2 $\pm$ 0.7 (3) OES            | 12.5 $\pm$ 0.2 (3) TCGS           |
| As                              | ppm   | 61 $\pm$ 6      | 61 $\pm$ 4 (54)      | 60     | 46 - 72     | 60 $\pm$ 5 (5)                           | 56 $\pm$ 1 (3)                   | 60 $\pm$ 5 (32)      | 62 $\pm$ 2 (9)                   | 64 $\pm$ 2 (3)         | ---                               | ---                               |
| Au                              | ppb   | ---             | 5.2 $\pm$ 2.6 (3)    | ---    | 2.75 - 1700 | ---                                      | ---                              | 6 $\pm$ 3 (4)        | ---                              | ---                    | ---                               | ---                               |
| B                               | ppm   | ---             | 440 $\pm$ 60 (10)    | 438    | 100 - 500   | ---                                      | ---                              | ---                  | ---                              | ---                    | 470 $\pm$ 30 (5) TCGS             | ---                               |
| Be                              | ppm   | ---             | 2650 $\pm$ 150 (41)  | 2630   | 1800 - 3400 | 2600 $\pm$ 300 (3)                       | 2600 (2)                         | 2700 $\pm$ 200 (33)  | 2603 $\pm$ 6 (3) <sup>a</sup>    | 2400 $\pm$ 400 (4)     | ---                               | ---                               |
| Bi                              | ppm   | 12              | 12.1 $\pm$ 0.8 (15)  | 12     | 5 - 14      | 12.4 $\pm$ 0.5 (11)                      | 11.5 $\pm$ 1.0 (3)               | ---                  | ---                              | ---                    | ---                               | ---                               |
| Br                              | ppm   | ---             | 0.89 (2)             | ---    | 0.7 - 1.08  | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Br                              | ppm   | ---             | 8.4 $\pm$ 2.2 (22)   | 7.7    | 5.8 - 12.1  | ---                                      | ---                              | 8.6 $\pm$ 2.3 (20)   | ---                              | ---                    | ---                               | ---                               |
| C                               | %     | ---             | 3.3 $\pm$ 0.2 (3)    | ---    | 3.05 - 3.45 | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Ca                              | %     | ---             | 4.6 $\pm$ 0.3 (40)   | 4.62   | 3.50 - 5.30 | 4.5 $\pm$ 0.4 (3)                        | 4.64 $\pm$ 0.12 (4)              | 4.5 $\pm$ 0.3 (19)   | 4.7 $\pm$ 0.5 (6)                | 4.7 $\pm$ 0.6 (3) TCGS | ---                               | ---                               |
| Cd                              | ppm   | 1.45 $\pm$ 0.06 | 1.46 $\pm$ 0.14 (33) | 1.5    | 0.93 - 15   | 1.46 $\pm$ 0.16 (13)                     | 1.55 (2)                         | 1.36 $\pm$ 0.20 (5)  | 1.35 $\pm$ 0.17 (6)              | ---                    | 1.85 (1) IDMS                     | ---                               |
| Ce                              | ppm   | ---             | 149 $\pm$ 7 (26)     | 149.6  | 125 - 210   | ---                                      | ---                              | 150 $\pm$ 12 (24)    | ---                              | 154 $\pm$ 6 (3)        | 153 $\pm$ 1 (4) <sup>b</sup> TCGS | 1.53 $\pm$ 0.06 (3) TCGS          |
| Cl                              | ppm   | ---             | 35 $\pm$ 17 (13)     | 40     | 19.6 - 185  | ---                                      | ---                              | 39 $\pm$ 14 (10)     | 23 $\pm$ 3 (3) <sup>a</sup>      | ---                    | ---                               | ---                               |
| Co                              | ppm   | 38              | 40 $\pm$ 2 (37)      | 40.1   | 26 - 50     | 39 $\pm$ 4 (5)                           | 36 $\pm$ 9 (3)                   | 40 $\pm$ 2 (26)      | 40 $\pm$ 3 (5) <sup>b</sup>      | ---                    | ---                               | ---                               |
| Cr                              | ppm   | 121 $\pm$ 2     | 128 $\pm$ 8 (60)     | 120    | 112 - 180   | 120 $\pm$ 5 (9)                          | 122 $\pm$ 8 (5)                  | 128 $\pm$ 7 (27)     | 125 $\pm$ 0 (3) <sup>b</sup>     | 131 $\pm$ 17 (5)       | ---                               | ---                               |
| Cs                              | ppm   | ---             | 8.6 $\pm$ 0.7 (24)   | 8.35   | 0.63 - 13.8 | ---                                      | ---                              | 8.4 $\pm$ 1.0 (26)   | 6 $\pm$ 4 (3) <sup>a</sup>       | ---                    | ---                               | ---                               |
| Cu                              | ppm   | 128 $\pm$ 5     | 129 $\pm$ 7 (33)     | 129    | 70 - 198    | 127 $\pm$ 4 (10)                         | 128 $\pm$ 8 (3)                  | 128 $\pm$ 11 (7)     | 138 $\pm$ 3 (3) <sup>a</sup>     | 129 $\pm$ 5 (6)        | 135 $\pm$ 9 (3) <sup>b</sup> TCGS | ---                               |
| Dy                              | ppm   | ---             | 10 $\pm$ 1 (9)       | 10.2   | 7.6 - 19    | ---                                      | ---                              | 10.0 $\pm$ 1.2 (10)  | ---                              | ---                    | ---                               | ---                               |
| Er                              | ppm   | ---             | 11 (1)               | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Eu                              | ppm   | ---             | 2.6 $\pm$ 0.2 (22)   | 2.58   | 1.9 - 5.3   | ---                                      | ---                              | 2.6 $\pm$ 0.3 (22)   | ---                              | ---                    | ---                               | ---                               |
| F                               | ppm   | ---             | 15 (2)               | ---    | 10 - 20     | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Fe                              | %     | ---             | 61.4 $\pm$ 0.24 (50) | 6.20   | 4.23 - 7.0  | 6.3 $\pm$ 0.4 (7)                        | 6.2 $\pm$ 0.2 (5)                | 6.2 $\pm$ 0.4 (27)   | 5.4 $\pm$ 1.0 (5)                | 6.10 $\pm$ 0.12 (7)    | 5.9 $\pm$ 0.3 (3)                 | 6.3 $\pm$ 0.4 (3) TCGS            |
| Ga                              | ppm   | ---             | 42 $\pm$ 4 (15)      | 42     | 34.3 - 72   | ---                                      | ---                              | 40 $\pm$ 3 (10)      | ---                              | 43 $\pm$ 5 (3)         | ---                               | ---                               |
| Gd                              | ppm   | ---             | 11.6 $\pm$ 0.5 (4)   | 11.8   | 11 - 23     | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Ge                              | ppm   | ---             | 22 $\pm$ 4 (4)       | 25     | 19 - 476    | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| H                               | ppm   | ---             | 1100 (2)             | ---    | 1000 - 1200 | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| H <sub>2</sub> O <sup>-</sup>   | %     | ---             | 0.03 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| H <sub>2</sub> O <sup>-</sup> T | %     | ---             | 0.17 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Hf                              | ppm   | ---             | 7.6 $\pm$ 0.5 (20)   | 7.62   | 6.5 - 10.8  | ---                                      | ---                              | 7.5 $\pm$ 0.5 (23)   | ---                              | ---                    | ---                               | ---                               |
| Hg                              | ppb   | 140 $\pm$ 10    | 136 $\pm$ 17 (14)    | 141    | 100 - 11000 | 130 $\pm$ 9 (4)                          | ---                              | 145 $\pm$ 12 (7)     | 160 $\pm$ 30 (6) <sup>b</sup>    | ---                    | ---                               | ---                               |
| Ho                              | ppm   | ---             | 2.5 $\pm$ 1.0 (3)    | ---    | 1.94 - 3.6  | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| I                               | ppm   | ---             | 2.7 $\pm$ 0.4 (5)    | 2.9    | 2.0 - 3.0   | ---                                      | ---                              | 2.7 $\pm$ 0.5 (4)    | ---                              | ---                    | ---                               | ---                               |
| In                              | ppb   | ---             | 220 $\pm$ 80 (10)    | 280    | 118 - 3000  | ---                                      | ---                              | 210 $\pm$ 90 (10)    | 287 $\pm$ 6 (3) <sup>a</sup>     | ---                    | ---                               | ---                               |
| Ir                              | ppb   | ---             | ---                  | ---    | 15 - 18600  | ---                                      | ---                              | 18 $\pm$ 2 (3)       | ---                              | ---                    | ---                               | ---                               |
| K                               | %     | 1.72            | 1.69 $\pm$ 0.09 (40) | 1.70   | 1.29 - 3.30 | 1.66 $\pm$ 0.06 (3)                      | 1.61 $\pm$ 0.11 (3) <sup>b</sup> | 1.74 $\pm$ 0.11 (24) | 1.60 $\pm$ 0.01 (4) <sup>b</sup> | 1.68 $\pm$ 0.05 (4)    | 1.74 $\pm$ 0.04 (3) TCGS          | ---                               |
| La                              | ppm   | ---             | 79 $\pm$ 5 (28)      | 80     | 45 - 110    | ---                                      | ---                              | 79 $\pm$ 7 (26)      | ---                              | 77 $\pm$ 5 (3)         | ---                               | ---                               |
| Li                              | ppm   | ---             | 170 $\pm$ 110 (3)    | ---    | 1.7 - 300   | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| *Only one analyst reporting.    |       |                 |                      |        |             |                                          |                                  |                      |                                  |                        |                                   |                                   |
| *Only two analysts reporting.   |       |                 |                      |        |             |                                          |                                  |                      |                                  |                        |                                   |                                   |
| Lu                              | ppm   | ---             | 1.08 $\pm$ 0.23 (11) | 1.06   | 0.87 - 4.0  | ---                                      | ---                              | 1.13 $\pm$ 0.30 (13) | ---                              | ---                    | ---                               | ---                               |
| Mg                              | %     | ---             | 1.60 $\pm$ 0.25 (30) | 1.52   | 1.01 - 6.30 | 1.29 $\pm$ 0.14 (3)                      | 1.4 $\pm$ 0.3 (4)                | 1.7 $\pm$ 0.2 (17)   | 1.48 $\pm$ 0.03 (5) <sup>b</sup> | ---                    | 1.6 $\pm$ 0.2 (3) OES             | 1.8 $\pm$ 0.5 (3) TCGS            |
| Mn                              | ppm   | 493 $\pm$ 7     | 496 $\pm$ 18 (51)    | 496    | 351 - 570   | 490 $\pm$ 40 (12)                        | 503 $\pm$ 18 (3)                 | 490 $\pm$ 24 (25)    | 493 $\pm$ 2 (5) <sup>b</sup>     | 508 $\pm$ 18 (6)       | 485 $\pm$ 22 (3) OES              | ---                               |
| Mo                              | ppm   | ---             | 28 $\pm$ 6 (13)      | 25.3   | 0.5 - 37    | ---                                      | ---                              | 27 $\pm$ 5 (8)       | 0.8 $\pm$ 0.6 (3) <sup>a</sup>   | ---                    | ---                               | ---                               |
| N                               | ppm   | ---             | <1000 (1)            | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Na                              | ppm   | ---             | 3100 $\pm$ 200 (36)  | 3200   | 2600 - 9700 | 3160 $\pm$ 150 (3)                       | 3000 $\pm$ 100 (3) <sup>b</sup>  | 3100 $\pm$ 200 (25)  | 3500 $\pm$ 300 (5) <sup>b</sup>  | ---                    | 5200 $\pm$ 3900 (3) OES           | 3200 $\pm$ 300 (3) TCGS           |
| Nb                              | ppm   | ---             | 20 $\pm$ 11 (3)      | ---    | 7 - 28      | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Nd                              | ppm   | ---             | 63 $\pm$ 7 (11)      | 62     | 58 - 94     | ---                                      | ---                              | 64 $\pm$ 7 (10)      | ---                              | ---                    | 62 (2) TCGS                       | ---                               |
| Ni                              | ppm   | 98 $\pm$ 3      | 98 $\pm$ 6 (41)      | 98     | 69 - 128    | 96 $\pm$ 9 (8)                           | 107 $\pm$ 18 (3)                 | 99 $\pm$ 14 (14)     | 97 $\pm$ 5 (9)                   | 98 $\pm$ 6 (6)         | 96 (3) <sup>a</sup> IDMS          | 98 (1) POL                        |
| O                               | %     | ---             | 47.02 (1)            | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Os                              | ppb   | ---             | <400 (2)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| P                               | ppm   | ---             | 1020 $\pm$ 150 (4)   | 1140   | 880 - 3000  | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Pb                              | ppm   | 70 $\pm$ 4      | 72 $\pm$ 6 (37)      | 71     | 40 - 100    | 74 $\pm$ 7 (13)                          | 74 $\pm$ 9 (3)                   | ---                  | 70 $\pm$ 2 (7)                   | 67 $\pm$ 3 (4)         | 78 (2) IDMS                       | 67 (1) POL                        |
| Pb-210                          | pCi/g | ---             | 3.37 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | 59 $\pm$ 17 (3) <sup>b</sup> SSMS |
| Pd                              | ppb   | ---             | <2 (3)               | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Pr                              | ppm   | ---             | 26 (2)               | ---    | 24 - 28     | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Pt                              | ppb   | ---             | 0.7 $\pm$ 0.6 (3)    | ---    | 0.4 - 1.38  | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Rb                              | ppm   | 112             | 115 $\pm$ 8 (28)     | 113    | 70 - 130    | ---                                      | ---                              | 117 $\pm$ 10 (24)    | 111 $\pm$ 15 (5)                 | 113 $\pm$ 7 (5)        | ---                               | ---                               |
| Re                              | ppb   | ---             | <200 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Rh                              | ppb   | ---             | <500 (3)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Ru                              | ppb   | ---             | ---                  | ---    | 0.26 - 3.0  | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| S                               | ppm   | ---             | 4000 $\pm$ 300 (4)   | 4000   | 2000 - 9000 | ---                                      | ---                              | ---                  | ---                              | ---                    | 4100 $\pm$ 300 (3) TCGS           | ---                               |
| Sb                              | ppm   | ---             | 6.8 $\pm$ 0.5 (31)   | 6.9    | 4.0 - 12.1  | ---                                      | ---                              | 6.8 $\pm$ 0.6 (26)   | 7.07 $\pm$ 0.06 (6)              | ---                    | ---                               | ---                               |
| Sc                              | ppm   | ---             | 26.6 $\pm$ 1.7 (25)  | 26.9   | 20 - 41     | ---                                      | ---                              | 27 $\pm$ 2 (26)      | 25 $\pm$ 4 (3) <sup>a</sup>      | ---                    | ---                               | ---                               |
| Se                              | ppm   | 9.4 $\pm$ 0.5   | 9.6 $\pm$ 0.6 (42)   | 9.75   | 3.2 - 35    | 7.4 $\pm$ 3.7 (3)                        | ---                              | 9.7 $\pm$ 0.7 (28)   | 9.7 $\pm$ 0.3 (6) <sup>b</sup>   | 9.6 $\pm$ 1.2 (3)      | ---                               | ---                               |
| Si                              | %     | ---             | 22.1 $\pm$ 1.1 (17)  | 21.8   | 16.0 - 24.5 | ---                                      | ---                              | 22.9 $\pm$ 0.5 (4)   | 20.3 $\pm$ 0.6 (3) <sup>b</sup>  | 22.1 $\pm$ 0.8 (3)     | 20.4 $\pm$ 2.4 (3)                | ---                               |
| Sm                              | ppm   | ---             | 12.7 $\pm$ 1.1 (21)  | 12.6   | 10 - 20     | ---                                      | ---                              | 12.6 $\pm$ 1.3 (21)  | ---                              | ---                    | ---                               | ---                               |
| Sn                              | ppm   | ---             | 8.6 $\pm$ 3.6 (9)    | 10.2   | 3 - 740     | ---                                      | ---                              | ---                  | 12.2 $\pm$ 0.3 (3) <sup>a</sup>  | ---                    | ---                               | ---                               |
| SO <sub>4</sub>                 | %     | ---             | 0.98 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Sr                              | ppm   | 1380            | 1380 $\pm$ 100 (36)  | 1390   | 120 - 8000  | ---                                      | 1300 (2)                         | 1410 $\pm$ 120 (20)  | 1320 $\pm$ 70 (5) <sup>b</sup>   | 1100 $\pm$ 500 (6)     | ---                               | ---                               |
| Ta                              | ppm   | ---             | 1.91 $\pm$ 0.12 (18) | 1.95   | 1.6 - 3.5   | ---                                      | ---                              | 1.93 $\pm$ 0.23 (22) | ---                              | ---                    | ---                               | ---                               |
| Tb                              | ppm   | ---             | 1.8 $\pm$ 0.3 (14)   | 2.0    | 0.22 - 3.3  | ---                                      | ---                              | 1.8 $\pm$ 0.3 (16)   | ---                              | ---                    | ---                               | ---                               |
| Tc                              | ppm   | ---             | 1.8 $\pm$ 0.8 (3)    | ---    | 0.92 - 9.9  | ---                                      | ---                              | ---                  | 2.31 $\pm$ 0.01 (3) <sup>a</sup> | ---                    | ---                               | ---                               |
| Th                              | ppm   | 24              | 24.6 $\pm$ 1.4 (22)  | 24.2   | 20 - 32     | ---                                      | ---                              | 24.7 $\pm$ 1.2 (20)  | ---                              | ---                    | ---                               | ---                               |
| Th-228                          | pCi/g | ---             | 2.23 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Th-230                          | pCi/g | ---             | 3.74 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Th-232                          | pCi/g | ---             | 2.45 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| Ti                              | ppm   | ---             | 7300 $\pm$ 300 (35)  | 7250   | 3000 - 8900 | 7700 $\pm$ 1000 (3)                      | 7200 $\pm$ 200 (4)               | 7100 $\pm$ 600 (22)  | 7400 $\pm$ 200 (6)               | 6900 $\pm$ 2000 (6)    | 7120 $\pm$ 140 (3) TCGS           | ---                               |
| Tl                              | ppm   | 4               | 3.4 $\pm$ 0.6 (7)    | 3.75   | 2.0 - 18    | ---                                      | ---                              | ---                  | 3.64 $\pm$ 0.12 (6)              | ---                    | ---                               | ---                               |
| Tm                              | ppm   | ---             | 1.3 (2)              | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| U                               | ppm   | 11.6 $\pm$ 0.2  | 11.8 $\pm$ 0.7 (26)  | 11.85  | 8.4 - 15    | ---                                      | ---                              | 11.7 $\pm$ 1.0 (19)  | 11.8 $\pm$ 0.5 (5) <sup>a</sup>  | ---                    | 11.8 (2) IDMS                     | ---                               |
| U-234                           | pCi/g | ---             | 4.07 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| U-235                           | pCi/g | ---             | 0.179 (1)            | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| U-238                           | pCi/g | ---             | 4.01 (1)             | ---    | ---         | ---                                      | ---                              | ---                  | ---                              | ---                    | ---                               | ---                               |
| V                               | ppm   | 21.4 $\pm$ 8    | 221 $\pm$ 20 (37)    | 223    | 151 - 410   | 260 $\pm$ 100 (4)                        | 225 $\pm$ 7 (3)                  | 228 $\pm$ 15 (21)    | 209 $\pm$ 1 (3) <sup>a</sup>     | 210 $\pm$ 50 (5)       | ---                               | ---                               |
| W                               | ppm   | ---             | 4.8 $\pm$ 0.7 (15)   | 4.8    | 3.8 - 12.7  | ---                                      | ---                              | 4.8 $\pm$ 0.7 (16)   | ---                              | ---                    | ---                               | ---                               |
| Y                               | ppm   | ---             | 63 $\pm$ 7 (10)      | 66     | 30 - 150    | ---                                      | ---                              | ---                  | 64 $\pm$ 3 (4)                   | 65 $\pm$ 4 (3)         | ---                               | ---                               |
| Yb                              | ppm   | ---             | 6.2 $\pm$ 1.0 (19)   | 6.2    | 4.7 - 9.0   | ---                                      | ---                              | 6.3 $\pm$ 1.0 (18)   | ---                              | ---                    | ---                               | ---                               |
| Zn                              | ppm   | 210 $\pm$ 20    | 210 $\pm$ 9 (54)     | 212    | 180 - 700   | 210 $\pm$ 13 (13)                        | 216 $\pm$ 8 (5)                  | 215 $\pm$ 19 (23)    | 213 $\pm$ 6 (7)                  | 207 $\pm$ 7 (7)        | ---                               | ---                               |
| Zr                              | ppm   | ---             | 300 $\pm$ 60 (21)    | 301    | 160 - 640   | ---                                      | ---                              | 350 $\pm$ 80 (14)    | 300 $\pm$ 1 (6) <sup>b</sup>     | 302 $\pm$ 11 (3)       | ---                               | ---                               |

TABLE 14  
ELEMENTAL CONCENTRATIONS IN NBS SRM 1633A: COAL FLY ASH (NEWER)

| Element            | Units | Literature      |                      |        |             |                                          |                |             |
|--------------------|-------|-----------------|----------------------|--------|-------------|------------------------------------------|----------------|-------------|
|                    |       | NBS<br>(1979)   | $\bar{x} \pm s$ (n)  | Median | Range       | Individual Means by Analytical Technique |                |             |
|                    |       |                 |                      |        |             | NAA                                      | TCGS           | Other       |
| Ag                 | ppb   | ---             | <600 (1)             | ---    | ---         | ---                                      | ---            | ---         |
| Al                 | %     | 14              | 14.4 $\pm$ 0.4 (9)   | 14.2   | 13.8 - 15.0 | 14.1 $\pm$ 0.2 (4)                       | 14.0 (2)       | ---         |
| As                 | ppm   | 145 $\pm$ 15    | 144 $\pm$ 2 (8)      | 145    | 97 - 148    | 145 $\pm$ 2 (5)                          | ---            | ---         |
| B                  | ppm   | ---             | 39.7 $\pm$ 1.3 (4)   | ---    | 39 - 41.6   | ---                                      | 40 $\pm$ 1 (4) | ---         |
| Ba                 | ppm   | 1500            | 1400 $\pm$ 200 (14)  | 1470   | 1060 - 1760 | 1480 $\pm$ 140 (9)                       | ---            | ---         |
| Be                 | ppm   | 12              | ---                  | ---    | ---         | ---                                      | ---            | ---         |
| Br                 | ppm   | ---             | 2.3 (2)              | ---    | 2.2 - 2.4   | ---                                      | ---            | ---         |
| Ca                 | %     | 1.11 $\pm$ 0.01 | 1.12 $\pm$ 0.04 (10) | 1.12   | 1.05 - 1.29 | 1.10 $\pm$ 0.03 (5)                      | 1.29 (2)       | ---         |
| Cd                 | ppm   | 1.0 $\pm$ 0.15  | 1.07 (1)             | ---    | ---         | ---                                      | ---            | ---         |
| Ce                 | ppm   | 180             | 175 $\pm$ 8 (7)      | 177    | 163 - 230   | 176 $\pm$ 10 (5) <sup>a</sup>            | ---            | ---         |
| Cl                 | ppm   | ---             | <69 (1)              | ---    | ---         | ---                                      | ---            | ---         |
| Co                 | ppm   | 46              | 43 $\pm$ 4 (8)       | 44     | 37 - 47     | 43 $\pm$ 4 (6) <sup>a</sup>              | ---            | ---         |
| Cr                 | ppm   | 196 $\pm$ 6     | 193 $\pm$ 5 (9)      | 194    | 185 - 200   | 193 $\pm$ 5 (5) <sup>a</sup>             | ---            | ---         |
| Cs                 | ppm   | 11              | 10.0 $\pm$ 0.4 (7)   | 10.1   | 9.3 - 10.6  | 10.6 $\pm$ 0.5 (6) <sup>a</sup>          | ---            | ---         |
| Cu                 | ppm   | 118 $\pm$ 3     | 120 (1)              | ---    | ---         | ---                                      | ---            | ---         |
| Dy                 | ppm   | ---             | 15.4 $\pm$ 1.2 (5)   | 15     | 14.3 - 16.8 | 15.1 $\pm$ 1.0 (4)                       | ---            | ---         |
| Eu                 | ppm   | 4               | 3.5 $\pm$ 0.3 (7)    | 3.62   | 2.0 - 3.7   | 3.5 $\pm$ 0.3 (6)                        | ---            | ---         |
| Fe                 | %     | 9.40 $\pm$ 0.10 | 9.45 $\pm$ 0.17 (10) | 9.40   | 8.84 - 9.70 | 9.45 $\pm$ 0.16 (6) <sup>a</sup>         | 9.70 (2)       | ---         |
| Ga                 | ppm   | 58              | 55 $\pm$ 3 (5)       | 55.7   | 51 - 59     | 57 $\pm$ 2 (3) <sup>a</sup>              | ---            | ---         |
| Gd                 | ppm   | ---             | 19 (2)               | ---    | 15.3 - 23.5 | ---                                      | ---            | ---         |
| H <sub>2</sub> O-T | %     | ---             | 0.35 (1)             | ---    | ---         | ---                                      | ---            | ---         |
| Hf                 | ppm   | 7.6             | 7.2 $\pm$ 0.5 (8)    | 73     | 6.3 - 7.8   | 7.4 $\pm$ 0.5 (6) <sup>a</sup>           | ---            | ---         |
| Hg                 | ppb   | 160 $\pm$ 10    | 150 (2)              | ---    | 150 - 151   | ---                                      | ---            | ---         |
| I                  | ppm   | ---             | <5 (1)               | ---    | ---         | ---                                      | ---            | ---         |
| In                 | ppb   | ---             | 156 (2)              | ---    | 151 - 160   | ---                                      | ---            | ---         |
| K                  | %     | 1.88 $\pm$ 0.06 | 1.89 $\pm$ 0.06 (11) | 1.88   | 1.80 - 1.99 | 1.88 $\pm$ 0.07 (5)                      | 1.97 (2)       | 1.95 (2) AA |
| La                 | ppm   | ---             | 83 $\pm$ 3 (6)       | 84     | 62 - 100    | 83 $\pm$ 3 (6)                           | ---            | ---         |
| Lu                 | ppm   | ---             | 1.1 $\pm$ 0.3 (3)    | ---    | 0.93 - 1.44 | ---                                      | ---            | ---         |
| Mg                 | ppm   | 4550 $\pm$ 10   | 4300 $\pm$ 300 (5)   | 4540   | 3800 - 8000 | ---                                      | ---            | ---         |
| Mn                 | ppm   | 190             | 210 $\pm$ 35 (10)    | 191    | 170 - 277   | 220 $\pm$ 40 (6)                         | 190 (2)        | ---         |
| Mo                 | ppm   | 29              | 31 $\pm$ 4 (3)       | ---    | 27 - 36     | ---                                      | ---            | ---         |
| Na                 | ppm   | 1700 $\pm$ 100  | 1750 $\pm$ 120 (10)  | 1750   | 1560 - 2200 | 1740 $\pm$ 40 (6)                        | 2100 (2)       | ---         |
| Nd                 | ppm   | ---             | 79 $\pm$ 23 (4)      | 71     | 65.6 - 122  | ---                                      | ---            | ---         |
| Ni                 | ppm   | 127 $\pm$ 4     | 124 $\pm$ 12 (4)     | ---    | 112 - 139   | ---                                      | ---            | ---         |
| O                  | %     | ---             | 47.66 (1)            | ---    | ---         | ---                                      | ---            | ---         |
| P                  | ppm   | ---             | 1830 $\pm$ 150 (3)   | ---    | 1700 - 2000 | ---                                      | ---            | ---         |
| Pb                 | ppm   | 72.4 $\pm$ 0.4  | 65 (1)               | ---    | ---         | ---                                      | ---            | ---         |
| Pr                 | ppm   | ---             | 18 (2)               | ---    | 17.9 - 18.9 | ---                                      | ---            | ---         |
| Rb                 | ppm   | 131 $\pm$ 2     | 140 $\pm$ 12 (8)     | 136    | 124 - 163   | 142 $\pm$ 14 (5) <sup>a</sup>            | ---            | ---         |
| S                  | ppm   | ---             | 2700 (1)             | ---    | ---         | ---                                      | ---            | ---         |
| Sb                 | ppm   | 7               | 7.1 $\pm$ 0.6 (6)    | 7.2    | 6.3 - 7.8   | 7.3 $\pm$ 0.5 (5)                        | ---            | ---         |
| Sc                 | ppm   | 40              | 38 $\pm$ 3 (8)       | 40     | 34 - 43     | 40 $\pm$ 2 (6) <sup>a</sup>              | ---            | ---         |
| Se                 | ppm   | 10.3 $\pm$ 0.6  | 9.5 $\pm$ 1.0 (7)    | 9.4    | 7.8 - 10.7  | 9.9 $\pm$ 0.6 (4) <sup>a</sup>           | ---            | ---         |
| Si                 | %     | 22.8 $\pm$ 0.8  | 23.5 $\pm$ 0.8 (5)   | 23.37  | 18.0 - 24.2 | ---                                      | ---            | ---         |
| Sm                 | ppm   | ---             | 17 $\pm$ 2 (7)       | 16.6   | 14.5 - 20.0 | 17 $\pm$ 2 (5)                           | ---            | ---         |
| Sr                 | ppm   | 830 $\pm$ 30    | 822 $\pm$ 25 (8)     | 819    | 740 - 850   | 800 $\pm$ 37 (6)                         | ---            | ---         |
| Ta                 | ppm   | ---             | 1.89 $\pm$ 0.14 (7)  | 1.8    | 1.71 - 2.10 | 1.91 $\pm$ 0.13 (6) <sup>a</sup>         | ---            | ---         |
| Tb                 | ppm   | ---             | 2.4 $\pm$ 0.4 (5)    | 2.3    | 2.1 - 2.9   | 2.5 $\pm$ 0.4 (4) <sup>a</sup>           | ---            | ---         |
| Te                 | ppm   | ---             | <6.6 (1)             | ---    | ---         | ---                                      | ---            | ---         |
| Th                 | ppm   | 24.7 3          | 24.6 $\pm$ 1.0 (8)   | 24.8   | 22.4 - 28   | 24.8 $\pm$ 0.2 (5) <sup>a</sup>          | ---            | ---         |
| Ti                 | ppm   | 8000            | 8100 $\pm$ 200 (10)  | 8200   | 7800 - 9000 | 8100 $\pm$ 200 (6)                       | 8400 (2)       | ---         |
| Tl                 | ppm   | ---             | 4.4 (1)              | ---    | ---         | ---                                      | ---            | ---         |
| U                  | ppm   | 10.2 $\pm$ 0.1  | 10.4 $\pm$ 0.2 (4)   | 10.4   | 9.8 - 11    | 10.3 $\pm$ 0.3 (9)                       | ---            | ---         |
| V                  | ppm   | 300             | 289 $\pm$ 7 (8)      | 291    | 280 - 360   | 293 $\pm$ 5 (5)                          | ---            | ---         |
| W                  | ppm   | ---             | 5.9 $\pm$ 0.7 (4)    | ---    | 5.4 - 6.9   | 5.8 $\pm$ 0.8 (4) <sup>a</sup>           | ---            | ---         |
| Yb                 | ppm   | ---             | 8.2 $\pm$ 1.3 (4)    | ---    | 6.9 - 10    | 8.6 $\pm$ 1.3 (3) <sup>a</sup>           | ---            | ---         |
| Zn                 | ppm   | 220 $\pm$ 10    | 235 $\pm$ 16 (7)     | 230    | 218 - 256   | 233 $\pm$ 20 (3) <sup>a</sup>            | ---            | ---         |
| Zr                 | ppm   | ---             | 370 $\pm$ 50 (4)     | ---    | 300 - 410   | ---                                      | ---            | ---         |

<sup>a</sup>Only two analysts reporting.

TABLE 15  
ELEMENTAL CONCENTRATIONS IN NEWER NBS SILICATE ROCK, SEDIMENT,  
AND AIR PARTICULATE STANDARD REFERENCE MATERIALS

| Element         | Units | 278           |                                   | 688           |                                   | 1645          |                                   | 1646          |                                   | 1648          |                                   | 1649          |                                   |
|-----------------|-------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|
|                 |       | NBS<br>(1981) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1981) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1978) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1978) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982) | Literature<br>$\bar{x} \pm s$ (n) |
| As              | ppb   | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | 6             | 6.1 ± 0.3 (3)                     | ...           | ...                               |
| Al              | %     | 7.49 ± 0.08   | 7.62 (2)                          | 9.18 ± 0.05   | 8.9 (2)                           | ...           | ...                               | 6.25 ± 0.20   | ...                               | 3.3           | 3.23 ± 0.17 (6)                   | ...           | ...                               |
| Ar              | ppm   | ...           | 4.9 ± 0.2 (3)                     | ...           | 2.7 (1)                           | 2.1           | 2.40 (2)                          | 11.6 ± 1.3    | ...                               | 115 ± 10      | 117 ± 3 (6)                       | 67            | ...                               |
| Au              | ppb   | ...           | 2.1 (2)                           | ...           | 0.9 (1)                           | 66            | 67 ± 3 (9)                        | ...           | ...                               | ...           | ...                               | ...           | ...                               |
| B               | ppm   | 25            | 15.1 ± 0.2 (3)                    | ...           | 1.1 (2)                           | ...           | 25.9 (1)                          | ...           | 83 (1)                            | ...           | 158 (1)                           | ...           | ...                               |
| Ba              | ppm   | 1140          | 1010 ± 110 (3)                    | 200           | 204 (2)                           | ...           | 370 (2)                           | ...           | ...                               | 737           | 780 ± 40 (5)                      | 569           | ...                               |
| Be              | ppm   | ...           | ...                               | ...           | ...                               | ...           | 1.0 (1)                           | 1.5           | ...                               | ...           | 3.0 (1)                           | ...           | ...                               |
| Bi              | ppb   | ...           | ...                               | ...           | ...                               | ...           | <100 (1)                          | ...           | ...                               | ...           | ...                               | ...           | ...                               |
| Br              | ppm   | ...           | 2.8 ± 0.2 (3)                     | ...           | ...                               | ...           | ...                               | ...           | ...                               | 500           | 505 ± 24 (6)                      | 1190          | ...                               |
| C               | %     | 0.05          | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | 15.0 (2)                          | ...           | ...                               |
| CO <sub>2</sub> | %     | 0.703 ± 0.002 | 6900 ± 800 (3)                    | 0.05          | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               |
| Ca              | %     | ...           | ...                               | 8.70          | 8.05 (2)                          | 2.9           | 2.8 ± 0.3 (5)                     | 0.83 ± 0.03   | ...                               | ...           | 5.8 ± 0.4 (7)                     | ...           | ...                               |
| Cd              | ppm   | ...           | ...                               | ...           | ...                               | 10.2 ± 1.5    | 10.1 ± 0.9 (8)                    | 0.96 ± 0.07   | ...                               | 75 ± 7        | 70 ± 4 (6)                        | 18            | ...                               |
| Ce              | ppm   | 62.2          | 60 ± 5 (4)                        | 13.3          | 10 (1)                            | ...           | 24 (2)                            | 80            | ...                               | 55            | 55 ± 4 (4)                        | 51.6          | ...                               |
| Cl              | ppm   | ...           | 640 (1)                           | ...           | ...                               | ...           | ...                               | ...           | ...                               | 4500          | 4700 (2)                          | 2820          | ...                               |
| Co              | ppm   | 1.5           | 1.91 ± 0.10 (3)                   | 49.7          | 52 (3)                            | 8             | 9.2 ± 1.3 (5)                     | 10.5 ± 1.3    | ...                               | 18            | 19 ± 5 (5)                        | 16.4          | ...                               |
| Cr              | ppm   | 6.1           | 6.5 ± 0.2 (3)                     | 332 ± 9       | 329 (2)                           | 39600 ± 2800  | 31100 ± 1280 (12)                 | 76 ± 3        | ...                               | 403 ± 12      | 405 ± 10 (8)                      | 211           | ...                               |
| Cs              | ppm   | 5.3           | 5.2 ± 0.2 (4)                     | ...           | 0.21 (1)                          | ...           | 2.8 (2)                           | 2.7           | 3.6 (1)                           | 3             | 3.5 ± 0.2 (3)                     | 2.85          | ...                               |
| Cu              | ppm   | 5.9 ± 0.2     | ...                               | 96            | ...                               | 109 ± 19      | 110 ± 10 (10)                     | 18 ± 3        | ...                               | 609 ± 27      | 591 ± 12 (8)                      | ...           | ...                               |
| Eu              | ppm   | 0.84          | 8.80 ± 0.03 (4)                   | 1.07          | 0.96 (2)                          | ...           | 0.5 (2)                           | 1.5           | ...                               | 0.8           | 0.85 ± 0.15 (3)                   | 0.87          | ...                               |
| F               | ppm   | 500           | ...                               | 200           | ...                               | ...           | 1740 (1)                          | ...           | ...                               | ...           | ...                               | ...           | ...                               |
| Fe              | %     | 1.43 ± 0.02   | 1.41 ± 0.18 (5)                   | 7.23 ± 0.03   | 7.19 ± 0.08 (5)                   | 11.3 ± 1.2    | 10.7 ± 0.6 (7)                    | 3.35 ± 0.10   | ...                               | 3.91 ± 0.10   | 3.90 ± 0.21 (11)                  | 3.00          | ...                               |
| FeO             | %     | 1.36 ± 0.02   | ...                               | 7.84 ± 0.03   | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               |
| Ga              | ppm   | ...           | 11 (2)                            | ...           | 37 (1)                            | ...           | 38 (1)                            | ...           | ...                               | ...           | 40 (2)                            | ...           | ...                               |
| Gd              | ppm   | ...           | 5.0 ± 0.5 (3)                     | ...           | 2.7 (2)                           | ...           | ...                               | 1.4           | ...                               | ...           | ...                               | ...           | ...                               |
| Ge              | ppm   | ...           | 0.089 (1)                         | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               |
| H               | %     | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               |
| Hf              | ppm   | 8.4           | 8.0 ± 1.4 (3)                     | 1.6           | 1.52 (2)                          | ...           | 1.39 (1)                          | ...           | ...                               | 4.4           | 4.6 ± 0.5 (3)                     | 4.41          | ...                               |
| Hg              | ppb   | ...           | ...                               | ...           | ...                               | 1100 ± 500    | 1130 ± 180 (5)                    | 63 ± 12       | ...                               | ...           | ...                               | ...           | ...                               |
| I               | ppm   | ...           | 0.044 (1)                         | ...           | ...                               | ...           | ...                               | ...           | ...                               | 20            | 18 (2)                            | ...           | ...                               |
| In              | ppm   | ...           | 3.7 ± 0.4 (4)                     | ...           | 0.17 (1)                          | 1.2           | 1.07 (2)                          | 1.4           | ...                               | 1.0           | 0.98 (1)                          | ...           | ...                               |
| K               | %     | 1.45 ± 0.02   | 32 ± 5 (4)                        | 0.155 ± 0.007 | 6.7 (2)                           | 9             | 15 (1)                            | ...           | ...                               | 1.0           | 1.03 ± 0.06 (5)                   | ...           | ...                               |
| La              | ppm   | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | 42            | 39 ± 3 (5)                        | 33.3          | ...                               |
| Li              | ppm   | ...           | ...                               | ...           | ...                               | ...           | ...                               | 49            | ...                               | ...           | ...                               | ...           | ...                               |
| Lu              | ppb   | 730           | 780 ± 50 (4)                      | 340           | 342 (1)                           | ...           | 1.8 (3)                           | 1.09 ± 0.08   | ...                               | ...           | 34 (1)                            | ...           | ...                               |
| Mg              | %     | 0.14          | ...                               | 5.1           | 4.8 (2)                           | 2.4           | 760 ± 13 (6)                      | 375 ± 20      | ...                               | 0.8           | 0.77 ± 0.04 (5)                   | ...           | ...                               |
| Mn              | ppm   | 400 ± 15      | 401 ± 26 (4)                      | 1290 ± 20     | 1200 ± 90 (3)                     | 785 ± 97      | 760 ± 13 (6)                      | ...           | ...                               | 860           | 821 ± 47 (13)                     | ...           | ...                               |
| Mo              | ppm   | ...           | 3.7 (2)                           | ...           | ...                               | ...           | 25 (1)                            | 2.0           | ...                               | ...           | 19 (2)                            | 14            | ...                               |
| N               | %     | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | 3.25 (1)                          | ...           | ...                               |
| N-Total         | %     | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               | ...           | ...                               |

TABLE 15 (cont)

| Element         | Units | 278              |                                   | 688             |                                   | 1645            |                                   | 1646           |                                   | 1648             |                                   | 1649          |                                   |
|-----------------|-------|------------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|----------------|-----------------------------------|------------------|-----------------------------------|---------------|-----------------------------------|
|                 |       | NBS<br>(1981)    | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1981)   | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1978)   | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982)  | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1978)    | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982) | Literature<br>$\bar{x} \pm s$ (n) |
| N-K-jetahl      | ppm   | ...              | ...                               | ...             | ...                               | 797 $\pm$ 48    | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| Na              | %     | 3.59 $\pm$ 0.04  | 3.3 $\pm$ 0.5 (4)                 | 1.60 $\pm$ 0.02 | 1.4 $\pm$ 0.3 (3)                 | 0.55            | 0.55 (2)                          | 1.0            | ...                               | 0.40             | 0.46 $\pm$ 0.07 (4)               | ...           | ...                               |
| Nb              | ppm   | ...              | ...                               | ...             | ...                               | ...             | 1.4 (1)                           | ...            | ...                               | ...              | 22 (1)                            | ...           | ...                               |
| Nd              | ppm   | ...              | 28 (1)                            | ...             | 10 (1)                            | ...             | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| NH <sub>4</sub> | %     | ...              | ...                               | ...             | ...                               | ...             | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| Ni              | ppm   | 3.6 $\pm$ 0.3    | ...                               | 150             | 123 (1)                           | 45.8 $\pm$ 2.9  | 42 $\pm$ 9 (11)                   | 32 $\pm$ 3     | ...                               | 2.01 $\pm$ 0.08  | 88 $\pm$ 13 (7)                   | ...           | ...                               |
| NO <sub>3</sub> | %     | ...              | ...                               | ...             | ...                               | ...             | ...                               | ...            | ...                               | 1.07 $\pm$ 0.06  | ...                               | ...           | ...                               |
| P               | ppm   | 160 $\pm$ 13     | ...                               | 580 $\pm$ 10    | ...                               | 510 $\pm$ 14    | 708 $\pm$ 19 (8)                  | 540 $\pm$ 50   | ...                               | ...              | 6500 $\pm$ 300 (9)                | ...           | ...                               |
| Pb              | ppm   | 16.4 $\pm$ 0.2   | ...                               | 3.3 $\pm$ 0.2   | ...                               | 714 $\pm$ 28    | 14 (1)                            | 28.1 $\pm$ 1.8 | ...                               | ...              | 8 (1)                             | ...           | ...                               |
| Pr              | ppm   | 127.5 $\pm$ 0.3  | 137 $\pm$ 7 (3)                   | 1.91 $\pm$ 0.01 | ...                               | ...             | 39.6 $\pm$ 1.4 (4)                | 87             | ...                               | ...              | 54 $\pm$ 3 (4)                    | 47            | ...                               |
| Rb              | ppm   | ...              | ...                               | ...             | ...                               | ...             | ...                               | ...            | ...                               | ...              | 5.21 (1)                          | 3.27          | ...                               |
| S               | %     | ...              | ...                               | ...             | ...                               | ...             | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| Sb              | ppm   | 1.5              | 1.7 $\pm$ 0.1 (4)                 | ...             | 0.44 (2)                          | 51              | 31 $\pm$ 6 (10)                   | 0.4            | 0.85 (1)                          | 45               | 44 $\pm$ 2 (5)                    | 29.9          | ...                               |
| Se              | ppm   | 5.1              | 4.9 $\pm$ 0.5 (4)                 | 38.1            | 36.2 (2)                          | 2               | 2.6 (2)                           | 16.8           | 10.4 (1)                          | 7                | 6.7 $\pm$ 0.1 (4)                 | 3.73          | ...                               |
| Si              | ppm   | ...              | ...                               | ...             | ...                               | ...             | 1.2 $\pm$ 0.3 (4)                 | 0.6            | ...                               | 24               | 25 $\pm$ 2 (4)                    | 25.6          | ...                               |
| Si              | %     | 34.11 $\pm$ 0.06 | 34.9 (2)                          | 22.6 $\pm$ 0.05 | 24.6 (1)                          | 24              | 30.6 (1)                          | 3              | ...                               | 12.5             | 13.5 $\pm$ 1.7 (6)                | ...           | ...                               |
| Si              | ppm   | 5.7              | 5.66 $\pm$ 0.04 (4)               | 2.79            | 2.3 $\pm$ 0.2 (3)                 | ...             | ...                               | ...            | ...                               | 4.4              | 4.2 $\pm$ 0.2 (3)                 | 1.71          | ...                               |
| Sn              | ppm   | ...              | ...                               | ...             | ...                               | ...             | 313 (1)                           | ...            | ...                               | ...              | 147 (1)                           | 55            | ...                               |
| SO <sub>4</sub> | %     | ...              | ...                               | ...             | ...                               | ...             | ...                               | ...            | ...                               | 15.42 $\pm$ 0.14 | 207 $\pm$ 15 (3)                  | ...           | ...                               |
| Si              | ppm   | 63.5 $\pm$ 0.1   | ...                               | 169.2 $\pm$ 0.7 | 179 (1)                           | ...             | 900 $\pm$ 90 (4)                  | ...            | ...                               | ...              | 7.0 (2)                           | ...           | ...                               |
| Ta              | ppm   | 1.2              | 1.26 $\pm$ 0.05 (3)               | ...             | 0.31 (2)                          | ...             | 0.22 (1)                          | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| Tb              | ppm   | 1.0              | 1.18 $\pm$ 0.06 (4)               | 0.448           | 0.49 (2)                          | ...             | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| Te              | ppb   | ...              | ...                               | ...             | ...                               | ...             | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| Th              | ppm   | 12.4 $\pm$ 0.3   | 12.6 $\pm$ 0.4 (4)                | 0.33 $\pm$ 0.02 | 0.46 (1)                          | 1.62 $\pm$ 0.22 | 1.8 (1)                           | ...            | ...                               | 7.4              | 7.6 $\pm$ 0.2 (3)                 | 1.63          | ...                               |
| Ti              | ppm   | 1470 $\pm$ 40    | 1475 (2)                          | 7009 $\pm$ 60   | 7100 (2)                          | ...             | 590 $\pm$ 220 (5)                 | 5108           | ...                               | 4000             | 4020 $\pm$ 140 (8)                | ...           | ...                               |
| Ti              | ppm   | 0.54 $\pm$ 0.04  | ...                               | ...             | ...                               | 1.44 $\pm$ 0.07 | 1.9 (1)                           | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| Tm              | ppm   | ...              | 301 (1)                           | ...             | ...                               | ...             | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |
| U               | ppm   | 4.58 $\pm$ 0.04  | 4.6 $\pm$ 0.3 (4)                 | 0.37            | 0.31 (2)                          | 1.11 $\pm$ 0.05 | 1.1 $\pm$ 0.3 (3)                 | ...            | 3.0 (1)                           | ...              | 5.6 $\pm$ 0.2 (3)                 | 1.65          | ...                               |
| V               | ppm   | ...              | ...                               | 250             | 235 (1)                           | 23.5 $\pm$ 6.9  | 26 $\pm$ 3 (3)                    | 81 $\pm$ 10    | ...                               | ...              | 118 $\pm$ 9 (5)                   | ...           | ...                               |
| W               | ppm   | ...              | ...                               | ...             | ...                               | ...             | ...                               | ...            | ...                               | ...              | 4.2 $\pm$ 0.7 (3)                 | 1.8           | ...                               |
| Y               | ppm   | ...              | ...                               | ...             | ...                               | ...             | 7.2 (2)                           | ...            | ...                               | ...              | 5 (1)                             | ...           | ...                               |
| Y               | ppm   | ...              | ...                               | ...             | 1.86 (1)                          | ...             | 0.6 (1)                           | ...            | ...                               | ...              | 2 (1)                             | ...           | ...                               |
| Yb              | ppm   | 4.5              | 4.2 $\pm$ 0.8 (4)                 | 2.09            | ...                               | 1720 $\pm$ 169  | 1640 $\pm$ 120 (12)               | ...            | ...                               | ...              | 4700 $\pm$ 140                    | 1670          | ...                               |
| Zn              | ppm   | 55               | 56 (2)                            | 58.0            | ...                               | ...             | 63 (2)                            | 131 $\pm$ 6    | ...                               | ...              | 169 (1)                           | ...           | ...                               |
| Zr              | ppm   | ...              | 298 (2)                           | ...             | 59 (1)                            | ...             | ...                               | ...            | ...                               | ...              | ...                               | ...           | ...                               |

TABLE 16

ELEMENTAL CONCENTRATIONS AND URANIUM ISOTOPE RATIOS IN  
SEVERAL NBS STANDARD REFERENCE MATERIALS

| SRM<br>No. | Element   | Units | Literature        |                     |                | Certification<br>Date |
|------------|-----------|-------|-------------------|---------------------|----------------|-----------------------|
|            |           |       | NBS               | $\bar{x} \pm s$ (n) | Range          |                       |
| 1619       | S         | ppm   | 7190 $\pm$ 70     | —                   | —              | 1981                  |
| 1620a      | S         | %     | 4.504 $\pm$ 0.010 | —                   | —              | 1981                  |
| 1621       | S         | %     | 1.05 $\pm$ 0.02   | 1.00 $\pm$ 0.07 (4) | 0.90 - 1.06    | 1967                  |
| 1621a      | S         | %     | 0.94 $\pm$ 0.01   | 0.94 $\pm$ 0.03 (6) | 0.89 - 0.973   | 1980                  |
| 1621b      | S         | %     | 0.950 $\pm$ 0.005 | —                   | —              | 1981                  |
| 1622a      | S         | %     | 1.96 $\pm$ 0.04   | 1.90 $\pm$ 0.20 (4) | 1.60 - 2.02    | 1979                  |
| 1622b      | S         | %     | 1.982 $\pm$ 0.018 | —                   | —              | 1981                  |
| 1623       | S         | ppm   | 2680 $\pm$ 40     | 2710 $\pm$ 130 (4)  | 2600 - 2900    | 1971                  |
| 1623a      | S         | ppm   | 2400 $\pm$ 30     | —                   | —              | 1981                  |
| 1624       | S         | ppm   | 2110 $\pm$ 40     | 2050 $\pm$ 120 (4)  | 1900 - 2200    | 1971                  |
| 1624a      | S         | ppm   | 1410 $\pm$ 20     | —                   | —              | 1981                  |
| 1631A      | Ash       | %     | 5.00 $\pm$ 0.02   | —                   | —              | 1974                  |
|            | S         | ppm   | 5460 $\pm$ 30     | 5530 $\pm$ 270 (4)  | 5260 - 5900    | —                     |
| 1631B      | Ash       | %     | 14.59 $\pm$ 0.09  | —                   | —              | 1974                  |
|            | S         | %     | 2.016 $\pm$ 0.014 | 1.99 $\pm$ 0.05 (4) | 1.92 - 2.04    | —                     |
| 1631C      | Ash       | %     | 6.17 $\pm$ 0.02   | —                   | —              | 1974                  |
|            | S         | %     | 3.020 $\pm$ 0.008 | 3.04 $\pm$ 0.07 (4) | 2.98 - 3.12    | —                     |
| 1641       | Hg        | ppm   | 1.49 $\pm$ 0.05   | 1.47 (1)            | —              | 1975                  |
| 1642       | Hg        | ppb   | 1.18 $\pm$ 0.05   | —                   | —              | 1974                  |
| 1642A      | Hg        | ppb   | 1.10 $\pm$ 0.06   | 1.30 (1)            | —              | 1977                  |
| 950A       | U-238/235 | —     | "normal"          | 138.1 $\pm$ 0.6 (4) | 137.55 - 138.9 | 1961                  |
| 950B       | U-238/234 | —     | "normal"          | 17630 (1)           | —              | 1978                  |
|            | U-238/235 | —     | "normal"          | 137.4 (1)           | —              | 1978                  |

TABLE 17

## ELEMENTAL CONCENTRATIONS IN NBS FUEL OIL STANDARD REFERENCE MATERIALS

| Element | Units | 1634            |                     |        |             | 1634A           |
|---------|-------|-----------------|---------------------|--------|-------------|-----------------|
|         |       | NBS<br>(1978)   | Literature          |        |             | NBS<br>(1982)   |
|         |       |                 | $\bar{x} \pm s$ (n) | Median | Range       |                 |
| As      | ppb   | 95              | 81 $\pm$ 26 (5)     | 70     | 56 - 120    | 120             |
| Au      | ppb   | ---             | 24 (1)              | ---    | ---         | ---             |
| Be      | ppb   | <10             | ---                 | ---    | ---         | 6               |
| Br      | ppb   | ---             | 39.8 $\pm$ 0.9 (4)  | 40     | 39 - 240    | <1              |
| Ca      | ppm   | ---             | 15 (1)              | ---    | ---         | 16              |
| Cd      | ppb   | <10             | 5 (1)               | ---    | ---         | 2               |
| Cl      | ppm   | ---             | 8.1 $\pm$ 0.3 (3)   | ---    | 7.8 - 18    | 31              |
| Co      | ppb   | ---             | 310 $\pm$ 50 (5)    | 301    | 250 - 400   | 300             |
| Cr      | ppb   | 90              | 97 $\pm$ 15 (4)     | ---    | 80 - 116    | 700             |
| Cu      | ppb   | ---             | 220 (1)             | ---    | ---         | ---             |
| Fe      | ppm   | 13.5 $\pm$ 1.0  | 14.2 $\pm$ 2.3 (14) | 14.1   | 10.8 - 25   | 31              |
| Hg      | ppb   | 2.3             | 12 (2)              | ---    | 2.3 - 22    | <2              |
| K       | ppm   | ---             | 315 (1)             | ---    | ---         | ---             |
| Mn      | ppb   | 120             | 200 $\pm$ 90 (4)    | ---    | 110 - 320   | 190 $\pm$ 20    |
| Mo      | ppb   | ---             | 870 (1)             | ---    | ---         | 120             |
| Na      | ppm   | ---             | 11.9 $\pm$ 0.9 (4)  | ---    | 11.2 - 13.2 | 87 $\pm$ 4      |
| Ni      | ppm   | 36 $\pm$ 4      | 36 $\pm$ 3 (16)     | 36.4   | 31.1 - 39.5 | 29 $\pm$ 1      |
| Pb      | ppb   | 41 $\pm$ 5      | 46 (2)              | ---    | 41 - 50     | 2.80 $\pm$ 0.08 |
| S       | %     | 2.14 $\pm$ 0.02 | 2.13 $\pm$ 0.11 (9) | 2.15   | 2.0 - 2.3   | 2.85 $\pm$ 0.05 |
| Sb      | ppb   | ---             | 11 $\pm$ 2 (3)      | ---    | 10 - 14     | ---             |
| Se      | ppb   | ---             | 187 $\pm$ 15 (3)    | ---    | 138 - 200   | 150 $\pm$ 20    |
| V       | ppm   | 320 $\pm$ 15    | 308 $\pm$ 16 (14)   | 312    | 266 - 326   | 56 $\pm$ 2      |
| Zn      | ppb   | 230 $\pm$ 50    | 320 $\pm$ 160 (3)   | ---    | 170 - 480   | 2.7 $\pm$ 0.2   |

TABLE 18  
ELEMENTAL CONCENTRATIONS IN NBS SULFUR IN COAL STANDARD REFERENCE MATERIALS

| Element                       | Units | 2682          | 2683          | 2684          | 2685          |
|-------------------------------|-------|---------------|---------------|---------------|---------------|
|                               |       | NBS<br>(1982) | NBS<br>(1982) | NBS<br>(1982) | NBS<br>(1982) |
| Al                            | %     | 0.46          | 0.86          | 1.1           | 1.7           |
| As                            | ppm   | 1.0           | 3.6           | 3.9           | 12            |
| Ash                           | %     | 6.37 ± 0.18   | 6.85 ± 0.02   | 11.09 ± 0.18  | 16.53 ± 0.15  |
| B                             | ppm   | 39            | 67            | 114           | 109           |
| Ba                            | ppm   | 382           | 71            | 41            | 105           |
| Br                            | ppm   | 3.7           | 17            | 11            | 5.6           |
| C                             | %     | 75            | 79            | 68            | 66            |
| Ca                            | %     | 1.1           | 0.20          | 0.44          | 0.52          |
| Ce                            | ppm   | 10            | 9             | 12            | 18            |
| Co                            | ppm   | 1.7           | 2.2           | 3.9           | 4.6           |
| Cr                            | ppm   | 15            | 11            | 17            | 22            |
| Cs                            | ppm   | <0.1          | 0.4           | 1.2           | 1.3           |
| Eu                            | ppb   | 170           | 180           | 230           | 360           |
| Fe                            | %     | 0.24          | 0.76          | 1.5           | 2.9           |
| H                             | %     | 4.7           | 5.0           | 4.8           | 4.6           |
| H <sub>2</sub> O <sup>-</sup> | %     | 18            | 1.4           | 3.6           | 1.8           |
| Hf                            | ppb   | 600           | 420           | 570           | 910           |
| K                             | ppm   | 100           | 800           | 2000          | 2600          |
| La                            | ppm   | 5.2           | 5.1           | 6.7           | 10            |
| Mg                            | ppm   | 6900          | 1900          | 3100          | 4200          |
| Mn                            | ppm   | 26            | 13            | 36            | 41            |
| N                             | %     | 0.8           | 1.6           | 1.6           | 1.1           |
| Na                            | ppm   | 1000          | 500           | 300           | 800           |
| Rb                            | ppm   | <2            | 5.3           | 15            | 17            |
| S                             | %     | 0.47 ± 0.03   | 1.85 ± 0.06   | 3.00 ± 0.13   | 4.62 ± 0.18   |
| Sb                            | ppb   | 190           | 280           | 350           | 360           |
| Sc                            | ppm   | 1.5           | 1.9           | 2.7           | 3.7           |
| Se                            | ppm   | 0.91          | 1.2           | 1.9           | 1.9           |
| Sm                            | ppm   | 0.78          | 0.86          | 1.1           | 1.7           |
| Th                            | ppm   | 1.5           | 1.4           | 2.0           | 2.7           |
| Ti                            | ppm   | 500           | 400           | 600           | 900           |
| U                             | ppb   | 520           | 420           | 900           | 950           |
| V                             | ppm   | 15            | 14            | 22            | 31            |
| W                             | ppm   | 1.8           | 0.48          | 0.56          | 1.2           |
| Zn                            | ppm   | 8.6           | 9.5           | 110           | 17            |

TABLE 19  
ELEMENTAL CONCENTRATIONS IN NBS WATER STANDARD REFERENCE MATERIALS

| Element         | Units | 1643          |                                   | 1643A         |                                   |
|-----------------|-------|---------------|-----------------------------------|---------------|-----------------------------------|
|                 |       | NBS<br>(1977) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1980) | Literature<br>$\bar{x} \pm s$ (n) |
| Ag              | ppb   | 3.4 $\pm$ 0.4 | ---                               | 2.8 $\pm$ 0.3 | 2.7 (2)                           |
| Al              | ppb   | 77 $\pm$ 1    | 81 $\pm$ 3 (3)                    | ---           | 57 (1)                            |
| As              | ppb   | 76 $\pm$ 1    | 76 $\pm$ 4 (4)                    | 76 $\pm$ 7    | 73 (2)                            |
| Ba              | ppb   | 18            | 18.3 $\pm$ 0.9 (5)                | 46 $\pm$ 2    | 46 (2)                            |
| Be              | ppb   | 19 $\pm$ 1    | 20 (2)                            | 19 $\pm$ 2    | ---                               |
| Ca              | ppm   | ---           | 24 (1)                            | ---           | 28 (2)                            |
| Cd              | ppb   | 8 $\pm$ 1     | <15 (1)                           | 10 $\pm$ 1    | 9.3 $\pm$ 3.8 (3)                 |
| Cr              | ppb   | 15 $\pm$ 1    | ---                               | 17 $\pm$ 2    | 19 (2)                            |
| Co              | ppb   | 17 $\pm$ 1    | 20 (1)                            | 19 $\pm$ 2    | ---                               |
| Cu              | ppb   | 16 $\pm$ 1    | 15.7 $\pm$ 1.6 (3)                | 18 $\pm$ 2    | 15 $\pm$ 4 (3)                    |
| Fe              | ppb   | 75 $\pm$ 1    | 79 (2)                            | 88 $\pm$ 4    | 70 $\pm$ 40 (3)                   |
| Hg              | ppb   | 2             | ---                               | <0.2          | ---                               |
| K               | ppm   | ---           | ---                               | ---           | 1.6 (2)                           |
| Mg              | ppm   | ---           | 5.7 (1)                           | ---           | 7.8 (2)                           |
| Mn              | ppb   | 29 $\pm$ 1    | 27.6 $\pm$ 1.2 (4)                | 31 $\pm$ 2    | 21 (2)                            |
| Mo              | ppb   | 105 $\pm$ 3   | 107 (2)                           | 95 $\pm$ 6    | ---                               |
| Na              | ppm   | ---           | 8.8 (1)                           | ---           | 9 (2)                             |
| Ni              | ppb   | 49 $\pm$ 1    | 49.8 $\pm$ 1.4 (4)                | 55 $\pm$ 3    | 57 (1)                            |
| NO <sub>3</sub> | ppm   | ---           | ---                               | ---           | 1.0 (1)                           |
| Pb              | ppb   | 20 $\pm$ 1    | 23 (1)                            | 27 $\pm$ 1    | 32 $\pm$ 8 (3)                    |
| Se              | ppb   | 12 $\pm$ 1    | 11 (2)                            | 11 $\pm$ 1    | 10 (1)                            |
| Sr              | ppb   | 212 $\pm$ 4   | ---                               | 239 $\pm$ 5   | 236 (1)                           |
| Sn              | ppb   | ---           | <20 (1)                           | ---           | ---                               |
| V               | ppb   | 50 $\pm$ 1    | 45 (2)                            | 53 $\pm$ 3    | ---                               |
| Zn              | ppb   | 65 $\pm$ 3    | 62 (2)                            | 72 $\pm$ 4    | 66 $\pm$ 10 (3)                   |

TABLE 20

## NBS ENVIRONMENTAL RADIOACTIVITY STANDARD REFERENCE MATERIALS

| Isotope           | Units | 4350                           |            | 4350B                          |            | 4353                           |            |
|-------------------|-------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                   |       | NBS<br>(1975)                  | Literature | NBS<br>(1981)                  | Literature | NBS<br>(1981)                  | Literature |
| K-40              | pCi/g | 1.40 ± 0.13                    | ---        | 15                             | ---        | 19.5 ± 1.9                     | ---        |
|                   | Bq/g  | 5.4 ± 0.5 × 10 <sup>-1</sup>   | ---        | 5.6 × 10 <sup>-1</sup>         | ---        | 7.23 ± 0.69 × 10 <sup>-1</sup> | ---        |
| Mn-54             | fCi/g | 57 ± 7                         | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 2.1 ± 0.2 × 10 <sup>-3</sup>   | ---        | ---                            | ---        | ---                            | ---        |
| Fe-55             | pCi/g | 43                             | ---        | 0.46                           | ---        | 0.067                          | ---        |
|                   | Bq/g  | 1.6                            | ---        | 1.7 × 10 <sup>-2</sup>         | ---        | 2.49 × 10 <sup>-3</sup>        | ---        |
| Co-60             | pCi/g | 4.00 ± 0.22                    | ---        | 0.125                          | 0.13 (1)   | ---                            | ---        |
|                   | Bq/g  | 1.48 ± 0.08 × 10 <sup>-1</sup> | ---        | 4.64 ± 0.23 × 10 <sup>-3</sup> | ---        | ---                            | ---        |
| Zn-65             | fCi/g | 350 ± 47                       | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 1.30 ± 0.18 × 10 <sup>-2</sup> | ---        | ---                            | ---        | ---                            | ---        |
| Sr-90 and Y-90    | fCi/g | 278 ± 42                       | ---        | 140                            | ---        | 206 ± 21                       | ---        |
|                   | Bq/g  | 1.03 ± 0.15 × 10 <sup>-2</sup> | ---        | 5.3 × 10 <sup>-3</sup>         | ---        | 7.63 ± 0.78 × 10 <sup>-3</sup> | ---        |
| Sb-125            | fCi/g | 95                             | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 3.5 × 10 <sup>-3</sup>         | ---        | ---                            | ---        | ---                            | ---        |
| Cs-137            | pCi/g | 2.70 ± 0.12                    | 2.5 (1)    | 0.783 ± 0.049                  | 0.85 (1)   | 0.464 ± 0.021                  | 0.52 (1)   |
|                   | Bq/g  | 1.00 ± 0.04 × 10 <sup>-1</sup> | ---        | 2.90 ± 0.18 × 10 <sup>-2</sup> | ---        | 1.76 ± 0.08 × 10 <sup>-2</sup> | ---        |
| Eu-152            | pCi/g | 6.50 ± 0.38                    | ---        | 0.824 ± 0.033                  | ---        | ---                            | ---        |
|                   | Bq/g  | 2.4 ± 0.1 × 10 <sup>-1</sup>   | ---        | 3.05 ± 0.12 × 10 <sup>-2</sup> | ---        | ---                            | ---        |
| Eu-154            | pCi/g | 1.4 ± 0.1                      | ---        | 0.102 ± 0.015                  | ---        | ---                            | ---        |
|                   | Bq/g  | 5.2 ± 0.4 × 10 <sup>-2</sup>   | ---        | 3.78 ± 0.57 × 10 <sup>-2</sup> | ---        | ---                            | ---        |
| Eu-155            | fCi/g | 380                            | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 1.4 × 10 <sup>-2</sup>         | ---        | ---                            | ---        | ---                            | ---        |
| Tl-208            | fCi/g | 380                            | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 14 × 10 <sup>-2</sup>          | ---        | ---                            | ---        | ---                            | ---        |
| Pb-212            | pCi/g | 1.6                            | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 6 × 10 <sup>-2</sup>           | ---        | ---                            | ---        | ---                            | ---        |
| Bi-212            | pCi/g | 1.4                            | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 5 × 10 <sup>-2</sup>           | ---        | ---                            | ---        | ---                            | ---        |
| Pb-214            | pCi/g | 1.1                            | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 4.1 × 10 <sup>-2</sup>         | ---        | ---                            | ---        | ---                            | ---        |
| Bi-214            | pCi/g | 0.92                           | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 3.4 × 10 <sup>-2</sup>         | ---        | ---                            | ---        | ---                            | ---        |
| Ra-226            | pCi/g | 0.84                           | ---        | 0.967 ± 0.097                  | ---        | 1.16 ± 0.08                    | ---        |
|                   | Bq/g  | 3.1 × 10 <sup>-2</sup>         | ---        | 3.58 ± 0.36 × 10 <sup>-2</sup> | ---        | 4.30 ± 0.28 × 10 <sup>-2</sup> | ---        |
| Ac-228            | pCi/g | 0.92 ± 0.18                    | ---        | ---                            | ---        | 1.88 ± 0.10                    | ---        |
|                   | Bq/g  | 3.4 ± 0.7 × 10 <sup>-2</sup>   | ---        | ---                            | ---        | 6.98 ± 0.36 × 10 <sup>-2</sup> | ---        |
| Th-228            | pCi/g | 1.07                           | ---        | 0.904                          | ---        | 1.91 ± 0.10                    | ---        |
|                   | Bq/g  | 3.95 × 10 <sup>-2</sup>        | ---        | 3.35 × 10 <sup>-2</sup>        | ---        | 7.08 ± 0.36 × 10 <sup>-2</sup> | ---        |
| Th-230            | pCi/g | 0.988                          | ---        | 0.796                          | 0.80 (1)   | 1.20 ± 0.06                    | 1.20 (1)   |
|                   | Bq/g  | 3.66 × 10 <sup>-2</sup>        | ---        | 2.95 × 10 <sup>-2</sup>        | ---        | 4.43 ± 0.22 × 10 <sup>-2</sup> | ---        |
| Th-232            | pCi/g | 0.84                           | ---        | 0.896                          | ---        | 1.87 ± 0.10                    | ---        |
|                   | Bq/g  | 3.4 × 10 <sup>-2</sup>         | ---        | 3.32 × 10 <sup>-2</sup>        | ---        | 6.93 ± 0.35 × 10 <sup>-2</sup> | ---        |
| Pa-231            | fCi/g | 47                             | ---        | ---                            | ---        | ---                            | ---        |
|                   | Bq/g  | 1.75 × 10 <sup>-3</sup>        | ---        | ---                            | ---        | ---                            | ---        |
| U-234             | pCi/g | 1.34                           | ---        | 0.896                          | ---        | 1.06 ± 0.04                    | ---        |
|                   | Bq/g  | 4.96 × 10 <sup>-2</sup>        | ---        | 3.32 × 10 <sup>-2</sup>        | ---        | 3.91 ± 0.14 × 10 <sup>-2</sup> | ---        |
| U-235             | fCi/g | 50                             | ---        | 46                             | ---        | 51                             | ---        |
|                   | Bq/g  | 1.85 × 10 <sup>-3</sup>        | ---        | 1.7 × 10 <sup>-3</sup>         | ---        | 1.9 × 10 <sup>-3</sup>         | ---        |
| U-238             | pCi/g | 1.14                           | ---        | 0.832                          | ---        | 1.05 ± 0.05                    | ---        |
|                   | Bq/g  | 4.42 × 10 <sup>-2</sup>        | ---        | 3.08 × 10 <sup>-2</sup>        | ---        | 3.89 ± 0.20 × 10 <sup>-2</sup> | ---        |
| Pu-238            | fCi/g | 2.0                            | ---        | 0.35 ± 0.06                    | 0.2 (1)    | 4.5 ± 0.5                      | 3.5 (1)    |
|                   | Bq/g  | 6.7 × 10 <sup>-5</sup>         | ---        | 1.3 ± 0.2 × 10 <sup>-5</sup>   | ---        | 1.66 ± 0.18 × 10 <sup>-4</sup> | ---        |
| Pu-239 and Pu-240 | fCi/g | 38 ± 3                         | 33 (1)     | 13.7 ± 0.8                     | 11.6 (1)   | 217 ± 16                       | 202 (1)    |
|                   | Bq/g  | 1.4 ± 0.1 × 10 <sup>-3</sup>   | ---        | 5.08 ± 0.29 × 10 <sup>-4</sup> | ---        | 8.03 ± 0.60 × 10 <sup>-3</sup> | ---        |
| Pu-239            | A%    | ---                            | ---        | 89.91                          | ---        | 94.57                          | ---        |
| Pu-240            | A%    | ---                            | ---        | 9.43                           | ---        | 5.23                           | ---        |
| Pu-241            | A%    | ---                            | ---        | 0.318                          | ---        | 0.178                          | ---        |
| Pu-242            | A%    | ---                            | ---        | 0.336                          | ---        | 0.023                          | ---        |
| Am-241            | fCi/g | 8.4                            | ---        | 4.0 ± 0.8                      | 5 (1)      | 33.8 ± 2.5                     | 42 (1)     |
|                   | Bq/g  | 3.15 × 10 <sup>-4</sup>        | ---        | 1.5 ± 0.3 × 10 <sup>-4</sup>   | ---        | 1.25 ± 0.09 × 10 <sup>-3</sup> | ---        |
| I                 | ppm   | ---                            | 5.4 (1)    | ---                            | ---        | ---                            | ---        |
| I-129             | fCi/g | ---                            | 0.032 (1)  | ---                            | ---        | ---                            | ---        |

TABLE 21

## ELEMENTAL CONCENTRATIONS IN VARIOUS NBS STANDARD REFERENCE MATERIALS

| Element | Units | 1A            |                                   | 1B             |                                   | 1C                | 70            |                                   | 70A           |                                   | 76            |                                   |
|---------|-------|---------------|-----------------------------------|----------------|-----------------------------------|-------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|
|         |       | NBS<br>(1931) | Literature<br>$\bar{x} \pm s$ (n) | *NBS<br>(1966) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1978)     | NBS<br>(1926) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1981) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1927) | Literature<br>$\bar{x} \pm s$ (n) |
| Al      | %     | 2.20          | 2.25 $\pm$ 0.10 (5)               | 0.592          | 0.57 (2)                          | 0.69 $\pm$ 0.02   | 9.54          | ---                               | 9.47          | ---                               | 19.93         | 20.0 (1)                          |
| B       | ppm   | ---           | 90 (2)                            | ---            | ---                               | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Ba      | ppm   | ---           | ---                               | ---            | 86 (1)                            | ---               | 300           | 380 (1)                           | 180           | 121 (2)                           | ---           | ---                               |
| Be      | ppb   | ---           | ---                               | ---            | 420 (1)                           | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| C       | %     | 9.76          | 9.73 (1)                          | 11.0           | ---                               | ---               | ---           | ---                               | ---           | 0.005 (1)                         | ---           | ---                               |
| Ca      | %     | 29.54         | 29.4 $\pm$ 0.5 (4)                | 36.4           | 36.4 (2)                          | 36.0 $\pm$ 0.2    | 0.05          | ---                               | 0.079         | 0.064 (1)                         | 0.19          | 0.16 (1)                          |
| Cd      | ppb   | ---           | ---                               | ---            | 52 (1)                            | ---               | ---           | ---                               | ---           | 8.7 (1)                           | ---           | ---                               |
| Co      | ppm   | ---           | 3.9 (1)                           | ---            | 4.1 (1)                           | ---               | ---           | 0.1 (1)                           | ---           | 0.2 (1)                           | ---           | ---                               |
| Cr      | ppm   | ---           | 26 (2)                            | ---            | 15.7 (1)                          | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Cs      | ppm   | ---           | ---                               | ---            | ---                               | ---               | ---           | 6.6 (1)                           | ---           | 9.6 (2)                           | ---           | ---                               |
| Cu      | ppm   | ---           | 3 (1)                             | ---            | 5.5 (1)                           | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Eu      | ppm   | ---           | ---                               | ---            | 1.7 (1)                           | ---               | ---           | 0.4 (1)                           | ---           | 0.37 (1)                          | ---           | ---                               |
| Fe      | %     | 1.14          | 1.07 $\pm$ 0.11 (6)               | 0.52           | 0.52 (2)                          | 0.38 $\pm$ 0.02   | 0.02          | 0.03 (1)                          | 0.052         | 0.054 (2)                         | 1.66          | 1.53 (2)                          |
| Ga      | ppm   | ---           | 4 (1)                             | ---            | ---                               | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Hg      | ppb   | ---           | 58 (2)                            | ---            | 15.7 (1)                          | ---               | ---           | 98 (1)                            | ---           | 15 (1)                            | ---           | ---                               |
| K       | %     | 0.59          | 0.69 (1)                          | 0.21           | 0.20 (1)                          | 0.23 $\pm$ 0.01   | 10.44         | ---                               | 9.79          | 9.74 $\pm$ 0.05 (3)               | 1.28          | 1.29 (1)                          |
| La      | ppm   | ---           | 100 (1)                           | ---            | ---                               | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Li      | ppm   | ---           | ---                               | ---            | ---                               | ---               | ---           | ---                               | ---           | ---                               | 510           | ---                               |
| Lu      | ppb   | ---           | ---                               | ---            | ---                               | ---               | ---           | ---                               | ---           | 8 (1)                             | ---           | ---                               |
| Mg      | %     | 1.32          | 1.34 $\pm$ 0.05 (4)               | 0.22           | 0.22 (2)                          | 0.25 $\pm$ 0.03   | 0.008         | ---                               | ---           | ---                               | 0.35          | 0.28 (1)                          |
| Mn      | ppm   | 290           | 440 $\pm$ 104 (3)                 | 1500           | 1470 (2)                          | 190 $\pm$ 40      | 8             | ---                               | ---           | ---                               | ---           | 230 (1)                           |
| Na      | %     | 0.29          | 0.25 (2)                          | 0.03           | 0.026 (1)                         | 0.015 $\pm$ 0.007 | 1.77          | ---                               | 1.89          | 1.86 $\pm$ 0.05 (3)               | 0.11          | ---                               |
| Ni      | ppm   | ---           | 10 (1)                            | ---            | 11 (1)                            | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| P       | ppm   | 650           | 1075 (2)                          | 350            | 370 (1)                           | 174 $\pm$ 44      | 50            | ---                               | ---           | ---                               | 300           | ---                               |
| Pb      | ppm   | ---           | 19 $\pm$ 2 (3)                    | ---            | 9.5 (2)                           | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Rb      | ppm   | ---           | ---                               | ---            | ---                               | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| S       | ppm   | 2600          | 2880 $\pm$ 140 (7)                | ---            | 100 (1)                           | ---               | ---           | 470 (1)                           | 550           | 528 $\pm$ 7 (7)                   | ---           | ---                               |
| Sc      | ppm   | ---           | 15 (1)                            | ---            | ---                               | ---               | ---           | 0.04 (1)                          | ---           | 3 (1)                             | ---           | ---                               |
| Se      | ppm   | ---           | ---                               | ---            | ---                               | ---               | ---           | ---                               | ---           | 0.11 (1)                          | ---           | ---                               |
| Si      | %     | 6.59          | 6.60 $\pm$ 0.08 (5)               | 2.30           | 2.3 (2)                           | 3.19 $\pm$ 0.04   | 31.13         | ---                               | 31.3          | 66 (1)                            | 25.54         | 25.8 (1)                          |
| Sn      | ppm   | ---           | 1.68 (1)                          | ---            | ---                               | ---               | ---           | ---                               | ---           | 0.75 (1)                          | ---           | ---                               |
| Sr      | ppm   | 1940          | 1910 $\pm$ 140 (4)                | 1200           | 1200 (2)                          | 250               | ---           | ---                               | ---           | 65 $\pm$ 1 (4)                    | ---           | 85 (1)                            |
| Ta      | ppb   | ---           | ---                               | ---            | ---                               | ---               | ---           | ---                               | ---           | 150 (1)                           | ---           | ---                               |
| Th      | ppm   | ---           | ---                               | ---            | ---                               | ---               | ---           | ---                               | ---           | 300 (1)                           | ---           | ---                               |
| Ti      | ppm   | 960           | 1050 $\pm$ 250 (5)                | 280            | 296 (2)                           | 420 $\pm$ 60      | 10            | ---                               | 60            | ---                               | 13200         | 13400 (1)                         |
| Tl      | ppm   | ---           | ---                               | ---            | ---                               | ---               | ---           | ---                               | ---           | 2.8 (2)                           | 120           | ---                               |
| V       | ppm   | ---           | 30 (1)                            | ---            | 30 (1)                            | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Y       | ppm   | ---           | 10 (1)                            | ---            | ---                               | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Yb      | ppm   | ---           | ---                               | ---            | 2.1 (1)                           | ---               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Zn      | ppm   | ---           | 20 (2)                            | ---            | 41 (1)                            | ---               | ---           | 6.9 $\pm$ 0.8 (3)                 | ---           | ---                               | ---           | ---                               |
| Zr      | ppm   | ---           | 60 (1)                            | ---            | 16 (1)                            | ---               | ---           | ---                               | ---           | ---                               | 520           | ---                               |

TABLE 22

## ELEMENTAL CONCENTRATIONS IN VARIOUS NBS STANDARD REFERENCE MATERIALS

| Element | Units | 77            |                                   | 88            |                                   | 88A           |                                   | 91            |                                   |
|---------|-------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|
|         |       | NBS<br>(1927) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1928) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1982) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1931) | Literature<br>$\bar{x} \pm s$ (n) |
| Al      | %     | 31.42         | 31.0 (2)                          | 0.035         | ---                               | 0.10          | 0.06 (2)                          | 3.18          | 3.2 (1)                           |
| B       | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---           | 302 (1)                           |
| Ba      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 13 (1)                            | ---           | 79 (1)                            |
| Be      | ppb   | ---           | ---                               | ---           | ---                               | ---           | 180 (1)                           | ---           | ---                               |
| C       | %     | ---           | ---                               | 12.90         | ---                               | 12.7          | 12.8 (1)                          | ---           | ---                               |
| Ca      | %     | 0.19          | 0.14 (1)                          | 21.80         | 21.8 (1)                          | 21.56         | 21.7 (2)                          | 7.49          | 7.54 (1)                          |
| Cl      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | 140           | ---                               |
| Co      | ppm   | ---           | ---                               | ---           | 0.7 (1)                           | ---           | 3 (1)                             | ---           | 4.5 (1)                           |
| Cr      | ppm   | ---           | ---                               | ---           | 3.9 (1)                           | ---           | 11.7 (1)                          | ---           | 26 (2)                            |
| Cu      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 2.5 (1)                           | ---           | 16 (1)                            |
| Eu      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 1.2 (1)                           | ---           | ---                               |
| F       | %     | ---           | ---                               | ---           | ---                               | ---           | ---                               | 5.72          | 5.68 $\pm$ 0.06 (6)               |
| Fe      | %     | 0.63          | 0.54 (2)                          | 0.059         | 0.058 (1)                         | 0.20          | 0.21 (2)                          | 0.037         | 0.25 $\pm$ 0.24 (4)               |
| Ga      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---           | 12 (1)                            |
| Gd      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 3.4 (1)                           | ---           | ---                               |
| Hg      | ppb   | ---           | ---                               | ---           | ---                               | ---           | 28 (1)                            | ---           | ---                               |
| K       | %     | 1.75          | 1.79 (1)                          | 0.025         | ---                               | 0.10          | 0.085 (2)                         | 2.70          | 2.68 (1)                          |
| Li      | ppm   | 1600          | ---                               | ---           | ---                               | ---           | ---                               | ---           | ---                               |
| Mg      | %     | 0.30          | 0.22 (1)                          | 12.95         | ---                               | 12.8          | 13.0 (2)                          | ---           | 0.006 (1)                         |
| Mn      | ppm   | ---           | 80 (1)                            | 44            | ---                               | 230           | 180 (2)                           | ---           | 51 (2)                            |
| Na      | %     | 0.045         | ---                               | 0.06          | ---                               | 0.007         | 0.01 (1)                          | 6.29          | 6.28 (2)                          |
| Ni      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---           | 3 (2)                             |
| O       | %     | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---           | 49.0 (1)                          |
| P       | ppm   | 2000          | ---                               | 13            | ---                               | 40            | 145 (2)                           | 96            | ---                               |
| Pb      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 27 (1)                            | 900           | 600 (2)                           |
| S       | ppm   | ---           | ---                               | 270           | 287 $\pm$ 15 (3)                  | ---           | 12 (2)                            | ---           | ---                               |
| Si      | %     | 15.12         | 15.32 (2)                         | 0.14          | ---                               | 0.56          | 0.41 (1)                          | 31.54         | 31.9 $\pm$ 0.4 (3)                |
| Sr      | ppm   | ---           | 1200 (1)                          | <80           | 58 (2)                            | 85            | 68 (2)                            | ---           | 39 (1)                            |
| Ti      | %     | 1.76          | 1.82 (1)                          | 0.003         | 0.018 (2)                         | 0.012         | 0.012 (2)                         | 0.011         | 0.014 $\pm$ 0.002 (3)             |
| U       | ppb   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---           | 540 (1)                           |
| V       | ppm   | 180           | ---                               | ---           | ---                               | ---           | 9 (1)                             | ---           | 43 (1)                            |
| Yb      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 1.2 (1)                           | ---           | ---                               |
| Zn      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 4.1 (1)                           | 640           | ---                               |
| Zr      | ppm   | 670           | ---                               | ---           | ---                               | ---           | ---                               | 70            | 47 (1)                            |

TABLE 23  
ELEMENTAL CONCENTRATIONS IN NBS CLAY STANDARD REFERENCE MATERIALS

| Element | Units | 97            |                                   | 97A           |                                   | 98            |                                   | 98A           |                                   |
|---------|-------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|
|         |       | NBS<br>(1931) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1969) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1931) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1969) | Literature<br>$\bar{x} \pm s$ (n) |
| Al      | %     | 20.51         | 20.5 (2)                          | 20.52         | ---                               | 11.93         | 13.53 $\pm$ 0.07 (5)              | 17.56         | ---                               |
| B       | ppm   | ---           | 64 (2)                            | ---           | 69 (1)                            | ---           | 140 $\pm$ 80 (4)                  | ---           | 120 (1)                           |
| Ba      | ppm   | ---           | 170 $\pm$ 80 (3)                  | 670           | 660 (1)                           | ---           | 680 $\pm$ 120 (3)                 | 270           | 320 (2)                           |
| Be      | ppm   | ---           | 1.3 (1)                           | ---           | 3.6 (1)                           | ---           | 4.1 (1)                           | ---           | 5.9 (1)                           |
| C       | ppm   | ---           | 3200 (1)                          | ---           | 600 (1)                           | ---           | 4000 (1)                          | ---           | 8100 (1)                          |
| Ca      | ppm   | 720           | ---                               | 790           | ---                               | 1500          | 1530 $\pm$ 60 (3)                 | ---           | ---                               |
| Ce      | ppm   | ---           | 59 (2)                            | ---           | 160 (2)                           | ---           | 127 (2)                           | ---           | 200 (2)                           |
| Co      | ppm   | ---           | 3.7 $\pm$ 0.6 (3)                 | ---           | 4.4 (2)                           | ---           | 15.8 $\pm$ 1.4 (5)                | ---           | 13 (3)                            |
| Cr      | ppm   | 540           | 550 $\pm$ 60 (6)                  | 200           | 190 (2)                           | 140           | 150 $\pm$ 40 (9)                  | 200           | 220 (2)                           |
| Cs      | ppm   | ---           | 2.4 (1)                           | ---           | 1.6 (1)                           | ---           | 11 (1)                            | ---           | 6.2 (1)                           |
| Cu      | ppm   | 24            | 18 $\pm$ 5 (4)                    | ---           | 25 (1)                            | 70            | 64 $\pm$ 24 (6)                   | ---           | 120 (1)                           |
| Dy      | ppm   | ---           | 4.3 (1)                           | ---           | 8.9 (1)                           | ---           | 7.1 (1)                           | ---           | 18 (1)                            |
| Eu      | ppm   | ---           | 1.4 (2)                           | ---           | 3.7 (1)                           | ---           | 1.9 (2)                           | ---           | 3.4 (2)                           |
| Fe      | %     | 0.68          | 0.66 $\pm$ 0.01 (4)               | 0.31          | 0.30 (1)                          | 1.43          | 1.32 $\pm$ 0.14 (6)               | 0.94          | 0.88 (1)                          |
| Ga      | ppm   | ---           | 45 (1)                            | ---           | 32 (1)                            | ---           | 52 (2)                            | ---           | 23 (1)                            |
| Hf      | ppm   | ---           | 40 (1)                            | ---           | 13 (2)                            | ---           | 7 (1)                             | ---           | 7.3 (1)                           |
| Hg      | ppb   | ---           | 114 (2)                           | ---           | 388 (1)                           | ---           | 460 (1)                           | ---           | 39 (1)                            |
| K       | %     | 0.45          | ---                               | 0.41          | ---                               | 2.63          | ---                               | 0.863         | ---                               |
| La      | ppm   | ---           | 34 (1)                            | ---           | 70 (2)                            | ---           | 94 $\pm$ 49 (3)                   | ---           | 130 (2)                           |
| Li      | ppm   | 1070          | 1074 (1)                          | 510           | 439 (1)                           | 140           | 144 (1)                           | 320           | 290 (1)                           |
| Lu      | ppm   | ---           | 0.96 (1)                          | ---           | 0.98 (1)                          | ---           | 0.65 (1)                          | ---           | 1.2 (1)                           |
| Mg      | ppm   | 1600          | 1450 (2)                          | 900           | ---                               | 4300          | 4300 $\pm$ 200 (5)                | 2500          | ---                               |
| Mn      | ppm   | 15            | 50 $\pm$ 43 (3)                   | ---           | 5.2 (1)                           | 40            | 69 $\pm$ 32 (6)                   | ---           | 41 (1)                            |
| Mo      | ppm   | ---           | 2 (1)                             | ---           | ---                               | ---           | 1.0 (1)                           | ---           | ---                               |
| Na      | ppm   | 520           | ---                               | 270           | ---                               | 1900          | ---                               | 610           | ---                               |
| Nb      | ppm   | ---           | 36 (1)                            | ---           | 39 (1)                            | ---           | ---                               | ---           | 40 (1)                            |
| Nd      | ppm   | ---           | 19 (1)                            | ---           | 88 (1)                            | ---           | 49 (1)                            | ---           | 98 (1)                            |
| Ni      | ppm   | ---           | 34 (2)                            | ---           | 81 (1)                            | ---           | 44 $\pm$ 8 (3)                    | ---           | 160 (1)                           |
| P       | ppm   | 350           | ---                               | 1600          | ---                               | 350           | 370 (2)                           | 480           | ---                               |
| Pb      | ppm   | ---           | 35 (2)                            | ---           | 42 (1)                            | ---           | 44 (2)                            | ---           | 69 (1)                            |
| Rb      | ppm   | ---           | 24 (1)                            | ---           | ---                               | ---           | 154 (1)                           | ---           | 35 (1)                            |
| S       | ppm   | 170           | 176 $\pm$ 22 (3)                  | ---           | 308 (1)                           | 280           | 273 $\pm$ 25 (3)                  | ---           | 1300 (1)                          |
| Sb      | ppm   | ---           | 1.4 (1)                           | ---           | 0.8 (1)                           | ---           | 1.3 (1)                           | ---           | 2.3 (1)                           |
| Sc      | ppm   | ---           | 16 (2)                            | ---           | 26 (2)                            | ---           | 25 $\pm$ 4 (3)                    | ---           | 32 (2)                            |
| Se      | ppm   | ---           | ---                               | ---           | ---                               | ---           | 1.2 $\pm$ 0.2 (3)                 | ---           | ---                               |
| Si      | %     | 20.02         | 20.0 (1)                          | 20.39         | ---                               | 27.60         | 27.60 $\pm$ 0.01 (3)              | 22.85         | ---                               |
| Sm      | ppm   | ---           | 5.8 (1)                           | ---           | 14 (2)                            | ---           | 8.3 (2)                           | ---           | 12 (2)                            |
| Sn      | ppm   | ---           | 8.6 (2)                           | ---           | 6.3 (2)                           | ---           | 6.5 (1)                           | ---           | 5.0 (2)                           |
| Sr      | ppm   | ---           | 73 $\pm$ 38 (3)                   | 1500          | 860 (1)                           | ---           | 290 $\pm$ 70 (5)                  | 330           | 440 (1)                           |
| Ta      | ppm   | ---           | 4.2 (1)                           | ---           | 3.2 (1)                           | ---           | 2.2 (1)                           | ---           | 2.5 (1)                           |
| Tb      | ppm   | ---           | 1.27 (1)                          | ---           | 2.8 (1)                           | ---           | 1.4 (1)                           | ---           | 2.9 (1)                           |
| Th      | ppm   | ---           | 37 (1)                            | ---           | 31 (1)                            | ---           | 20 (1)                            | ---           | 24 (1)                            |
| Ti      | %     | 1.43          | 1.36 (2)                          | 1.14          | ---                               | 0.88          | 0.90 $\pm$ 0.06 (6)               | 0.964         | ---                               |
| Tl      | ppb   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---           | 350 (1)                           |
| U       | ppm   | ---           | ---                               | ---           | 6.6 (1)                           | ---           | ---                               | ---           | ---                               |
| V       | ppm   | 220           | 240 $\pm$ 90 (4)                  | ---           | 360 (1)                           | 140           | 180 $\pm$ 80 (8)                  | ---           | 550 (1)                           |
| Y       | ppm   | ---           | 35 (2)                            | ---           | 120 (1)                           | ---           | 38 $\pm$ 9 (3)                    | ---           | 180 (1)                           |
| Yb      | ppm   | ---           | 7.1 (2)                           | ---           | 8.9 (2)                           | ---           | 11 $\pm$ 9 (3)                    | ---           | 9.8 (2)                           |
| Zn      | ppm   | ---           | 92 (2)                            | ---           | ---                               | ---           | 125 (1)                           | ---           | ---                               |
| Zr      | ppm   | 1800          | 1390 (1)                          | ---           | 520 (2)                           | 300           | 320 $\pm$ 40 (5)                  | ---           | 740 (1)                           |

TABLE 24  
ELEMENTAL CONCENTRATIONS IN NBS FEDLSPAR AND PHOSPHATE  
ROCK STANDARD REFERENCE MATERIALS

| Element | Units | 99            |                                   | 99A           |                                   | 120A          |                                   | 120B            |                                   |
|---------|-------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|-----------------|-----------------------------------|
|         |       | NBS<br>(1931) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1981) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1961) | Literature<br>$\bar{x} \pm s$ (n) | NBS<br>(1979)   | Literature<br>$\bar{x} \pm s$ (n) |
| Ag      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---             | 5 (1)                             |
| Al      | %     | 10.08         | 10.1 (1)                          | 10.8          | ---                               | 0.50          | 0.45 (1)                          | ---             | 0.60 $\pm$ 0.10 (5)               |
| B       | ppm   | ---           | 10 (1)                            | ---           | ---                               | ---           | ---                               | ---             | ---                               |
| Ba      | ppm   | 90            | ---                               | 2300          | 2600 (1)                          | ---           | ---                               | ---             | 61 (1)                            |
| Be      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---             | 2.9 (1)                           |
| C       | %     | ---           | ---                               | ---           | 0.03 (1)                          | 0.87          | 1.04 (1)                          | 0.76            | 1.4 (2)                           |
| Ca      | %     | 0.26          | ---                               | 1.53          | 1.51 (1)                          | 36.0          | 36.1 (2)                          | 35.7            | 33.7 $\pm$ 0.9 (5)                |
| Cd      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | 18              | 24 (2)                            |
| Ce      | ppm   | ---           | 8 (1)                             | ---           | 5 (1)                             | ---           | ---                               | ---             | 182 (1)                           |
| Co      | ppm   | ---           | 0.74 (2)                          | ---           | 0.1 (1)                           | ---           | ---                               | ---             | 3 (1)                             |
| Cr      | ppm   | ---           | 7 $\pm$ 5 (3)                     | ---           | ---                               | ---           | ---                               | ---             | 63 (1)                            |
| Cs      | ppm   | ---           | 0.7 (1)                           | ---           | 5 (2)                             | ---           | ---                               | ---             | ---                               |
| Cu      | ppm   | ---           | 21 (2)                            | ---           | ---                               | ---           | ---                               | ---             | 10 (2)                            |
| Eu      | ppm   | ---           | 0.35 (1)                          | ---           | 0.82 (1)                          | ---           | ---                               | ---             | 4.8 (1)                           |
| F       | %     | ---           | ---                               | ---           | ---                               | 3.92          | 3.88 $\pm$ 0.09 (5)               | 3.84            | 3.88 $\pm$ 0.11 (4)               |
| Fe      | ppm   | 470           | 500 (1)                           | 450           | 480 (2)                           | 6990          | 7340 (1)                          | ---             | 7500 $\pm$ 500 (7)                |
| Ga      | ppm   | ---           | 30 (1)                            | ---           | ---                               | ---           | ---                               | ---             | ---                               |
| Gd      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---             | 21 (1)                            |
| Hf      | ppm   | ---           | 0.9 (1)                           | ---           | 0.3 (1)                           | ---           | ---                               | ---             | ---                               |
| Hg      | ppb   | ---           | ---                               | ---           | 165 (1)                           | ---           | 58 (1)                            | ---             | ---                               |
| K       | %     | 0.34          | ---                               | 4.3           | 4.27 $\pm$ 0.12 (3)               | 0.083         | ---                               | 0.087           | 0.070 $\pm$ 0.09 (4)              |
| La      | ppm   | ---           | ---                               | ---           | 22 (1)                            | ---           | ---                               | ---             | 89 (1)                            |
| Mg      | ppm   | 320           | ---                               | 120           | 130 (1)                           | 1600          | 1400 (1)                          | 1700            | 2000 $\pm$ 600 (4)                |
| Mn      | ppm   | <70           | 30 (2)                            | ---           | ---                               | 150           | 160 (1)                           | 250             | 210 $\pm$ 50 (6)                  |
| Na      | %     | 7.96          | ---                               | 4.6           | 4.55 $\pm$ 0.09 (3)               | 0.30          | ---                               | 0.26            | 0.26 $\pm$ 0.03 (4)               |
| Nd      | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---             | 127 (1)                           |
| Ni      | ppm   | ---           | 15 (1)                            | ---           | ---                               | ---           | ---                               | ---             | 17 $\pm$ 6 (3)                    |
| O       | %     | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---             | 36.0 (1)                          |
| P       | %     | 0.062         | 0.057 (1)                         | 0.009         | ---                               | 15.0          | ---                               | 15.1            | 14.9 $\pm$ 0.9 (5)                |
| Pb      | ppm   | ---           | 110 (2)                           | ---           | ---                               | ---           | ---                               | ---             | 30 (2)                            |
| Rb      | ppm   | ---           | 23 (1)                            | ---           | 104 (2)                           | ---           | ---                               | ---             | ---                               |
| S       | ppm   | ---           | ---                               | ---           | 19 (1)                            | ---           | 2900 (1)                          | ---             | 2200 (1)                          |
| Sb      | ppm   | ---           | 0.5 (1)                           | ---           | ---                               | ---           | ---                               | ---             | 10 (1)                            |
| Sc      | ppm   | ---           | 0.83 (1)                          | ---           | 0.23 (1)                          | ---           | ---                               | ---             | ---                               |
| Si      | %     | 32.06         | 32.0 (2)                          | 30.4          | 30.4 (1)                          | ---           | ---                               | 2.18            | 2.18 $\pm$ 0.13 (6)               |
| Sm      | ppm   | ---           | ---                               | ---           | 0.5 (1)                           | ---           | ---                               | ---             | 38 (1)                            |
| Sn      | ppb   | ---           | ---                               | ---           | 450 (1)                           | ---           | ---                               | ---             | ---                               |
| Sr      | ppm   | ---           | 220 $\pm$ 160 (3)                 | ---           | ---                               | ---           | ---                               | ---             | 700 (1)                           |
| Ta      | ppm   | ---           | 1.9 (1)                           | ---           | ---                               | ---           | ---                               | ---             | ---                               |
| Tb      | ppb   | ---           | 280 (1)                           | ---           | ---                               | ---           | ---                               | ---             | ---                               |
| Th      | ppm   | ---           | 1.6 (1)                           | ---           | 0.5 (1)                           | ---           | ---                               | ---             | 8.5 (2)                           |
| Ti      | ppm   | 100           | 240 $\pm$ 220 (4)                 | 40            | ---                               | 720           | 720 (1)                           | 900             | 850 $\pm$ 230 (5)                 |
| U       | ppm   | ---           | 1.1 (1)                           | ---           | ---                               | ---           | 110 (1)                           | 128.4 $\pm$ 0.5 | 131 (2)                           |
| V       | ppm   | ---           | ---                               | ---           | ---                               | ---           | ---                               | ---             | 170 $\pm$ 100 (3)                 |
| Y       | ppm   | ---           | 10 (1)                            | ---           | ---                               | ---           | ---                               | ---             | ---                               |
| Yb      | ppm   | ---           | 1 (1)                             | ---           | ---                               | ---           | ---                               | ---             | 13 (1)                            |
| Zn      | ppm   | ---           | 16 $\pm$ 2 (3)                    | ---           | ---                               | ---           | ---                               | ---             | 120 (2)                           |
| Zr      | ppm   | ---           | 26 (2)                            | ---           | 70 (1)                            | ---           | ---                               | ---             | 12 (1)                            |

TABLE 25: ANALYTICAL METHODS CODE

| CODE                                    | SPECIFIC TECHNIQUES                                 |
|-----------------------------------------|-----------------------------------------------------|
| Neutron Activation:                     |                                                     |
| NAA                                     | General, Unspecified or Mixed Conditions            |
| ITNA                                    | Instrumental Thermal                                |
| IENA                                    | Instrumental Epithermal                             |
| RTNA                                    | Radiochemical Thermal                               |
| RENA                                    | Radiochemical Epithermal                            |
| 14NAA                                   | 14 MeV                                              |
| TCGS                                    | Thermal Neutron Capture Gamma Spectrometry          |
| DNA                                     | Delayed Neutron Assay                               |
| Atomic Absorption - Emission:           |                                                     |
| AA                                      | General, Flame AA, Unspecified or Mixed Conditions  |
| FAA                                     | Flameless AA                                        |
| HAA                                     | Hydride Evolution AA                                |
| CVAA                                    | Cold Vapor AA                                       |
| FE                                      | Flame Emission - Flame Photometry - Atomic Emission |
| FAE                                     | Flameless Atomic Emission                           |
| AF                                      | Atomic Fluorescence                                 |
| AE + AF                                 | Atomic Emission + Atomic Fluorescence               |
| X-ray Methods:                          |                                                     |
| XRF                                     | General or Unspecified                              |
| EXRF                                    | Energy Dispersive XRF                               |
| WXRF                                    | Wavelength Dispersive XRF                           |
| CPXRF                                   | Charged Particle Induced XRF                        |
| Optical Emission:                       |                                                     |
| OES                                     | General, DC ARC                                     |
| MPOES                                   | Microwave Plasma OES                                |
| ICPES                                   | Inductively Coupled Plasma OES                      |
| DCP                                     | Direct Coupled Plasma OES                           |
| Gas Chromatography - Mass Spectrometry: |                                                     |
| GC                                      | Gas Chromatography                                  |
| IDMS                                    | Isotope Dilution Mass Spectrometry                  |
| SSMS                                    | Spark Source Mass Spectrometry                      |
| GC-MS                                   | Gas Chromatography-Mass Spectrometry                |
| GCMES                                   | Gas Chromatography Microwave Emission               |
| MS                                      | Mass Spectrometry without Isotope Dilution          |
| GC-AA                                   | Gas Chromatography-Atomic Absorption Spectrometry   |

TABLE 25 (cont.)

## Others:

|       |                                                       |
|-------|-------------------------------------------------------|
| AS    | Alpha Spectrometry                                    |
| ASV   | Anodic Stripping Voltammetry                          |
| CB    | Combustion, Elemental Analyzer                        |
| CHEM  | Chemical                                              |
| CHEML | Chemiluminescence, Candoluminescence                  |
| COLOR | Colorimetry, Photometry, Spectrophotometry            |
| CPAA  | Charged Particle Activation Analysis                  |
| CSV   | Cathodic Stripping Voltammetry                        |
| ESCA  | Electron Spectroscopy for Chemical Applications       |
| FD    | Freeze Drying                                         |
| FLUOR | Fluorometry                                           |
| GAMMA | Direct Gamma-Ray Counting                             |
| GRAV  | Gravimetry                                            |
| IC    | Ion Chromatography                                    |
| ISE   | Ion Selective Electrodes                              |
| MECA  | Molecular Emission Cavity Analysis                    |
| NM    | Nuclear Method (General)                              |
| NT    | Nuclear Track                                         |
| PAA   | Photon Activation Analysis, X-ray Activation Analysis |
| POL   | Polarography                                          |
| POT   | Potentiometry                                         |
| RR    | Rapid Rock                                            |
| SIMS  | Secondary Ion Mass Spectrometry                       |
| TITR  | Titrimetry                                            |
| TURB  | Turbidimetry                                          |
| UU    | Unspecified                                           |
| VOLT  | Voltammetry                                           |
| VV    | Various                                               |

TABLE 26: "WHOLE ROCK" CONCENTRATION SUMMATIONS OF MAJOR AND MINOR ELEMENTS IN COAL AND FLY ASH SRMS

| ELEMENT (%) | SRM   |        |        |        |       |
|-------------|-------|--------|--------|--------|-------|
|             | 1632  | 1632A  | 1633   | 1633A  | 1635  |
| Al          | 1.73  | 2.95   | 12.60  | 14.40  | 0.31  |
| Ba          | 0.03  | 0.01   | 0.26   | 0.14   | --    |
| C           | 70.40 | 66.00  | 3.30   | --     | 62.60 |
| Ca          | 0.42  | 0.24   | 4.60   | 1.12   | 0.55  |
| Cl          | 0.09  | 0.08   | --     | --     | --    |
| Fe          | 0.86  | 1.12   | 6.14   | 9.45   | 0.23  |
| H           | 4.20  | 3.85   | 0.11   | 0.04   | 4.07  |
| K           | 0.28  | 0.41   | 1.69   | 1.89   | 0.01  |
| Mg          | 0.16  | 0.12   | 1.60   | 0.43   | 0.10  |
| N           | 1.27  | 1.23   | --     | --     | 1.26  |
| Na          | 0.04  | 0.08   | 0.31   | 0.18   | 0.24  |
| O           | 15.05 | 18.80  | 47.02  | 47.66  | 29.60 |
| P           | 0.02  | 0.03   | 0.10   | 0.18   | --    |
| S           | 1.19  | 1.58   | 0.40   | 0.27   | 0.32  |
| Si          | 3.17  | 6.01   | 22.10  | 23.50  | 0.54  |
| Sr          | 0.01  | --     | 0.14   | 0.08   | 0.01  |
| Ti          | 0.09  | 0.16   | 0.73   | 0.81   | 0.02  |
| Total       | 99.01 | 102.67 | 101.10 | 100.15 | 99.86 |

TABLE 27: ELEMENTAL DATA REPORTED BY YEAR

| DATE     | NO. REPORTED MEASUREMENTS |
|----------|---------------------------|
| pre 1972 | 245                       |
| 1972     | 127                       |
| 1973     | 349                       |
| 1974     | 669                       |
| 1975     | 995                       |
| 1976     | 905                       |
| 1977     | 1603                      |
| 1978     | 1192                      |
| 1979     | 1393                      |
| 1980     | 1581                      |
| 1981     | 1424                      |
| 1982     | 1761                      |

TABLE 28

Distribution of SRM data by Analytical Technique

| Analytical Method              | Geological SRMs | Biological SRMs |
|--------------------------------|-----------------|-----------------|
| Neutron Activation             | 3104            | 2566            |
| Atomic Absorption              | 428             | 1034            |
| X-ray Fluorescence             | 458             | 507             |
| Optical Emission               | 453             | 1323            |
| Mass Spectrometry              | 99              | 89              |
| Colorimetry, Spectrophotometry | 14              | 55              |
| Photon Activation              | 332             | 104             |
| Other                          | 217             | 357             |
| TOTAL                          | 5105            | 6088            |

TABLE 29: COMMENT CODES FOR APPENDIX TABLES

| CODE | DEFINITION                                                                                                       |
|------|------------------------------------------------------------------------------------------------------------------|
| D    | Same data apparently reported in two or more references                                                          |
| H    | Hydride generation                                                                                               |
| L    | Limit                                                                                                            |
| R    | Range                                                                                                            |
| *    | Not used in mean value calculation                                                                               |
| 1    | Different nebulizers used for independent results                                                                |
| 2    | V205 catalyst used in dissolution                                                                                |
| 3    | Different electrodes used for independent results                                                                |
| 4    | Aqueous slurry of reground sample                                                                                |
| 5    | Different radioactive isotopes used for independent results                                                      |
| 6    | Different methods of standardization used for independent results                                                |
| 7    | Different chemical separation methods used for independent results                                               |
| 8    | Isotope dilution methods combined with spark source mass spectrometry                                            |
| 9    | Gamma-gamma coincidence                                                                                          |
| 10   | Different neutron filters used for independent results by epithermal neutron activation                          |
| 11   | Different dissolution or matrix destruction methods used for independent results                                 |
| 12   | Different methods of peak integration or dead time correction used for independent results by neutron activation |
| 13   | Different detectors used for independent results                                                                 |
| 14   | Different furnace configuration used for independent results                                                     |
| 15   | Different laboratories prepared fused beads used for independent results                                         |
| 16   | Different matrix correction methods used for independent results                                                 |
| 17   | Different laboratories reporting independent results in the same reference                                       |
| 18   | Different bottles of reference material                                                                          |
| 19   | Duplicate entries from same reference from previous data compilation source - reason unknown                     |
| 20   | Different emission-absorption lines used for independent results                                                 |
| 21   | Dichromate used for FeO determination                                                                            |
| 22   | Vanadate used for FeO determination                                                                              |
| 23   | Modified Penfield method used for H <sub>2</sub> O <sup>+</sup> determination                                    |
| 24   | Different irradiation containers used for independent results by neutron activation                              |
| 25   | Different colorimetric methods used in same reference for independent results                                    |
| 31   | Different chemical methods used for independent results                                                          |
| 32   | Different background correction and/or X-ray tubes and/or crystals used for independent results by XRF           |
| 33   | Different pellet sizes used for independent results by XRF                                                       |
| 34   | Analyzed on dry sample basis                                                                                     |
| 35   | Analyzed on as-received basis                                                                                    |
| 36   | OES pre-ignition at various temperatures for independent results                                                 |

TABLE 30: MULTIPLIERS USED FOR OXIDE TO ELEMENT CONVERSIONS

| <u>OXIDE</u>                       | <u>MULTIPLIER</u> | <u>OXIDE</u>                   | <u>MULTIPLIER</u> |
|------------------------------------|-------------------|--------------------------------|-------------------|
| Al <sub>2</sub> O <sub>3</sub>     | 0.529             | MnO                            | 0.774             |
| B <sub>2</sub> O <sub>3</sub>      | 0.311             | Mn <sub>2</sub> O <sub>3</sub> | 0.696             |
| BaO                                | 0.896             | Mn <sub>3</sub> O <sub>4</sub> | 0.720             |
| BeO                                | 0.360             | MoO <sub>3</sub>               | 0.667             |
| CO <sub>2</sub>                    | 0.273             | Na <sub>2</sub> O              | 0.742             |
| CaO                                | 0.715             | Nd <sub>2</sub> O <sub>3</sub> | 0.857             |
| CdO                                | 0.875             | NiO                            | 0.786             |
| CoO                                | 0.786             | P <sub>2</sub> O <sub>5</sub>  | 0.436             |
| Cr <sub>2</sub> O <sub>3</sub>     | 0.684             | PbO                            | 0.928             |
| Cs <sub>2</sub> O                  | 0.943             | Rb <sub>2</sub> O              | 0.914             |
| CuO                                | 0.799             | SiO <sub>2</sub>               | 0.467             |
| FeO+Fe <sub>2</sub> O <sub>3</sub> | 1.112             | SO <sub>3</sub>                | 0.400             |
| FeO                                | 0.777             | Sc <sub>2</sub> O <sub>3</sub> | 0.652             |
| Fe <sub>2</sub> O <sub>3</sub>     | 0.699             | SrO                            | 0.846             |
| Ga <sub>2</sub> O <sub>3</sub>     | 0.592             | TiO <sub>2</sub>               | 0.599             |
| H <sub>2</sub> O                   | 0.112             | U <sub>3</sub> O <sub>8</sub>  | 0.848             |
| K <sub>2</sub> O                   | 0.830             | V <sub>2</sub> O <sub>5</sub>  | 0.560             |
| La <sub>2</sub> O <sub>3</sub>     | 0.853             | Y <sub>2</sub> O <sub>3</sub>  | 0.787             |
| Li <sub>2</sub> O                  | 0.465             | ZnO                            | 0.803             |
| MgO                                | 0.603             | ZrO <sub>2</sub>               | 0.740             |





TABLE A

## NBS SRM 120A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Al (ppm) |       |         |              |             |            |
| 4500.    |       |         | ICPES        | 80BRE 01    |            |
| C (%)    |       |         |              |             |            |
| 1.04     |       |         | CB           | 78TER 01    |            |
| Ca (%)   |       |         |              |             |            |
| 36.02    |       |         | TITR         | 80HIT 02    |            |
| 36.1     |       |         | ICPES        | 80BRE 01    |            |
| F (%)    |       |         |              |             |            |
| 3.8      |       | 11      | ISE          | 69EDM 01    |            |
| 3.8      | 0.1   |         | ISE          | 77HOP 01    |            |
| 3.88     |       | 11      | ISE          | 69EDM 01    |            |
| 3.93     |       | 11      | ISE          | 71PET 01    |            |
| 4.01     |       | 11      | ISE          | 71PET 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 7340.    |       |         | ICPES        | 80BRE 01    |            |
| Hg (ppb) |       |         |              |             |            |
| 57.5     | 3.6   |         | FAA          | 82FLA 01    |            |
| Mg (ppm) |       |         |              |             |            |
| 1400.    |       |         | ICPES        | 80BRE 01    |            |
| Mn (ppm) |       |         |              |             |            |
| 160      |       |         | ICPES        | 80BRE 01    |            |
| S (ppm)  |       |         |              |             |            |
| 2900.    |       |         | CB           | 78TER 01    |            |
| Ti (ppm) |       |         |              |             |            |
| 720.     |       |         | ICPES        | 80BRE 01    |            |
| U (ppm)  |       |         |              |             |            |
| 110.     | 10    |         | COLOR        | 810GU 01    |            |

TABLE B

## NBS SRM 120B—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppm) |       |         |              |             |            |
| 5.       |       |         | ICPES        | 81CHU 01    |            |
| Al (ppm) |       |         |              |             |            |
| 5100.    | 100.  |         | AA           | 82JEN 01    |            |
| 5400.    | 500.  |         | ICPES        | 82JEN 01    |            |
| 5870.    | 20.   |         | ICPES        | 81CHU 01    |            |
| 6000.    |       | 35      | TCGS         | 78GLA 04    |            |
| 7780.    |       |         | EXRF         | 80DAL 01    |            |
| 8500.    |       | *       | SIMS         | 78MOR 01    |            |
| As (ppm) |       |         |              |             |            |
|          | 5.    | L*      | ICPES        | 81CHU 01    |            |
| Au (ppm) |       |         |              |             |            |
|          | 3.    | L*      | ICPES        | 81CHU 01    |            |
| Ba (ppm) |       |         |              |             |            |
| 61       | 1.2   |         | ICPES        | 81CHU 01    |            |
| Be (ppm) |       |         |              |             |            |
| 2.9      | 0.06  |         | ICPES        | 81CHU 01    |            |
| Bi (ppm) |       |         |              |             |            |
|          | 25.   | L*      | ICPES        | 81CHU 01    |            |
| C (%)    |       |         |              |             |            |
| 0.983    |       |         | CB           | 77TIL 01    |            |
| 1.8      |       |         | SIMS         | 78MOR 01    |            |
| Ca (%)   |       |         |              |             |            |
| 17.8     |       | *       | SIMS         | 78MOR 01    |            |
| 32.7     |       | 35      | TCGS         | 78GLA 04    |            |
| 33.      |       |         | EXRF         | 80DAL 01    |            |
| 33.78    | 2.07  |         | ICPES        | 82JEN 01    |            |
| 33.98    | 0.72  |         | AA           | 82JEN 01    |            |
| 35.06    | 1.16  |         | ICPES        | 81CHU 01    |            |
| Cd (ppm) |       |         |              |             |            |
| 22.      | 10.   |         | ICPES        | 81CHU 01    |            |
| 25.3     |       |         | AA           | 76KRI 03    |            |
| Ce (ppm) |       |         |              |             |            |
| 182.     | 3.6   |         | ICPES        | 81CHU 01    |            |
| Co (ppm) |       |         |              |             |            |
| 3.       | 1     |         | ICPES        | 81CHU 01    |            |
| Cr (ppm) |       |         |              |             |            |
| 63.1     | 1.9   |         | ICPES        | 81CHU 01    |            |

TABLE B (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cu (ppm) |       |         |              |             |            |
| 8.6      | 1     |         | ICPES        | 81CHU       | 01         |
| 11.3     |       |         | AA           | 76KRI       | 03         |
| Eu (ppm) |       |         |              |             |            |
| 4.8      | 1.    |         | ICPES        | 81CHU       | 01         |
| F (%)    |       |         |              |             |            |
| 3.78     | 0.07  |         | NAA          | 80NOR       | 01         |
| 3.82     |       | 35      | IENA         | 79GLA       | 03         |
| 3.89     | 0.21  |         | IC           | 82JEN       | 01         |
| 4.04     | 0.47  |         | ISE          | 82JEN       | 01         |
| Fe (ppm) |       |         |              |             |            |
| 3200.    |       | *       | SIMS         | 78MOR       | 01         |
| 6600.    | 200.  |         | AA           | 82JEN       | 01         |
| 7200.    | 800.  |         | ICPES        | 82JEN       | 01         |
| 7400.    |       | 35      | TCGS         | 78GLA       | 04         |
| 7700.    |       | 35      | IENA         | 79GLA       | 03         |
| 7827.    |       |         | AA           | 76KRI       | 03         |
| 7900.    | 200.  |         | ICPES        | 81CHU       | 01         |
| 7970.    |       |         | EXRF         | 80DAL       | 01         |
| Gd (ppm) |       |         |              |             |            |
| 21.      | 0.6   |         | ICPES        | 81CHU       | 01         |
| K (ppm)  |       |         |              |             |            |
| 110.     |       | *35     | TCGS         | 78GLA       | 04         |
| 600.     | 200.  |         | ICPES        | 82JEN       | 01         |
| 660.     |       |         | EXRF         | 80DAL       | 01         |
| 760.     |       |         | SIMS         | 78MOR       | 01         |
| 800.     | 100.  |         | AA           | 82JEN       | 01         |
| 1170.    | 25.   | *       | ICPES        | 81CHU       | 01         |
| La (ppm) |       |         |              |             |            |
| 89.      | 4.    |         | ICPES        | 81CHU       | 01         |
| Li (ppm) |       |         |              |             |            |
|          | 2.    | L*      | ICPES        | 81CHU       | 01         |
| Mg (ppm) |       |         |              |             |            |
| 51.      |       | *35     | TCGS         | 78GLA       | 04         |
| 1600.    | 100.  |         | ICPES        | 82JEN       | 01         |
| 1600.    | 100.  |         | AA           | 82JEN       | 01         |
| 1870.    | 60.   |         | ICPES        | 81CHU       | 01         |
| 2800.    |       |         | SIMS         | 78MOR       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 130.     |       |         | SIMS         | 78MOR       | 01         |
| 150.     |       |         | EXRF         | 80DAL       | 01         |
| 230.     | 15.   |         | ICPES        | 82JEN       | 01         |

TABLE B (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Mo (ppm) |       |         |              |             |            |
| 240.     | 20.   |         | AA           | 82JEN       | 01         |
| 246.     |       |         | AA           | 76KRI       | 03         |
| 260.     | 7.8   |         | ICPES        | 81CHU       | 01         |
| Na (ppm) |       |         |              |             |            |
| 2300.    | 100.  |         | AA           | 82JEN       | 01         |
| 2630.    | 70.   |         | ICPES        | 81CHU       | 01         |
| 2800.    |       | 35      | TCGS         | 78GLA       | 04         |
| 2900.    |       |         | SIMS         | 78MOR       | 01         |
| Nd (ppm) |       |         |              |             |            |
| 127.     | 25.   |         | ICPES        | 81CHU       | 01         |
| Ni (ppm) |       |         |              |             |            |
| 12.      |       | 35      | IENA         | 79GLA       | 03         |
| 15.4     | 1.    |         | ICPES        | 81CHU       | 01         |
| 22.9     |       |         | AA           | 76KRI       | 03         |
| O (%)    |       |         |              |             |            |
| 36.      | 0.5   |         | 14NAA        | 80NOR       | 01         |
| P (%)    |       |         |              |             |            |
| 12.97    | 0.79  | *       | IC           | 82JEN       | 01         |
| 13.5     |       |         | SIMS         | 78MOR       | 01         |
| 14.7     |       | 35      | TCGS         | 78GLA       | 04         |
| 15.19    | 1.23  |         | ICPES        | 82JEN       | 01         |
| 15.21    | 0.38  |         | ICPES        | 81CHU       | 01         |
| 15.9     |       |         | EXRF         | 80DAL       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 25.      | 5.    |         | ICPES        | 81CHU       | 01         |
| 32.7     |       |         | AA           | 76KRI       | 03         |
| S (ppm)  |       |         |              |             |            |
| 2200.    |       |         | EXRF         | 80DAL       | 01         |
| Sb (ppm) |       |         |              |             |            |
| 10.      |       |         | ICPES        | 81CHU       | 01         |
| Se (ppm) |       |         |              |             |            |
|          | 30.   | L*      | ICPES        | 81CHU       | 01         |
| Si (%)   |       |         |              |             |            |
| 2.01     |       |         | EXRF         | 80DAL       | 01         |
| 2.12     |       | 35      | IENA         | 79GLA       | 03         |
| 2.12     | 0.19  |         | ICPES        | 82JEN       | 01         |
| 2.19     |       | 35      | TCGS         | 78GLA       | 04         |

TABLE C

## NBS SRM 1566—COLLECTED DATA

TABLE B (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|-----------------|-------|---------|--------------|-------------|------------|
| 2.21     | 0.01  |         | AA           | 82KIS       | 01         | <b>As (ppm)</b> |       |         |              |             |            |
| 2.41     | 0.24  |         | AA           | 82JEN       | 01         | 12.2            | 1.1   |         | IENA         | 82GLA       | 02         |
| Sm (ppm) |       |         |              |             |            | 12.4            |       |         | IENA         | 83GLA       | 01         |
|          |       |         |              |             |            | 13.             | 1.2   |         | ITNA         | 79KOB       | 03         |
| 38.      | 1.9   |         | ICPES        | 81CHU       | 01         | 13.17           | 0.34  |         | HAA          | 81UTH       | 01         |
| Sn (ppm) |       |         |              |             |            | 15.5            | 0.3   | *11     | HAA          | 82JON       | 01         |
|          |       |         |              |             |            | <b>B (ppm)</b>  |       |         |              |             |            |
|          | 3.    | L*      | ICPES        | 81CHU       | 01         | 7.              | 1.    |         | TCGS         | 82GLA       | 02         |
| Sr (ppm) |       |         |              |             |            | <b>Br (ppm)</b> |       |         |              |             |            |
| 705.     | 14.   |         | ICPES        | 81CHU       | 01         | 45.             | 1.4   |         | ITNA         | 79KOB       | 03         |
| Th (ppm) |       |         |              |             |            | 180.            |       |         | EXRF         | 81PAR       | 01         |
|          | 25.   | L*      | ICPES        | 81CHU       | 01         | <b>Ca (ppm)</b> |       |         |              |             |            |
| 7.9      | 0.8   |         | AS           | 82ROE       | 01         | 880.            | 3370. | R*      | AA           | 80UCH       | 01         |
| 9.05     | 0.4   |         | AS           | 82THO       | 02         | 1510.           | 20.   | 11      | ICPES        | 82JON       | 01         |
| Ti (ppm) |       |         |              |             |            | 1530.           | 30.   | 11      | ICPES        | 82JON       | 01         |
|          |       |         |              |             |            | 4500.           |       |         | EXRF         | 81PAR       | 01         |
| 590.     |       |         | SIMS         | 78MOR       | 01         | <b>Cd (ppm)</b> |       |         |              |             |            |
| 740.     | 20.   |         | ICPES        | 81CHU       | 01         | 3.2             | 0.1   |         | FAA          | 82SUZ       | 01         |
| 780.     |       | 35      | IENA         | 79GLA       | 03         | 3.24            | 0.29  |         | ASV          | 82SAT       | 02         |
| 950.     |       | 35      | TCGS         | 78GLA       | 04         | 3.3             | 0.3   |         | ASV          | 82GAJ       | 01         |
| 1200.    |       |         | EXRF         | 80DAL       | 01         | 3.4             | 0.22  |         | FAA          | 81CHA       | 01         |
| U (ppm)  |       |         |              |             |            | 3.54            | 0.04  | 11      | ICPES        | 82JON       | 01         |
|          | 30.   | L*      | ICPES        | 81CHU       | 01         | 3.61            | 0.03  | 11      | ICPES        | 82JON       | 01         |
| 130.     | 5.    |         | AS           | 82ROE       | 01         | <b>Co (ppb)</b> |       |         |              |             |            |
| 132.     | 2.    |         | AS           | 82THO       | 02         | 340.            | 20.   |         | ITNA         | 79KOB       | 03         |
| V (ppm)  |       |         |              |             |            | <b>Cr (ppb)</b> |       |         |              |             |            |
| 103.     | 3.1   |         | ICPES        | 81CHU       | 01         | 340.            | 90.   | 11      | ICPES        | 82JON       | 01         |
| 120.     | 10.   |         | ICPES        | 82JEN       | 01         | 600.            | 200.  | 11      | ICPES        | 82JON       | 01         |
| 280.     | 40.   |         | AA           | 82JEN       | 01         | 700.            | 200.  |         | ITNA         | 79KOB       | 03         |
| Yb (ppm) |       |         |              |             |            | <b>Cu (ppm)</b> |       |         |              |             |            |
| 12.7     | 0.4   |         | ICPES        | 81CHU       | 01         | 61.             |       |         | XRF          | 80SUZ       | 02         |
| Zn (ppm) |       |         |              |             |            | 61.8            | 0.9   | 11      | ICPES        | 82JON       | 01         |
| 107.     |       |         | AA           | 76KRI       | 03         | 62.9            | 0.5   | 11      | ICPES        | 82JON       | 01         |
| 127.     | 3.9   |         | ICPES        | 81CHU       | 01         | 63.             |       |         | AA           | 80UCH       | 01         |
| Zr (ppm) |       |         |              |             |            | 128.            | 2.    | *       | AA           | 81UCH       | 01         |
| 12.      | 1.2   |         | ICPES        | 81CHU       | 01         | 189.            |       | *       | EXRF         | 81PAR       | 01         |
|          |       |         |              |             |            | <b>Eu (ppb)</b> |       |         |              |             |            |
|          |       |         |              |             |            | 20.             | 10.   |         | ITNA         | 79KOB       | 03         |
|          |       |         |              |             |            | <b>F (ppm)</b>  |       |         |              |             |            |
|          |       |         |              |             |            | 4.9             | 0.5   |         | ISE          | 83KNA       | 01         |
|          |       |         |              |             |            | 5.4             | 1.2   |         | ISE          | 83GLA       | 01         |

TABLE C (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Fe (ppm)</b> |       |         |              |             |            |
| 178.            | 4.    |         | ITNA         | 79KOB       | 03         |
| 191.            | 5.    | 11      | ICPES        | 82JON       | 01         |
| 194.            | 9.    | 11      | ICPES        | 82JON       | 01         |
| 196.            | 6.    | 11      | ICPES        | 82JON       | 01         |
| 203.            | 8.    | 11      | ICPES        | 82JON       | 01         |
| 209.            |       |         | AA           | 80UCH       | 01         |
| 576.            |       | *       | EXRF         | 81PAR       | 01         |
| <b>Hg (ppb)</b> |       |         |              |             |            |
| 40.             |       |         | CVAA         | 83GLA       | 01         |
| <b>I (ppm)</b>  |       |         |              |             |            |
| 2.337           | 0.074 | *       | RTNA         | 80GVA       | 01         |
| 2.79            |       |         | NAA          | 79HEC       | 01         |
| 3.062           | 0.128 | 35      | RTNA         | 81ALL       | 01         |
| 3.209           | 0.134 |         | RTNA         | 81STR       | 01         |
| 3.209           | 0.134 | 34      | RTNA         | 81ALL       | 01         |
| <b>K (%)</b>    |       |         |              |             |            |
| 0.87            | 0.03  |         | ITNA         | 79KOB       | 03         |
| 0.977           |       |         | FE           | 80UCH       | 01         |
| 0.98            | 0.04  | 11      | ICPES        | 82JON       | 01         |
| 0.98            | 0.02  | 11      | ICPES        | 82JON       | 01         |
| 1.89            |       | *       | EXRF         | 81PAR       | 01         |
| <b>Mg (ppm)</b> |       |         |              |             |            |
| 1280.           |       |         | AA           | 80UCH       | 01         |
| 1410.           | 20.   | 11      | ICPES        | 82JON       | 01         |
| 1430.           | 40.   | 11      | ICPES        | 82JON       | 01         |
| <b>Mn (ppm)</b> |       |         |              |             |            |
| 3.              |       | *       | XRF          | 80SUZ       | 02         |
| 15.             | 1.2   |         | ITNA         | 79KOB       | 03         |
| 17.2            | 0.6   |         | FAA          | 81CHA       | 01         |
| 17.2            | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 17.4            | 0.6   | 11      | ICPES        | 82JON       | 01         |
| 17.8            | 0.9   | 11      | ICPES        | 82JON       | 01         |
| 19.             |       |         | AA           | 80UCH       | 01         |
| 49.             |       | *       | EXRF         | 81PAR       | 01         |
| <b>Mo (ppb)</b> |       |         |              |             |            |
| 100.            | 70.   | L*      | ICPES        | 82JON       | 01         |
|                 | 100.  | 11      | ICPES        | 82JON       | 01         |
| <b>Na (ppm)</b> |       |         |              |             |            |
| 4600.           | 240.  |         | ITNA         | 79KOB       | 03         |
| 4920.           |       |         | FE           | 80UCH       | 01         |
| <b>Ni (ppm)</b> |       |         |              |             |            |
| 0.92            | 0.04  | 11      | ICPES        | 82JON       | 01         |
| 0.97            | 0.09  | 11      | ICPES        | 82JON       | 01         |

TABLE C (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>P (ppm)</b>  |       |         |              |             |            |
| 7600.           | 400.  | 6       | FAA          | 81LAN       | 01         |
| 7800.           | 200.  | 11      | ICPES        | 82JON       | 01         |
| 7800.           | 300.  | 6       | FAA          | 81LAN       | 01         |
| 7900.           | 100.  | 11      | ICPES        | 82JON       | 01         |
| <b>Pb (ppb)</b> |       |         |              |             |            |
| 440.            | 40.   |         | FAA          | 82RAI       | 01         |
| 450.            |       | 6       | FAA          | 81HIN       | 01         |
| 450.            |       | 6       | FAA          | 82KOI       | 01         |
| 470.            | 10.   |         | FAA          | 81CHA       | 01         |
| 480.            |       | 6       | FAA          | 82KOI       | 01         |
| 480.            |       | 6       | FAA          | 81HIN       | 01         |
| 500.            | 20.   |         | ASV          | 82GAJ       | 01         |
| 500.            | 200.  | 11      | ICPES        | 82JON       | 01         |
| 500.            | 300.  | 11      | ICPES        | 82JON       | 01         |
| 510.            | 60.   |         | ASV          | 82SAT       | 02         |
| <b>Rb (ppm)</b> |       |         |              |             |            |
| 20.             |       |         | EXRF         | 81PAR       | 01         |
| <b>Sb (ppb)</b> |       |         |              |             |            |
| 150.            | 40.   |         | ITNA         | 79KOB       | 03         |
| <b>Sc (ppb)</b> |       |         |              |             |            |
| 89.             | 6.    |         | ITNA         | 79KOB       | 03         |
| <b>Se (ppm)</b> |       |         |              |             |            |
| 1.8             | 0.2   |         | HAA          | 82MAY       | 01         |
| 2.22            | 0.03  | 11      | HAA          | 82JON       | 01         |
| 2.42            | 0.08  | 11      | HAA          | 82JON       | 01         |
| <b>Sr (ppm)</b> |       |         |              |             |            |
| 9.9             | 1.1   |         | FAA          | 82SUZ       | 03         |
| 92.             |       |         | EXRF         | 81PAR       | 01         |
| <b>U (ppb)</b>  |       |         |              |             |            |
| 126.            |       |         | DNA          | 83GLA       | 01         |
| <b>V (ppm)</b>  |       |         |              |             |            |
| 2.44            | 0.06  | 11      | ICPES        | 82JON       | 01         |
| <b>Zn (ppm)</b> |       |         |              |             |            |
| 750.            |       | *       | XRF          | 80SUZ       | 02         |
| 843.            | 12.   | 11      | ICPES        | 82JON       | 01         |
| 859.            | 9.    | 11      | ICPES        | 82JON       | 01         |
| 860.            |       |         | AA           | 80UCH       | 01         |
| 869.            | 8.    | 11      | ICPES        | 82JON       | 01         |
| 870.            | 35.   |         | ITNA         | 79KOB       | 03         |
| 878.            | 15.   | 11      | ICPES        | 82JON       | 01         |
| 2953.           |       | *       | EXRF         | 81PAR       | 01         |

TABLE D

## NBS SRM 1567—COLLECTED DATA

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>As (ppb)</b> |       |         |              |             |            |
|                 | 80.   | L*      | ICPES        | 81WOL       | 01         |
|                 | 50.   | L*      | HAA          | 82JON       | 01         |
|                 | 30.   | L*      | IENA         | 82GLA       | 02         |
|                 | 50.   | L*      | HAA          | 82JON       | 01         |
| 5.4             | 0.5   | 7       | RTNA         | 77GIL       | 03         |
| 5.4             | 0.5   |         | RTNA         | 78GIL       | 01         |
| 5.6             | 1.    | 7       | RTNA         | 77GIL       | 03         |
| 6.              | 1.    | H       | ICPES        | 82HAH       | 01         |
| 30.             | 10.   | *       | COLOR        | 77BUR       | 01         |
| <b>B (ppm)</b>  |       |         |              |             |            |
| 1.5             |       |         | TCGS         | 82GLA       | 02         |
| <b>Be (ppb)</b> |       |         |              |             |            |
|                 | 30.   | L*      | ICPES        | 82KUE       | 01         |
|                 | 30.   | L*      | ICPES        | 82KUE       | 01         |
|                 | 30.   | L*      | ICPES        | 82KUE       | 01         |
| <b>Bi (ppb)</b> |       |         |              |             |            |
|                 | 8.    | L*      | ICPES        | 82HAH       | 01         |
| <b>Br (ppm)</b> |       |         |              |             |            |
| 9.9             | 1.5   |         | ITNA         | 78GIL       | 01         |
| <b>Ca (ppm)</b> |       |         |              |             |            |
| 173.            |       | 38      | AA           | 81YAS       | 01         |
| 179.            |       | 38      | AA           | 81YAS       | 01         |
| 181.            |       | 38      | AA           | 81YAS       | 01         |
| 183.            |       | 38      | AA           | 81YAS       | 01         |
| 193.            |       |         | ICPES        | 81WOL       | 01         |
| 194.            | 6.    | 11      | ICPES        | 82JON       | 01         |
| 195.            | 2.    | 6       | ICPES        | 82KUE       | 01         |
| 195.            | 3.    | 6       | ICPES        | 82KUE       | 01         |
| 196.            | 2.    | 6       | ICPES        | 82KUE       | 01         |
| 197.            |       | 38      | AA           | 81YAS       | 01         |
| 199.            |       | 38      | AA           | 81YAS       | 01         |
| 199.            | 4.    | 11      | ICPES        | 82JON       | 01         |
| <b>Cd (ppb)</b> |       |         |              |             |            |
| 20.             |       |         | ASV          | 82GAJ       | 01         |
| 29.             | 4.    |         | ASV          | 82SAT       | 02         |
| 30.             | 20.   | 6       | ICPES        | 82KUE       | 01         |
| 30.             | 20.   | 6       | ICPES        | 82KUE       | 01         |
| 30.             | 20.   | 6       | ICPES        | 82KUE       | 01         |
| 40.             | 10.   | 11      | ICPES        | 82JON       | 01         |
| 50.             | 30.   | 11      | ICPES        | 82JON       | 01         |
| <b>Co (ppb)</b> |       |         |              |             |            |
| 21.             | 4.    |         | ITNA         | 78GIL       | 01         |

TABLE D (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Cr (ppb)</b> |       |         |              |             |            |
|                 | 250.  | L*      | ICPES        | 82KUE       | 01         |
|                 | 250.  | L*      | ICPES        | 82KUE       | 01         |
|                 | 250.  | L*      | ICPES        | 82KUE       | 01         |
| 300.            | 100.  | 11      | ICPES        | 82JON       | 01         |
| 400.            | 200.  | 11      | ICPES        | 82JON       | 01         |
| <b>Cs (ppb)</b> |       |         |              |             |            |
|                 | 200.  | L*      | ITNA         | 82GLA       | 02         |
| <b>Cu (ppm)</b> |       |         |              |             |            |
| 1.8             | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 1.9             | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 2.              | 0.1   |         | ICPES        | 81KNA       | 01         |
| 2.              | 0.2   |         | RTNA         | 78GIL       | 01         |
| 2.              | 0.01  | 6       | ICPES        | 82KUE       | 01         |
| 2.04            |       |         | ICPES        | 81WOL       | 01         |
| 2.06            | 0.04  | 6       | ICPES        | 82KUE       | 01         |
| 2.06            | 0.03  | 6       | ICPES        | 82KUE       | 01         |
| <b>F (ppb)</b>  |       |         |              |             |            |
|                 | 200.  | L*      | ISE          | 83GLA       | 01         |
| 40.             | 20.   |         | ISE          | 83KNA       | 01         |
| <b>Fe (ppm)</b> |       |         |              |             |            |
| 17.             | 1.    | 11      | ICPES        | 82JON       | 01         |
| 17.1            | 0.8   | 11      | ICPES        | 82JON       | 01         |
| 17.2            | 0.6   |         | ITNA         | 78GIL       | 01         |
| 17.7            | 0.7   | 6       | ICPES        | 82KUE       | 01         |
| 17.9            | 0.8   | 11      | ICPES        | 82JON       | 01         |
| 18.             | 1.    | 11      | ICPES        | 82JON       | 01         |
| 18.4            | 1.    | 6       | ICPES        | 82KUE       | 01         |
| 18.7            | 2.1   | 6       | ICPES        | 82KUE       | 01         |
| 19.3            | 1.1   |         | ICPES        | 81KNA       | 01         |
| 19.6            |       |         | ICPES        | 81WOL       | 01         |
| <b>Ge (ppb)</b> |       |         |              |             |            |
|                 | 20.   | L*      | ICPES        | 82HAH       | 01         |
| <b>Hg (ppb)</b> |       |         |              |             |            |
| 1.              | 0.3   |         | RTNA         | 78GIL       | 01         |
| <b>K (ppm)</b>  |       |         |              |             |            |
| 1300.           | 50.   | 11      | ICPES        | 82JON       | 01         |
| 1310.           | 40.   | 11      | ICPES        | 82JON       | 01         |
| 1320.           | 10.   | 6       | ICPES        | 82KUE       | 01         |
| 1320.           | 10.   | 6       | ICPES        | 82KUE       | 01         |
| 1330.           | 20.   | 6       | ICPES        | 82KUE       | 01         |
| 1392.           | 37.   | *       | ITNA         | 78GIL       | 01         |

TABLE D (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Mg (ppm) |       |         |              |             |            |
| 398.     | 10.   | 6       | ICPES        | 82KUE       | 01         |
| 406.     | 3.    | 6       | ICPES        | 82KUE       | 01         |
| 419.     | 4.    | 6       | ICPES        | 82KUE       | 01         |
| 420.     | 10.   | 11      | ICPES        | 82JON       | 01         |
| 429.     | 9.    | 11      | ICPES        | 82JON       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 6.7      | 1.2   | *       | AE+AF        | 82GOL       | 01         |
| 8.       | 0.4   | 11      | ICPES        | 82JON       | 01         |
| 8.2      | 0.3   | 11      | ICPES        | 82JON       | 01         |
| 8.3      |       |         | ICPES        | 81WOL       | 01         |
| 8.3      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 8.55     | 0.15  | 6       | ICPES        | 82KUE       | 01         |
| 8.58     | 0.16  | 6       | ICPES        | 82KUE       | 01         |
| 8.6      | 0.4   |         | ITNA         | 78GIL       | 01         |
| 8.67     | 0.12  | 6       | ICPES        | 82KUE       | 01         |
| 9.9      | 0.5   | *       | ICPES        | 81KNA       | 01         |
| Mo (ppb) |       |         |              |             |            |
| 380.     | 30.   | 6       | ICPES        | 82KUE       | 01         |
| 390.     | 90.   | 11      | ICPES        | 82JON       | 01         |
| 400.     | 40.   | 6       | ICPES        | 82KUE       | 01         |
| 420.     | 40.   | 6       | ICPES        | 82KUE       | 01         |
| 420.     | 70.   | 11      | ICPES        | 82JON       | 01         |
| Na (ppm) |       |         |              |             |            |
| 10.4     | 2.5   |         | ITNA         | 78GIL       | 01         |
| Ni (ppb) |       |         |              |             |            |
|          | 500.  | L*      | ICPES        | 82KUE       | 01         |
|          | 500.  | L*      | ICPES        | 82KUE       | 01         |
|          | 500.  | L*      | ICPES        | 82KUE       | 01         |
| 160.     | 40.   | 11      | ICPES        | 82JON       | 01         |
| 200.     | 40.   | 11      | ICPES        | 82JON       | 01         |
| P (ppm)  |       |         |              |             |            |
| 1350.    | 20.   | 6       | ICPES        | 82KUE       | 01         |
| 1370.    | 50.   | 11      | ICPES        | 82JON       | 01         |
| 1370.    | 10.   | 6       | ICPES        | 82KUE       | 01         |
| 1400.    | 10.   | 6       | ICPES        | 82KUE       | 01         |
| 1420.    | 30.   | 11      | ICPES        | 82JON       | 01         |
| Pb (ppm) |       |         |              |             |            |
|          | 0.1   | L*      | ICPES        | 82JON       | 01         |
|          | 0.02  | L*      | ASV          | 82GAJ       | 01         |
|          | 0.1   | L*      | ICPES        | 82JON       | 01         |
|          | 3.8   | L*      | ICPES        | 82KUE       | 01         |
|          | 3.8   | L*      | ICPES        | 82KUE       | 01         |
|          | 3.8   | L*      | ICPES        | 82KUE       | 01         |
| 0.018    | 0.003 |         | ASV          | 82SAT       | 02         |

TABLE D (cont)

| CONC     | UNCER    | COMMENT | ANAL<br>METH  | REF<br>CODE    | REF<br>NUM |
|----------|----------|---------|---------------|----------------|------------|
| Rb (ppm) |          |         |               |                |            |
| 0.99     | 0.16     |         | ITNA          | 78GIL          | 01         |
| Sb (ppb) |          |         |               |                |            |
| 38.      | 2.<br>1. | L*      | ICPES<br>RTNA | 82HAH<br>78GIL | 01<br>01   |
| Se (ppm) |          |         |               |                |            |
| 0.7      |          | *       | FAA           | 81MEY          | 01         |
| 0.76     | 0.08     | 11      | HAA           | 82JON          | 01         |
| 0.82     | 0.08     |         | ICPES         | 81WOL          | 01         |
| 0.87     |          |         | HAA           | 81HAH          | 01         |
| 0.87     | 0.06     | H       | ICPES         | 82HAH          | 01         |
| 0.901    | 0.051    |         | HAA           | 80RAP          | 02         |
| 0.91     | 0.03     | 11      | HAA           | 82JON          | 01         |
| 0.95     | 0.04     |         | GC-MS         | 81REA          | 02         |
| 0.96     | 0.08     |         | HAA           | 81MEY          | 01         |
| 1.       | 0.1      | 11      | XRF           | 80RAP          | 01         |
| 1.       | 0.2      |         | HAA           | 81REA          | 01         |
| 1.       | 0.1      |         | HAA           | 80VIJ          | 01         |
| 1.       |          |         | CSV           | 81HAN          | 01         |
| 1.03     | 0.04     |         | HAA           | 81HAN          | 01         |
| 1.04     | 0.01     | D*      | EXRF          | 80RAP          | 03         |
| 1.05     | 0.09     | 7       | RTNA          | 77GIL          | 03         |
| 1.05     | 0.09     | 7       | RTNA          | 77GIL          | 03         |
| 1.1      | 0.02     |         | XRF           | 81KNA          | 01         |
| 1.1      | 0.02     | 11      | XRF           | 80RAP          | 01         |
| 1.11     | 0.05     |         | RTNA          | 78GIL          | 01         |
| 1.12     | 0.01     | 7       | RTNA          | 77GIL          | 03         |
| 1.12     | 0.01     |         | ITNA          | 78GIL          | 01         |
| 1.17     | 0.18     | 7*      | RTNA          | 77GIL          | 03         |
| Sn (ppb) |          |         |               |                |            |
|          | 20.      | L*      | ICPES         | 82HAH          | 01         |
| U (ppb)  |          |         |               |                |            |
| 0.95     | 0.24     | 35      | DNA           | 80GLA          | 04         |
| V (ppb)  |          |         |               |                |            |
|          | 50.      | L*      | ICPES         | 82JON          | 01         |
| Zn (ppm) |          |         |               |                |            |
| 10.2     |          | *       | ICPES         | 81WOL          | 01         |
| 10.5     | 0.7      | 11      | ICPES         | 82JON          | 01         |
| 10.6     | 0.7      | 11      | ICPES         | 82JON          | 01         |
| 10.6     | 0.5      | 11      | ICPES         | 82JON          | 01         |
| 10.6     | 0.4      | 11      | ICPES         | 82JON          | 01         |
| 10.88    | 0.56     |         | ITNA          | 78GIL          | 01         |
| 10.9     | 0.1      | 6       | ICPES         | 82KUE          | 01         |
| 11.      | 0.2      | 6       | ICPES         | 82KUE          | 01         |
| 11.1     | 0.4      | 6       | ICPES         | 82KUE          | 01         |
| 11.3     | 1.1      |         | ICPES         | 81KNA          | 01         |

TABLE E

## NBS SRM 1568—COLLECTED DATA

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>As (ppb)</b> |       |         |              |             |            |
|                 | 50.   | L*      | HAA          | 82JON 01    |            |
| 90.             | 10.   | *       | COLOR        | 77BUR 01    |            |
| 320.            | 40.   | *11     | HAA          | 82JON 01    |            |
| 380.            | 20.   | 7       | RTNA         | 77GIL 03    |            |
| 390.            | 80.   | 7       | RTNA         | 77GIL 03    |            |
| 390.            | 70.   | 7       | RTNA         | 77GIL 03    |            |
| 400.            | 10.   | 11      | HAA          | 81RAP 01    |            |
| 400.            | 10.   |         | RTNA         | 78GIL 01    |            |
| 410.            | 20.   | 11      | HAA          | 81RAP 01    |            |
| 410.            | 70.   | 11      | HAA          | 81RAP 01    |            |
| 410.            | 70.   |         | HAA          | 81KNA 01    |            |
| 436.            | 18.   |         | HAA          | 82TAM 01    |            |
| 440.            | 50.   | R       | ICPES        | 82HAH 01    |            |
| 452.            | 70.   |         | ICPES        | 81WOL 01    |            |
| 460.            | 70.   |         | IENA         | 82GLA 02    |            |
| <b>B (ppm)</b>  |       |         |              |             |            |
|                 | 1.    | L*      | TCGS         | 82GLA 02    |            |
| <b>Bi (ppb)</b> |       |         |              |             |            |
|                 | 8.    | L*      | ICPES        | 82HAH 01    |            |
| <b>Br (ppm)</b> |       |         |              |             |            |
| 1.23            | 0.08  |         | ITNA         | 78GIL 01    |            |
| <b>Ca (ppm)</b> |       |         |              |             |            |
| 142.            | 3.    |         | ICPES        | 81WOL 01    |            |
| 144.            |       | 38      | AA           | 81YAS 01    |            |
| 145.            |       | 38      | AA           | 81YAS 01    |            |
| 146.            |       | 38      | AA           | 81YAS 01    |            |
| 146.            |       | 38      | AA           | 81YAS 01    |            |
| 148.            | 5.    | 11      | ICPES        | 82JON 01    |            |
| 148.            | 3.    | 11      | ICPES        | 82JON 01    |            |
| 149.            |       | 38      | AA           | 81YAS 01    |            |
| 151.            |       | 38      | AA           | 81YAS 01    |            |
| <b>Cd (ppb)</b> |       |         |              |             |            |
| 20.             |       |         | ASV          | 82GAJ 01    |            |
| 25.             | 2.    |         | ASV          | 82SAT 02    |            |
| 40.             | 20.   | 11      | ICPES        | 82JON 01    |            |
| 60.             | 30.   | 11      | ICPES        | 82JON 01    |            |
| <b>Co (ppb)</b> |       |         |              |             |            |
| 18.             | 2.    |         | ITNA         | 78GIL 01    |            |
| <b>Cr (ppb)</b> |       |         |              |             |            |
| 80.             | 80.   | 11      | ICPES        | 82JON 01    |            |
| 200.            | 200.  | 11      | ICPES        | 82JON 01    |            |
| <b>Cs (ppb)</b> |       |         |              |             |            |
|                 | 200.  | L*      | ITNA         | 82GLA 02    |            |

TABLE E (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Cu (ppm)</b> |       |         |              |             |            |
| 1.9             | 0.2   | 11      | ICPES        | 82JON 01    |            |
| 1.9             | 0.2   | 11      | ICPES        | 82JON 01    |            |
| 2.01            | 0.01  |         | ICPES        | 81WOL 01    |            |
| 2.1             | 0.1   |         | ICPES        | 81KNA 01    |            |
| 2.2             | 0.13  |         | RTNA         | 78GIL 01    |            |
| <b>F (ppb)</b>  |       |         |              |             |            |
| 180.            | 40.   |         | ISE          | 83KNA 01    |            |
| 200.            |       |         | ISE          | 83GLA 01    |            |
| <b>Fe (ppm)</b> |       |         |              |             |            |
| 7.1             | 0.4   | 11      | ICPES        | 82JON 01    |            |
| 7.3             | 0.4   | 11      | ICPES        | 82JON 01    |            |
| 7.6             | 0.4   | 11      | ICPES        | 82JON 01    |            |
| 7.8             | 0.4   | 11      | ICPES        | 82JON 01    |            |
| 8.85            | 0.94  |         | ITNA         | 78GIL 01    |            |
| 9.06            | 1.    |         | ICPES        | 81WOL 01    |            |
| 9.4             | 0.3   |         | ICPES        | 81KNA 01    |            |
| <b>Ge (ppb)</b> |       |         |              |             |            |
|                 | 20.   | L*      | ICPES        | 82HAH 01    |            |
| <b>Hg (ppb)</b> |       |         |              |             |            |
| 5.6             | 0.5   |         | CVAA         | 81KNA 01    |            |
| 6.4             | 1.    |         | RTNA         | 78GIL 01    |            |
| <b>I (ppm)</b>  |       |         |              |             |            |
| 0.011           | 0.001 | 35      | RTNA         | 81ALL 01    |            |
| 0.012           | 0.001 | 34      | RTNA         | 81ALL 01    |            |
| <b>K (ppm)</b>  |       |         |              |             |            |
| 965.            | 11.   |         | ICPES        | 81WOL 01    |            |
| 1125.           | 16.   |         | ITNA         | 78GIL 01    |            |
| 1140.           | 30.   | 11      | ICPES        | 82JON 01    |            |
| 1150.           | 80.   | 11      | ICPES        | 82JON 01    |            |
| <b>Mg (ppm)</b> |       |         |              |             |            |
| 510.            | 20.   | 11      | ICPES        | 82JON 01    |            |
| 510.            | 10.   | 11      | ICPES        | 82JON 01    |            |
| <b>Mn (ppm)</b> |       |         |              |             |            |
| 19.1            | 0.9   | 11      | ICPES        | 82JON 01    |            |
| 19.9            | 0.4   |         | ICPES        | 81WOL 01    |            |
| 19.95           | 0.69  |         | ITNA         | 78GIL 01    |            |
| 20.1            | 0.3   | 11      | ICPES        | 82JON 01    |            |
| 20.2            | 0.5   | 11      | ICPES        | 82JON 01    |            |
| 21.4            | 1.4   |         | ICPES        | 81KNA 01    |            |
| <b>Mo (ppm)</b> |       |         |              |             |            |
| 1.59            | 0.07  | 11      | ICPES        | 82JON 01    |            |
| 1.59            | 0.09  | 11      | ICPES        | 82JON 01    |            |

TABLE E (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.6      | 0.13  |         | ICPES        | 81WOL       | 01         |
| Na (ppm) |       |         |              |             |            |
| 6.9      | 0.4   |         | ITNA         | 78GIL       | 01         |
| Ni (ppb) |       |         |              |             |            |
| 150.     | 20.   | 11      | ICPES        | 82JON       | 01         |
| 160.     | 30.   | 11      | ICPES        | 82JON       | 01         |
| P (ppm)  |       |         |              |             |            |
| 1600.    | 60.   | 11      | ICPES        | 82JON       | 01         |
| 1630.    | 30.   | 11      | ICPES        | 82JON       | 01         |
| Pb (ppb) |       |         |              |             |            |
|          | 100.  | L*      | ICPES        | 82JON       | 01         |
|          | 100.  | L*      | ICPES        | 82JON       | 01         |
| 30.      |       |         | ASV          | 82GAJ       | 01         |
| 35.      | 4.    |         | ASV          | 82SAT       | 02         |
| Rb (ppm) |       |         |              |             |            |
| 7.27     | 0.21  |         | ITNA         | 78GIL       | 01         |
| Sb (ppb) |       |         |              |             |            |
|          | 2.    | L*      | ICPES        | 82HAH       | 01         |
| 5.       | 1.    |         | RTNA         | 78GIL       | 01         |
| Se (ppb) |       |         |              |             |            |
| 280.     | 55.   |         | FAA          | 81MEY       | 01         |
| 280.     | 30.   | 11      | HAA          | 82JON       | 01         |
| 315.     | 14.   |         | HAA          | 81HAH       | 01         |
| 320.     | 40.   | 11      | HAA          | 82JON       | 01         |
| 320.     | 50.   |         | HAA          | 81MEY       | 01         |
| 331.     | 29.   |         | ICPES        | 81WOL       | 01         |
| 338.     | 3.    | 7       | RTNA         | 77GIL       | 03         |
| 370.     | 60.   | H       | ICPES        | 82HAH       | 01         |
| 370.     | 30.   |         | HAA          | 80RAP       | 02         |
| 380.     | 10.   |         | HAA          | 81HAN       | 01         |
| 380.     | 50.   |         | HAA          | 80VIJ       | 01         |
| 390.     | 70.   |         | HAA          | 81REA       | 01         |
| 390.     | 20.   |         | GC MS        | 81REA       | 02         |
| 400.     | 100.  | 11      | XRF          | 80RAP       | 01         |
| 400.     | 20.   |         | XRF          | 81KNA       | 01         |
| 400.     | 20.   | 11      | XRF          | 80RAP       | 01         |
| 400.     | 8.    | D*      | EXRF         | 80RAP       | 03         |
| 420.     | 30.   |         | ITNA         | 78GIL       | 01         |
| 420.     | 30.   | 7       | RTNA         | 77GIL       | 03         |
| 450.     | 30.   |         | RTNA         | 78GIL       | 01         |
| 460.     | 80.   | 7       | RTNA         | 77GIL       | 03         |
| 480.     | 70.   |         | HAA          | 82TAM       | 01         |
| Sn (ppb) |       |         |              |             |            |
|          | 20.   | L*      | ICPES        | 82HAH       | 01         |

TABLE E (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| U (ppb)  |       |         |              |             |            |
| 0.89     | 0.22  | 35      | DNA          | 80GLA       | 04         |
| V (ppb)  |       |         |              |             |            |
|          | 50.   | L*      | ICPES        | 82JON       | 01         |
| Zn (ppm) |       |         |              |             |            |
| 19.3     | 0.7   | 11      | ICPES        | 82JON       | 01         |
| 19.4     | 0.4   |         | ICPES        | 81WOL       | 01         |
| 19.8     | 0.8   | 11      | ICPES        | 82JON       | 01         |
| 19.97    | 0.69  |         | ITNA         | 78GIL       | 01         |
| 20.      | 1.    | 11      | ICPES        | 82JON       | 01         |
| 20.2     | 0.8   | 11      | ICPES        | 82JON       | 01         |
| 21.3     | 1.3   | *       | ICPES        | 81KNA       | 01         |

TABLE F

## NBS SRM 1569—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Al (ppm) |       |         |              |             |            |
| 2000.    | 56.   | 11      | ICPES        | 82JON 01    |            |
| 2300.    | 10.   |         | ITNA         | 78BER 01    |            |
| As (ppb) |       |         |              |             |            |
| 530.     | 80.   | 11      | HAA          | 82JON 01    |            |
| 560.     | 30.   | 11      | HAA          | 82JON 01    |            |
| 670.     | 70.   |         | IENA         | 82GLA 02    |            |
| B (ppm)  |       |         |              |             |            |
| 6.2      |       |         | TCGS         | 82GLA 02    |            |
| Br (ppm) |       |         |              |             |            |
| 0.65     | 0.03  |         | ITNA         | 78BER 01    |            |
| 6.7      | 0.4   |         | ITNA         | 79KOB 03    |            |
| Ca (ppm) |       |         |              |             |            |
| 2270.    | 70.   | 11      | ICPES        | 82JON 01    |            |
| 2290.    | 10.   | 11      | ICPES        | 82JON 01    |            |
| 2420.    | 40.   | 11      | ICPES        | 82JON 01    |            |
| 2490.    | 30.   | 11      | ICPES        | 82JON 01    |            |
| Cd (ppb) |       |         |              |             |            |
| 80.      | 40.   | 11      | ICPES        | 82JON 01    |            |
| 120.     | 70.   | 11      | ICPES        | 82JON 01    |            |
| 180.     | 70.   | 11      | ICPES        | 82JON 01    |            |
| 290.     | 60.   | 11      | ICPES        | 82JON 01    |            |
| Ce (ppm) |       |         |              |             |            |
| 2.3      | 0.1   |         | ITNA         | 78BER 01    |            |
| Cl (ppm) |       |         |              |             |            |
| 460.     | 30.   |         | ITNA         | 78BER 01    |            |
| Co (ppb) |       |         |              |             |            |
| 260.     | 20.   |         | ITNA         | 78BER 01    |            |
| 300.     | 60.   |         | ITNA         | 79KOB 03    |            |
| Cr (ppm) |       |         |              |             |            |
| 0.078    | 0.026 | *       | FAA          | 74WOL 01    |            |
| 0.7      | 0.1   | *11     | ICPES        | 82JON 01    |            |
| 0.87     |       |         | FAA          | 80CHA 01    |            |
| 1.04     | 0.04  | 7       | FAA          | 80CHA 01    |            |
| 1.12     | 0.08  |         | RTNA         | 78GOE 01    |            |
| 1.2      | 0.6   | 11      | ICPES        | 82JON 01    |            |
| 1.558    | 0.015 | 11      | RTNA         | 78MCC 01    |            |
| 2.       | 0.02  |         | NM           | 80SHI 01    |            |
| 2.043    |       | 11      | NAA          | 79VER 01    |            |
| 2.074    | 0.012 | 11      | RTNA         | 78MCC 01    |            |
| 2.08     | 0.09  |         | IDMS         | 79VEI 01    |            |
| 2.082    | 0.013 | 24      | ITNA         | 78MCC 01    |            |

TABLE F (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 2.094    |       | 11      | NAA          | 79VER 01    |            |
| 2.096    | 0.02  | 24      | ITNA         | 78MCC 01    |            |
| 2.1      | 0.5   |         | ITNA         | 79KOB 03    |            |
| 2.119    | 0.025 | 24      | ITNA         | 78MCC 01    |            |
| 2.12     | 0.08  |         | ITNA         | 78BER 01    |            |
| 2.13     | 0.12  | 7       | FAA          | 80CHA 01    |            |
| 2.17     | 0.11  |         | ITNA         | 82GLA 02    |            |
| Cs (ppb) |       |         |              |             |            |
| 200.     |       | L*      | ITNA         | 82GLA 02    |            |
| Cu (ppm) |       |         |              |             |            |
| 11.      | 2.    |         | ITNA         | 78BER 01    |            |
| 13.      | 1.    | 11      | ICPES        | 82JON 01    |            |
| 17.7     | 0.2   | 11      | ICPES        | 82JON 01    |            |
| 18.1     | 0.7   | 11      | ICPES        | 82JON 01    |            |
| 18.4     | 0.3   | 11      | ICPES        | 82JON 01    |            |
| Eu (ppb) |       |         |              |             |            |
| 20.      | 10.   |         | ITNA         | 79KOB 03    |            |
| F (ppm)  |       |         |              |             |            |
| 14.      | 2.    |         | ISE          | 83KNA 01    |            |
| 15.      | 2.    |         | ISE          | 83GLA 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 257.     | 34.   | *11     | ICPES        | 82JON 01    |            |
| 499.     | 15.   | 11      | ICPES        | 82JON 01    |            |
| 590.     | 24.   |         | ITNA         | 79KOB 03    |            |
| 660.     | 15.   | 11      | ICPES        | 82JON 01    |            |
| 693.     | 25.   | 11      | ICPES        | 82JON 01    |            |
| 707.     | 16.   |         | ITNA         | 78BER 01    |            |
| Ga (ppm) |       |         |              |             |            |
| 7.1      | 0.5   |         | ITNA         | 78BER 01    |            |
| Hf (ppb) |       |         |              |             |            |
| 130.     | 10.   |         | ITNA         | 78BER 01    |            |
| Hg (ppb) |       |         |              |             |            |
| 22.      |       |         | CVAA         | 82GLA 02    |            |
| I (ppb)  |       |         |              |             |            |
| 60.      | 20.   |         | IENA         | 82SAT 01    |            |
| K (%)    |       |         |              |             |            |
| 1.4      | 0.1   | 11      | ICPES        | 82JON 01    |            |
| 1.45     | 0.007 | 11      | ICPES        | 82JON 01    |            |
| 1.45     | 0.05  | 11      | ICPES        | 82JON 01    |            |
| 1.55     | 0.05  |         | ITNA         | 78BER 01    |            |
| 1.59     | 0.04  | 11      | ICPES        | 82JON 01    |            |
| 1.71     | 0.12  |         | ITNA         | 79KOB 03    |            |

TABLE F (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Mg (ppm)</b> |       |         |              |             |            |
| 1730.           | 70.   | 11      | ICPES        | 82JON 01    |            |
| 1780.           | 100.  |         | ITNA         | 78BER 01    |            |
| 1870.           | 50.   | 11      | ICPES        | 82JON 01    |            |
| 1900.           | 60.   | 11      | ICPES        | 82JON 01    |            |
| 1980.           | 60.   | 11      | ICPES        | 82JON 01    |            |
| <b>Mn (ppm)</b> |       |         |              |             |            |
| 7.              | 0.8   | *       | ITNA         | 78BER 01    |            |
| 9.1             | 0.6   | 11      | ICPES        | 82JON 01    |            |
| 9.6             | 0.6   | 11      | ICPES        | 82JON 01    |            |
| 10.             | 1.5   |         | ITNA         | 79KOB 03    |            |
| 10.4            | 0.8   | 11      | ICPES        | 82JON 01    |            |
| 10.9            | 0.7   | 11      | ICPES        | 82JON 01    |            |
| <b>Mo (ppm)</b> |       |         |              |             |            |
| 3.3             | 0.3   | 11      | ICPES        | 82JON 01    |            |
| 3.4             | 0.1   | 11      | ICPES        | 82JON 01    |            |
| 3.8             | 0.2   | 11      | ICPES        | 82JON 01    |            |
| 3.9             | 0.2   | 11      | ICPES        | 82JON 01    |            |
| <b>Na (ppm)</b> |       |         |              |             |            |
| 510.            | 30.   |         | ITNA         | 78BER 01    |            |
| 670.            | 42.   |         | ITNA         | 79KOB 03    |            |
| <b>Ni (ppm)</b> |       |         |              |             |            |
| 4.6             | 0.3   | 11      | ICPES        | 82JON 01    |            |
| 4.8             | 0.1   | 11      | ICPES        | 82JON 01    |            |
| 5.9             | 0.2   | 11      | ICPES        | 82JON 01    |            |
| 6.              | 0.2   | 11      | ICPES        | 82JON 01    |            |
| <b>P (%)</b>    |       |         |              |             |            |
| 1.              | 0.04  | 11      | ICPES        | 82JON 01    |            |
| 1.02            | 0.03  | 11      | ICPES        | 82JON 01    |            |
| 1.04            | 0.05  | 11      | ICPES        | 82JON 01    |            |
| 1.08            | 0.04  | 11      | ICPES        | 82JON 01    |            |
| <b>Pb (ppb)</b> |       |         |              |             |            |
| 200.            | 200.  | 11      | ICPES        | 82JON 01    |            |
| 500.            | 500.  | 11      | ICPES        | 82JON 01    |            |
| <b>Rb (ppm)</b> |       |         |              |             |            |
| 16.             | 1.    |         | ITNA         | 78BER 01    |            |
| <b>Sb (ppb)</b> |       |         |              |             |            |
| 75.             | 5.    |         | ITNA         | 78BER 01    |            |
| 230.            | 50.   |         | ITNA         | 79KOB 03    |            |
| <b>Sc (ppb)</b> |       |         |              |             |            |
| 180.            | 10.   |         | ITNA         | 78BER 01    |            |
| 220.            | 30.   |         | ITNA         | 79KOB 03    |            |

TABLE F (cont)

| CONC             | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------------------|-------|---------|--------------|-------------|------------|
| <b>Se (ppm)</b>  |       |         |              |             |            |
| 0.92             | 0.09  |         | ITNA         | 78BER 01    |            |
| 0.98             | 0.05  | 11      | HAA          | 82JON 01    |            |
| 1.01             | 0.06  | 11      | HAA          | 82JON 01    |            |
| <b>Th (ppm)</b>  |       |         |              |             |            |
| 3.7              | 0.2   |         | ITNA         | 78BER 01    |            |
| <b>Ti (ppm)</b>  |       |         |              |             |            |
| 38.              | 2.    |         | ITNA         | 78BER 01    |            |
| <b>U (ppb)</b>   |       |         |              |             |            |
| 441.             | 4.    |         | IDMS         | 82CUR 01    |            |
| 460.             | 20.   | 35      | DNA          | 81GLA 03    |            |
| 470.             | 20.   |         | DNA          | 83GLA 01    |            |
| 470.             | 20.   | 35      | DNA          | 80GLA 04    |            |
| 470.             | 20.   |         | DNA          | 82GLA 02    |            |
| 470.             | 50.   | 35      | DNA          | 81GLA 04    |            |
| 490.             | 20.   |         | ITNA         | 78BER 01    |            |
| <b>U-238/235</b> |       |         |              |             |            |
| 137.7            | 1.3   |         | IDMS         | 82CUR 01    |            |
| <b>V (ppm)</b>   |       |         |              |             |            |
| 1.46             | 0.05  | 11      | ICPES        | 82JON 01    |            |
| 4.1              | 0.1   |         | ITNA         | 78BER 01    |            |
| 4.4              | 0.1   | 11      | ICPES        | 82JON 01    |            |
| <b>Zn (ppm)</b>  |       |         |              |             |            |
| 30.              | 4.3   | *       | ITNA         | 79KOB 03    |            |
| 59.              | 6.    | 11      | ICPES        | 82JON 01    |            |
| 63.              | 2.    | 11      | ICPES        | 82JON 01    |            |
| 64.              | 5.    | 11      | ICPES        | 82JON 01    |            |
| 64.              | 4.    | 11      | ICPES        | 82JON 01    |            |
| 65.              | 2.    | 11      | ICPES        | 82JON 01    |            |
| 65.              | 2.    | 11      | ICPES        | 82JON 01    |            |
| 66.              | 2.    | 11      | ICPES        | 82JON 01    |            |
| 70.              | 2.    |         | ITNA         | 78BER 01    |            |
| 70.              | 4.    | 11      | ICPES        | 82JON 01    |            |

TABLE G

## NBS SRM 1570—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppb) |       |         |              |             |            |
| 65.      | 40.   |         | AA           | 80JAC 01    |            |
| 65.      | 10.   |         | RTNA         | 80SLO 01    |            |
| Al (ppm) |       |         |              |             |            |
| 482.     |       | *       | ICPES        | 78CAP 01    |            |
| 782.     | 31.   | 11      | ICPES        | 82JON 01    |            |
| 820.     | 25.   |         | ITNA         | 83GLA 01    |            |
| 824.     | 10.   |         | ITNA         | 80SLO 01    |            |
| 829.     | 23.   |         | ITNA         | 77NAD 02    |            |
| 881.     |       |         | ITNA         | 78CAP 01    |            |
| 1190.    |       | *35     | ITNA         | 81GLA 03    |            |
| As (ppb) |       |         |              |             |            |
|          | 100.  | L*      | IENA         | 83GLA 01    |            |
| 62.      | 13.   | *7      | FAA          | 82HOE 02    |            |
| 114.     |       | *       | HAA          | 77IHN 01    |            |
| 147.     | 1.    |         | RTNA         | 79HOE 01    |            |
| 150.     | 10.   | 11      | HAA          | 82JON 01    |            |
| 150.     | 13.   | 7       | FAA          | 82HOE 02    |            |
| 152.     | 5.    | 7       | FAA          | 82HOE 02    |            |
| 160.     |       |         | FAA          | 78CAP 01    |            |
| 160.     | 10.   | 11      | HAA          | 82JON 01    |            |
| 170.     | 20.   |         | FAA          | 80DUP 01    |            |
| 170.     | 10.   | H       | ICPES        | 82HAH 01    |            |
| 170.     | 40.   |         | RTNA         | 80SLO 01    |            |
| 170.     | 10.   |         | COLOR        | 77BUR 01    |            |
| 180.     | 70.   |         | IENA         | 82GLA 02    |            |
| 180.     | 20.   |         | HAA          | 80TAM 01    |            |
| Au (ppb) |       |         |              |             |            |
| 0.4      |       |         | RTNA         | 80SLO 01    |            |
| 2.       |       |         | ITNA         | 79REN 03    |            |
| B (ppm)  |       |         |              |             |            |
| 20.9     | 0.3   |         | ICPES        | 79HER 01    |            |
| 28.      | 0.4   |         | TCGS         | 82GLA 02    |            |
| Ba (ppm) |       |         |              |             |            |
|          | 45.   | L*      | ITNA         | 78CAP 01    |            |
| 13.1     | 1.8   |         | ITNA         | 77NAD 02    |            |
| 87.      | 29.   |         | ITNA         | 79REN 03    |            |
| Be (ppb) |       |         |              |             |            |
|          | 30.   | L*      | ICPES        | 82KUE 01    |            |
|          | 60.   | L*      | ICPES        | 78CAP 01    |            |
|          | 30.   | L*      | ICPES        | 82KUE 01    |            |
|          | 30.   | L*      | ICPES        | 82KUE 01    |            |
| Bi (ppb) |       |         |              |             |            |
|          | 8.    | L*      | ICPES        | 82HAH 01    |            |

TABLE G (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Br (ppm) |       |         |              |             |            |
|          | 65.   | L*      | ITNA         | 80TOU 01    |            |
| 42.4     | 2.4   | 5       | ITNA         | 80HOE 01    |            |
| 43.6     | 2.3   | 5       | IENA         | 79GLA 02    |            |
| 45.      | 3.3   |         | ITNA         | 80SLO 01    |            |
| 45.1     | 0.3   | 5       | IENA         | 79GLA 02    |            |
| 46.      | 2.    | 5       | ITNA         | 80HOE 01    |            |
| 47.      | 4.    |         | ITNA         | 83GLA 01    |            |
| 47.2     | 0.5   |         | ITNA         | 77NAD 02    |            |
| 48.      | 9.4   |         | ITNA         | 79REN 03    |            |
| 48.      |       |         | ITNA         | 78CAP 01    |            |
| 52.      | 4.8   |         | ITNA         | 79KOB 03    |            |
| 54.      | 3.    | 35      | NAA          | 81GLA 03    |            |
| 55.3     | 3.8   | 5       | ITNA         | 80TOU 01    |            |
| 138.     |       | *       | EXRF         | 81PAR 01    |            |
| C (%)    |       |         |              |             |            |
| 40.82    | 0.81  |         | CB           | 80SCH 02    |            |
| Ca (%)   |       |         |              |             |            |
|          | 0.86  | L*      | ITNA         | 80TOU 01    |            |
| 0.82     | 0.11  | *       | ITNA         | 80SLO 01    |            |
| 1.19     | 0.09  | 6       | EXRF         | 79MAT 01    |            |
| 1.21     |       | 35      | AA           | 81GLA 04    |            |
| 1.24     | 0.08  | 11      | ICPES        | 82JON 01    |            |
| 1.25     | 0.01  | 11      | ICPES        | 82JON 01    |            |
| 1.29     | 0.03  | 6       | ICPES        | 82KUE 01    |            |
| 1.347    | 0.014 |         | NM           | 81YUZ 01    |            |
| 1.35     | 0.025 | 6       | ICPES        | 82KUE 01    |            |
| 1.36     | 0.04  | 11      | ICPES        | 82JON 01    |            |
| 1.37     | 0.07  | 5       | ITNA         | 80TOU 01    |            |
| 1.38     | 0.014 | 6       | ICPES        | 82KUE 01    |            |
| 1.39     | 0.03  | 11      | ICPES        | 82JON 01    |            |
| 1.4      | 0.04  | 6       | EXRF         | 79MAT 01    |            |
| 1.46     |       |         | ITNA         | 78CAP 01    |            |
| 1.49     | 0.1   |         | ITNA         | 77NAD 02    |            |
| 1.54     | 0.01  |         | ICPES        | 79HER 01    |            |
| 1.62     |       |         | ICPES        | 78CAP 01    |            |
| 1.78     | 0.25  | *       | ITNA         | 79REN 03    |            |
| 2.45     |       | *       | EXRF         | 81PAR 01    |            |
| Cd (ppm) |       |         |              |             |            |
|          | 2.5   | L*      | ICPES        | 78CAP 01    |            |
| 1.2      | 0.15  |         | ASV          | 82GAJ 01    |            |
| 1.2      |       |         | FAA          | 80PRE 01    |            |
| 1.23     | 0.16  |         | ASV          | 82SAT 02    |            |
| 1.3      |       |         | FAA          | 82PRE 01    |            |
| 1.32     |       |         | ASV          | 78CAP 01    |            |
| 1.38     | 0.08  |         | RTNA         | 80SLO 01    |            |
| 1.4      | 0.08  | 11      | ICPES        | 82JON 01    |            |
| 1.41     | 0.03  | 6       | ICPES        | 82KUE 01    |            |
| 1.42     | 0.03  | 6       | ICPES        | 82KUE 01    |            |
| 1.45     | 0.07  | 6       | ICPES        | 82KUE 01    |            |
| 1.46     | 0.04  |         | FAA          | 80LEG 01    |            |
| 1.46     | 0.02  |         | NAA          | 76DER 01    |            |
| 1.49     | 0.08  | 11      | ICPES        | 82JON 01    |            |
| 1.52     | 0.07  |         | RTNA         | 77DER 01    |            |
| 1.6      | 0.2   |         | FAA          | 81KNA 01    |            |

TABLE G (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.67     | 0.29  |         | SSMS         | 77PAU       | 01         |
| 1.7      | 0.1   |         | RTNA         | 76GAL       | 01         |
| 1.7      | 0.2   |         | AA           | 80SCH       | 05         |
| 2.       | 0.1   |         | AA           | 76GAL       | 01         |
| 2.1      | 0.2   |         | ICPES        | 79HER       | 01         |
| 2.2      | 1.    | *11     | ICPES        | 82JON       | 01         |
| 2.8      | 0.1   | *11     | ICPES        | 82JON       | 01         |
| Ce (ppb) |       |         |              |             |            |
| 240.     | 30.   |         | RTNA         | 80SLO       | 01         |
| Cl (ppm) |       |         |              |             |            |
| 6000.    |       | 35      | ITNA         | 81GLA       | 04         |
| 6290.    |       |         | ITNA         | 78CAP       | 01         |
| 6500.    | 300.  |         | CPXRF        | 79REN       | 02         |
| 6800.    | 100.  |         | ITNA         | 80SLO       | 01         |
| 7000.    | 120.  |         | ITNA         | 83GLA       | 01         |
| 10000.   | 1000. | *       | ITNA         | 77NAD       | 02         |
| Co (ppm) |       |         |              |             |            |
|          | 26.   | L*      | ITNA         | 80TOU       | 01         |
| 0.9      | 0.1   | *       | PAA          | 80YAM       | 01         |
| 1.41     |       |         | ITNA         | 78CAP       | 01         |
| 1.47     | 0.1   |         | AA           | 80JAC       | 01         |
| 1.49     | 0.05  |         | RTNA         | 80SLO       | 01         |
| 1.5      | 0.1   |         | ITNA         | 79KOB       | 03         |
| 1.5      | 0.2   |         | ITNA         | 79REN       | 03         |
| 1.6      | 0.1   | 5       | ITNA         | 80TOU       | 01         |
| 1.65     |       |         | FAA          | 82HOE       | 01         |
| 1.68     | 0.03  |         | RTNA         | 77MEL       | 01         |
| 1.7      | 0.1   |         | ITNA         | 76GAL       | 01         |
| 1.76     | 0.01  |         | ITNA         | 77NAD       | 02         |
| 3.2      | 0.2   | *       | AA           | 76GAL       | 01         |
| Cr (ppm) |       |         |              |             |            |
| 3.06     | 0.3   |         | AA           | 80JAC       | 01         |
| 3.5      | 0.3   | 6       | ICPES        | 82KUE       | 01         |
| 3.54     | 0.3   | 6       | ICPES        | 82KUE       | 01         |
| 3.6      | 0.5   | 11      | ICPES        | 82JON       | 01         |
| 3.75     |       | 11      | AA           | 79HOE       | 02         |
| 4.3      | 0.5   |         | ITNA         | 77NAD       | 02         |
| 4.3      | 0.7   | 6       | ICPES        | 82KUE       | 01         |
| 4.4      |       |         | FAA          | 82HOE       | 01         |
| 4.4      |       | 11      | AA           | 79HOE       | 02         |
| 4.5      | 0.2   |         | RTNA         | 76GAL       | 01         |
| 4.5      | 0.3   |         | ITNA         | 79KOB       | 03         |
| 4.51     |       | 11      | AA           | 79HOE       | 02         |
| 4.6      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 4.7      | 0.3   | D*      | DCP          | 81REE       | 01         |
| 4.7      | 0.3   |         | DCP          | 79REE       | 01         |
| 4.7      | 0.4   |         | ITNA         | 82GLA       | 02         |
| 4.8      |       |         | ITNA         | 78CAP       | 01         |
| 5.2      | 0.5   |         | ITNA         | 76GAL       | 01         |
| 5.2      | 1.5   |         | AE+AF        | 82GOL       | 01         |
| 5.8      | 0.2   |         | AA           | 76GAL       | 01         |
| 6.       | 0.7   |         | PAA          | 80YAM       | 01         |
| 6.2      | 0.1   |         | ICPES        | 79HER       | 01         |
| 7.5      | 1.6   |         | ITNA         | 79REN       | 03         |

TABLE G (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 20.5     | 2.8   | *11     | RTNA         | 76STE       | 01         |
| 21.      | 2.    | *11     | RTNA         | 77MEL       | 01         |
| 21.3     | 2.6   | *11     | RTNA         | 76STE       | 01         |
| 21.8     | 1.5   | *11     | RTNA         | 76STE       | 01         |
| 23.9     | 0.9   | *11     | RTNA         | 76STE       | 01         |
| 24.5     | 1.2   | *11     | RTNA         | 76STE       | 01         |
| 24.8     | 2.8   |         | ITNA         | 76STE       | 01         |
| Cs (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 82GLA       | 02         |
| 48.      | 5.    |         | ITNA         | 77NAD       | 02         |
| 64.      | 2.    |         | ITNA         | 83GLA       | 01         |
| 270.     | 40.   |         | RTNA         | 77MEL       | 01         |
| 320.     | 40.   |         | ITNA         | 79REN       | 03         |
| Cu (ppm) |       |         |              |             |            |
| 9.1      | 0.4   | *       | AA           | 76GAL       | 01         |
| 10.9     | 0.6   |         | RTNA         | 80SLO       | 01         |
| 10.9     | 0.3   | 11      | ICPES        | 82JON       | 01         |
| 11.1     | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 11.1     | 0.5   | 11      | ICPES        | 82JON       | 01         |
| 11.2     | 0.4   | 11      | ICPES        | 82JON       | 01         |
| 11.4     | 0.5   |         | RTNA         | 79KOB       | 01         |
| 11.5     | 0.5   |         | SSMS         | 77PAU       | 01         |
| 11.5     | 0.4   |         | FAE          | 76EPS       | 01         |
| 11.6     | 0.7   |         | ITNA         | 79KOB       | 03         |
| 11.6     | 0.7   |         | RTNA         | 78KOB       | 01         |
| 11.8     | 0.3   |         | RTNA         | 77DER       | 01         |
| 11.8     | 0.3   | 6       | ICPES        | 82KUE       | 01         |
| 11.8     | 2.5   |         | VV           | 80SCH       | 05         |
| 12.      | 0.3   | 6       | ICPES        | 82KUE       | 01         |
| 12.06    | 0.03  |         | COLOR        | 77BUR       | 01         |
| 12.1     | 0.2   |         | ICPES        | 79HER       | 01         |
| 12.1     |       |         | AA           | 80EVA       | 01         |
| 12.1     | 0.1   |         | COLOR        | 76EPS       | 01         |
| 12.2     | 0.1   | 6       | ICPES        | 82KUE       | 01         |
| 12.3     |       |         | ICPES        | 78CAP       | 01         |
| 12.3     |       | 11      | AA           | 79HOE       | 02         |
| 12.6     |       |         | FAA          | 78CAP       | 01         |
| 12.6     | 1.4   | 6       | EXRF         | 79MAT       | 01         |
| 12.7     | 0.4   |         | AA           | 76EPS       | 01         |
| 13.      | 1.    | D*      | DCP          | 81REE       | 01         |
| 13.      | 1.    |         | DCP          | 79REE       | 01         |
| 13.2     |       | *11     | AA           | 79HOE       | 02         |
| Eu (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 78CAP       | 01         |
| 14.      | 1.    |         | ITNA         | 79KOB       | 03         |
| 20.      | 1.    |         | ITNA         | 77NAD       | 02         |
| F (ppm)  |       |         |              |             |            |
| 4.3      | 0.4   |         | ISE          | 83KNA       | 01         |
| 4.4      | 0.3   |         | ISE          | 83GLA       | 01         |
| Fe (ppm) |       |         |              |             |            |
| 178.     | 2.    | D*      | DCP          | 81REE       | 01         |
| 470.     | 50.   | 6       | ICPES        | 82KUE       | 01         |
| 478.     |       |         | ICPES        | 78CAP       | 01         |

TABLE G (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 491.     | 20.   | 11      | ICPES        | 82JON       | 01         |
| 494.     |       |         | FAA          | 78CAP       | 01         |
| 510.     |       |         | ITNA         | 78CAP       | 01         |
| 511.     | 7.    |         | ICPES        | 79HER       | 01         |
| 518.     | 8.    | 11      | ICPES        | 82JON       | 01         |
| 522.     | 14.   | 11      | COLOR        | 82SCH       | 03         |
| 525.     | 11.   | 6       | EXRF         | 79MAT       | 01         |
| 530.     | 11.   | 6       | ICPES        | 82KUE       | 01         |
| 540.     | 18.   |         | ICPES        | 80SCH       | 05         |
| 540.     | 23.   |         | ITNA         | 79KOB       | 03         |
| 540.     | 10.   | 6       | ICPES        | 82KUE       | 01         |
| 541.     | 15.   | 11      | ICPES        | 82JON       | 01         |
| 545.     |       |         | AA           | 80EVA       | 01         |
| 548.     | 9.    |         | NH           | 80SUZ       | 01         |
| 551.     |       | 11      | AA           | 79HOE       | 02         |
| 556.     | 11.   | 11      | COLOR        | 82SCH       | 03         |
| 557.     | 8.    |         | RTNA         | 80SLO       | 01         |
| 557.     | 19.   | 11      | ICPES        | 82JON       | 01         |
| 557.     | 8.    |         | ITNA         | 79DAS       | 01         |
| 566.     | 18.   |         | ITNA         | 77NAD       | 02         |
| 570.     |       | 11      | AA           | 79HOE       | 02         |
| 597.     | 6.    | 6       | EXRF         | 79MAT       | 01         |
| 600.     | 90.   | 35      | ITNA         | 81GLA       | 03         |
| 660.     | 300.  | *       | ITNA         | 79REN       | 03         |
| 763.     | 34.   | *       | RTNA         | 77MEL       | 01         |
| 1200.    |       | *       | EXRF         | 81PAR       | 01         |
| Ge (ppb) |       |         |              |             |            |
|          | 20.   | L*      | ICPES        | 82HAH       | 01         |
| H (%)    |       |         |              |             |            |
| 5.54     | 0.08  |         | CB           | 80SCH       | 02         |
| 5.6      | 0.1   | 35      | TCGS         | 79GLA       | 04         |
| Hf (ppb) |       |         |              |             |            |
| 40.      | 20.   |         | RTNA         | 80SLO       | 01         |
| Hg (ppb) |       |         |              |             |            |
| 25.      |       | 11      | CVAA         | 79HOE       | 02         |
| 26.      | 8.    |         | RTNA         | 80SLO       | 01         |
| 30.      | 5.    |         | CVAA         | 82GLA       | 02         |
| 33.      | 16.   |         | CVAA         | 82DOO       | 01         |
| 34.      | 3.    |         | ITNA         | 77NAD       | 02         |
| 110.     | 20.   | *       | RTNA         | 77MEL       | 01         |
| I (ppm)  |       |         |              |             |            |
| 1.08     | 0.16  |         | IENA         | 82SAT       | 01         |
| 1.1      | 0.2   |         | PAA          | 77WIL       | 01         |
| 1.267    | 0.054 | 35      | RTNA         | 81ALL       | 01         |
| 1.325    | 0.055 |         | RTNA         | 81STR       | 01         |
| 1.325    | 0.055 | 34      | RTNA         | 81ALL       | 01         |
| In (ppb) |       |         |              |             |            |
| 1.2      | 0.1   |         | RTNA         | 78KOB       | 01         |
| 1.3      | 0.2   |         | RTNA         | 79KOB       | 01         |

TABLE G (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| K (%)    |       |         |              |             |            |
| 3.26     | 0.23  |         | ITNA         | 79REN       | 03         |
| 3.29     | 0.18  |         | ICPES        | 79HER       | 01         |
| 3.43     | 0.11  |         | ITNA         | 77NAD       | 02         |
| 3.52     | 0.1   | 6       | ICPES        | 82KUE       | 01         |
| 3.53     | 0.032 | 6       | ICPES        | 82KUE       | 01         |
| 3.54     |       |         | ITNA         | 80EDD       | 01         |
| 3.56     |       | 1       | AA           | 78SZY       | 01         |
| 3.57     | 0.04  | 6       | ICPES        | 82KUE       | 01         |
| 3.59     |       |         | ICPES        | 79COO       | 01         |
| 3.6      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 3.6      | 0.09  |         | ITNA         | 79KOB       | 03         |
| 3.61     |       | 1       | AA           | 78SZY       | 01         |
| 3.61     | 0.35  |         | ITNA         | 82ERM       | 01         |
| 3.7      | 0.04  | 11      | ICPES        | 82JON       | 01         |
| 3.7      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 3.73     |       |         | ITNA         | 78CAP       | 01         |
| 3.74     | 0.07  |         | ITNA         | 80SLO       | 01         |
| 3.9      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 4.04     | 0.06  | *6      | EXRF         | 79MAT       | 01         |
| 4.85     | 0.05  | *6      | EXRF         | 79MAT       | 01         |
| 7.95     |       | *       | EXRF         | 81PAR       | 01         |
| La (ppb) |       |         |              |             |            |
| 260.     | 700.  | L*      | ITNA         | 79REN       | 03         |
| 320.     | 50.   |         | RTNA         | 80SLO       | 01         |
| 350.     | 30.   |         | ITNA         | 77NAD       | 02         |
|          | 60.   |         | ITNA         | 79REN       | 03         |
| Lu (ppb) |       |         |              |             |            |
|          | 5.    | L*      | RTNA         | 80SLO       | 01         |
| Mg (ppm) |       |         |              |             |            |
| 7000.    |       | *       | ICPES        | 78CAP       | 01         |
| 7300.    | 500.  |         | ITNA         | 80SLO       | 01         |
| 8400.    |       |         | FAA          | 78CAP       | 01         |
| 8550.    | 65.   | 6       | ICPES        | 82KUE       | 01         |
| 8600.    | 400.  | 11      | ICPES        | 82JON       | 01         |
| 8600.    | 230.  | 6       | ICPES        | 82KUE       | 01         |
| 8700.    | 100.  |         | ICPES        | 79HER       | 01         |
| 8790.    | 150.  | 6       | ICPES        | 82KUE       | 01         |
| 8800.    | 100.  | 11      | ICPES        | 82JON       | 01         |
| 8900.    | 300.  | 11      | ICPES        | 82JON       | 01         |
| 9000.    | 600.  |         | ITNA         | 78CAP       | 01         |
| 9000.    | 200.  | 11      | ICPES        | 82JON       | 01         |
| 9800.    |       |         | ITNA         | 77NAD       | 02         |
| Mn (ppm) |       |         |              |             |            |
| 1.3      | 0.1   | D*      | DCP          | 81REE       | 01         |
| 49.      | 2.    | *11     | ICPES        | 82JON       | 01         |
| 102.     | 3.    | *       | AA           | 76GAL       | 01         |
| 118.     | 3.    | *       | ITNA         | 76GAL       | 01         |
| 146.     | 32.   |         | AE+AF        | 82GOL       | 01         |
| 155.     |       |         | FAA          | 78CAP       | 01         |
| 156.     |       | 11      | AA           | 79HOE       | 02         |
| 156.     | 5.    |         | ITNA         | 79KOB       | 03         |
| 157.     |       |         | ICPES        | 78CAP       | 01         |

TABLE G (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 158.     | 7.    | 11      | ICPES        | 82JON 01    |            |
| 159.     |       | 11      | AA           | 79HOE 02    |            |
| 160.     |       | 35      | ITNA         | 81GLA 04    |            |
| 160.     | 3.    | 11      | ICPES        | 82JON 01    |            |
| 161.     | 6.    |         | ITNA         | 77NAD 02    |            |
| 162.     | 9.    |         | ITNA         | 83GLA 01    |            |
| 165.     | 3.    | 6       | EXRF         | 79MAT 01    |            |
| 165.     | 3.    | 6       | ICPES        | 82KUE 01    |            |
| 166.     | 5.    | 11      | ICPES        | 82JON 01    |            |
| 166.     | 1.    |         | ICPES        | 79HER 01    |            |
| 167.     | 6.    | 11      | ICPES        | 82JON 01    |            |
| 168.     | 3.    |         | VV           | 80SCH 05    |            |
| 169.     | 4.    |         | ITNA         | 80SLO 01    |            |
| 170.     |       |         | AA           | 80EVA 01    |            |
| 171.     | 1.    | 6       | ICPES        | 82KUE 01    |            |
| 171.     |       |         | ITNA         | 78CAP 01    |            |
| 172.     | 5.    | 6       | ICPES        | 82KUE 01    |            |
| 178.     | 2.    |         | DCP          | 79REE 01    |            |
| 184.     | 10.   | 6       | EXRF         | 79MAT 01    |            |
| 187.9    | 18.9  |         | PAA          | 80YAM 01    |            |
| 200.     |       | *       | ITNA         | 79REN 03    |            |
| 684.     |       | *       | EXRF         | 81PAR 01    |            |
| Mo (ppb) |       |         |              |             |            |
|          | 300.  | L*      | ICPES        | 82KUE 01    |            |
|          | 5000. | L*      | ICPES        | 78CAP 01    |            |
|          | 300.  | L*      | ICPES        | 82KUE 01    |            |
|          | 300.  | L*      | ICPES        | 82KUE 01    |            |
| 200.     | 100.  | 11      | ICPES        | 82JON 01    |            |
| 200.     | 100.  | 11      | ICPES        | 82JON 01    |            |
| 300.     | 100.  |         | RTNA         | 80SLO 01    |            |
| 300.     | 100.  | 11      | ICPES        | 82JON 01    |            |
| 400.     | 200.  | 11      | ICPES        | 82JON 01    |            |
| N (%)    |       |         |              |             |            |
| 5.62     | 0.11  |         | CB           | 80SCH 02    |            |
| 6.       | 0.4   | 35      | TCGS         | 79GLA 04    |            |
| Na (%)   |       |         |              |             |            |
| 1.13     | 0.02  |         | ITNA         | 80SLO 01    |            |
| 1.28     | 0.1   |         | ITNA         | 82SCH 05    |            |
| 1.31     | 0.07  |         | ITNA         | 77NAD 02    |            |
| 1.33     | 0.05  |         | ITNA         | 79KOB 03    |            |
| 1.43     |       |         | ITNA         | 83GLA 01    |            |
| 1.44     |       |         | ITNA         | 78CAP 01    |            |
| 1.48     |       | 35      | ITNA         | 81GLA 04    |            |
| 1.54     | 0.14  |         | ITNA         | 79REN 03    |            |
| 1.55     |       | 1       | AA           | 78SZY 01    |            |
| 1.56     |       | 1       | AA           | 78SZY 01    |            |
| Ni (ppm) |       |         |              |             |            |
| 1.3      | 0.1   | *       | DCP          | 79REE 01    |            |
| 2.3      | 0.5   | *       | RTNA         | 80SLO 01    |            |
| 4.1      | 0.5   |         | ITNA         | 77NAD 02    |            |
| 4.9      | 0.2   | 11      | ICPES        | 82JON 01    |            |
| 5.1      | 0.1   | 11      | ICPES        | 82JON 01    |            |
| 5.12     |       |         | VOLT         | 81PIH 01    |            |
| 5.4      | 1.    | 6       | EXRF         | 79MAT 01    |            |

TABLE G (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 5.4      | 0.1   | 11      | ICPES        | 82JON 01    |            |
| 5.4      | 0.1   | 11      | ICPES        | 82JON 01    |            |
| 5.51     | 0.32  | 6       | ICPES        | 82KUE 01    |            |
| 6.03     | 0.52  | 6       | ICPES        | 82KUE 01    |            |
| 6.1      | 0.2   |         | PAA          | 80YAM 01    |            |
| 6.17     | 0.72  | 6       | ICPES        | 82KUE 01    |            |
| 6.5      | 0.2   |         | RTNA         | 78KOB 01    |            |
| 6.5      | 0.3   |         | RTNA         | 79KOB 01    |            |
| 7.5      | 0.5   |         | RTNA         | 77MEL 01    |            |
| 8.1      |       |         | FAA          | 82HOE 01    |            |
| 8.1      | 0.2   |         | ICPES        | 79HER 01    |            |
| P (ppm)  |       |         |              |             |            |
| 4500.    |       | *       | ICPES        | 78CAP 01    |            |
| 5100.    |       |         | FAA          | 79EDI 01    |            |
| 5200.    | 200.  | 11      | ICPES        | 82JON 01    |            |
| 5240.    | 70.   | 6       | ICPES        | 82KUE 01    |            |
| 5300.    | 100.  | 11      | ICPES        | 82JON 01    |            |
| 5300.    | 70.   | 6       | ICPES        | 82KUE 01    |            |
| 5350.    | 45.   | 6       | ICPES        | 82KUE 01    |            |
| 5360.    | 270.  |         | ICPES        | 81OWE 01    |            |
| 5400.    |       |         | ICPES        | 79EDI 01    |            |
| 5500.    | 200.  | 11      | ICPES        | 82JON 01    |            |
| 5600.    | 400.  | 7       | NM           | 81SHI 01    |            |
| 5700.    | 200.  | 11      | ICPES        | 82JON 01    |            |
| 6000.    | 100.  |         | ICPES        | 79HER 01    |            |
| Pb (ppm) |       |         |              |             |            |
|          | 3.5   | L*      | ICPES        | 78CAP 01    |            |
|          | 3.8   | L*      | ICPES        | 82KUE 01    |            |
|          | 3.8   | L*      | ICPES        | 82KUE 01    |            |
|          | 3.8   | L*      | ICPES        | 82KUE 01    |            |
|          | 3.8   | L*      | ICPES        | 82KUE 01    |            |
| 0.8      | 0.3   | 11      | ICPES        | 82JON 01    |            |
| 0.8      | 0.1   | 11      | ICPES        | 82JON 01    |            |
| 1.       | 0.1   |         | FAA          | 80LEG 01    |            |
| 1.       | 0.8   |         | ICPES        | 79HER 01    |            |
| 1.02     |       |         | FAA          | 82HOE 01    |            |
| 1.03     | 0.15  |         | ASV          | 82GAJ 01    |            |
| 1.04     | 0.09  |         | ASV          | 80SZY 01    |            |
| 1.09     | 0.06  |         | FAA          | 79DAB 02    |            |
| 1.1      | 0.2   |         | FAA          | 81KNA 01    |            |
| 1.1      | 0.1   |         | AA           | 80SCH 05    |            |
| 1.1      | 0.08  |         | ASV          | 82SAT 02    |            |
| 1.1      |       | 11      | FAA          | 79HOE 02    |            |
| 1.12     | 0.03  |         | SSMS         | 77PAU 01    |            |
| 1.16     | 0.08  |         | FAA          | 82RAI 01    |            |
| 1.2      |       |         | FAA          | 80PRE 01    |            |
| 1.25     |       |         | ASV          | 78CAP 01    |            |
| 1.3      |       | 6       | FAA          | 81HIN 01    |            |
| 1.3      | 0.4   |         | HAA          | 82WEI 01    |            |
| 1.3      |       |         | FAA          | 82PRE 01    |            |
| 1.3      |       | 6       | FAA          | 82KOI 01    |            |
| 1.4      |       | 6       | FAA          | 81HIN 01    |            |
| 1.4      |       | 6       | FAA          | 82KOI 01    |            |
| 2.       | 1.4   | *       | PAA          | 80YAM 01    |            |
| Pd (ppb) |       |         |              |             |            |
|          | 2.    | L*      | RTNA         | 81BYR 01    |            |

| TABLE G (cont) |        |         |           |          |         | TABLE G (cont) |             |         |                |                      |         |
|----------------|--------|---------|-----------|----------|---------|----------------|-------------|---------|----------------|----------------------|---------|
| CONC           | UNCER  | COMMENT | ANAL METH | REF CODE | REF NUM | CONC           | UNCER       | COMMENT | ANAL METH      | REF CODE             | REF NUM |
| Pr (ppb)       |        |         |           |          |         | 80.<br>200.    | 20.<br>140. |         | RTNA<br>ITNA   | 80SLO 01<br>79REN 03 |         |
|                | 60.    | L*      | RTNA      | 80SLO 01 |         |                |             |         |                |                      |         |
| Rb (ppm)       |        |         |           |          |         |                | 20.         | L*      | ICPES<br>ICPES | 82HAH 01<br>78CAP 01 |         |
| 10.            |        |         | ITNA      | 78CAP 01 |         | 3.1            |             |         |                |                      |         |
| 11.            | 1.     | 35      | ITNA      | 81GLA 03 |         |                |             |         |                |                      |         |
| 11.32          | 3.1    |         | ITNA      | 79REN 03 |         |                |             |         |                |                      |         |
| 11.6           | 0.3    |         | ITNA      | 77NAD 02 |         |                |             |         |                |                      |         |
| 17.            | 3.     | *       | RTNA      | 77MEL 01 |         | 79.            | 1.          |         | ICPES          | 79HER 01             |         |
| 39.            |        |         | EXRF      | 81PAR 01 |         | 82.5<br>208.   | 15.8        |         | AE+AF<br>EXRF  | 82GOL 01<br>81PAR 01 |         |
| S (ppm)        |        |         |           |          |         |                |             |         |                |                      |         |
| 2400.          | 600.   |         | CPKRF     | 79REN 02 |         |                |             |         |                |                      |         |
| Sb (ppb)       |        |         |           |          |         | 0.23           | 0.08        |         | ITNA           | 79REN 03             |         |
| 14.            | 3.     | *H      | ICPES     | 82HAH 01 |         |                |             |         |                |                      |         |
| 27.            | 6.     |         | ITNA      | 77NAD 02 |         | 110.           | 10.         |         | ITNA           | 77NAD 02             |         |
| 31.            | 1.     |         | RTNA      | 80KOS 02 |         | 150.           | 40.         |         | RTNA           | 80SLO 01             |         |
| 38.            | 3.     |         | RTNA      | 79ROE 01 |         |                |             |         |                |                      |         |
| 44.            | 2.     |         | ITNA      | 79KOB 03 |         |                |             |         |                |                      |         |
| 50.            |        |         | ITNA      | 78CAP 01 |         |                |             |         |                |                      |         |
| 50.            | 20.    |         | RTNA      | 80SLO 01 |         | 16.5           |             |         | ICPES          | 78CAP 01             |         |
| 690.           | 150.   | *       | ITNA      | 79REN 03 |         |                |             |         |                |                      |         |
| Sc (ppb)       |        |         |           |          |         |                |             |         |                |                      |         |
|                |        |         |           |          |         | 31.            | 5.          |         | 33MIS          | 77FAU 01             |         |
| 340.           |        | L*      | ITNA      | 80TOU 01 |         |                |             |         |                |                      |         |
| 150.           | 30.    | 5       | ITNA      | 80TOU 01 |         |                |             |         |                |                      |         |
| 160.           |        |         | ITNA      | 78CAP 01 |         | 42.            |             |         |                |                      |         |
| 170.           |        |         | ITNA      | 80EDD 01 |         | 45.            | 0.8         | 35      | DNA            | 83GLA 01             |         |
| 170.           | 20.    |         | RTNA      | 80SLO 01 |         | 69.            | 120.        | R*      | DNA            | 80GLA 04             |         |
| 170.           | 4.     |         | ITNA      | 77NAD 02 |         |                |             |         | DNA            | 81GLA 03             |         |
| 180.           | 10.    |         | ITNA      | 79KOB 03 |         |                |             |         |                |                      |         |
| 180.           | 20.    |         | RTNA      | 77MEL 01 |         |                |             |         |                |                      |         |
| 470.           | 40.    | *       | ITNA      | 79REN 03 |         |                |             |         |                |                      |         |
| Se (ppb)       |        |         |           |          |         |                |             |         |                |                      |         |
|                |        |         |           |          |         | 1.06           | 0.17        |         | ITNA           | 77NAD 02             |         |
|                |        |         |           |          |         | 1.08           | 0.07        | D*      | DCP            | 81RFE 01             |         |
|                |        |         |           |          |         | 1.08           | 0.07        |         | DCP            | 79REE 01             |         |
| 100.           | 100.   | L*      | HAA       | 82JON 01 |         | 1.13           | 0.01        |         | RTNA           | 78BYR 01             |         |
| 100.           |        | L*      | RTNA      | 77MEL 01 |         | 1.2            | 0.06        |         | ITNA           | 76GAL 01             |         |
| 3.             | 3.     | L*      | ICPES     | 82HAH 01 |         | 1.28           | 0.07        | 11      | ICPES          | 82JON 01             |         |
| 600.           |        | L*      | ITNA      | 78CAP 01 |         | 1.34           | 0.06        | 11      | ICPES          | 82JON 01             |         |
| 100.           | 100.   | L*      | HAA       | 82JON 01 |         | 1.7            |             | *       | ITNA           | 78CAP 01             |         |
| 24.            | 10.    | 9       | ITNA      | 80WAN 01 |         |                |             |         |                |                      |         |
| 25.            |        |         | FAA       | 78CAP 01 |         |                |             |         |                |                      |         |
| 33.            | 3.     | 11      | GC        | 81UCH 02 |         |                |             |         |                |                      |         |
| 33.            | 3.     | 11      | GC        | 81UCH 02 |         |                |             |         |                |                      |         |
| 37.            |        |         | FLUOR     | 79WAT 02 |         |                |             |         |                |                      |         |
| 40.            | 10.    |         | RTNA      | 80KNA 01 |         |                |             |         |                |                      |         |
| 42.9           |        |         | HAA       | 77IHN 01 |         |                |             |         |                |                      |         |
| 60.            | 20.    |         | RTNA      | 80SLO 01 |         |                |             |         | RTNA           | 80SLO 01             |         |
| 66.            | 9.     |         | ITNA      | 77NAD 02 |         |                |             |         |                |                      |         |
| 510.           | 80.    | *       | RTNA      | 82POL 01 |         |                |             |         |                |                      |         |
| Sm (ppb)       |        |         |           |          |         |                |             |         |                |                      |         |
|                |        |         |           |          |         | 42.            | 2.          |         | RTNA           | 80SLO 01             |         |
|                |        |         |           |          |         | 45.9           | 2.8         |         | RTNA           | 77DER 01             |         |
|                |        |         |           |          |         | 46.            | 2.          | 11      | ICPES          | 82JON 01             |         |
| 33.            | 12000. | L*      | ITNA      | 80TOU 01 |         | 46.            | 1.          | 11      | ICPES          | 82JON 01             |         |
|                | 4.     | 5       | ITNA      | 80TOU 01 |         |                |             |         |                |                      |         |

TABLE H

## NBS SRM 1571—COLLECTED DATA

| TABLE G (cont) |       |         |              |             |            |          |       |         |              |             |            |
|----------------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| CONC           | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
| 46.2           | 0.6   | 11      | ICPES        | 82JON       | 01         | Ag (ppb) |       |         |              |             |            |
| 46.7           |       | 11      | AA           | 79HOE       | 02         |          |       |         |              |             |            |
| 47.            | 0.48  |         | ITNA         | 79REN       | 03         |          | 20.   | L*      | ITNA         | 74RAN       | 02         |
| 48.            | 2.    | 11      | ICPES        | 82JON       | 01         |          | 100.  |         | OES          | 75BOL       | 02         |
| 48.            |       |         | ICPES        | 78CAP       | 01         | 13.      | 5.    |         | RTNA         | 80SLO       | 01         |
| 48.            | 1.    | 11      | ICPES        | 82JON       | 01         | 620.     | 60.   |         | RTNA         | 74CAR       | 03         |
| 48.            | 3.    |         | ICPES        | 80SCH       | 05         | Al (ppm) |       |         |              |             |            |
| 48.            | 3.    | 11      | ICPES        | 82JON       | 01         |          |       |         |              |             |            |
| 48.            |       |         | ITNA         | 78CAP       | 01         | 99.      |       |         | OES          | 75JON       | 02         |
| 49.2           | 0.1   |         | PAA          | 80YAM       | 01         | 103.     | 22.   | 6       | ITNA         | 74HOF       | 01         |
| 49.5           | 0.7   |         | SSMS         | 77PAU       | 01         | 110.     | 140.  | R*      | AA           | 75MAN       | 01         |
| 49.8           | 1.3   | 6       | ICPES        | 82KUE       | 01         | 128.     |       |         | OES          | 75JON       | 11         |
| 50.            | 1.    |         | ITNA         | 77NAD       | 02         | 140.     | 8.    |         | ICPES        | 81BLA       | 02         |
| 50.6           | 1.3   | 6       | ICPES        | 82KUE       | 01         | 146.     | 20.   |         | ICPES        | 79ABE       | 01         |
| 50.8           |       |         | AA           | 80EVA       | 01         | 157.     |       |         | ICPES        | 78CAP       | 01         |
| 51.2           | 0.6   | 6       | ICPES        | 82KUE       | 01         | 165.     |       |         | OES          | 75JON       | 07         |
| 52.            | 1.    | D*      | DCP          | 81REE       | 01         | 196.     |       |         | OES          | 75JON       | 06         |
| 52.            | 1.    |         | DCP          | 79REE       | 01         | 201.     |       |         | OES          | 75JON       | 01         |
| 52.            | 2.2   |         | ITNA         | 79KOB       | 03         | 223.     |       |         | OES          | 75JON       | 09         |
| 52.9           | 2.2   | 6       | EXRF         | 79MAT       | 01         | 231.     |       |         | OES          | 75JON       | 04         |
| 53.            | 3.    | 11      | ICPES        | 82JON       | 01         | 243.     |       |         | OES          | 75JON       | 08         |
| 53.            |       | 11      | AA           | 79HOE       | 02         | 255.     |       |         | OES          | 75JON       | 05         |
| 54.            | 1.    |         | ICPES        | 79HER       | 01         | 278.     |       |         | OES          | 75JON       | 10         |
| 57.            | 8.    |         | RTNA         | 77MEL       | 01         | 296.     | 30.   |         | ITNA         | 77ZIK       | 01         |
| 59.7           |       |         | FAA          | 78CAP       | 01         | 322.     | 22.   |         | 14NAA        | 81WIL       | 01         |
| 60.1           | 2.    | 6       | EXRF         | 79MAT       | 01         | 322.     | 18.   | 11      | ICPES        | 82JON       | 01         |
| 72.5           | 1.6   | *       | RTNA         | 76GAL       | 01         | 330.     |       |         | NAA          | 77LAU       | 01         |
| 72.8           | 1.3   | *       | AA           | 76GAL       | 01         | 333.     |       |         | ITNA         | 76BAT       | 01         |
| 119.           |       | *       | EXRF         | 81PAR       | 01         | 343.     | 460.  | R*      | ITNA         | 79IMA       | 03         |
|                |       |         |              |             |            | 343.     | 460.  | R*      | ITNA         | 79IMA       | 01         |
|                |       |         |              |             |            | 347.     | 7.5   |         | POL          | 72MAI       | 01         |
|                |       |         |              |             |            | 347.     | 7.5   |         | POL          | 77MAI       | 01         |
|                |       |         |              |             |            | 349.7    | 6.1   |         | ITNA         | 77G00       | 01         |
|                |       |         |              |             |            | 350.     |       |         | ITNA         | 78LAU       | 02         |
|                |       |         |              |             |            | 359.     | 4.    |         | ITNA         | 79JON       | 01         |
|                |       |         |              |             |            | 377.     | 21.   |         | ICPES        | 79MCQ       | 01         |
|                |       |         |              |             |            | 378.     | 13.   |         | ITNA         | 75RIC       | 01         |
|                |       |         |              |             |            | 380.     |       |         | ITNA         | 83GLA       | 01         |
|                |       |         |              |             |            | 380.     | 100.  |         | 14NAA        | 81WIL       | 02         |
|                |       |         |              |             |            | 383.     |       |         | ITNA         | 78CAP       | 01         |
|                |       |         |              |             |            | 390.     | 50.   |         | AA           | 79MCQ       | 01         |
|                |       |         |              |             |            | 398.     | 24.   |         | ITNA         | 82EHM       | 01         |
|                |       |         |              |             |            | 407.     | 11.   | 6       | ITNA         | 74HOF       | 01         |
|                |       |         |              |             |            | 420.     | 58.   |         | ITNA         | 77HAM       | 01         |
|                |       |         |              |             |            | 430.     | 40.   |         | ITNA         | 74RAN       | 02         |
|                |       |         |              |             |            | 430.     |       |         | CPAA         | 80HAN       | 01         |
|                |       |         |              |             |            | 440.     |       |         | RTNA         | 72MOR       | 03         |
|                |       |         |              |             |            | 460.     | 33.   |         | ITNA         | 79KOB       | 03         |
|                |       |         |              |             |            | 460.     | 7.    |         | VV           | 81NON       | 01         |
|                |       |         |              |             |            | 470.     |       | 35      | ITNA         | 81GLA       | 03         |
|                |       |         |              |             |            | 500.     |       |         | ITNA         | 80CRE       | 01         |
|                |       |         |              |             |            | 520.     | 180.  |         | FAA          | 77FUJ       | 01         |
|                |       |         |              |             |            | 824.     | 50.   | *       | ITNA         | 80SLO       | 01         |
|                |       |         |              |             |            | As (ppm) |       |         |              |             |            |
|                |       |         |              |             |            | 1.1      |       | *       | ITNA         | 78KEL       | 02         |
|                |       |         |              |             |            | 3.5      | 1.6   | *       | CPXRF        | 80KIR       | 01         |
|                |       |         |              |             |            | 7.5      |       | *       | SSMS         | 81VER       | 02         |
|                |       |         |              |             |            | 8.       | 1.    |         | PAA          | 80SEG       | 01         |
|                |       |         |              |             |            | 8.5      | 0.3   |         | HAA          | 74LOO       | 01         |

TABLE H (cont)

| CONC          | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------------|-------|---------|--------------|-------------|------------|
| 14.1          |       | 6       | NAA          | 78GAN       | 01         |
| 14.3          |       | *       | XRF          | 78CAM       | 02         |
| 14.3          | 0.4   | *       | EXRF         | 77NIE       | 01         |
| 15.           | 0.1   | *       | RTNA         | 77BAN       | 03         |
| 15.3          | 0.5   | *       | EXRF         | 73SPA       | 01         |
| 15.3          | 2.    | *       | ITNA         | 79AHM       | 01         |
| 15.4          | 0.2   | *19     | ITNA         | 74RAN       | 02         |
| 16.           | 2.    | *       | CPXRF        | 77CAM       | 01         |
| 16.           |       | *       | AA           | 79HIL       | 01         |
| 17.           |       | *       | CPXRF        | 76ZEI       | 01         |
| 17.           |       | *       | CPAA         | 78MCG       | 01         |
| 38.           |       | *       | EXRF         | 81PAR       | 01         |
| As(III) (ppm) |       |         |              |             |            |
| 4.9           |       |         | HAA          | 76AGG       | 01         |
| Au (ppb)      |       |         |              |             |            |
| 0.78          | 0.15  |         | ITNA         | 79REN       | 03         |
| 0.97          | 0.09  |         | RTNA         | 77NAD       | 01         |
| 1.            |       |         | RTNA         | 72MOR       | 03         |
| 1.            |       |         | ITNA         | 82QUR       | 01         |
| 1.2           |       | 1       | IENA         | 79KUC       | 01         |
| 1.4           |       |         | ITNA         | 81KUL       | 01         |
| 1.4           | 0.5   |         | IENA         | 81KOS       | 01         |
| 1.5           | 4.    | R*      | RTNA         | 80SLO       | 01         |
| 1.5           |       |         | ITNA         | 79KUC       | 01         |
| 1.5           | 0.5   |         | RTNA         | 77KUS       | 01         |
| 1.64          | 0.1   |         | ITNA         | 77MIN       | 01         |
| 1.8           | 0.3   |         | ITNA         | 81HAB       | 01         |
| 1.8           |       | 1       | IENA         | 79KUC       | 01         |
| 2.            | 0.8   |         | ITNA         | 81KOS       | 01         |
| 3.5           | 0.6   | *       | RTNA         | 74CAR       | 03         |
| B (ppm)       |       |         |              |             |            |
| 16.           | 12.   | *       | ITNA         | 82SCH       | 05         |
| 22.55         |       | *6      | AE+AF        | 74DAU       | 01         |
| 23.           |       | *       | OES          | 75JON       | 10         |
| 24.           | 2.    |         | ICPES        | 79PER       | 01         |
| 25.15         |       | 6       | AE+AF        | 74DAU       | 01         |
| 27.           |       |         | OES          | 75JON       | 05         |
| 27.           |       |         | OES          | 75JON       | 02         |
| 30.           |       |         | OES          | 75JON       | 01         |
| 31.2          | 2.8   |         | NM           | 79YAN       | 01         |
| 31.9          | 4.7   | 14      | FAA          | 79SZY       | 01         |
| 32.           | 4.    |         | ICPES        | 79ABE       | 01         |
| 32.           |       |         | OES          | 75JON       | 04         |
| 32.           |       |         | OES          | 75JON       | 09         |
| 32.2          | 0.4   |         | TCGS         | 79AND       | 01         |
| 32.5          | 0.5   |         | COLOR        | 79YAN       | 01         |
| 32.8          | 2.3   | 6       | TCGS         | 76GLA       | 01         |
| 33.           | 4.    |         | CPAA         | 80HAN       | 01         |
| 33.           | 2.    | 11      | ICPES        | 79MIZ       | 01         |
| 33.           |       |         | OES          | 75JON       | 06         |
| 33.           |       |         | OES          | 75JON       | 07         |
| 33.2          | 0.1   |         | TCGS         | 79FAI       | 01         |
| 33.3          | 2.3   | 6       | TCGS         | 76GLA       | 01         |
| 33.4          | 0.7   |         | ICPES        | 81KNA       | 01         |
| 34.           | 1.    | 11      | ICPES        | 79MIZ       | 01         |
| 35.1          | 9.9   | 14      | FAA          | 79SZY       | 01         |
| 36.           |       |         | CPAA         | 81SAS       | 02         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 36.      |       |         | OES          | 75JON       | 03         |
| 36.      | 3.    |         | CPAA         | 81SAS       | 01         |
| 36.      | 5.    |         | CPAA         | 75MCG       | 01         |
| 38.      |       |         | OES          | 75JON       | 08         |
| 38.      |       |         | OES          | 75JON       | 11         |
| 40.      | 1.    | 11      | ICPES        | 79MIZ       | 01         |
| Ba (ppm) |       |         |              |             |            |
| 230.     |       | L*      | ITNA         | 80TOU       | 01         |
| 240.     |       | L*      | 14NAA        | 81WIL       | 01         |
| 0.3      | 0.1   | *       | CPXRF        | 77RIN       | 01         |
| 14.7     |       | *       | SSMS         | 81VER       | 02         |
| 25.9     | 6.8   | *       | ITNA         | 81HAB       | 01         |
| 28.      |       | *       | ITNA         | 80CRE       | 01         |
| 30.      |       |         | NAA          | 74BEL       | 01         |
| 37.      | 11.   | 5       | ITNA         | 80TOU       | 01         |
| 37.9     |       | 1       | IENA         | 79KUC       | 01         |
| 38.      | 4.7   |         | CPXRF        | 80KIR       | 01         |
| 38.      |       |         | OES          | 75JON       | 05         |
| 39.4     |       |         | ITNA         | 79KUC       | 01         |
| 40.      |       |         | NAA          | 77LAU       | 01         |
| 40.      | 3.    | 9       | ITNA         | 78LAU       | 02         |
| 40.      |       |         | OES          | 75JON       | 03         |
| 41.      | 4.    |         | ITNA         | 79SAT       | 01         |
| 41.      | 1.3   |         | RTNA         | 77GUI       | 03         |
| 42.      | 2.    |         | ICPES        | 79MCQ       | 01         |
| 42.      | 6.    |         | ITNA         | 78LAU       | 02         |
| 42.      | 2.    |         | ICPES        | 79MCQ       | 02         |
| 43.      | 5.7   |         | ITNA         | 77HAM       | 01         |
| 43.      |       |         | OES          | 75JON       | 11         |
| 43.9     |       | 1       | IENA         | 79KUC       | 01         |
| 44.      | 57.   | R*      | AA           | 75MAN       | 01         |
| 44.3     |       |         | AA           | 74BUS       | 02         |
| 44.8     | 2.5   |         | IENA         | 81KOS       | 01         |
| 45.      |       |         | ITNA         | 78CAP       | 01         |
| 45.      |       |         | OES          | 75JON       | 04         |
| 45.      | 6.    |         | VV           | 81NON       | 01         |
| 45.3     | 2.7   |         | ITNA         | 81KOS       | 01         |
| 46.      | 6.    |         | ITNA         | 74RAN       | 02         |
| 47.      | 3.    |         | ITNA         | 81KUL       | 01         |
| 51.      |       |         | RTNA         | 72MOR       | 03         |
| 51.3     | 4.5   |         | PAA          | 74CHA       | 01         |
| 51.9     |       |         | ICPES        | 78DAH       | 01         |
| 52.      |       |         | OES          | 75JON       | 01         |
| 59.54    | 1.81  | *       | ITNA         | 79REN       | 03         |
| 62.      | 21.   | *       | ITNA         | 77ZIK       | 01         |
| 80.      | 22.   | *       | 14NAA        | 81WIL       | 02         |
| Be (ppb) |       |         |              |             |            |
| 60.      |       | L*      | ICPES        | 78CAP       | 01         |
| 13.7     | 1.8   | 6       | ICPES        | 82SCH       | 01         |
| 14.8     | 1.6   | 6       | ICPES        | 82SCH       | 01         |
| 26.      | 1.    |         | FLUOR        | 77WIC       | 01         |
| 30.      | 4.    |         | VV           | 74FLO       | 01         |
| 36.      | 4.    | 11      | FAA          | 75OWE       | 01         |
| 67.      | 7.    | *11     | FAA          | 75OWE       | 01         |
| 110.     | 10.   | *       | GC           | 73BLA       | 01         |

TABLE H (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 8.66  | 1.25  |         | ITNA         | 79REN       | 03         |
| 8.7   | 0.2   |         | RTNA         | 73HEY       | 01         |
| 8.8   | 0.4   |         | ICPES        | 80HAA       | 01         |
| 8.9   | 2.2   |         | ICPES        | 81NAD       | 01         |
| 9.    |       |         | RTNA         | 75ABU       | 01         |
| 9.    | 0.4   | H       | ICPES        | 79ROB       | 01         |
| 9.1   |       | 1       | IENA         | 79KUC       | 01         |
| 9.2   |       |         | ITNA         | 79KUC       | 01         |
| 9.27  |       |         | HAA          | 77IHN       | 01         |
| 9.3   |       | 35      | HAA          | 77TAM       | 01         |
| 9.4   | 1.    |         | HAA          | 76VIJ       | 02         |
| 9.5   |       |         | HAA          | 81INU       | 01         |
| 9.5   | 0.76  |         | RTNA         | 79HEI       | 04         |
| 9.5   | 0.5   |         | RTNA         | 80SLO       | 01         |
| 9.5   | 0.3   | 11      | HAA          | 81RAP       | 01         |
| 9.5   | 0.8   |         | RTNA         | 79ROS       | 02         |
| 9.6   |       |         | FAA          | 82HEI       | 01         |
| 9.6   | 0.3   | 11      | HAA          | 81RAP       | 01         |
| 9.68  | 0.14  |         | NAA          | 74HEY       | 01         |
| 9.7   | 0.4   | 7       | RTNA         | 77GIL       | 03         |
| 9.7   | 0.12  |         | RTNA         | 72BYR       | 01         |
| 9.7   | 0.3   |         | RTNA         | 79KAN       | 02         |
| 9.7   | 0.4   |         | ITNA         | 75RIC       | 01         |
| 9.7   | 0.4   |         | RTNA         | 78GAL       | 01         |
| 9.76  | 0.17  |         | RTNA         | 79HOE       | 01         |
| 9.8   | 0.9   |         | ESCA         | 78CAR       | 01         |
| 9.8   | 0.1   |         | HAA          | 81KNA       | 01         |
| 9.8   | 0.3   |         | RTNA         | 82COR       | 01         |
| 9.8   | 0.9   |         | COLOR        | 76VIJ       | 02         |
| 9.8   | 0.1   | 11      | HAA          | 81RAP       | 01         |
| 9.8   | 0.4   | H       | ICPES        | 81PIC       | 01         |
| 9.9   | 0.1   |         | IENA         | 78WAN       | 01         |
| 9.98  | 0.31  |         | HAA          | 80TAM       | 01         |
| 10.   |       |         | RTNA         | 72MOR       | 03         |
| 10.   | 14.   | R*      | ITNA         | 79IMA       | 03         |
| 10.   |       |         | HAA          | 79PEA       | 01         |
| 10.   | 0.1   |         | VV           | 81NON       | 01         |
| 10.   |       |         | RTNA         | 79BYR       | 01         |
| 10.   | 2.    |         | ITNA         | 77MIN       | 01         |
| 10.   | 14.   | R*      | ITNA         | 79IMA       | 01         |
| 10.   | 1.    |         | EXRF         | 80DYC       | 01         |
| 10.   | 0.4   |         | RTNA         | 78GIL       | 01         |
| 10.   | 2.    |         | COLOR        | 79MCQ       | 01         |
| 10.1  | 0.4   |         | IENA         | 81KOS       | 01         |
| 10.1  | 0.3   | 7       | RTNA         | 77GIL       | 03         |
| 10.1  | 0.2   | 19      | ITNA         | 74RAN       | 02         |
| 10.1  |       |         | ITNA         | 80CRE       | 01         |
| 10.1  | 0.8   |         | EXRF         | 79GLA       | 01         |
| 10.1  | 0.3   |         | RTNA         | 78WEE       | 01         |
| 10.14 |       |         | ASV          | 78DAV       | 01         |
| 10.2  | 1.    |         | PAA          | 74CHA       | 01         |
| 10.2  | 1.    |         | NAA          | 77JER       | 01         |
| 10.2  |       |         | HAA          | 80HON       | 01         |
| 10.2  | 0.2   |         | HAA          | 77SMI       | 01         |
| 10.2  | 0.2   |         | COLOR        | 77BUR       | 01         |
| 10.2  |       | 35      | XRF          | 77TAM       | 01         |
| 10.3  | 0.9   |         | ITNA         | 81KOS       | 01         |
| 10.3  |       |         | HAA          | 81ARA       | 01         |
| 10.3  | 0.2   |         | HAA          | 80AGE       | 02         |
| 10.3  | 0.4   | 7       | RTNA         | 77GIL       | 03         |
| 10.3  | 0.2   | 34      | HAA          | 78FLA       | 01         |
| 10.3  | 1.6   |         | RTNA         | 79REN       | 01         |

TABLE H (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 10.4  | 0.4   |         | ITNA         | 78LAU       | 02         |
| 10.43 | 0.22  |         | HAA          | 81UTH       | 01         |
| 10.5  |       | 1       | IENA         | 79KUC       | 01         |
| 10.5  | 1.    |         | PAA          | 76KAT       | 04         |
| 10.5  |       |         | ITNA         | 82AKA       | 01         |
| 10.6  |       |         | ASV          | 81LEE       | 01         |
| 10.6  | 0.8   |         | RTNA         | 74ORV       | 01         |
| 10.6  | 0.3   |         | 14NAA        | 81WIL       | 01         |
| 10.6  | 0.8   |         | EXRF         | 73GIA       | 01         |
| 10.6  | 0.5   |         | 14NAA        | 81WIL       | 02         |
| 10.7  | 0.4   |         | FAA          | 78HAY       | 01         |
| 10.7  | 1.    | 6       | ITNA         | 74BEC       | 01         |
| 10.8  |       |         | HAA          | 81ERO       | 01         |
| 10.8  |       |         | IENA         | 83GLA       | 01         |
| 10.8  |       |         | FAA          | 78CAP       | 01         |
| 10.8  | 0.5   |         | IENA         | 82GLA       | 02         |
| 10.8  | 0.9   |         | RTNA         | 76MEL       | 01         |
| 10.8  |       | 6       | NAA          | 78GAN       | 01         |
| 10.82 | 0.25  |         | HAA          | 77YAS       | 02         |
| 11.   |       |         | ICPES        | 79MCQ       | 02         |
| 11.   | 2.    |         | RTNA         | 77KUS       | 01         |
| 11.   | 1.    |         | PAA          | 76KAT       | 02         |
| 11.   | 3.    |         | ITNA         | 77ZIK       | 01         |
| 11.   |       |         | ICPES        | 79MCQ       | 01         |
| 11.   | 0.6   |         | PAA          | 78HIS       | 01         |
| 11.   | 1.    |         | HAA          | 76FIO       | 01         |
| 11.5  | 0.5   |         | HAA          | 81YAN       | 01         |
| 11.5  | 1.5   |         | RTNA         | 74GOE       | 01         |
| 11.5  | 0.47  |         | HAA          | 81YAN       | 01         |
| 11.5  | 0.3   |         | GCMES        | 75TAL       | 01         |
| 11.6  | 0.27  | H       | HAA          | 76SIE       | 01         |
| 11.6  | 1.8   |         | RTNA         | 79NIC       | 01         |
| 11.6  |       |         | HAA          | 77SIE       | 01         |
| 11.6  | 1.3   |         | ITNA         | 74NAD       | 02         |
| 11.8  | 0.8   |         | SSMS         | 77DON       | 01         |
| 11.9  | 0.2   |         | ITNA         | 81HAB       | 01         |
| 11.9  |       | H       | FAE          | 79FEL       | 01         |
| 11.9  | 0.1   |         | FAA          | 80DUP       | 01         |
| 11.98 | 0.08  | H       | ICPES        | 81PAH       | 01         |
| 12.   | 0.6   |         | AE+AF        | 82MAT       | 01         |
| 12.   | 2.5   |         | ITNA         | 77HAM       | 01         |
| 12.   | 3.    |         | ITNA         | 81KUL       | 01         |
| 12.   | 0.6   | 11      | HAA          | 82JON       | 01         |
| 12.   | 2.    |         | HAA          | 79STO       | 01         |
| 12.   |       |         | RTNA         | 74ERD       | 01         |
| 12.   | 0.38  |         | HAA          | 82TAM       | 01         |
| 12.   | 2.6   |         | EXRF         | 75REU       | 01         |
| 12.   | 1.    |         | ITNA         | 76KUC       | 01         |
| 12.15 | 0.43  |         | NAA          | 76GUZ       | 01         |
| 12.3  | 0.2   |         | ITNA         | 79KOB       | 03         |
| 12.3  | 0.4   |         | RTNA         | 73TJI       | 01         |
| 12.7  | 2.    |         | ITNA         | 82QUR       | 01         |
| 12.7  | 0.7   |         | ITNA         | 79JER       | 01         |
| 12.9  | 0.4   | 11      | HAA          | 82JON       | 01         |
| 13.   | 3.    |         | CPAA         | 77ZIK       | 01         |
| 13.   | 0.1   |         | ITNA         | 75BOL       | 01         |
| 13.   | 1.    | H       | ICPES        | 82HAH       | 01         |
| 13.2  |       |         | CPXRF        | 75CAM       | 01         |
| 13.3  | 0.4   |         | HAA          | 76WAU       | 01         |
| 13.4  | 0.93  |         | COLOR        | 73LEB       | 01         |
| 13.5  |       |         | HAA          | 76AGG       | 01         |
| 14.   | 1.    |         | ITNA         | 78FUR       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Bi (ppb) |       |         |              |             |            |
|          | 8.    | L*      | ICPES        | 82HAH       | 01         |
| 4.       | 1.    | H*      | ICPES        | 81PAH       | 01         |
| 39.      |       |         | FAA          | 79INU       | 01         |
| 110.     | 20.   |         | POL          | 77MAI       | 01         |
| 110.     | 20.   |         | POL          | 72MAI       | 01         |
| 110.     | 100.  |         | POL          | 74MAI       | 01         |
| 64000.   |       | *       | FAA          | 82HEI       | 01         |
| Br (ppm) |       |         |              |             |            |
|          | 19.   | L*      | ITNA         | 80TOU       | 01         |
| 5.       | 5.    | *       | ITNA         | 77ZIK       | 01         |
| 6.3      | 2.    | *       | EXRF         | 77FLO       | 01         |
| 6.6      | 0.4   | *5      | IENA         | 79GLA       | 02         |
| 6.6      | 0.4   | *       | EXRF         | 73SPA       | 01         |
| 7.1      |       |         | EXRF         | 81BIS       | 01         |
| 7.3      | 9.3   | R*      | ITNA         | 79IMA       | 03         |
| 7.3      | 3.2   |         | CPXRF        | 80KIR       | 01         |
| 7.3      | 9.3   | R*      | ITNA         | 79IMA       | 01         |
| 7.4      | 0.2   |         | ITNA         | 75RIC       | 01         |
| 7.8      | 0.3   |         | EXRF         | 80DYC       | 01         |
| 8.2      |       |         | RTNA         | 72MOR       | 03         |
| 8.2      | 0.6   |         | ITNA         | 80SLO       | 01         |
| 8.3      | 0.5   | 5       | ITNA         | 80HOE       | 01         |
| 8.48     | 0.07  | 5       | ITNA         | 80HOE       | 01         |
| 8.5      | 0.5   | 6       | ITNA         | 74BEC       | 01         |
| 8.7      |       |         | ITNA         | 83GLA       | 01         |
| 8.8      | 0.6   | 5       | IENA         | 79GLA       | 02         |
| 8.8      | 1.6   |         | EXRF         | 75REU       | 01         |
| 9.       | 0.5   |         | EXRF         | 79GIA       | 01         |
| 9.       | 0.5   |         | ITNA         | 78LAU       | 02         |
| 9.1      | 0.5   |         | ITNA         | 78WEE       | 01         |
| 9.19     | 1.39  |         | ITNA         | 79REN       | 03         |
| 9.2      | 0.2   |         | ITNA         | 74RAN       | 02         |
| 9.2      |       |         | ITNA         | 80CRE       | 01         |
| 9.3      | 0.6   |         | EXRF         | 73GIA       | 01         |
| 9.3      | 1.4   |         | RTNA         | 78WEE       | 01         |
| 9.4      |       |         | ITNA         | 79KUC       | 01         |
| 9.5      | 1.    |         | EXRF         | 77NIE       | 01         |
| 9.5      | 0.8   |         | RTNA         | 76MEL       | 03         |
| 9.5      |       |         | XRF          | 78CAM       | 02         |
| 9.5      |       | 1       | IENA         | 79KUC       | 01         |
| 9.5      |       | 1       | IENA         | 79KUC       | 01         |
| 9.6      | 2.8   |         | ITNA         | 77HAM       | 01         |
| 9.6      | 1.2   | 6       | NAA          | 78GAN       | 01         |
| 9.7      | 1.1   |         | ITNA         | 78GIL       | 01         |
| 9.8      | 0.78  |         | ITNA         | 77STE       | 02         |
| 9.8      | 0.8   |         | RTNA         | 79CRO       | 01         |
| 9.9      | 0.2   |         | IENA         | 81KOS       | 01         |
| 10.      | 1.    |         | ITNA         | 76KUC       | 01         |
| 10.      | 2.1   |         | VV           | 81NON       | 01         |
| 10.1     | 0.8   |         | ITNA         | 77GUI       | 02         |
| 10.2     | 1.    |         | ITNA         | 81KUL       | 01         |
| 10.5     | 1.4   |         | ITNA         | 79CRO       | 01         |
| 10.5     | 0.6   |         | ITNA         | 81KOS       | 01         |
| 10.8     | 0.9   | 6       | NAA          | 78GAN       | 01         |
| 10.8     | 0.4   | 35      | NAA          | 81GLA       | 03         |
| 10.9     |       |         | ITNA         | 80SAT       | 01         |
| 11.      | 1.2   |         | ITNA         | 79KOB       | 03         |

TABLE H (cont)

| CONC   | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------|-------|---------|--------------|-------------|------------|
|        |       |         |              |             |            |
| 11.    |       |         | ITNA         | 78CAP       | 01         |
| 11.    | 0.7   | 5       | ITNA         | 80TOU       | 01         |
| 12.    | 1.3   |         | ITNA         | 79AHM       | 01         |
| 12.    | 3.    |         | ITNA         | 77ZIK       | 01         |
| 12.5   |       | *       | ITNA         | 82AKA       | 01         |
| 34.    |       | *       | EXRF         | 81PAR       | 01         |
| C (%)  |       |         |              |             |            |
| 45.76  | 0.51  |         | CB           | 82GLA       | 02         |
| 45.8   | 1.3   | 35      | CB           | 79GLA       | 04         |
| 46.    | 2.    |         | TCGS         | 79FAI       | 01         |
| 46.35  | 0.31  |         | CR           | 80SCH       | 02         |
| 47.    | 5.    | 35      | TCGS         | 79GLA       | 04         |
| 52.    | 5.    | *       | TCGS         | 79AND       | 01         |
| Ca (%) |       |         |              |             |            |
|        | 3.    | L*      | 14NAA        | 81WIL       | 01         |
| 1.58   |       | *35     | AA           | 81GLA       | 04         |
| 1.6    | 2.26  | R*      | ITNA         | 79IMA       | 01         |
| 1.6    | 2.26  | R*      | ITNA         | 79IMA       | 03         |
| 1.63   |       | *       | OES          | 75JON       | 07         |
| 1.74   |       | *       | OES          | 75JON       | 05         |
| 1.8    |       |         | NAA          | 77LAU       | 01         |
| 1.8    |       |         | OES          | 75JON       | 02         |
| 1.81   | 0.24  | 5       | ITNA         | 80TOU       | 01         |
| 1.81   |       |         | ITNA         | 82AKA       | 01         |
| 1.83   | 0.07  |         | CPXRF        | 80KIR       | 01         |
| 1.86   | 0.1   |         | 14NAA        | 77VAN       | 01         |
| 1.9    | 0.11  |         | ITNA         | 79REN       | 03         |
| 1.91   |       |         | OES          | 75JON       | 10         |
| 1.92   |       |         | EXRF         | 81BIS       | 01         |
| 1.93   | 0.07  |         | EXRF         | 79KUE       | 01         |
| 1.932  | 0.09  |         | ITNA         | 77ZIK       | 01         |
| 1.94   |       |         | OES          | 75JON       | 04         |
| 1.96   | 0.06  |         | FE           | 78KOR       | 01         |
| 1.96   | 0.002 | 11      | AA           | 75ISA       | 01         |
| 1.97   | 0.03  | 11      | ICPES        | 82JON       | 01         |
| 1.97   | 0.055 |         | PAA          | 76KAT       | 04         |
| 1.97   | 0.15  |         | 14NAA        | 81WIL       | 02         |
| 1.97   | 0.08  |         | TCGS         | 79AND       | 01         |
| 1.97   | 0.05  |         | PAA          | 76KAT       | 02         |
| 1.98   | 0.05  |         | ICPES        | 79MCQ       | 02         |
| 1.98   | 0.04  | 11      | ICPES        | 82JON       | 01         |
| 1.98   | 0.08  |         | EXRF         | 75REU       | 01         |
| 1.98   | 0.07  |         | ICPES        | 79MCQ       | 01         |
| 1.99   | 0.06  |         | EXRF         | 77NIE       | 01         |
| 1.99   |       |         | XRF          | 78CAM       | 02         |
| 2.     |       |         | OES          | 75ISA       | 01         |
| 2.     | 0.08  |         | ITNA         | 80SLO       | 01         |
| 2.01   | 0.02  |         | AA           | 79MCQ       | 01         |
| 2.01   | 0.18  |         | RTNA         | 80CAN       | 01         |
| 2.02   | 0.11  |         | EXRF         | 82DAK       | 01         |
| 2.02   | 0.002 | 11      | AA           | 75ISA       | 01         |
| 2.03   |       |         | ICPES        | 78DAH       | 01         |
| 2.03   | 0.04  | 11      | ICPES        | 82JON       | 01         |
| 2.03   | 0.02  | 11      | ICPES        | 82JON       | 01         |
| 2.039  | 0.06  |         | CPAA         | 77ZIK       | 01         |
| 2.04   |       |         | OES          | 75JON       | 03         |
| 2.04   |       |         | AA           | 80URE       | 01         |
| 2.04   | 0.02  | 11      | AA           | 78GAI       | 01         |
| 2.06   |       |         | COLOR        | 77HAM       | 04         |

TABLE H (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| 2.07     | 0.06   |         | IENA         | 79JON 01    |            |
| 2.08     | 0.02   | 11      | AA           | 78GAI 01    |            |
| 2.08     | 0.01   |         | PAA          | 74CHA 01    |            |
| 2.08     | 0.04   |         | ITNA         | 79KOB 03    |            |
| 2.08     | 0.06   |         | ICPES        | 79ABE 01    |            |
| 2.08     |        |         | OES          | 75JON 09    |            |
| 2.08     |        |         | OES          | 75JON 11    |            |
| 2.1      |        |         | RTNA         | 72MOR 03    |            |
| 2.1      | 0.2    |         | 14NAA        | 80FAA 01    |            |
| 2.1      | 0.08   | 6       | EXRF         | 79MAT 01    |            |
| 2.1      | 0.05   |         | ITNA         | 81KOS 01    |            |
| 2.1      | 0.2    |         | ITNA         | 78LAU 02    |            |
| 2.11     |        |         | ICPES        | 81WEI 01    |            |
| 2.11     |        |         | AA           | 79HIL 01    |            |
| 2.11     | 0.08   | 6       | EXRF         | 79MAT 01    |            |
| 2.12     | 0.07   |         | IENA         | 81KOS 01    |            |
| 2.13     | 0.09   |         | ITNA         | 75RIC 01    |            |
| 2.13     |        |         | SSMS         | 81VER 02    |            |
| 2.13     | 0.11   |         | TCGS         | 79FAI 01    |            |
| 2.13     |        |         | ITNA         | 76BAT 01    |            |
| 2.14     | 0.02   |         | ITNA         | 78FUR 01    |            |
| 2.145    | 0.017  |         | CPXRF        | 81ROB 02    |            |
| 2.15     |        |         | COLOR        | 80LAU 01    |            |
| 2.15     |        |         | ITNA         | 78CAP 01    |            |
| 2.17     |        |         | OES          | 75JON 08    |            |
| 2.17     | 0.03   |         | EXRF         | 80DYC 01    |            |
| 2.2      | 0.1    |         | ITNA         | 81KUL 01    |            |
| 2.2      | 0.02   |         | ICPES        | 79HER 01    |            |
| 2.2      | 0.05   |         | PAA          | 78HIS 01    |            |
| 2.21     | 0.15   |         | ITNA         | 77HAM 01    |            |
| 2.28     |        |         | CPAA         | 80HAN 01    |            |
| 2.29     | 0.04   |         | VV           | 81NON 01    |            |
| 2.29     |        |         | OES          | 75JON 06    |            |
| 2.41     |        | *       | OES          | 75JON 01    |            |
| 2.46     | 0.09   | *5      | ITNA         | 80TOU 01    |            |
| 2.63     |        | *       | ICPES        | 78CAP 01    |            |
| 5.01     |        | *       | EXRF         | 81PAR 01    |            |
| Cd (ppb) |        |         |              |             |            |
|          | 300.   | L*      | AA           | 73LOO 03    |            |
|          | 200.   | L*      | PAA          | 80SEG 01    |            |
|          | 50000. | L*      | RTNA         | 72MOR 03    |            |
|          | 200.   | L*      | PAA          | 78HIS 01    |            |
|          | 2500.  | L*      | ICPES        | 78CAP 01    |            |
|          | 100.   | L*      | POL          | 72SIN 01    |            |
|          | 1900.  | L*      | OES          | 75BOL 02    |            |
|          | 100.   | L*      | POL          | 72SIN 01    |            |
| 70.      |        |         | RTNA         | 80SLO 01    |            |
| 70.      |        |         | FAA          | 73LOO 01    |            |
| 72.      | 14.    |         | FAA          | 81ZAU 01    |            |
| 90.      | 10.    |         | FAA          | 80LEG 01    |            |
| 90.      |        |         | AA           | 79HIL 01    |            |
| 92.      | 18.    |         | RTNA         | 73TJI 01    |            |
| 95.      |        | 11      | FAA          | 79HOE 02    |            |
| 100.     |        |         | FAA          | 80PRE 01    |            |
| 100.     | 40.    |         | HAA          | 82WEI 01    |            |
| 100.     |        |         | AA           | 73LOO 01    |            |
| 100.     |        |         | AA           | 79NAR 01    |            |
| 100.     | 4.     |         | ASV          | 82SAT 02    |            |
| 100.     | 10.    |         | POL          | 74MAI 01    |            |
| 105.     | 5.     |         | FAA          | 79STO 01    |            |
| 105.     |        |         | FAA          | 82HOE 01    |            |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 106.     | 9.    |         | FAA          | 74RAI 02    |            |
| 108.     | 8.    |         | AE+AF        | 74RAI 02    |            |
| 109.     | 2.    |         | FAA          | 79DAB 02    |            |
| 110.     | 10.   |         | FAA          | 81KNA 01    |            |
| 110.     | 10.   |         | NAA          | 77JER 01    |            |
| 110.     |       |         | FAA          | 82PRE 01    |            |
| 110.     | 6.    |         | AA           | 80SCH 05    |            |
| 110.     |       |         | FAA          | 82AKA 01    |            |
| 110.     |       |         | RTNA         | 79BYR 01    |            |
| 110.     | 10.   |         | AA           | 82RIT 01    |            |
| 110.     | 10.   |         | PAA          | 74CHA 01    |            |
| 110.     | 10.   |         | AA           | 75EPS 01    |            |
| 110.     | 10.   |         | AA           | 78RIT 01    |            |
| 110.     | 10.   |         | AF           | 75EPS 01    |            |
| 116.     | 8.    |         | RTNA         | 78GAL 01    |            |
| 116.     | 10.   |         | FAA          | 83GLA 01    |            |
| 116.     | 13.   |         | RTNA         | 80GRE 01    |            |
| 120.     | 10.   |         | IENA         | 81KOS 01    |            |
| 120.     |       | 11      | FAA          | 79HOE 02    |            |
| 120.     | 80.   | 11      | ICPES        | 82JON 01    |            |
| 120.     | 14.   |         | NAA          | 76GUZ 01    |            |
| 120.     | 20.   | 11      | FAA          | 78SMI 01    |            |
| 120.     |       |         | RTNA         | 74ROO 01    |            |
| 120.     | 20.   | 11      | FAA          | 78SMI 01    |            |
| 120.     | 10.   |         | RTNA         | 74ORV 01    |            |
| 130.     | 20.   |         | ITNA         | 81KOS 01    |            |
| 130.     |       |         | FAA          | 82HEI 01    |            |
| 130.     | 5.    | 7       | AA           | 73TAL 01    |            |
| 130.     | 5.    |         | FAA          | 74TAL 01    |            |
| 130.     | 7.    | 7       | AA           | 73TAL 01    |            |
| 130.     | 7.    |         | FAA          | 74TAL 01    |            |
| 140.     | 40.   |         | FAA          | 82WEI 01    |            |
| 150.     | 50.   |         | AA           | 80AGE 01    |            |
| 150.     | 50.   |         | AA           | 76GAL 01    |            |
| 150.     | 60.   |         | TCGS         | 79AND 01    |            |
| 160.     | 16.   |         | FAA          | 76URE 01    |            |
| 160.     | 10.   |         | ICPES        | 79HER 01    |            |
| 160.     | 50.   |         | RTNA         | 80VAL 01    |            |
| 160.     | 70.   | 11      | ICPES        | 82JON 01    |            |
| 170.     |       |         | AF           | 78URE 02    |            |
| 170.     | 70.   | 11      | ICPES        | 82JON 01    |            |
| 180.     |       | 16      | AA           | 79ABO 01    |            |
| 200.     | 100.  | *11     | ICPES        | 82JON 01    |            |
| 200.     | 80.   | *       | RTNA         | 76GAL 01    |            |
| 230.     | 20.   | *       | FAA          | 73SEG 01    |            |
| 230.     | 60.   | *       | ITNA         | 74RAN 02    |            |
| 580.     |       | *16     | AA           | 79ABO 01    |            |
| 660.     |       | *       | AA           | 79MON 01    |            |
| 2000.    | 340.  | *       | AE+AF        | 79ULL 01    |            |
| Ce (ppm) |       |         |              |             |            |
|          |       | 2.      | L*           | 14NAA       | 81WIL 01   |
|          |       | 2.      | L*           | 14NAA       | 81WIL 02   |
| 0.75     | 0.067 |         | ITNA         | 77HAM 01    |            |
| 0.84     | 0.04  |         | ITNA         | 81KOS 01    |            |
| 0.9      |       | D*      | RTNA         | 82LAU 01    |            |
| 0.9      |       |         | RTNA         | 77LAU 02    |            |
| 0.91     | 0.06  |         | RTNA         | 80SLO 01    |            |
| 0.92     | 0.14  |         | ITNA         | 77NAD 02    |            |
| 0.97     |       |         | ITNA         | 79KUC 01    |            |
| 0.98     | 0.07  |         | VV           | 81NON 01    |            |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 0.98     | 0.05  |         | ITNA         | 78LAU       | 02         |
| 1.       |       |         | NAA          | 77LAU       | 01         |
| 1.       |       |         | RTNA         | 72MOR       | 03         |
| 1.1      |       |         | SSMS         | 78KUR       | 01         |
| 1.2      | 0.2   | *       | ITNA         | 81KUL       | 01         |
| Cl (ppm) |       |         |              |             |            |
|          | 1400. | L*      | 14NAA        | 81WIL       | 01         |
| 53.      |       | *       | SSMS         | 81VER       | 02         |
| 400.     | 770.  | R*      | ITNA         | 79IMA       | 03         |
| 400.     | 770.  | R*      | ITNA         | 79IMA       | 01         |
| 510.     |       | *35     | ITNA         | 81GLA       | 03         |
| 580.     | 27.   | *       | FAA          | 78TSU       | 01         |
| 630.     | 24.   |         | AA           | 78TSU       | 01         |
| 632.     | 80.   |         | ITNA         | 77ZIK       | 01         |
| 638.     | 27.   |         | ISE          | 81NAD       | 01         |
| 675.     |       |         | ITNA         | 78CAP       | 01         |
| 685.     | 32.   |         | PAA          | 74CHA       | 01         |
| 690.     |       |         | NAA          | 76GUZ       | 01         |
| 700.     | 60.   | 35      | ITNA         | 81GLA       | 04         |
| 706.     | 26.   |         | ITNA         | 78FUR       | 01         |
| 717.     | 193.  |         | PAA          | 76KAT       | 04         |
| 719.5    |       |         | ITNA         | 82AKA       | 01         |
| 720.     | 15.   |         | VV           | 81NON       | 01         |
| 720.     | 140.  |         | PAA          | 76KAT       | 02         |
| 730.     | 60.   |         | ITNA         | 80SLO       | 01         |
| 730.     | 30.   |         | TCGS         | 79FAI       | 01         |
| 730.     | 26.   |         | NAA          | 78GAN       | 01         |
| 732.     | 29.   |         | ITNA         | 77GUI       | 02         |
| 732.     | 29.   |         | NAA          | 76MIL       | 02         |
| 739.     |       |         | ITNA         | 76BAT       | 01         |
| 740.     | 58.   |         | ITNA         | 77HAM       | 01         |
| 740.     | 30.   |         | TCGS         | 79AND       | 01         |
| 750.     | 35.   |         | ITNA         | 77STE       | 02         |
| 750.     |       |         | ITNA         | 74RAN       | 02         |
| 750.     | 19.   |         | ITNA         | 75RIC       | 01         |
| 755.     |       |         | ITNA         | 80CRE       | 01         |
| 760.     |       |         | ITNA         | 83GLA       | 01         |
| 770.     |       |         | XRF          | 78CAM       | 02         |
| 770.     | 150.  |         | CPXRF        | 79REN       | 02         |
| 770.     | 240.  |         | EXRF         | 77NIE       | 01         |
| 790.     |       |         | RTNA         | 72MOR       | 03         |
| 800.     | 40.   |         | IENA         | 79JON       | 01         |
| 810.     | 150.  |         | EXRF         | 80DYC       | 01         |
| 950.     | 70.   | *       | 14NAA        | 81WIL       | 02         |
| Co (ppb) |       |         |              |             |            |
|          | 1300. | L*      | ITNA         | 80TOU       | 01         |
|          | 6000. | L*      | EXRF         | 79GIA       | 01         |
|          | 8000. | L*      | 14NAA        | 81WIL       | 01         |
|          | 8000. | L*      | 14NAA        | 81WIL       | 02         |
| 100.     |       |         | RTNA         | 72MOR       | 03         |
| 110.     | 20.   | 6       | NAA          | 78GAN       | 01         |
| 112.     | 17.   |         | NAA          | 76GUZ       | 01         |
| 120.     | 50.   |         | AA           | 76GAL       | 01         |
| 130.     |       |         | NAA          | 77LAU       | 01         |
| 130.     |       |         | ITNA         | 79KUC       | 01         |
| 130.     |       |         | ITNA         | 78CAP       | 01         |
| 130.     | 10.   |         | RTNA         | 74GOE       | 01         |
| 130.     |       |         | ITNA         | 80CRE       | 01         |
| 130.     | 10.   |         | ITNA         | 78LAU       | 02         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 130.     | 20.   |         | RTNA         | 77KUS       | 01         |
| 130.     | 20.   | 6       | ITNA         | 74BEC       | 01         |
| 138.     | 10.   |         | ITNA         | 74RAN       | 02         |
| 140.     | 30.   | 6       | NAA          | 78GAN       | 01         |
| 140.     |       |         | NAA          | 74BEL       | 01         |
| 140.     | 10.   |         | ITNA         | 78GIL       | 01         |
| 142.     | 7.    |         | FAA          | 75HAG       | 01         |
| 145.     |       |         | ITNA         | 82AKA       | 01         |
| 150.     |       |         | ITNA         | 80SAT       | 01         |
| 150.     | 20.   | 1       | IENA         | 79KUC       | 01         |
| 150.     | 30.   | 11      | FAA          | 80FUD       | 01         |
| 160.     | 20.   |         | ITNA         | 76KUC       | 01         |
| 160.     | 10.   |         | RTNA         | 80SLO       | 01         |
| 170.     | 10.   |         | ITNA         | 82COR       | 01         |
| 170.     | 10.   |         | ITNA         | 79SAT       | 01         |
| 180.     | 30.   |         | ITNA         | 79KOB       | 03         |
| 180.     | 20.   |         | ITNA         | 81KUL       | 01         |
| 180.     | 28.   |         | RTNA         | 77MEL       | 01         |
| 190.     | 40.   |         | ITNA         | 77HAM       | 01         |
| 190.     | 5.    | 11      | VV           | 81NON       | 01         |
| 210.     | 20.   | 6       | FAA          | 80FUD       | 01         |
| 210.     | 20.   |         | ITNA         | 74BEC       | 01         |
| 220.     | 40.   |         | ITNA         | 81KOS       | 01         |
| 220.     | 30.   |         | ITNA         | 78FUR       | 01         |
| 230.     | 50.   |         | ITNA         | 82QUR       | 01         |
| 230.     | 30.   |         | IENA         | 81KOS       | 01         |
| 260.     | 120.  | 5       | ITNA         | 79AHM       | 01         |
| 297.     | 26.   | *       | ITNA         | 80TOU       | 01         |
| 300.     | 40.   | *       | COLOR        | 82KIR       | 01         |
| 300.     |       | *       | ITNA         | 76GAL       | 01         |
| 420.     |       | *       | FAA          | 82HOE       | 01         |
| 460.     | 100.  | R*      | ITNA         | 75RIC       | 01         |
| 290.     | 100.  | *       | ITNA         | 79REN       | 03         |
|          |       | *       | ITNA         | 77ZIK       | 01         |
| Cr (ppm) |       |         |              |             |            |
|          | 5.    | L*      | EXRF         | 79GIA       | 01         |
|          | 2.    | L*      | 14NAA        | 81WIL       | 01         |
|          | 2.    | L*      | 14NAA        | 81WIL       | 02         |
| 1.07     | 0.13  | 6*      | NAA          | 78GAN       | 01         |
| 1.5      |       | *       | AA           | 73LOO       | 03         |
| 1.97     | 0.44  |         | NAA          | 76GUZ       | 01         |
| 2.       | 0.13  |         | GC-AA        | 76WOL       | 01         |
| 2.       |       |         | ICPES        | 79MCQ       | 01         |
| 2.       | 0.2   | 6       | ITNA         | 74BEC       | 01         |
| 2.       |       |         | ICPES        | 79MCQ       | 02         |
| 2.       |       |         | NAA          | 74BEL       | 01         |
| 2.05     |       | 11      | AA           | 79MCQ       | 01         |
| 2.2      | 0.4   |         | AA           | 79HOE       | 02         |
| 2.2      | 1.    |         | VV           | 81NON       | 01         |
| 2.2      | 2.9   | R*      | CPXRF        | 80KIR       | 01         |
| 2.2      | 0.3   |         | AA           | 75MAN       | 01         |
| 2.22     | 0.2   |         | RTNA         | 77MEL       | 01         |
| 2.23     |       | 6       | PAA          | 74CHA       | 01         |
| 2.25     |       | 11      | NAA          | 78GAN       | 01         |
| 2.37     | 0.07  |         | AA           | 79HOE       | 02         |
| 2.4      | 0.36  |         | SSMS         | 72MAG       | 01         |
| 2.4      | 0.1   | 11      | ITNA         | 77HAM       | 01         |
| 2.4      | 0.6   |         | ICPES        | 82JON       | 01         |
| 2.4      |       |         | ICPES        | 81BLA       | 02         |
| 2.4      |       |         | RTNA         | 75ABU       | 01         |
| 2.4      |       |         | ITNA         | 79KUC       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 2.4      | 0.3   |         | ITNA         | 78LAU       | 02         |
| 2.4      | 0.1   |         | RTNA         | 76MEL       | 03         |
| 2.4      | 0.1   |         | CHEML        | 74LI        | 01         |
| 2.4      | 0.1   | 9       | ITNA         | 78LAU       | 02         |
| 2.46     | 0.025 |         | RTNA         | 74MCC       | 01         |
| 2.463    | 0.02  | 11      | RTNA         | 78MCC       | 01         |
| 2.47     | 0.14  |         | FAA          | 75CAR       | 02         |
| 2.495    | 0.014 | 11      | RTNA         | 78MCC       | 01         |
| 2.5      | 1.6   |         | EXRF         | 73GIA       | 01         |
| 2.5      | 0.4   |         | ITNA         | 76KUC       | 01         |
| 2.5      |       |         | RTNA         | 72MOR       | 03         |
| 2.574    | 0.01  |         | ITNA         | 78MCC       | 01         |
| 2.58     | 0.04  |         | ITNA         | 81KOS       | 01         |
| 2.59     | 0.15  | 7       | FAA          | 80CHA       | 01         |
| 2.6      | 0.3   | 11      | ICPES        | 82JON       | 01         |
| 2.6      | 0.1   | 35      | FAA          | 81GLA       | 03         |
| 2.6      | 0.4   |         | ITNA         | 78FUR       | 01         |
| 2.6      | 0.1   |         | ITNA         | 79KOB       | 03         |
| 2.6      | 0.2   |         | NM           | 80SHI       | 01         |
| 2.6      | 0.2   | 6       | ITNA         | 74BEC       | 01         |
| 2.6      |       | 11      | AA           | 79HOE       | 02         |
| 2.65     | 0.16  | 7       | FAA          | 80CHA       | 01         |
| 2.67     | 0.15  |         | RTNA         | 78GAL       | 01         |
| 2.7      | 0.2   | D*      | DCP          | 81REE       | 01         |
| 2.7      |       |         | FAA          | 82HOE       | 01         |
| 2.7      |       |         | AA           | 81ARA       | 01         |
| 2.7      | 0.2   |         | DCP          | 79REE       | 01         |
| 2.7      | 0.17  |         | AA           | 80AGE       | 01         |
| 2.7      | 0.3   |         | ITNA         | 82COR       | 01         |
| 2.7      |       |         | ITNA         | 78CAP       | 01         |
| 2.7      | 0.2   |         | ITNA         | 79SAT       | 01         |
| 2.8      | 0.2   |         | ICPES        | 81KNA       | 01         |
| 2.8      | 0.2   |         | ITNA         | 82QUR       | 01         |
| 2.8      |       |         | NAA          | 77LAU       | 01         |
| 2.8      |       |         | SSMS         | 81VER       | 02         |
| 2.8      | 0.4   |         | ITNA         | 74RAN       | 02         |
| 2.8      | 0.2   |         | ITNA         | 75RIC       | 01         |
| 2.8      | 0.2   |         | ITNA         | 79AHM       | 01         |
| 2.8      | 0.6   |         | FAA          | 74WOL       | 01         |
| 2.82     |       | 7       | FAA          | 80CHA       | 01         |
| 2.9      | 0.3   |         | RTNA         | 74GOE       | 01         |
| 2.9      | 0.4   |         | EXRF         | 80DYC       | 01         |
| 2.9      |       |         | RTNA         | 78GOE       | 01         |
| 3.       | 1.    |         | ITNA         | 77ZIK       | 01         |
| 3.       | 0.2   |         | AA           | 76GAL       | 01         |
| 3.14     | 0.4   |         | ITNA         | 81HAB       | 01         |
| 3.2      | 0.3   |         | RTNA         | 76GAL       | 01         |
| 3.2      | 0.3   |         | ITNA         | 81KUL       | 01         |
| 3.3      |       | *       | ITNA         | 80CRE       | 01         |
| 3.4      | 0.5   | *       | ITNA         | 76GAL       | 01         |
| 3.67     | 0.01  | *       | ICPES        | 79HER       | 01         |
| 5.5      | 2.2   | *       | PAA          | 80YAM       | 01         |
| 5.81     | 0.84  | *       | ITNA         | 79REN       | 03         |
| Cs (ppb) |       |         |              |             |            |
|          | 60.   | L*      | RTNA         | 72MOR       | 03         |
|          | 100.  | L*      | ITNA         | 82GLA       | 02         |
|          | 300.  | L*      | 14NAA        | 81WIL       | 02         |
| 20.      |       |         | NAA          | 77LAU       | 01         |
| 24.      | 3.    | 9       | ITNA         | 78LAU       | 02         |
| 28.      | 5.    |         | ITNA         | 81KUL       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 28.      | 5.    |         | ITNA         | 78LAU       | 02         |
| 29.      | 2.    |         | ITNA         | 74RAN       | 02         |
| 37.      | 2.    |         | ITNA         | 83GLA       | 01         |
| 37.4     | 11.   |         | NAA          | 76GUZ       | 01         |
| 38.      | 7.    | 6       | ITNA         | 74BEC       | 01         |
| 40.      | 10.   |         | ITNA         | 79SAT       | 01         |
| 40.      | 9.    |         | VV           | 81NON       | 01         |
| 42.      |       |         | ITNA         | 80CRE       | 01         |
| 42.      | 1.    |         | IENA         | 81KOS       | 01         |
| 48.      | 4.    |         | ITNA         | 81KOS       | 01         |
| 80.      | 10.   | *       | RTNA         | 77MEL       | 01         |
| 150.     | 60.   | *       | ITNA         | 79REN       | 03         |
| Cu (ppm) |       |         |              |             |            |
| 3.6      | 1.3   | *6      | ITNA         | 74HOF       | 01         |
| 8.       |       | *       | EXRF         | 82KEE       | 01         |
| 8.1      | 2.    | *       | EXRF         | 77FLO       | 01         |
| 8.4      | 0.8   |         | ITNA         | 78FUR       | 01         |
| 8.9      | 1.7   |         | FAA          | 77FUJ       | 01         |
| 9.4      |       |         | EXRF         | 81BIS       | 01         |
| 9.6      | 1.7   |         | EXRF         | 73SPA       | 01         |
| 9.76     | 0.61  | 9       | ITNA         | 77GAN       | 03         |
| 9.8      | 0.6   | 6       | NAA          | 78GAN       | 01         |
| 9.8      | 0.6   | 6       | NAA          | 78GAN       | 01         |
| 10.      |       |         | RTNA         | 72MOR       | 03         |
| 10.      | 1.    |         | XRF          | 78LIN       | 01         |
| 10.      | 2.    |         | CPXRF        | 77CAM       | 01         |
| 10.      | 0.7   |         | AA           | 78LIN       | 01         |
| 10.3     | 0.5   |         | FAA          | 82JEN       | 02         |
| 10.3     |       |         | AA           | 76KRI       | 03         |
| 10.3     | 0.6   |         | AA           | 76GAL       | 01         |
| 10.4     | 13.3  | R*      | ITNA         | 79IMA       | 03         |
| 10.4     | 2.4   |         | EXRF         | 75REU       | 01         |
| 10.4     | 13.3  | R*      | ITNA         | 79IMA       | 01         |
| 10.5     | 1.    |         | RTNA         | 80SLO       | 01         |
| 10.8     |       | 6       | NAA          | 72SIN       | 02         |
| 11.      |       |         | ICPES        | 81WEI       | 01         |
| 11.      |       |         | AE+AF        | 79ULL       | 01         |
| 11.      |       |         | OES          | 75JON       | 10         |
| 11.      |       | 1       | AA           | 77FRY       | 01         |
| 11.      | 1.    |         | ICPES        | 79MCQ       | 02         |
| 11.      | 1.    |         | RTNA         | 77KUS       | 01         |
| 11.      | 15.   | R*      | AA           | 75MAN       | 01         |
| 11.      | 1.5   |         | AA           | 79MON       | 01         |
| 11.      | 1.    |         | FAA          | 79KRA       | 01         |
| 11.1     | 1.    |         | RTNA         | 82COR       | 01         |
| 11.2     |       |         | VV           | 81NON       | 01         |
| 11.2     | 0.18  |         | AA           | 80AGE       | 01         |
| 11.2     | 1.3   |         | ITNA         | 74RAN       | 02         |
| 11.2     | 1.    | 6       | POL          | 72SIN       | 01         |
| 11.3     |       | 16      | AA           | 79ABO       | 01         |
| 11.4     |       |         | ICPES        | 78CAP       | 01         |
| 11.43    | 0.2   |         | RTNA         | 74RAV       | 01         |
| 11.5     | 0.6   |         | FAA          | 83GLA       | 01         |
| 11.5     | 1.    |         | EXRF         | 79GIA       | 01         |
| 11.5     | 1.    |         | POL          | 74MAI       | 01         |
| 11.5     | 0.5   |         | RTNA         | 73TJI       | 01         |
| 11.6     | 0.4   |         | ICPES        | 81BLA       | 02         |
| 11.6     | 0.2   |         | AA           | 75ABU       | 01         |
| 11.6     | 0.4   |         | RTNA         | 78GAL       | 01         |
| 11.6     |       |         | FAA          | 78CAP       | 02         |

TABLE H (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 11.7  | 1.7   |         | CPXRF        | 81ROB       | 02         |
| 11.7  | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 11.8  | 0.7   |         | ITNA         | 79KOB       | 03         |
| 11.8  | 0.3   |         | RTNA         | 78GIL       | 01         |
| 11.8  |       |         | RTNA         | 79BYR       | 01         |
| 11.9  | 1.4   |         | FAA          | 82GRO       | 01         |
| 11.9  | 1.6   |         | ASV          | 79BRI       | 02         |
| 12.   |       |         | CPXRF        | 76ZEI       | 01         |
| 12.   |       |         | AA           | 79HIL       | 01         |
| 12.   |       |         | AA           | 81ARA       | 01         |
| 12.   | 0.4   | 11      | ICPES        | 82JON       | 01         |
| 12.   | 1.    |         | AA           | 77YAN       | 01         |
| 12.   |       |         | AA           | 76PUK       | 01         |
| 12.   | 2.    |         | FAA          | 77LOR       | 01         |
| 12.   | 1.    |         | ICPES        | 79MCQ       | 01         |
| 12.   | 1.4   |         | EXRF         | 77NIE       | 01         |
| 12.   | 0.8   | 11      | ICPES        | 82JON       | 01         |
| 12.   |       |         | XRF          | 78CAM       | 02         |
| 12.   | 0.5   |         | AA           | 73TAL       | 01         |
| 12.   | 1.    |         | AA           | 79MCQ       | 01         |
| 12.   | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 12.   |       |         | OES          | 75JON       | 02         |
| 12.   |       |         | CPAA         | 78MCG       | 01         |
| 12.   |       |         | AA           | 73LOO       | 03         |
| 12.   | 1.    |         | AA           | 78RIT       | 01         |
| 12.   | 1.    |         | RTNA         | 74GOE       | 01         |
| 12.   | 2.    |         | RTNA         | 74CAR       | 03         |
| 12.   |       |         | FAA          | 73SEG       | 01         |
| 12.1  | 0.2   |         | ICPES        | 81KNA       | 01         |
| 12.1  | 0.9   |         | ITNA         | 79SAT       | 01         |
| 12.1  |       | 16      | AA           | 79ABO       | 01         |
| 12.1  | 1.3   |         | PAA          | 76WIL       | 01         |
| 12.2  | 1.1   |         | ICPES        | 79ABE       | 01         |
| 12.3  | 1.4   |         | VV           | 80SCH       | 05         |
| 12.3  | 0.9   |         | RTNA         | 76MEL       | 03         |
| 12.4  | 1.6   |         | RTNA         | 80VAL       | 01         |
| 12.5  |       | 11      | AA           | 79HOE       | 02         |
| 12.5  | 0.8   |         | VV           | 79STO       | 01         |
| 12.5  | 0.7   |         | FAA          | 74WOL       | 01         |
| 12.6  | 0.6   |         | EXRF         | 73GIA       | 01         |
| 12.62 | 0.85  |         | NAA          | 76GUZ       | 01         |
| 12.7  |       | 6       | POL          | 72SIN       | 01         |
| 12.9  |       | 6       | AA           | 72SIN       | 01         |
| 13.   |       |         | ICPES        | 78DAH       | 01         |
| 13.   |       | 11      | AA           | 79HOE       | 02         |
| 13.   | 1.    | 35      | RTNA         | 77GLA       | 01         |
| 13.   | 0.47  | 11      | AA           | 75ISA       | 01         |
| 13.   | 4.2   |         | CPXRF        | 80KIR       | 01         |
| 13.   |       |         | OES          | 75JON       | 07         |
| 13.   |       | 1       | AA           | 77FRY       | 01         |
| 13.1  | 0.6   |         | AA           | 73THO       | 01         |
| 13.2  | 0.5   |         | SSMS         | 72MAG       | 01         |
| 13.3  | 0.1   |         | ICPES        | 79HER       | 01         |
| 13.5  | 1.5   |         | ITNA         | 82QUR       | 01         |
| 13.5  | 1.5   |         | ITNA         | 79AHM       | 01         |
| 13.7  | 1.3   | 6       | EXRF         | 79MAT       | 01         |
| 13.8  | 1.4   |         | XRF          | 74REU       | 01         |
| 14.   | 2.    |         | ITNA         | 77ZIK       | 01         |
| 14.   | 4.5   | 6       | ITNA         | 74HOF       | 01         |
| 14.   | 1.    |         | EXRF         | 80DYC       | 01         |
| 14.   | 0.13  | 11      | AA           | 75ISA       | 01         |
| 14.   |       |         | OES          | 75JON       | 11         |
| 14.   |       |         | OES          | 75JON       | 04         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 14.      |       |         | OES          | 75JON       | 03         |
| 14.5     | 4.7   |         | ITNA         | 77HAM       | 01         |
| 14.5     | 1.    |         | FAA          | 82KRI       | 01         |
| 15.      |       |         | OES          | 75ISA       | 01         |
| 15.      |       |         | OES          | 75JON       | 05         |
| 15.5     |       |         | SSMS         | 81VER       | 02         |
| 15.5     |       |         | ITNA         | 82AKA       | 01         |
| 16.      |       |         | OES          | 75JON       | 01         |
| 16.      |       |         | OES          | 75JON       | 09         |
| 17.      |       | *       | OES          | 75JON       | 06         |
| 18.1     |       | *       | CPXRF        | 75CAM       | 01         |
| 18.3     | 6.9   | *       | XRF          | 77SMI       | 04         |
| 19.      |       | *       | ITNA         | 78KEL       | 02         |
| 20.      |       | *       | OES          | 75JON       | 08         |
| 21.      | 11.   | *       | CPAA         | 77ZIK       | 01         |
| 27.      |       | *       | OES          | 75BOL       | 02         |
| 30.      |       | *       | XRF          | 80SUZ       | 02         |
| 35.      |       | *       | EXRF         | 81PAR       | 01         |
| Dy (ppb) |       |         |              |             |            |
|          |       |         |              |             |            |
|          | 100.  | L*      | NAA          | 77LAU       | 01         |
| 53.      | 8.    |         | ITNA         | 77NAD       | 02         |
| 110.     |       |         | SSMS         | 78URE       | 01         |
| Er (ppb) |       |         |              |             |            |
|          |       |         |              |             |            |
|          | 100.  |         | RTNA         | 77LAU       | 02         |
|          | 100.  | D*      | RTNA         | 82LAU       | 01         |
| 30.      |       |         | SSMS         | 78URE       | 01         |
| Eu (ppb) |       |         |              |             |            |
|          |       |         |              |             |            |
|          | 50.   | L*      | ITNA         | 78CAP       | 01         |
| 20.      |       |         | SSMS         | 78URE       | 01         |
| 20.      |       |         | ITNA         | 80CRE       | 01         |
| 20.      | 2.    |         | ITNA         | 78LAU       | 02         |
| 21.      |       |         | RTNA         | 77LAU       | 02         |
| 21.      |       | D*      | RTNA         | 82LAU       | 01         |
| 21.      | 1.    |         | ITNA         | 74RAN       | 02         |
| 22.      | 8.    |         | RTNA         | 80SLO       | 01         |
| 22.      | 3.    |         | ITNA         | 79KOB       | 03         |
| 24.      | 4.    |         | ITNA         | 77NAD       | 02         |
| 26.      | 1.    |         | IENA         | 81KOS       | 01         |
| 26.      |       |         | NAA          | 77LAU       | 01         |
| 27.      | 3.    |         | ITNA         | 81KOS       | 01         |
| 27.      | 6.    |         | ITNA         | 81KUL       | 01         |
| 28.      | 6.3   |         | ITNA         | 77HAM       | 01         |
| 31.      | 4.    | *       | ITNA         | 74BEC       | 01         |
| 120.     | 20.   | *       | RTNA         | 77KUS       | 01         |
| 300.     |       | *       | RTNA         | 72MOR       | 03         |
| F (ppm)  |       |         |              |             |            |
|          |       |         |              |             |            |
|          | 60.   | L*      | 14NAA        | 81WIL       | 02         |
|          | 240.  | L*      | 14NAA        | 81WIL       | 01         |
|          |       |         | COLOR        | 79DAB       | 01         |
| 3.12     |       |         | AA           | 77TSU       | 01         |
| 3.6      |       |         | COLOR        | 79DAB       | 01         |
| 3.69     |       |         | ISE          | 79DAB       | 01         |
| 3.8      | 0.32  |         | ISE          | 79DAB       | 01         |
| 3.88     |       |         | ISE          | 79DAB       | 01         |
| 4.       | 0.3   |         | ISE          | 82GLA       | 02         |
| 4.2      | 0.4   |         | ISE          | 83GLA       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 4.4      | 0.3   |         | ISE          | 83KNA       | 01         |
| 4.8      | 1.    |         | MS           | 77STE       | 02         |
| 10.      |       | *       | CFAA         | 80HAN       | 01         |
| Fe (ppm) |       |         |              |             |            |
| 121.     |       | *       | CFAA         | 78MCG       | 01         |
| 121.     |       | *       | CPXRF        | 76ZEI       | 01         |
| 145.     | 4.    | *11     | AA           | 78GAI       | 01         |
| 151.     |       | *       | OES          | 75JON       | 09         |
| 174.     |       | *       | OES          | 75JON       | 06         |
| 190.     |       | *       | OES          | 75JON       | 11         |
| 190.     |       | *       | OES          | 75JON       | 02         |
| 205.     | 37.   | *       | ITNA         | 81HAB       | 01         |
| 213.     |       |         | OES          | 75JON       | 03         |
| 220.     | 6.    | 11      | AA           | 78GAI       | 01         |
| 225.     | 58.   |         | XRF          | 77SMI       | 04         |
| 229.     | 22.   |         | XRF          | 78LIN       | 01         |
| 229.     |       |         | OES          | 75JON       | 08         |
| 232.     |       |         | OES          | 75JON       | 04         |
| 235.     |       |         | ICPES        | 78CAP       | 01         |
| 235.     |       |         | AA           | 76FUK       | 01         |
| 237.     | 13.   |         | CHEML        | 72SEI       | 01         |
| 238.     |       |         | AA           | 76KRI       | 03         |
| 239.     |       |         | OES          | 75ISA       | 01         |
| 240.     | 330.  | R*      | AA           | 75MAN       | 01         |
| 245.     | 35.   |         | ICPES        | 79ABE       | 01         |
| 246.     |       |         | FAA          | 78CAP       | 01         |
| 250.     |       |         | AA           | 73LOO       | 03         |
| 250.     | 42.5  | 11      | AA           | 75ISA       | 01         |
| 250.     | 30.   |         | RTNA         | 74CAR       | 03         |
| 253.     |       |         | ITNA         | 80SAT       | 01         |
| 254.     | 9.    |         | EXRF         | 80DYC       | 01         |
| 255.     | 5.    | 11      | COLOR        | 82SCH       | 03         |
| 256.     | 11.   | 11      | ICPES        | 82JON       | 01         |
| 256.     | 1.    |         | AA           | 78LIN       | 01         |
| 259.     |       |         | ITNA         | 78CAP       | 01         |
| 260.     | 20.   |         | ITNA         | 78GIL       | 01         |
| 261.     |       |         | SSMS         | 81VER       | 02         |
| 261.     | 39.1  | 11      | AA           | 75ISA       | 01         |
| 262.     | 5.    |         | ICPES        | 79HER       | 01         |
| 267.     |       |         | ICPES        | 78DAH       | 01         |
| 267.     | 2.9   |         | CPXRF        | 81ROB       | 02         |
| 267.     | 6.    |         | ICPES        | 79MCQ       | 02         |
| 270.     |       |         | ITNA         | 80CRE       | 01         |
| 270.     | 50.   | 35      | ITNA         | 81CLA       | 03         |
| 270.     |       |         | OES          | 75BOL       | 02         |
| 271.     | 7.    |         | RTNA         | 77MEL       | 01         |
| 271.     | 6.    | 11      | COLOR        | 82SCH       | 03         |
| 272.     | 16.   |         | AA           | 73THO       | 01         |
| 273.     | 6.    |         | ICPES        | 79MCQ       | 01         |
| 274.     | 19.   |         | EXRF         | 79GIA       | 01         |
| 276.     | 8.    |         | EXRF         | 73GIA       | 01         |
| 276.     |       |         | OES          | 75JON       | 05         |
| 278.     | 11.   |         | AA           | 79MCQ       | 01         |
| 279.     | 79.   |         | RTNA         | 77KUS       | 01         |
| 280.     | 10.   |         | ITNA         | 78LAU       | 02         |
| 280.     |       |         | NAA          | 77LAU       | 01         |
| 280.     | 26.   |         | ITNA         | 77HAM       | 01         |
| 282.     |       |         | COLOR        | 72SEI       | 01         |
| 282.     | 21.   |         | 14NAA        | 81WIL       | 02         |
| 283.     | 23.   |         | ITNA         | 75RIC       | 01         |

TABLE H (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 283.  | 3.    | 11      | ICPES        | 82JON       | 01         |
| 285.  | 5.    |         | RTNA         | 80SLO       | 01         |
| 285.  | 9.    | 11      | COLOR        | 82SCH       | 03         |
| 285.  | 5.    |         | ITNA         | 79DAS       | 01         |
| 287.  |       |         | AA           | 79HIL       | 01         |
| 288.  | 20.   |         | ICPES        | 80SCH       | 05         |
| 290.  | 35.   |         | IENA         | 81KOS       | 01         |
| 290.  | 6.    | 11      | ICPES        | 82JON       | 01         |
| 290.  | 30.   |         | CFAA         | 77ZIK       | 01         |
| 290.  |       |         | RTNA         | 72MOR       | 03         |
| 290.  | 12.   |         | PAA          | 74CHA       | 01         |
| 290.  | 25.   | 6       | NAA          | 78GAN       | 01         |
| 290.  | 30.   |         | ITNA         | 81KOS       | 01         |
| 290.  |       |         | FAA          | 73SEG       | 01         |
| 290.  | 30.   |         | ITNA         | 81KUL       | 01         |
| 291.  | 24.   |         | VV           | 81NON       | 01         |
| 293.  | 14.   |         | EXRF         | 77FLO       | 01         |
| 293.  |       | 11      | AA           | 79HOE       | 02         |
| 293.  | 18.   |         | EXRF         | 79KUE       | 01         |
| 294.  |       |         | OES          | 75JON       | 10         |
| 295.  |       | 11      | AA           | 79HOE       | 02         |
| 295.7 | 20.1  |         | ITNA         | 82COR       | 01         |
| 296.  | 12.   |         | ICPES        | 81BLA       | 02         |
| 296.  | 8.    |         | ITNA         | 82QUR       | 01         |
| 296.  | 8.    |         | ITNA         | 79AHM       | 01         |
| 297.  |       |         | AA           | 81ARA       | 01         |
| 297.  | 10.   |         | FAA          | 82JEN       | 02         |
| 299.  | 1.    |         | ITNA         | 79KOB       | 03         |
| 300.  | 50.   |         | 14NAA        | 80FAA       | 01         |
| 300.  | 14.   |         | COLOR        | 82MOR       | 01         |
| 300.  |       |         | EXRF         | 81BIS       | 01         |
| 300.  | 40.   |         | ITNA         | 76KUC       | 01         |
| 300.  | 17.   | 11      | ICPES        | 82JON       | 01         |
| 300.  |       |         | NAA          | 74BEL       | 01         |
| 300.  | 45.   |         | ITNA         | 74RAN       | 02         |
| 301.  | 2.5   |         | EXRF         | 73SPA       | 01         |
| 303.  | 32.   |         | ITNA         | 79SAT       | 01         |
| 304.  | 30.   |         | ITNA         | 78FUR       | 01         |
| 306.  |       |         | ITNA         | 79KUC       | 01         |
| 306.  | 6.    |         | EXRF         | 77NIE       | 01         |
| 310.  | 54.   |         | FAA          | 77FUJ       | 01         |
| 310.  |       |         | XRF          | 78CAM       | 02         |
| 311.1 | 10.4  |         | NAA          | 76GUZ       | 01         |
| 312.  | 11.4  |         | POL          | 72MAI       | 01         |
| 312.  | 11.4  |         | POL          | 77MAI       | 01         |
| 312.  | 11.   |         | POL          | 74MAI       | 01         |
| 313.  |       |         | ICPES        | 81WEI       | 01         |
| 314.  | 40.   |         | EXRF         | 75REU       | 01         |
| 315.  | 25.   |         | RTNA         | 74GOE       | 01         |
| 316.  |       |         | OES          | 75JON       | 01         |
| 317.  | 25.   |         | ICPES        | 81KNA       | 01         |
| 318.4 | 26.9  | 6       | ITNA         | 74BEC       | 01         |
| 319.  | 32.   |         | XRF          | 74REU       | 01         |
| 320.  | 25.   | 6       | NAA          | 78GAN       | 01         |
| 326.  |       |         | EXRF         | 82KEE       | 01         |
| 326.  | 30.   |         | ITNA         | 77ZIK       | 01         |
| 331.5 | 118.  |         | PAA          | 76KAT       | 04         |
| 332.  | 84.   |         | PAA          | 76KAT       | 02         |
| 335.  | 14.   | 6       | EXRF         | 79MAT       | 01         |
| 338.  | 16.   | 6       | EXRF         | 79MAT       | 01         |
| 343.  | 6.    |         | SSMS         | 72MAG       | 01         |
| 348.  | 10.   |         | 14NAA        | 81WIL       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 367.     |       | *       | OES          | 75JON       | 07         |
| 370.     | 45.   | *       | CPXRF        | 77CAM       | 01         |
| 422.     |       | *       | CPXRF        | 75CAM       | 01         |
| 450.     | 70.   | *       | ITNA         | 79REN       | 03         |
| 500.     |       | *       | AE+AF        | 79ULL       | 01         |
| 884.     |       | *       | EXRF         | 81PAR       | 01         |
| Ga (ppb) |       |         |              |             |            |
|          | 500.  | L*      | EXRF         | 79GIA       | 01         |
|          | 160.  | L*      | IENA         | 78WAN       | 01         |
| 78.      | 25.   |         | NAA          | 76GUZ       | 01         |
| 86.      |       |         | RTNA         | 72MOR       | 03         |
| 89.3     | 3.6   |         | RTNA         | 80STU       | 01         |
| 100.     | 10.   |         | RTNA         | 77KUS       | 01         |
| Gd (ppb) |       |         |              |             |            |
| 1.64     | 0.24  |         | ITNA         | 77NAD       | 02         |
| 100.     |       | D*      | RTNA         | 82LAU       | 01         |
| 100.     |       |         | RTNA         | 77LAU       | 02         |
| 100.     |       |         | SSMS         | 78BURE      | 01         |
| Ge (ppb) |       |         |              |             |            |
|          | 400.  | L*      | EXRF         | 79CIA       | 01         |
| 150.     |       | H       | ICPES        | 82HAH       | 01         |
| H (%)    |       |         |              |             |            |
| 5.54     | 0.08  |         | TCGS         | 79FAI       | 01         |
| 5.6      | 0.1   |         | TCGS         | 79AND       | 01         |
| 5.91     | 0.3   |         | CB           | 82GLA       | 02         |
| 6.05     | 0.07  |         | CB           | 80SCH       | 02         |
| 6.1      | 0.1   | 35      | TCGS         | 79GLA       | 04         |
| Hf (ppb) |       |         |              |             |            |
| 13.      |       |         | RTNA         | 80SLO       | 01         |
| 23.      |       |         | NAA          | 77LAU       | 01         |
| 27.      |       |         | ITNA         | 80CRE       | 01         |
| 31.      | 4.    |         | ITNA         | 78LAU       | 02         |
| 37.      | 5.    |         | ITNA         | 74RAN       | 02         |
| Hg (ppb) |       |         |              |             |            |
|          | 5000. | L*      | 14NAA        | 81WIL       | 01         |
|          | 1000. | L*      | EXRF         | 79GIA       | 01         |
| 110.     | 30.   | *       | RTNA         | 77BAN       | 03         |
| 120.     | 10.   |         | RTNA         | 74GOE       | 01         |
| 120.     | 20.   |         | RTNA         | 80SLO       | 01         |
| 122.     |       | 11      | CVAA         | 79HOE       | 02         |
| 125.     |       |         | IDMS         | 74RIC       | 01         |
| 125.     |       |         | AA           | 74RIC       | 01         |
| 130.     |       |         | CVAA         | 80NAD       | 01         |
| 138.     | 2.    | 11      | CVAA         | 77TAG       | 01         |
| 140.     | 20.   |         | IDMS         | 72RAI       | 01         |
| 140.     | 10.   |         | PAA          | 74CHA       | 01         |
| 140.     | 10.   |         | NAA          | 77JER       | 01         |
| 140.     | 10.   |         | ITNA         | 74FRI       | 01         |
| 141.     | 9.    |         | SSMS         | 74ALV       | 01         |
| 142.     | 27.   |         | CVAA         | 82DOO       | 01         |

TABLE H (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 146. | 12.   |         | RTNA         | 82LO        | 01         |
| 146. | 6.    |         | FAE          | 76CAV       | 01         |
| 146. |       |         | UU           | 74FEL       | 01         |
| 146. | 17.   |         | NAA          | 76GUZ       | 01         |
| 148. | 10.   | 7       | RTNA         | 72HEI       | 01         |
| 150. | 17.   |         | CVAA         | 74FIT       | 01         |
| 150. |       |         | CVAA         | 81NAR       | 01         |
| 150. | 5.    |         | FAA          | 72LYO       | 01         |
| 152. | 6.    |         | CVAA         | 80TON       | 01         |
| 152. | 5.    | 2       | CVAA         | 79KNE       | 01         |
| 152. | 6.    |         | RTNA         | 76MEL       | 01         |
| 153. | 8.    |         | CVAA         | 80KOR       | 01         |
| 153. | 14.   |         | FAA          | 75KOI       | 01         |
| 154. | 16.   | 5       | RTNA         | 80GRE       | 01         |
| 154. | 13.   |         | CVAA         | 79DOG       | 01         |
| 154. | 28.   |         | FAA          | 74CHU       | 03         |
| 154. | 13.   |         | FAA          | 76DOG       | 01         |
| 154. | 20.   |         | RTNA         | 78GIL       | 01         |
| 154. | 5.    |         | RTNA         | 74ORV       | 01         |
| 155. | 5.6   |         | RTNA         | 72ROO       | 02         |
| 155. | 6.    | 11      | CVAA         | 77TAG       | 01         |
| 155. | 15.   |         | RTNA         | 73TJI       | 01         |
| 155. | 6.    |         | RTNA         | 72ROO       | 01         |
| 155. | 13.   | 5       | RTNA         | 80GRE       | 01         |
| 155. | 3.    |         | RTNA         | 72RAI       | 01         |
| 157. | 20.   |         | CVAA         | 82GLA       | 02         |
| 157. | 1.    |         | AF           | 81EBD       | 01         |
| 158. | 10.   |         | FAA          | 77GLA       | 03         |
| 158. |       |         | RTNA         | 74RIC       | 01         |
| 158. | 5.    |         | RTNA         | 72LYO       | 01         |
| 158. |       |         | ITNA         | 80SAT       | 01         |
| 159. | 21.   |         | CVAA         | 78MAT       | 01         |
| 160. | 70.   |         | ITNA         | 81KUL       | 01         |
| 160. | 20.   |         | FAA          | 79STO       | 01         |
| 160. | 20.   |         | CVAA         | 82CHA       | 01         |
| 160. | 12.   |         | FAA          | 72ROO       | 01         |
| 160. | 30.   |         | RTNA         | 80VAL       | 01         |
| 160. | 12.   |         | FAA          | 74SIE       | 02         |
| 160. | 6.    |         | CVAA         | 72RAI       | 01         |
| 160. | 40.   | 6       | POT          | 82JAG       | 01         |
| 160. |       |         | RTNA         | 79DES       | 01         |
| 160. | 20.   |         | FAA          | 82JEN       | 02         |
| 161. | 13.   |         | RTNA         | 75LIT       | 01         |
| 162. | 10.   | 7       | RTNA         | 72HEI       | 01         |
| 163. | 6.    | 17      | CVAA         | 77TAG       | 01         |
| 163. | 12.   |         | RTNA         | 82GRI       | 01         |
| 165. | 5.    | 35      | CVAA         | 81GLA       | 04         |
| 167. |       |         | ITNA         | 74RIC       | 01         |
| 168. | 10.   |         | ITNA         | 82QUR       | 01         |
| 168. | 10.   |         | ITNA         | 79AHM       | 01         |
| 175. | 5.    | 17      | CVAA         | 77TAG       | 01         |
| 180. | 40.   | 6       | POT          | 82JAG       | 01         |
| 180. | 10.   |         | ITNA         | 78FUR       | 01         |
| 180. | 20.   |         | ITNA         | 74RAN       | 02         |
| 180. | 30.   |         | RTNA         | 77MEL       | 01         |
| 190. | 30.   | 6       | ITNA         | 74BEC       | 01         |
| 190. | 40.   |         | CVAA         | 77AND       | 01         |
| 190. |       |         | ITNA         | 75RIC       | 01         |
| 200. | 30.   | *       | ITNA         | 81HAB       | 01         |
| 200. | 30.   | *       | PAA          | 80SEG       | 01         |
| 200. | 80.   | *       | ITNA         | 74GVI       | 01         |
| 200. | 20.   | *       | ITNA         | 81KOS       | 01         |

TABLE H (cont)

| CONC        | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------------|-------|---------|--------------|-------------|------------|
| 203.        | 11.   | *17     | CVAA         | 77TAG       | 01         |
| 240.        |       | *17     | CVAA         | 77TAG       | 01         |
| 305.        | 70.   | *       | ITNA         | 75LIT       | 01         |
| 190.        | 10.   |         | NAA          | 78GAN       | 01         |
| 210.        | 50.   | *       | ITNA         | 77ZIK       | 01         |
| Ho (ppb)    |       |         |              |             |            |
| 13.         |       | D*      | RTNA         | 82LAU       | 01         |
| 13.         |       |         | RTNA         | 77LAU       | 02         |
| 20.         |       |         | SSMS         | 78URE       | 01         |
| I (ppb)     |       |         |              |             |            |
|             | 1000. | L*      | ITNA         | 83GLA       | 01         |
| 100.        | 50.   |         | PAA          | 77WIL       | 01         |
| 100.        | 50.   |         | PAA          | 78HIS       | 01         |
| 160.        | 20.   |         | IENA         | 82SAT       | 01         |
| 167.        | 10.   |         | RTNA         | 77ROO       | 01         |
| 173.2       | 4.4   |         | RTNA         | 80GVA       | 01         |
| 183.        | 6.    | 17      | NAA          | 79HEC       | 01         |
| 188.        | 26.   |         | NAA          | 79BRA       | 01         |
| 200.        | 70.   |         | RTNA         | 77STE       | 02         |
| 220.        |       | 17      | NAA          | 79HEC       | 01         |
| I-129 (fci) |       |         |              |             |            |
| 0.006       | 0.002 |         | RTNA         | 79BRA       | 01         |
| In (ppb)    |       |         |              |             |            |
| 1.23        | 0.11  |         | RTNA         | 74RAV       | 01         |
| 1.6         | 0.1   |         | RTNA         | 78KOB       | 01         |
| 1.8         | 0.8   |         | RTNA         | 77KUS       | 01         |
| Ir (ppb)    |       |         |              |             |            |
| 15.         | 3.    |         | RTNA         | 74CAR       | 03         |
| K (%)       |       |         |              |             |            |
| 1.05        | 1.41  | R*      | ITNA         | 79IMA       | 01         |
| 1.05        | 1.406 | R*      | ITNA         | 79IMA       | 03         |
| 1.11        |       | *       | OES          | 75JON       | 05         |
| 1.19        |       | *       | OES          | 75JON       | 09         |
| 1.229       | 0.018 | *       | CPXRF        | 81ROB       | 02         |
| 1.26        |       | *       | OES          | 75JON       | 03         |
| 1.28        |       |         | OES          | 75JON       | 11         |
| 1.3         | 0.2   |         | 14NAA        | 77SEG       | 01         |
| 1.35        |       | 1       | AA           | 78SZY       | 01         |
| 1.35        |       |         | OES          | 75JON       | 04         |
| 1.36        | 0.01  | 11      | AA           | 78GAI       | 01         |
| 1.37        | 0.14  |         | IENA         | 79JON       | 01         |
| 1.37        |       |         | ITNA         | 80CRE       | 01         |
| 1.37        | 0.06  |         | ITNA         | 74RAN       | 02         |
| 1.374       |       | 1       | AA           | 78SZY       | 01         |
| 1.38        | 0.04  |         | ITNA         | 75RIC       | 01         |
| 1.38        |       |         | OES          | 75ISA       | 01         |
| 1.39        |       |         | CPAA         | 80HAN       | 01         |
| 1.4         | 0.2   | 35      | ITNA         | 81GLA       | 04         |
| 1.4         |       |         | ITNA         | 82AKA       | 01         |
| 1.4         | 0.01  | 11      | AA           | 78GAI       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.4      | 0.06  |         | ITNA         | 78LAU       | 02         |
| 1.4      | 0.098 | 6       | NAA          | 78GAN       | 01         |
| 1.4      |       |         | OES          | 75JON       | 02         |
| 1.41     | 0.03  |         | TCGS         | 79AND       | 01         |
| 1.41     |       |         | OES          | 75JON       | 07         |
| 1.42     | 0.04  |         | ITNA         | 81KOS       | 01         |
| 1.42     |       |         | EXRF         | 81BIS       | 01         |
| 1.42     | 0.09  |         | ITNA         | 76KUC       | 01         |
| 1.42     |       |         | ITNA         | 78CAP       | 01         |
| 1.43     | 0.04  |         | EXRF         | 79KUE       | 01         |
| 1.43     | 0.07  | 11      | ICPES        | 82JON       | 01         |
| 1.43     | 0.06  |         | FE           | 78KOR       | 01         |
| 1.437    | 0.079 |         | NAA          | 76GUZ       | 01         |
| 1.44     |       | 11      | AA           | 75ISA       | 01         |
| 1.44     | 0.04  |         | RTNA         | 76MEL       | 03         |
| 1.445    | 0.11  |         | PAA          | 76KAT       | 04         |
| 1.45     |       |         | ITNA         | 79KUC       | 01         |
| 1.45     |       |         | ICPES        | 79COO       | 01         |
| 1.45     |       |         | OES          | 75JON       | 01         |
| 1.45     | 0.08  |         | PAA          | 76KAT       | 02         |
| 1.45     |       | 11      | AA           | 75ISA       | 01         |
| 1.46     | 0.14  |         | 14NAA        | 80FAA       | 01         |
| 1.46     | 0.11  |         | EXRF         | 82DAK       | 01         |
| 1.46     | 0.07  |         | ITNA         | 79AHM       | 01         |
| 1.46     | 0.2   |         | 14NAA        | 81WIL       | 02         |
| 1.47     |       |         | NAA          | 77LAU       | 01         |
| 1.47     | 0.1   |         | ITNA         | 79REN       | 03         |
| 1.47     | 0.02  | 11      | ICPES        | 82JON       | 01         |
| 1.47     | 0.12  |         | ITNA         | 79KOB       | 03         |
| 1.47     | 0.07  | 11      | ICPES        | 82JON       | 01         |
| 1.48     |       |         | AA           | 79HIL       | 01         |
| 1.48     |       |         | ICPES        | 81WEI       | 01         |
| 1.49     | 0.03  |         | ITNA         | 78GIL       | 01         |
| 1.49     |       | 1       | IENA         | 79KUC       | 01         |
| 1.49     | 0.194 |         | ITNA         | 77HAM       | 01         |
| 1.49     | 0.04  |         | TCGS         | 79FAI       | 01         |
| 1.496    | 0.043 |         | ITNA         | 78FUR       | 01         |
| 1.5      |       |         | RTNA         | 72MOR       | 03         |
| 1.5      |       |         | ITNA         | 76BAT       | 01         |
| 1.5      | 0.08  |         | VV           | 81NON       | 01         |
| 1.5      |       |         | ITNA         | 78KEL       | 02         |
| 1.51     | 0.06  |         | CPXRF        | 80KIR       | 01         |
| 1.51     | 0.06  |         | EXRF         | 77NIE       | 01         |
| 1.51     |       |         | XRF          | 78CAM       | 02         |
| 1.54     |       |         | OES          | 75JON       | 08         |
| 1.54     | 0.03  |         | ITNA         | 80SLO       | 01         |
| 1.56     | 0.05  | 11      | ICPES        | 82JON       | 01         |
| 1.57     | 0.08  |         | EXRF         | 75REU       | 01         |
| 1.57     | 0.25  |         | 14NAA        | 81WIL       | 01         |
| 1.58     | 0.08  | 6       | NAA          | 78GAN       | 01         |
| 1.59     |       |         | OES          | 75JON       | 10         |
| 1.62     |       |         | OES          | 75JON       | 06         |
| 1.66     | 0.8   | *6      | EXRF         | 79MAT       | 01         |
| 1.7      | 0.07  | *       | ICPES        | 79HEP       | 01         |
| 1.74     | 0.04  | *       | EXRF         | 80DYC       | 01         |
| 1.81     | 0.08  | 6*      | EXRF         | 79MAT       | 01         |
| 3.89     |       | *       | EXRF         | 81PAR       | 01         |
| La (ppm) |       |         |              |             |            |
| 0.7      | 0.1   | *       | ITNA         | 77ZIK       | 01         |
| 0.8      | 0.05  |         | RTNA         | 80SLO       | 01         |
| 0.89     | 1.25  | R*      | ITNA         | 79IMA       | 03         |

TABLE H (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 0.89 | 1.25  | R*      | ITNA         | 79IMA       | 01         |
| 0.95 |       |         | ITNA         | 79KUC       | 01         |
| 0.98 |       |         | ITNA         | 80CRE       | 01         |
| 0.99 | 0.08  | 6       | ITNA         | 74BEC       | 01         |
| 1.   |       |         | NAA          | 77LAU       | 01         |
| 1.   |       | D*      | RTNA         | 82LAU       | 01         |
| 1.   |       |         | RTNA         | 77LAU       | 02         |
| 1.   |       |         | NAA          | 74BEL       | 01         |
| 1.1  | 0.1   |         | ITNA         | 78LAU       | 02         |
| 1.15 | 0.1   |         | IENA         | 81KOS       | 01         |
| 1.18 | 0.09  |         | ITNA         | 81KOS       | 01         |
| 1.2  |       |         | ITNA         | 78CAP       | 01         |
| 1.2  | 0.1   |         | RTNA         | 76MEL       | 03         |
| 1.2  |       |         | RTNA         | 72MOR       | 03         |
| 1.2  | 0.165 |         | ITNA         | 77HAM       | 01         |
| 1.2  |       |         | SSMS         | 78URE       | 01         |
| 1.2  | 0.1   |         | ITNA         | 81KUL       | 01         |
| 1.22 | 0.02  |         | VV           | 81NON       | 01         |
| 1.24 | 0.08  |         | ITNA         | 79REN       | 03         |
| 1.3  | 0.1   |         | ITNA         | 74RAN       | 02         |
| 1.7  | 0.6   | *       | RTNA         | 77KUS       | 01         |
| 1.96 | 0.02  | *       | ITNA         | 77NAD       | 02         |

Li (ppb)

|        |       |    |      |       |    |
|--------|-------|----|------|-------|----|
|        | 900.  | L* | CPAA | 81SAS | 01 |
| 510.   | 660.  | R* | AA   | 75MAN | 01 |
| 570.   | 70.   |    | AA   | 83CLA | 01 |
| 770.   | 30.   |    | ITNA | 77HEY | 01 |
| 800.   | 200.  |    | CPAA | 80HAN | 01 |
| 13700. | 1500. | *  | NT   | 74CAR | 02 |

Lu (ppb)

|      |      |    |      |       |    |
|------|------|----|------|-------|----|
|      | 20.  | L* | NAA  | 77LAU | 01 |
|      | 10.  | L* | ITNA | 78LAU | 02 |
| 0.61 | 0.09 |    | ITNA | 77NAD | 02 |
| 0.9  | 0.1  |    | ITNA | 81KOS | 01 |
| 3.3  |      | D* | RTNA | 82LAU | 01 |
| 3.3  |      |    | RTNA | 77LAU | 02 |
| 6.   |      |    | RTNA | 80SLO | 01 |
| 10.  |      |    | SSMS | 78URE | 01 |

Mg (ppm)

|       |       |    |       |       |    |
|-------|-------|----|-------|-------|----|
| 4000. | 6250. | R* | ITNA  | 79IMA | 01 |
| 4000. | 6250. | R* | ITNA  | 79IMA | 03 |
| 4900. |       | *  | ICPES | 78CAP | 01 |
| 5140. | 190.  | *  | VV    | 81NON | 01 |
| 5300. |       | *  | FAA   | 78CAP | 01 |
| 5400. |       |    | NAA   | 77LAU | 01 |
| 5500. | 300.  |    | ICPES | 79ABE | 01 |
| 5500. |       |    | AA    | 80URE | 01 |
| 5500. | 300.  |    | IENA  | 79JON | 01 |
| 5600. | 100.  |    | AA    | 79MCQ | 01 |
| 5700. |       |    | OES   | 75JON | 05 |
| 5700. | 60.   |    | ICPES | 79MCQ | 02 |
| 5700. | 80.   |    | ICPES | 79MCQ | 01 |
| 5800. | 100.  | 11 | AA    | 78GAI | 01 |
| 5800. | 730.  |    | ITNA  | 77HAM | 01 |
| 5900. | 1.    | 11 | AA    | 75ISA | 01 |
| 5980. | 70.   | 11 | ICPES | 82JON | 01 |

TABLE H (cont)

| CONC   | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------|-------|---------|--------------|-------------|------------|
| 6000.  |       |         | RTNA         | 72MOR       | 03         |
| 6000.  | 500.  |         | CPXRF        | 80KIR       | 01         |
| 6000.  | 500.  |         | ITNA         | 78LAU       | 02         |
| 6000.  | 100.  | 11      | AA           | 78GAI       | 01         |
| 6000.  | 200.  | 11      | ICPES        | 82JON       | 01         |
| 6000.  | 500.  |         | 14NAA        | 80FAA       | 01         |
| 6000.  | 2.    | 11      | AA           | 75ISA       | 01         |
| 6000.  |       |         | OES          | 75JON       | 09         |
| 6000.  |       |         | OES          | 75JON       | 07         |
| 6100.  | 400.  |         | ITNA         | 80SLO       | 01         |
| 6100.  |       |         | AA           | 79HIL       | 01         |
| 6100.  | 200.  | 11      | ICPES        | 82JON       | 01         |
| 6100.  | 100.  |         | PAA          | 74CHA       | 01         |
| 6100.  | 1100. |         | 14NAA        | 81WIL       | 02         |
| 6100.  | 200.  |         | PAA          | 78HIS       | 01         |
| 6100.  |       |         | OES          | 75JON       | 10         |
| 6150.  |       |         | ICPES        | 78DAH       | 01         |
| 6150.  | 100.  |         | PAA          | 76KAT       | 04         |
| 6150.  | 70.   |         | PAA          | 76KAT       | 02         |
| 6173.8 | 179.  |         | NAA          | 76GUZ       | 01         |
| 6174.  | 173.  |         | ITNA         | 75PIE       | 01         |
| 6200.  | 100.  | 11      | ICPES        | 82JON       | 01         |
| 6200.  |       |         | OES          | 75JON       | 08         |
| 6200.  |       |         | OES          | 75JON       | 02         |
| 6258.  | 315.  |         | ITNA         | 77ZIK       | 01         |
| 6300.  | 700.  |         | TCGS         | 79FAI       | 01         |
| 6300.  |       |         | ITNA         | 78CAP       | 01         |
| 6300.  | 130.  |         | ITNA         | 78FUR       | 01         |
| 6400.  |       |         | ICPES        | 81WEI       | 01         |
| 6400.  |       |         | OES          | 75ISA       | 01         |
| 6500.  |       |         | OES          | 75JON       | 06         |
| 6500.  | 100.  |         | COLOR        | 74SLE       | 01         |
| 6550.  | 480.  |         | ITNA         | 79KOB       | 03         |
| 6600.  |       |         | OES          | 75JON       | 11         |
| 6700.  |       |         | CPAA         | 80HAN       | 01         |
| 6700.  | 100.  |         | ICPES        | 79HER       | 01         |
| 6800.  | 1000. |         | 14NAA        | 77SEG       | 01         |
| 6800.  |       |         | OES          | 75JON       | 03         |
| 6800.  |       |         | OES          | 75JON       | 04         |
| 7000.  |       |         | ITNA         | 76BAT       | 01         |
| 7030.  | 170.  | *       | 14NAA        | 81WIL       | 01         |
| 7100.  |       | *       | OES          | 75JON       | 01         |
| 7830.  |       | *       | ITNA         | 75RIC       | 01         |

Mn (ppm)

|      |     |     |       |       |    |
|------|-----|-----|-------|-------|----|
| 23.1 | 4.4 | 6*  | ITNA  | 74HOF | 01 |
| 32.  | 16. | *   | EXRF  | 77FLO | 01 |
| 52.  |     | *   | OES   | 75JON | 07 |
| 65.  | 90. | R*  | ITNA  | 79IMA | 01 |
| 65.  | 90. | R*  | ITNA  | 79IMA | 03 |
| 68.2 | 8.2 | *   | XRF   | 77SMT | 04 |
| 72.  |     | *   | OES   | 75JON | 06 |
| 72.  | 1.  | *11 | AA    | 78GAI | 01 |
| 73.5 |     | *   | ITNA  | 82AKA | 01 |
| 77.  |     |     | SSMS  | 81VER | 02 |
| 79.  | 3.  |     | RTNA  | 76MEL | 03 |
| 80.  |     |     | ICPES | 78CAP | 01 |
| 80.  |     |     | AA    | 73LOO | 03 |
| 80.  | 3.  |     | XRF   | 78LIN | 01 |
| 80.  |     |     | OES   | 75ISA | 01 |
| 80.  |     |     | OES   | 75JON | 11 |

TABLE H (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 80.6 | 2.9   |         | CPXRF        | 81ROB       | 02         |
| 80.7 | 3.3   |         | ITNA         | 81HAB       | 01         |
| 81.  | 4.    |         | RTNA         | 77KUS       | 01         |
| 81.3 |       |         | FAA          | 78CAP       | 01         |
| 82.  | 7.    |         | EXRF         | 79KUE       | 01         |
| 82.  |       |         | EXRF         | 82KEE       | 01         |
| 82.  | 99.   | R*      | AA           | 75MAN       | 01         |
| 82.  | 3.    |         | IENA         | 79JON       | 01         |
| 82.  | 4.2   |         | AA           | 78LIN       | 01         |
| 83.3 |       |         | ICPES        | 78DAH       | 01         |
| 83.4 |       |         | FAA          | 77SHE       | 02         |
| 84.  | 1.    | 11      | ICPES        | 82JON       | 01         |
| 84.  |       |         | NAA          | 77LAU       | 01         |
| 84.  | 4.    |         | ITNA         | 78LAU       | 02         |
| 85.  | 4.    |         | EXRF         | 80DYC       | 01         |
| 85.  | 10.   | 6       | EXRF         | 79MAT       | 01         |
| 85.  |       |         | ITNA         | 78CAP       | 01         |
| 85.  | 2.    | 11      | ICPES        | 82JON       | 01         |
| 85.6 | 2.8   | 6       | ITNA         | 74HOF       | 01         |
| 86.  |       |         | RTNA         | 72MOR       | 03         |
| 86.  |       |         | ASV          | 80CHR       | 01         |
| 86.  |       |         | ITNA         | 83GLA       | 01         |
| 86.  | 1.    |         | ICPES        | 79MCQ       | 02         |
| 86.  | 2.    | 11      | ICPES        | 82JON       | 01         |
| 86.  |       |         | AA           | 76FUK       | 01         |
| 86.  | 2.    |         | ICPES        | 79MCQ       | 01         |
| 86.5 | 4.9   |         | EXRF         | 79GLA       | 01         |
| 87.  |       |         | FAA          | 73SEC       | 01         |
| 87.  |       | 11      | AA           | 79HOE       | 02         |
| 87.  |       |         | FAA          | 73SEG       | 01         |
| 87.  |       | 11      | AA           | 79HOE       | 02         |
| 87.1 | 1.6   |         | RTNA         | 73HEY       | 01         |
| 87.8 | 5.9   |         | RTNA         | 74RAV       | 01         |
| 88.  | 4.4   | 11      | AA           | 75ISA       | 01         |
| 88.  |       |         | OES          | 75JON       | 02         |
| 88.  |       |         | OES          | 75JON       | 04         |
| 88.2 | 3.4   |         | PAA          | 74CHA       | 01         |
| 88.6 | 2.2   |         | EXRF         | 73GIA       | 01         |
| 88.8 |       | 11      | AA           | 79HOE       | 02         |
| 89.  | 3.    |         | VV           | 80SCH       | 05         |
| 89.  | 1.    | 11      | ICPES        | 82JON       | 01         |
| 89.  | 5.    |         | ITNA         | 78GIL       | 01         |
| 89.  | 2.67  | 11      | AA           | 75ISA       | 01         |
| 89.  | 4.4   |         | ITNA         | 79KOB       | 03         |
| 89.  | 4.    |         | ITNA         | 74RAN       | 02         |
| 89.  | 0.6   |         | ICPES        | 79HER       | 01         |
| 89.  | 4.    |         | AA           | 79MCQ       | 01         |
| 89.9 |       |         | ITNA         | 76BAT       | 01         |
| 90.  | 7.    |         | ITNA         | 77HAM       | 01         |
| 90.  | 3.    |         | ICPES        | 79ABE       | 01         |
| 90.  |       |         | ITNA         | 80CRE       | 01         |
| 90.  | 6.    |         | ITNA         | 76KUC       | 01         |
| 90.  | 1.    |         | ITNA         | 80SLO       | 01         |
| 90.  | 0.9   | 11      | AA           | 78GAI       | 01         |
| 90.  | 12.   |         | CPXRF        | 77CAM       | 01         |
| 91.  | 4.    | MD      | FAA          | 79WES       | 01         |
| 91.  |       |         | EXRF         | 81BIS       | 01         |
| 91.  | 2.    | 6       | NAA          | 78GAN       | 01         |
| 91.1 | 18.   |         | EXRF         | 75REU       | 01         |
| 91.6 | 1.08  |         | NAA          | 76GUZ       | 01         |
| 92.  | 4.    | 35      | ITNA         | 81GLA       | 04         |
| 92.  | 3.    |         | ITNA         | 78FUR       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 92.      | 1.    |         | DCP          | 79REE       | 01         |
| 92.      | 1.    | D*      | DCP          | 81REE       | 01         |
| 92.      | 3.    |         | ITNA         | 75RIC       | 01         |
| 92.      |       |         | AA           | 76KRI       | 03         |
| 92.4     | 0.8   |         | ICPES        | 81KNA       | 01         |
| 93.      |       |         | ITNA         | 80SAT       | 01         |
| 93.      |       |         | OES          | 75JON       | 05         |
| 93.      |       |         | XRF          | 78CAM       | 02         |
| 93.      | 6.    |         | EXRF         | 77NIE       | 01         |
| 93.8     | 17.2  |         | PAA          | 80YAM       | 01         |
| 94.      | 3.5   | 6       | NAA          | 78GAN       | 01         |
| 94.5     | 5.    |         | PAA          | 76KAT       | 04         |
| 94.8     | 4.    |         | ITNA         | 82QUR       | 01         |
| 94.8     | 4.    |         | ITNA         | 79AHM       | 01         |
| 95.      | 7.3   |         | CPXRF        | 80KIR       | 01         |
| 95.      | 4.    |         | PAA          | 76KAT       | 02         |
| 95.      | 12.   |         | ITNA         | 79SAT       | 01         |
| 95.      |       |         | AE+AF        | 79ULL       | 01         |
| 95.4     | 2.1   |         | ITNA         | 76GAL       | 01         |
| 96.      |       |         | ICPES        | 81WEI       | 01         |
| 96.      |       |         | OES          | 75JON       | 03         |
| 96.      | 5.    |         | PAA          | 78HIS       | 01         |
| 96.2     | 4.8   |         | AA           | 76GAL       | 01         |
| 96.8     | 3.6   |         | AA           | 73THO       | 01         |
| 97.      | 10.   |         | ITNA         | 77ZIK       | 01         |
| 97.      |       |         | OES          | 75JON       | 10         |
| 97.4     |       |         | CPXRF        | 75CAM       | 01         |
| 98.      |       |         | XRF          | 80SUZ       | 02         |
| 98.      | 20.   |         | TCGS         | 79FAI       | 01         |
| 100.     |       |         | ITNA         | 78KEL       | 02         |
| 101.     |       |         | OES          | 75JON       | 01         |
| 101.     | 10.   |         | XRF          | 74REU       | 01         |
| 103.     | 5.    | *       | VV           | 81NON       | 01         |
| 107.     | 3.    | *       | SSMS         | 72MAG       | 01         |
| 110.     |       | *       | ITNA         | 79REN       | 03         |
| 110.     | 9.    | *6      | EXRF         | 79MAT       | 01         |
| 131.     |       | *       | OES          | 75JON       | 08         |
| 144.     |       | *       | OES          | 75JON       | 09         |
| 242.     |       | *       | EXRF         | 81PAR       | 01         |
| Mo (ppb) |       |         |              |             |            |
|          | 5000. | L*      | ICPES        | 78CAP       | 01         |
|          | 1400. | L*      | 14NAA        | 81WIL       | 01         |
|          | 5000. | L*      | RTNA         | 72MOR       | 03         |
|          | 1000. | L*      | PAA          | 78HIS       | 01         |
|          | 800.  | L*      | 14NAA        | 81WIL       | 02         |
| 110.     | 80.   | *11     | ICPES        | 82JON       | 01         |
| 200.     |       |         | FAA          | 79BEN       | 01         |
| 200.     | 100.  | 11      | ICPES        | 82JON       | 01         |
| 200.     | 100.  | 11      | ICPES        | 82JON       | 01         |
| 200.     | 200.  | 11      | ICPES        | 82JON       | 01         |
| 240.     | 20.   |         | RTNA         | 78NAD       | 01         |
| 240.     | 21.   |         | RTNA         | 82HAD       | 01         |
| 250.     |       | 1       | IENA         | 79KUC       | 01         |
| 280.     | 20.   |         | ICPES        | 82LYO       | 01         |
| 300.     | 60.   |         | RTNA         | 77DIK       | 01         |
| 300.     | 30.   |         | RTNA         | 74GOE       | 01         |
| 320.     | 60.   |         | RTNA         | 80SLO       | 01         |
| 320.     |       | 1       | IENA         | 79KUC       | 01         |
| 327.     | 70.   |         | NAA          | 76GUZ       | 01         |
| 390.     | 40.   |         | FAA          | 81NEU       | 01         |

TABLE H (cont)

| CONC   | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------|-------|---------|--------------|-------------|------------|
| 400.   | 100.  |         | PAA          | 80SEG       | 01         |
| 2260.  | 210.  | *       | PAA          | 74CHA       | 01         |
| 2300.  |       | *       | OES          | 75JON       | 10         |
| 3300.  |       | *       | OES          | 75JON       | 11         |
| 4000.  | 2000. | *       | CPAA         | 77ZIK       | 01         |
| 4600.  |       | *       | OES          | 75JON       | 03         |
| 6200.  |       | *       | OES          | 75JON       | 01         |
| 10500. |       | *       | OES          | 75JON       | 07         |
| 15200. |       | *       | OES          | 75JON       | 02         |

N (%)

|       |       |    |       |       |    |
|-------|-------|----|-------|-------|----|
| 2.59  | 0.11  | *  | CB    | 82GLA | 02 |
| 2.61  | 0.05  |    | 14NAA | 80FAA | 01 |
| 2.62  | 0.03  |    | CB    | 80SCH | 02 |
| 2.7   | 0.01  | 11 | TITR  | 82LIA | 01 |
| 2.7   | 0.4   |    | 14NAA | 77SEG | 01 |
| 2.7   | 0.09  |    | TCGS  | 79FAI | 01 |
| 2.7   | 0.09  | 13 | NT    | 74CAR | 01 |
| 2.7   | 0.4   | 35 | TCGS  | 79GLA | 04 |
| 2.71  | 0.01  |    | TITR  | 80GIN | 01 |
| 2.72  |       | 11 | TITR  | 82LIA | 01 |
| 2.74  | 0.01  |    | COLOR | 80GIN | 01 |
| 2.74  | 0.02  | 11 | TITR  | 82LIA | 01 |
| 2.74  | 0.01  | 11 | TITR  | 82LIA | 01 |
| 2.75  | 0.03  | 11 | TITR  | 82LIA | 01 |
| 2.755 | 0.038 |    | GRAV  | 74CAR | 01 |
| 2.76  | 0.09  | 13 | NT    | 74CAR | 01 |
| 2.81  | 0.15  |    | TCGS  | 79AND | 01 |

N-15 (AZ)

|       |       |  |    |       |    |
|-------|-------|--|----|-------|----|
| 0.367 | 0.002 |  | MS | 73CAR | 01 |
|-------|-------|--|----|-------|----|

Na (ppm)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
| 70.  |      | L* | 14NAA | 81WIL | 02 |
| 25.  |      | L* | ITNA  | 74HOF | 01 |
| 360. |      | L* | 14NAA | 81WIL | 01 |
| 100. |      | L* | ITNA  | 74HOF | 01 |
| 40.  |      | *  | OES   | 75JON | 03 |
| 74.  |      |    | OES   | 75JON | 06 |
| 75.  |      |    | NAA   | 77LAU | 01 |
| 76.  |      |    | NAA   | 74BEL | 01 |
| 77.  |      |    | RTNA  | 72MOR | 03 |
| 77.  | 6.   |    | ITNA  | 80SLO | 01 |
| 77.  | 4.   |    | RTNA  | 76MEL | 03 |
| 78.  | 3.   |    | ITNA  | 74RAN | 02 |
| 78.  | 5.   |    | ITNA  | 76KUC | 01 |
| 79.3 | 5.   |    | PAA   | 74CHA | 01 |
| 80.  | 2.   |    | FE    | 81MIZ | 01 |
| 80.  |      |    | ITNA  | 78LAU | 02 |
| 80.6 | 1.3  |    | FE    | 78KOR | 01 |
| 81.  | 17.  |    | ITNA  | 78FUR | 01 |
| 81.  |      |    | ITNA  | 79KUC | 01 |
| 81.5 | 3.   |    | ITNA  | 79AHM | 01 |
| 81.8 | 1.83 |    | NAA   | 76GUZ | 01 |
| 82.  |      | 1  | IENA  | 79KUC | 01 |
| 83.  | 8.5  |    | ITNA  | 77HAM | 01 |
| 83.  | 5.   |    | ITNA  | 75RIC | 01 |
| 84.  | 4.   |    | ITNA  | 78GIL | 01 |
| 84.4 |      |    | ITNA  | 76BAT | 01 |
| 86.  | 1.   |    | VV    | 81NON | 01 |

TABLE H (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 86.   | 5.    |         | ITNA         | 77ZIK       | 01         |
| 87.   | 11.   |         | PAA          | 76KAT       | 02         |
| 87.   |       |         | CPAA         | 80HAN       | 01         |
| 87.   | 16.   |         | PAA          | 76KAT       | 04         |
| 88.   | 6.8   |         | ITNA         | 79KOB       | 03         |
| 88.   | 142.  | R*      | ITNA         | 79IMA       | 01         |
| 88.   | 142.  | R*      | ITNA         | 79IMA       | 03         |
| 90.   | 8.    |         | ITNA         | 81KOS       | 01         |
| 92.   |       |         | ITNA         | 80CRE       | 01         |
| 92.   |       | 35      | ITNA         | 81GLA       | 04         |
| 100.  |       |         | OES          | 75JON       | 01         |
| 100.  |       |         | OES          | 75JON       | 05         |
| 103.5 |       |         | ITNA         | 82AKA       | 01         |
| 110.  |       | 35      | ITNA         | 81GLA       | 03         |
| 114.  | 2.    |         | NAA          | 78GAN       | 01         |
| 120.  | 40.   |         | ITNA         | 79REN       | 03         |
| 140.  | 12.   |         | ICPES        | 79ABE       | 01         |
| 150.  |       | *       | OES          | 75JON       | 04         |
| 154.  |       | *       | OES          | 75JON       | 09         |
| 155.  |       | *       | ITNA         | 78CAP       | 01         |
| 162.  |       | *1      | AA           | 78SZY       | 01         |
| 170.  | 30.   | *       | IENA         | 79JON       | 01         |
| 244.  |       | *1      | AA           | 78SZY       | 01         |
| 400.  |       | *       | OES          | 75JON       | 11         |
| 524.  |       | *       | OES          | 75JON       | 08         |

Nb (ppm)

Nd (ppb)

|      |       |    |      |       |    |
|------|-------|----|------|-------|----|
| 320. | 1000. | L* | NAA  | 77LAU | 01 |
| 480. | 90.   |    | ITNA | 77NAD | 02 |
| 570. |       |    | SSMS | 78URE | 01 |
| 570. |       | D* | RTNA | 77LAU | 02 |
|      |       |    | RTNA | 82LAU | 01 |

Ni (ppm)

|      |       |    |       |       |    |
|------|-------|----|-------|-------|----|
|      | 5.    | L* | 14NAA | 81WIL | 02 |
|      | 10.   | L* | AA    | 76KRI | 03 |
|      | 2.5   | L* | PAA   | 78HIS | 01 |
| 0.7  |       |    | CPXRF | 75CAM | 01 |
| 1.   |       | 1  | IENA  | 79KUC | 01 |
| 1.1  |       | 16 | AA    | 79ABO | 01 |
| 1.14 | 0.08  |    | FAA   | 79STO | 01 |
| 1.15 | 0.07  | 11 | ICPES | 82JON | 01 |
| 1.15 | 0.09  | 11 | ICPES | 82JON | 01 |
| 1.18 | 0.08  |    | AA    | 80AGE | 01 |
| 1.2  | 0.5   |    | EXRF  | 79GIA | 01 |
| 1.2  | 0.063 | 6  | COLOR | 78FUD | 01 |
| 1.2  | 0.4   |    | FAA   | 82GRO | 01 |
| 1.2  | 1.    |    | EXRF  | 77NIE | 01 |
| 1.2  | 0.07  | 6  | COLOR | 78FUD | 01 |
| 1.24 | 0.07  | 11 | XRF   | 78CAM | 02 |
| 1.27 | 0.08  |    | ICPES | 82JON | 01 |
| 1.27 | 0.08  | 11 | PAA   | 74CHA | 01 |
| 1.27 | 0.08  |    | ICPES | 82JON | 01 |
| 1.28 | 0.16  |    | NAA   | 76GUZ | 01 |
| 1.3  |       |    | AA    | 73LOO | 03 |
| 1.3  | 0.1   |    | RTNA  | 75ABU | 01 |
| 1.3  | 0.07  |    | VOL T | 81PTH | 01 |

TABLE H (cont)

| CONC    | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------|-------|---------|--------------|-------------|------------|
| 1.3     | 0.2   | 9       | ITNA         | 78LAU       | 02         |
| 1.3     | 0.4   |         | EXRF         | 73GIA       | 01         |
| 1.31    | 0.17  |         | FAA          | 80DOR       | 01         |
| 1.31    | 0.11  |         | ITNA         | 75PIE       | 01         |
| 1.37    | 0.03  |         | COLOR        | 77BUR       | 01         |
| 1.4     | 0.1   |         | POL          | 72MAI       | 01         |
| 1.4     |       | 1       | IENA         | 79KUC       | 01         |
| 1.4     | 0.3   |         | RTNA         | 77MEL       | 01         |
| 1.4     |       |         | FAA          | 82HOE       | 01         |
| 1.4     | 0.1   |         | POL          | 77MAI       | 01         |
| 1.4     | 0.1   |         | POL          | 74MAI       | 01         |
| 1.4     | 0.6   |         | ITNA         | 74RAN       | 02         |
| 1.4     |       |         | FAA          | 73SEG       | 01         |
| 1.5     | 0.2   |         | FAA          | 80SEG       | 01         |
| 1.5     | 0.3   |         | EXRF         | 80DYC       | 01         |
| 1.5     | 0.3   |         | RTNA         | 80SLO       | 01         |
| 1.5     | 0.3   |         | FAA          | 80YAM       | 01         |
| 1.6     | 0.4   |         | AA           | 78RIT       | 01         |
| 1.7     | 0.1   | D*      | DCP          | 81REE       | 01         |
| 1.7     | 0.1   |         | DCP          | 79REE       | 01         |
| 1.8     | 0.2   |         | ICPES        | 79ABE       | 01         |
| 2.      |       |         | NAA          | 77LAU       | 01         |
| 2.1     | 0.02  |         | ICPES        | 79HER       | 01         |
| 2.2     | 0.7   | *       | 14NAA        | 81WIL       | 01         |
| 2.6     | 1.    | *       | CPXRF        | 80KIR       | 01         |
| 2.9     | 1.    | *       | CPXRF        | 77CAM       | 01         |
| 4.      |       | *       | AE+AF        | 79ULL       | 01         |
| 4.      | 1.3   | *       | AA           | 79MON       | 01         |
| 4.3     |       | *16     | AA           | 79ABO       | 01         |
| P (ppm) |       |         |              |             |            |
| 1400.   |       | *       | OES          | 75JON       | 04         |
| 1500.   |       | *       | OES          | 75JON       | 05         |
| 1560.   |       | *       | ICPES        | 78CAP       | 01         |
| 1770.   | 90.   |         | ICPES        | 81OWE       | 01         |
| 1800.   | 100.  |         | COLOR        | 79MCQ       | 01         |
| 1800.   |       |         | OES          | 75JON       | 07         |
| 1800.   |       |         | OES          | 75JON       | 11         |
| 1900.   | 200.  | 6       | FAA          | 81LAN       | 01         |
| 1900.   | 40.   |         | ICPES        | 79MCQ       | 02         |
| 1900.   |       |         | OES          | 75JON       | 06         |
| 1900.   | 100.  |         | ICPES        | 79MCQ       | 01         |
| 1900.   |       |         | OES          | 75JON       | 10         |
| 1920.   | 1000. |         | EXRF         | 77NIE       | 01         |
| 1930.   |       |         | COLOR        | 77HAM       | 04         |
| 1970.   | 70.   | 11      | ICPES        | 82JON       | 01         |
| 1980.   | 40.   | 11      | ICPES        | 82JON       | 01         |
| 2000.   | 100.  | 6       | FAA          | 81LAN       | 01         |
| 2000.   | 400.  |         | CPXRF        | 80KIR       | 01         |
| 2000.   |       |         | COLOR        | 79HIL       | 01         |
| 2000.   | 100.  | 6       | FAA          | 81LAN       | 01         |
| 2000.   |       |         | CPAA         | 80HAN       | 01         |
| 2000.   |       |         | ICPES        | 79EDI       | 01         |
| 2000.   | 100.  |         | 14NAA        | 81WIL       | 01         |
| 2000.   | 500.  |         | ICPES        | 79ABE       | 01         |
| 2000.   | 200.  |         | 14NAA        | 81WIL       | 02         |
| 2060.   | 40.   | 11      | ICPES        | 82JON       | 01         |
| 2070.   | 70.   | 7       | NM           | 81SHI       | 01         |
| 2070.   | 100.  |         | IENA         | 79JON       | 01         |
| 2090.   | 60.   | 11      | ICPES        | 82JON       | 01         |
| 2096.7  | 70.14 |         | NAA          | 76GUZ       | 01         |
| 2100.   | 80.   | 12      | FAA          | 78EDI       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 2100.    | 130.  | 7       | NM           | 81SHI       | 01         |
| 2100.    |       |         | OES          | 75JON       | 02         |
| 2100.    | 100.  |         | 14NAA        | 80FAA       | 01         |
| 2100.    |       |         | FAA          | 79EDI       | 01         |
| 2100.    |       |         | OES          | 75JON       | 09         |
| 2110.    | 110.  | 7       | NM           | 81SHI       | 01         |
| 2130.    | 20.   |         | ICPES        | 79HER       | 01         |
| 2160.    | 50.   | 12      | FAA          | 78EDI       | 01         |
| 2190.    | 110.  | 7       | NM           | 81SHI       | 01         |
| 2300.    |       |         | OES          | 75JON       | 08         |
| 2380.    | 180.  |         | EXRF         | 75REU       | 01         |
| 2400.    |       |         | OES          | 75JON       | 03         |
| 2500.    | 400.  | *       | 14NAA        | 77SEG       | 01         |
| 3100.    |       | *       | OES          | 75JON       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 15.      | 5.1   | *       | CPXRF        | 80KIR       | 01         |
| 17.6     |       | *       | SSMS         | 81VER       | 02         |
| 26.      |       | *       | AA           | 76FUK       | 01         |
| 28.5     | 3.6   | *       | FAA          | 77FUJ       | 01         |
| 31.      | 2.    | *       | ICPES        | 81NAD       | 01         |
| 37.      |       |         | AA           | 73LOO       | 03         |
| 38.      | 3.    |         | FAA          | 77LOR       | 01         |
| 40.      | 2.    |         | EXRF         | 73SPA       | 01         |
| 40.      | 4.    |         | PAA          | 78HIS       | 01         |
| 40.7     | 3.    |         | EXRF         | 79GIA       | 01         |
| 41.      |       |         | ICPES        | 78DAH       | 01         |
| 41.      | 2.    |         | AA           | 83GLA       | 01         |
| 41.      | 1.    |         | ICPES        | 79HER       | 01         |
| 42.      | 1.7   |         | AA           | 80AGE       | 01         |
| 42.      |       |         | FAA          | 82HOE       | 01         |
| 42.      | 4.    |         | ITNA         | 77GUI       | 02         |
| 42.      | 4.    |         | NAA          | 76MIL       | 02         |
| 42.      | 1.    |         | ICPES        | 79MCQ       | 02         |
| 42.      | 9.    |         | 14NAA        | 81WIL       | 02         |
| 42.      |       |         | FAA          | 78URE       | 02         |
| 42.      | 3.    |         | ICPES        | 79MCQ       | 01         |
| 42.2     |       | 11      | FAA          | 79HOE       | 02         |
| 42.9     |       | 11      | FAA          | 79HOE       | 02         |
| 43.      |       |         | FAA          | 80PRE       | 01         |
| 43.      |       |         | SSMS         | 74LUT       | 01         |
| 43.2     | 5.1   |         | FAA          | 82JEN       | 02         |
| 43.3     |       |         | AA           | 76KRI       | 03         |
| 43.4     |       | 6       | POL          | 72SIN       | 01         |
| 43.7     | 0.9   |         | HAA          | 76VIJ       | 01         |
| 44.      | 2.    |         | NAA          | 77JER       | 01         |
| 44.      | 4.    |         | FAA          | 81KNA       | 01         |
| 44.      |       |         | FAA          | 79HEI       | 03         |
| 44.      | 2.    |         | FAA          | 80LEG       | 01         |
| 44.      | 2.3   | 6       | POL          | 72SIN       | 01         |
| 44.      | 2.    | 11      | ICPES        | 82JON       | 01         |
| 44.      | 2.    |         | AA           | 75ABU       | 01         |
| 44.      |       |         | FAA          | 73SEG       | 01         |
| 44.2     | 2.1   |         | PAA          | 74CHA       | 01         |
| 44.3     |       |         | FAA          | 79YAS       | 01         |
| 44.5     | 1.7   |         | POL          | 74MAI       | 01         |
| 44.5     | 6.2   |         | XRF          | 77SMI       | 04         |
| 44.6     | 1.7   |         | POL          | 72MAI       | 01         |
| 44.6     | 1.7   |         | POL          | 77MAI       | 01         |
| 44.67    | 1.53  |         | ASV          | 77KON       | 01         |
| 44.9     | 1.    |         | ASV          | 82SAT       | 02         |
| 44.9     |       |         | ICPES        | 78CAP       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 45.      |       | 6       | FAA          | 81JAC       | 01         |
| 45.      | 3.6   |         | AA           | 79MON       | 01         |
| 45.      | 2.    |         | PAA          | 74LUT       | 01         |
| 45.      | 0.5   |         | AA           | 73TAL       | 01         |
| 45.      |       |         | POL          | 74LUT       | 01         |
| 45.3     | 1.13  |         | FAA          | 82VAN       | 01         |
| 45.3     | 0.7   |         | FAA          | 79DAR       | 02         |
| 45.3     |       |         | CPXRF        | 75CAM       | 01         |
| 45.4     | 2.    |         | EXRF         | 73GIA       | 01         |
| 45.5     | 1.    |         | RTNA         | 72GIB       | 01         |
| 45.9     | 0.14  |         | FAA          | 79STO       | 01         |
| 46.      | 1.    | 11      | ICPES        | 82JON       | 01         |
| 46.      | 2.    |         | AA           | 80SCH       | 05         |
| 46.      | 2.    |         | FAA          | 79KRA       | 01         |
| 46.      | 2.    |         | AA           | 77YAN       | 01         |
| 46.      |       |         | FAA          | 82PRE       | 01         |
| 46.      | 52.   | R*      | AA           | 75MAN       | 01         |
| 46.4     |       |         | AA           | 74BOP       | 01         |
| 46.5     |       | 16      | AA           | 79ABO       | 01         |
| 46.8     | 5.6   |         | HAA          | 82WEI       | 01         |
| 47.      |       |         | ICPES        | 81WEI       | 01         |
| 47.      |       |         | AA           | 79HIL       | 01         |
| 47.      |       | 6       | FAA          | 81JAC       | 01         |
| 47.      | 2.5   |         | ASV          | 79BRI       | 02         |
| 47.      | 5.    |         | ASV          | 81DOG       | 01         |
| 47.      | 6.    |         | EXRF         | 79KUE       | 01         |
| 47.      | 4.    |         | ICPES        | 79ABE       | 01         |
| 47.1     | 4.7   |         | XRF          | 74REU       | 01         |
| 47.3     | 5.6   |         | FAA          | 82WEI       | 01         |
| 48.      | 5.    |         | AA           | 78RIT       | 01         |
| 48.      | 5.    |         | AA           | 82RIT       | 01         |
| 48.6     | 3.8   |         | EXRF         | 75REU       | 01         |
| 49.      | 2.    |         | PAA          | 80SEG       | 01         |
| 49.      |       |         | DCP          | 78NAK       | 01         |
| 49.      | 5.    |         | EXRF         | 77NIE       | 01         |
| 49.3     |       | 16      | AA           | 79ABO       | 01         |
| 49.3     | 1.5   |         | PAA          | 80YAM       | 01         |
| 50.      | 11.   |         | AA           | 79MCQ       | 01         |
| 50.      | 5.    |         | EXRF         | 77FLO       | 01         |
| 50.      |       |         | FAA          | 74BRA       | 03         |
| 50.      |       |         | AE+AF        | 79ULL       | 01         |
| 50.      |       |         | AA           | 76FUK       | 01         |
| 51.      | 3.    |         | EXRF         | 80DYC       | 01         |
| 52.6     |       |         | FAA          | 78CAP       | 01         |
| 54.      | 10.   | *       | CPXRF        | 77CAM       | 01         |
| 57.      | 12.   | *       | 14NAA        | 81WIL       | 01         |
| 57.      | 17.   | *       | CPAA         | 77ZIK       | 01         |
| 85.      |       | *       | OES          | 75BOL       | 02         |
| 115.     |       | *       | EXRF         | 81PAR       | 01         |
| Pd (ppb) |       |         |              |             |            |
|          | 1.    | L*      | RTNA         | 81BYR       | 01         |
| Pr (ppb) |       |         |              |             |            |
| 60.      |       |         | SSMS         | 78URE       | 01         |
| 110.     |       |         | RTNA         | 80SLO       | 01         |
| 230.     |       | D*      | RTNA         | 82LAU       | 01         |
| 230.     |       |         | RTNA         | 77LAU       | 02         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Pt (ppb) |       |         |              |             |            |
| 89.2     | 15.4  |         | RTNA         | 77NAD       | 01         |
| 1200.    | 300.  |         | RTNA         | 74CAR       | 03         |
| Rb (ppm) |       |         |              |             |            |
|          | 15.5  | L*      | ITNA         | 80TOU       | 01         |
| 5.       | 2.    | *       | EXRF         | 77FLO       | 01         |
| 9.8      | 1.3   |         | XRF          | 77SMI       | 04         |
| 10.      | 1.    |         | EXRF         | 79KUE       | 01         |
| 10.      | 1.5   |         | CPXRF        | 80KIR       | 01         |
| 10.      | 1.    |         | 14NAA        | 81WIL       | 02         |
| 10.      |       |         | NAA          | 77LAU       | 01         |
| 10.      | 0.9   |         | ITNA         | 79AHM       | 01         |
| 10.      |       |         | ITNA         | 80CRE       | 01         |
| 10.3     |       | 1       | IENA         | 79KUC       | 01         |
| 10.3     | 0.7   |         | ITNA         | 75RIC       | 01         |
| 10.3     | 0.6   |         | ITNA         | 74RAN       | 02         |
| 10.5     |       |         | ITNA         | 78CAP       | 01         |
| 10.5     |       |         | ITNA         | 79KUC       | 01         |
| 10.6     |       | 1       | IENA         | 79KUC       | 01         |
| 10.8     | 0.4   |         | ITNA         | 79SAT       | 01         |
| 10.95    | 0.08  |         | ITNA         | 81KOS       | 01         |
| 11.      | 2.    |         | RTNA         | 77MEL       | 01         |
| 11.      | 16.   | R*      | AA           | 75MAN       | 01         |
| 11.      | 0.8   |         | EXRF         | 73GIA       | 01         |
| 11.      | 1.    |         | EXRF         | 80DYC       | 01         |
| 11.      | 1.    |         | ITNA         | 78LAU       | 02         |
| 11.      |       |         | RTNA         | 72MOR       | 03         |
| 11.      | 1.    |         | ITNA         | 77ZIK       | 01         |
| 11.      | 2.    |         | CPXRF        | 77CAM       | 01         |
| 11.2     | 0.4   |         | EXRF         | 73SPA       | 01         |
| 11.2     | 0.3   |         | IENA         | 81KOS       | 01         |
| 11.2     | 1.5   |         | ITNA         | 81HAB       | 01         |
| 11.28    | 0.42  |         | NAA          | 76GUZ       | 01         |
| 11.3     | 2.9   | 5       | ITNA         | 80TOU       | 01         |
| 11.3     | 5.2   |         | EXRF         | 75REU       | 01         |
| 11.4     |       |         | EXRF         | 81BIS       | 01         |
| 11.5     | 0.6   |         | EXRF         | 79GIA       | 01         |
| 11.5     | 1.    |         | EXRF         | 77NTE       | 01         |
| 11.5     |       |         | XRF          | 78CAM       | 02         |
| 11.7     | 0.1   |         | ITNA         | 78GIL       | 01         |
| 11.8     | 1.2   | 35      | ITNA         | 81GLA       | 03         |
| 11.8     |       |         | ITNA         | 80SAT       | 01         |
| 11.9     | 0.8   |         | NAA          | 78CAN       | 01         |
| 12.      | 0.7   |         | ITNA         | 82COR       | 01         |
| 12.      | 1.5   |         | ITNA         | 77HAM       | 01         |
| 12.      |       |         | NAA          | 74BEL       | 01         |
| 12.      | 0.04  |         | ITNA         | 78FUR       | 01         |
| 12.      | 2.    |         | ITNA         | 76KUC       | 01         |
| 12.      | 1.1   | 6       | ITNA         | 74BEC       | 01         |
| 12.1     | 1.    | 9       | ITNA         | 78LAU       | 02         |
| 12.5     | 1.    |         | PAA          | 76KAT       | 04         |
| 12.5     | 0.6   |         | PAA          | 78HIS       | 01         |
| 12.8     | 0.6   |         | 14NAA        | 81WIL       | 01         |
| 13.      | 2.    |         | ITNA         | 81KUL       | 01         |
| 13.      | 1.    |         | PAA          | 76KAT       | 02         |
| 13.      | 3.5   |         | CPXRF        | 81ROB       | 02         |
| 13.      | 0.9   |         | VV           | 81NON       | 01         |
| 14.8     |       | *       | CPXRF        | 75CAM       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM |
|----------|-------|---------|-----------|----------|---------|
| 15.61    | 3.01  | *       | ITNA      | 79REN    | 03      |
| 19.9     |       | *       | SSMS      | 81VER    | 02      |
| 28.      |       | *       | EXRF      | 81PAR    | 01      |
| 30.      |       | *       | CPXRF     | 76ZEI    | 01      |
| 30.      |       | *       | CPAA      | 78MCG    | 01      |
| S (ppm)  |       |         |           |          |         |
| 1400.    | 600.  | *       | CPXRF     | 79REN    | 02      |
| 1660.    | 220.  |         | TCGS      | 79AND    | 01      |
| 1690.    | 5.    |         | TITR      | 80SMI    | 01      |
| 1700.    | 200.  |         | TCGS      | 79FAI    | 01      |
| 1860.    | 180.  |         | COLOR     | 82BAR    | 01      |
| 1950.    | 200.  |         | XRF       | 82BAR    | 01      |
| 2120.    | 50.   |         | EXRF      | 77NIE    | 01      |
| 2120.    |       |         | XRF       | 78CAM    | 02      |
| 2150.    | 380.  |         | EXRF      | 75REU    | 01      |
| 2150.    | 200.  |         | CB        | 77LAN    | 01      |
| 2200.    | 103.  |         | CPXRF     | 80KIR    | 01      |
| 2300.    | 200.  |         | TCGS      | 77JUR    | 01      |
| 2400.    |       |         | FE        | 79BOG    | 01      |
| 2400.    |       |         | TURB      | 79BOG    | 01      |
| 2700.    | 400.  |         | XRF       | 81NAD    | 01      |
| 7020.    | 2620. | *       | EXRF      | 77NIE    | 01      |
| Sb (ppm) |       |         |           |          |         |
|          | 99.   | L*      | ITNA      | 80TOU    | 01      |
| 1.1      | 0.2   | *       | ITNA      | 77ZIK    | 01      |
| 2.2      | 0.2   | *       | HAA       | 74LOO    | 01      |
| 2.3      | 0.3   | *H      | ICPES     | 79ROB    | 01      |
| 2.5      |       |         | ITNA      | 78CAP    | 01      |
| 2.5      | 3.6   | R*      | ITNA      | 79IMA    | 03      |
| 2.5      | 3.6   | R*      | ITNA      | 79IMA    | 01      |
| 2.55     |       | 11      | FAA       | 79HOE    | 02      |
| 2.55     |       | 11      | FAA       | 79HOE    | 02      |
| 2.57     | 0.19  |         | ITNA      | 79REN    | 03      |
| 2.62     |       | 6       | NAA       | 78GAN    | 01      |
| 2.7      | 0.4   |         | 14NAA     | 81WIL    | 02      |
| 2.7      |       |         | ITNA      | 80CRE    | 01      |
| 2.7      | 0.1   |         | ITNA      | 78LAU    | 02      |
| 2.7      |       |         | NAA       | 77LAU    | 01      |
| 2.7      |       | 1       | IENA      | 79KUC    | 01      |
| 2.7      | 0.4   | 6       | ITNA      | 74BEC    | 01      |
| 2.7      | 0.3   | 6       | ITNA      | 74BEC    | 01      |
| 2.7      | 0.2   |         | RTNA      | 74GOE    | 01      |
| 2.7      | 0.3   |         | ITNA      | 74RAN    | 02      |
| 2.72     | 0.2   |         | ITNA      | 82QUR    | 01      |
| 2.72     | 0.01  |         | ITNA      | 79AHM    | 01      |
| 2.77     | 0.02  | H       | ICPES     | 81PAH    | 01      |
| 2.8      | 0.1   |         | RTNA      | 78GAL    | 01      |
| 2.8      | 0.1   | H       | ICPES     | 82HAH    | 01      |
| 2.8      | 0.2   |         | ITNA      | 81KOS    | 01      |
| 2.8      |       |         | HAA       | 80HON    | 01      |
| 2.8      |       | 1       | IENA      | 79KUC    | 01      |
| 2.8      | 0.1   | 7       | RTNA      | 77GIL    | 03      |
| 2.8      |       | 11      | HAA       | 82KUE    | 03      |
| 2.8      |       |         | ITNA      | 79KUC    | 01      |
| 2.85     | 0.06  |         | RTNA      | 80SLO    | 01      |
| 2.86     | 0.08  |         | RTNA      | 78GIL    | 01      |
| 2.88     | 0.05  | 7       | RTNA      | 77GIL    | 03      |
| 2.9      | 0.1   |         | IENA      | 81KOS    | 01      |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM |
|----------|-------|---------|-----------|----------|---------|
| 2.9      | 0.2   |         | ITNA      | 78VAL    | 01      |
| 2.9      | 0.5   |         | RTNA      | 79REN    | 01      |
| 2.9      | 0.09  |         | RTNA      | 79HOE    | 01      |
| 2.92     | 0.08  | 7       | RTNA      | 77GIL    | 03      |
| 2.99     | 0.05  |         | HAA       | 76FIO    | 01      |
| 2.99     | 0.45  |         | RTNA      | 79ROS    | 02      |
| 3.       |       |         | RTNA      | 72MOR    | 03      |
| 3.       | 0.2   |         | FAA       | 80NAK    | 01      |
| 3.       |       | 11      | HAA       | 82KUE    | 03      |
| 3.       |       |         | RTNA      | 79BYR    | 01      |
| 3.02     | 0.26  |         | HAA       | 79VIJ    | 01      |
| 3.1      | 0.03  |         | VV        | 81NON    | 01      |
| 3.1      | 0.1   |         | ITNA      | 79SAT    | 01      |
| 3.1      | 0.7   |         | ITNA      | 77HAM    | 01      |
| 3.14     | 0.13  |         | RTNA      | 72BYR    | 01      |
| 3.15     | 0.26  |         | PAA       | 74CHA    | 01      |
| 3.16     | 0.26  |         | NAA       | 77JER    | 01      |
| 3.2      | 0.2   |         | GCMES     | 75TAL    | 01      |
| 3.25     | 0.3   |         | FAA       | 76KAT    | 04      |
| 3.3      | 0.3   |         | ITNA      | 81KUL    | 01      |
| 3.3      | 0.2   | 5       | ITNA      | 80TOU    | 01      |
| 3.3      |       | 11      | HAA       | 82KUE    | 03      |
| 3.3      | 0.6   |         | RTNA      | 77KUS    | 01      |
| 3.3      | 0.14  |         | ITNA      | 79KOB    | 03      |
| 3.3      | 0.2   |         | PAA       | 76KAT    | 02      |
| 3.5      | 0.2   | *       | FAA       | 78HIS    | 01      |
| 3.5      | 0.3   | *       | FAA       | 78HAY    | 01      |
| 3.78     | 0.02  | *       | ITNA      | 81HAB    | 01      |
| 3.8      | 0.6   | *6      | NAA       | 78GAN    | 01      |
| 3.8      | 0.2   | *       | RTNA      | 73TJI    | 01      |
| 5.1      | 1.1   | *       | 14NAA     | 81WIL    | 01      |
| Sc (ppb) |       |         |           |          |         |
|          | 2000. | L*      | 14NAA     | 81WIL    | 01      |
|          | 97.   | L*      | ITNA      | 80TOU    | 01      |
| 40.      | 3.    | 6       | ITNA      | 74BEC    | 01      |
| 40.      |       | 6       | NAA       | 78GAN    | 01      |
| 40.      | 10.   | 6       | NAA       | 78GAN    | 01      |
| 41.      | 4.    |         | VV        | 81NON    | 01      |
| 44.      | 3.    |         | ITNA      | 74RAN    | 02      |
| 52.      | 3.    |         | ITNA      | 79CHA    | 04      |
| 54.      | 4.    |         | RTNA      | 80SLO    | 01      |
| 57.      | 6.    |         | ITNA      | 81KOS    | 01      |
| 60.      | 1.    |         | ITNA      | 78LAU    | 02      |
| 62.      | 2.    |         | ITNA      | 79KOB    | 03      |
| 62.      |       |         | NAA       | 74BEL    | 01      |
| 63.      | 8.    |         | ITNA      | 76KUC    | 01      |
| 65.      |       |         | NAA       | 77LAU    | 01      |
| 65.      | 3.    |         | ITNA      | 75RIC    | 01      |
| 66.      | 6.    |         | ITNA      | 79SAT    | 01      |
| 67.      | 5.    |         | ITNA      | 81HAB    | 01      |
| 67.      |       |         | ITNA      | 78CAP    | 01      |
| 73.      |       |         | ITNA      | 80CRE    | 01      |
| 75.      | 5.    | 5       | ITNA      | 80TOU    | 01      |
| 80.      | 6.    |         | ITNA      | 79REN    | 03      |
| 80.      |       |         | ITNA      | 79KUC    | 01      |
| 90.      | 20.   |         | ITNA      | 81KUL    | 01      |
| 110.     |       | *       | SSMS      | 78URE    | 01      |
| 170.     | 50.   | *       | RTNA      | 77MEL    | 01      |
| 200.     |       | *       | RTNA      | 72MOR    | 03      |
| 220.     | 10.   | *       | PAA       | 74CHA    | 01      |

TABLE H (cont)

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TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 150.     | 20.   |         | VV           | 81NON       | 01         |
| 170.     | 30.   | *       | TCGS         | 79AND       | 01         |
| 320.     | 120.  | *       | ITNA         | 79REN       | 03         |
| Sn (ppb) |       |         |              |             |            |
|          | 1500. | L*      | ICPES        | 78CAP       | 01         |
| 180.     | 10.   | H       | ICPES        | 82HAH       | 01         |
| 284.     | 4.    | 5       | RTNA         | 74BYR       | 01         |
| 290.     | 25.   |         | RTNA         | 77BYR       | 01         |
| 304.     | 15.   | 5       | RTNA         | 74BYR       | 01         |
| 340.     | 90.   |         | ICPES        | 80HAA       | 01         |
| 375.     | 25.   |         | COLOR        | 82OMA       | 01         |
| 4100.    |       | *       | RTNA         | 72BOW       | 01         |
| Sr (ppm) |       |         |              |             |            |
| 14.5     | 2.5   | *       | FAA          | 77FUJ       | 01         |
| 18.1     |       | *       | SSMS         | 81VER       | 02         |
| 23.      |       | *       | OES          | 75JON       | 03         |
| 28.      | 0.6   |         | PAA          | 78HIS       | 01         |
| 28.      | 28.3  | R*      | AA           | 75MAN       | 01         |
| 31.      | 3.3   |         | CPXRF        | 80KIR       | 01         |
| 31.3     | 4.1   |         | XRF          | 77SMI       | 04         |
| 31.7     | 4.8   |         | 14NAA        | 77VAN       | 01         |
| 33.1     |       |         | EXRF         | 81BIS       | 01         |
| 34.      | 1.    |         | FAA          | 82SUZ       | 03         |
| 34.3     | 0.5   |         | EXRF         | 73SPA       | 01         |
| 35.      |       |         | NAA          | 77LAU       | 01         |
| 35.      | 3.    | 9       | ITNA         | 78LAU       | 02         |
| 35.      | 2.    |         | EXRF         | 80DYC       | 01         |
| 35.      |       |         | OES          | 75JON       | 04         |
| 35.      | 3.    |         | ICPES        | 79ABE       | 01         |
| 35.2     |       |         | ICPES        | 78DAH       | 01         |
| 36.      |       |         | CPAA         | 78MCG       | 01         |
| 36.      |       |         | CPXRF        | 76ZEI       | 01         |
| 36.      | 6.    |         | ITNA         | 78LAU       | 02         |
| 36.2     | 2.    |         | PAA          | 74CHA       | 01         |
| 36.3     | 1.3   |         | EXRF         | 79GIA       | 01         |
| 36.5     | 2.    |         | EXRF         | 77FLO       | 01         |
| 36.5     | 4.    |         | EXRF         | 75REU       | 01         |
| 36.5     | 0.3   |         | ICPES        | 79HER       | 01         |
| 36.5     | 1.    |         | PAA          | 76KAT       | 04         |
| 36.6     | 1.2   |         | EXRF         | 73GIA       | 01         |
| 37.      | 1.    |         | ICPES        | 79MCQ       | 02         |
| 37.      | 1.    |         | PAA          | 76KAT       | 02         |
| 37.      | 1.    |         | ITNA         | 79SAT       | 01         |
| 37.      | 2.    |         | ICPES        | 79MCQ       | 01         |
| 37.2     | 0.2   |         | IENA         | 81KOS       | 01         |
| 37.4     | 8.3   |         | CPXRF        | 81ROB       | 02         |
| 38.      | 5.    |         | NAA          | 78GAN       | 01         |
| 38.7     | 1.5   |         | ITNA         | 81KOS       | 01         |
| 39.      | 2.    |         | 14NAA        | 81WIL       | 02         |
| 40.      |       |         | RTNA         | 72MOR       | 03         |
| 41.      | 3.    |         | RTNA         | 77KUS       | 01         |
| 42.2     | 4.2   |         | XRF          | 74REU       | 01         |
| 44.2     | 2.85  |         | NAA          | 76GUZ       | 01         |
| 45.      | 15.   |         | CPAA         | 77ZIK       | 01         |
| 45.      |       |         | OES          | 75JON       | 01         |
| 45.      | 2.    |         | ITNA         | 74RAN       | 02         |
| 53.      | 4.    | *       | 14NAA        | 81WIL       | 01         |
| 118.     |       | *       | EXRF         | 81PAR       | 01         |

TABLE H (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| Ta (ppb) |        |         |              |             |            |
| 5.       |        |         | NAA          | 77LAU       | 01         |
| 7.       | 2.     |         | ITNA         | 78LAU       | 02         |
| 10.      |        |         | ITNA         | 80CRE       | 01         |
| 10.      | 3.     |         | ITNA         | 74RAN       | 02         |
| Tb (ppb) |        |         |              |             |            |
| 1.23     | 0.12   | *       | ITNA         | 77NAD       | 02         |
| 9.       | 1.     |         | RTNA         | 80SLO       | 01         |
| 12.      | 2.     |         | ITNA         | 78LAU       | 02         |
| 13.      |        |         | RTNA         | 77LAU       | 02         |
| 13.      |        | D*      | RTNA         | 82LAU       | 01         |
| 14.      |        |         | ITNA         | 80CRE       | 01         |
| 15.      |        |         | NAA          | 77LAU       | 01         |
| 18.      | 1.     |         | ITNA         | 74RAN       | 02         |
| 80.      |        | *       | SSMS         | 78URE       | 01         |
| Te (ppb) |        |         |              |             |            |
| 11.      | 3.     | 35      | RTNA         | 75GLA       | 01         |
| Th (ppb) |        |         |              |             |            |
|          | 1000.  | L*      | EXRF         | 79GIA       | 01         |
| 6.6      | 0.3    | *       | IENA         | 81KOS       | 01         |
| 6.8      | 0.4    | *       | ITNA         | 81KOS       | 01         |
| 44.      |        |         | ITNA         | 79KUC       | 01         |
| 44.      |        | 1       | IENA         | 79KUC       | 01         |
| 50.      | 10.    |         | RTNA         | 80SLO       | 01         |
| 52.      | 4.     |         | ITNA         | 78LAU       | 02         |
| 59.      | 13.    |         | ITNA         | 81KUL       | 01         |
| 59.      | 20.    |         | ITNA         | 74RAN       | 02         |
| 60.      |        |         | ITNA         | 80CRE       | 01         |
| 60.      |        |         | NAA          | 77LAU       | 01         |
| 69.      |        | 1       | IENA         | 79KUC       | 01         |
| 90.      | 50.    | *       | VV           | 81NON       | 01         |
| Tl (ppm) |        |         |              |             |            |
| 2.4      | 0.4    | *       | CPAA         | 77ZIK       | 01         |
| 6.6      | 0.5    | *       | ICPES        | 79ABE       | 01         |
| 7.6      |        | *       | ICPES        | 78CAP       | 01         |
| 14.2     |        |         | SSMS         | 81VER       | 02         |
| 17.2     | 0.3    |         | COLOR        | 82KIR       | 02         |
| 18.      | 8.5    |         | EXRF         | 79GIA       | 01         |
| 26.      | 3.     |         | 14NAA        | 81WIL       | 01         |
| 26.      |        |         | SSMS         | 78URE       | 01         |
| 30.      | 4.     |         | 14NAA        | 81WIL       | 02         |
| 40.      |        |         | ITNA         | 78LAU       | 02         |
| 60.      |        | *       | NAA          | 77LAU       | 01         |
| 96.      | 12.    | *       | PAA          | 78HIS       | 01         |
| 191.     | 33.    | *       | ITNA         | 81HAB       | 01         |
| Tl (ppb) |        |         |              |             |            |
|          | 20000. | L*      | ITNA         | 74RAN       | 02         |
| 74.      |        |         | FAA          | 82HEI       | 01         |
| 200.     | 40.    |         | PAA          | 80SEG       | 01         |
| 300.     | 100.   |         | PAA          | 78HIS       | 01         |

TABLE H (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Tm (ppb) |       |         |              |             |            |
|          | 10.   | L*      | RTNA         | 77LAU       | 02         |
|          | 10.   | D*      | RTNA         | 82LAU       | 01         |
| 3.72     | 0.23  |         | ITNA         | 77NAD       | 02         |
| 10.      |       |         | SSMS         | 78URE       | 01         |
| U (ppb)  |       |         |              |             |            |
|          | 20.   | L*      | RTNA         | 80SLO       | 01         |
|          | 2000. | L*      | EXRF         | 79GIA       | 01         |
| 18.      | 3.    | *       | IENA         | 79FAA       | 01         |
| 25.      | 5.    |         | PAA          | 80SEG       | 01         |
| 25.      | 4.    | 35      | RTNA         | 75GLA       | 01         |
| 25.2     | 1.    |         | RTNA         | 78DER       | 01         |
| 26.      | 3.    |         | RTNA         | 72BEC       | 03         |
| 27.      | 8.    |         | ITNA         | 81KUL       | 01         |
| 28.      | 3.    | 5       | RTNA         | 80AUG       | 01         |
| 28.      | 2.    |         | NT           | 72BEC       | 03         |
| 28.      | 3.    |         | IENA         | 81KOS       | 01         |
| 29.      | 3.    | 5       | RTNA         | 80AUG       | 01         |
| 30.      | 1.    |         | IDMS         | 72BEC       | 03         |
| 30.      | 4.    | 13      | PAA          | 81SEG       | 01         |
| 30.      |       | 35      | DNA          | 81GLA       | 04         |
| 30.      | 6.    | 13      | PAA          | 81SEG       | 01         |
| 30.6     | 0.6   | 35      | DNA          | 80GLA       | 04         |
| 32.      | 9.    |         | ITNA         | 74WEA       | 01         |
| 32.      | 5.    |         | ITNA         | 81KOS       | 01         |
| 33.      | 2.    |         | DNA          | 83GLA       | 01         |
| 56.      | 9.    | *35     | DNA          | 81GLA       | 03         |
| V (ppb)  |       |         |              |             |            |
|          | 1000. | L*      | NAA          | 77LAU       | 01         |
|          | 8000. | L*      | EXRF         | 79GIA       | 01         |
|          | 600.  | L*      | RTNA         | 72MOR       | 03         |
|          | 500.  | L*      | ITNA         | 74RAN       | 02         |
| 140.     | 30.   | 6*      | ITNA         | 74HOF       | 01         |
| 340.     | 20.   | 11      | RTNA         | 72LEV       | 01         |
| 361.     | 90.   |         | UU           | 75WEL       | 02         |
| 370.     | 11.   |         | FAA          | 77MYR       | 01         |
| 377.     | 10.   |         | RTNA         | 80HEY       | 01         |
| 390.     | 980.  | R*      | ITNA         | 79IMA       | 01         |
| 390.     | 980.  | R*      | ITNA         | 79IMA       | 03         |
| 400.     | 100.  |         | ITNA         | 77ZIK       | 01         |
| 401.     | 16.   |         | RTNA         | 81COR       | 02         |
| 401.     | 16.   |         | RTNA         | 79COR       | 01         |
| 408.     | 16.   |         | RTNA         | 80HEY       | 01         |
| 409.     | 41.   |         | RTNA         | 72DAM       | 01         |
| 410.     | 15.   |         | RTNA         | 80HEY       | 01         |
| 435.     | 20.   |         | RTNA         | 80HEY       | 01         |
| 440.     | 40.   |         | RTNA         | 79BLO       | 01         |
| 471.     | 14.   | 11      | RTNA         | 78BYR       | 01         |
| 480.     | 28.   |         | COLOR        | 82KIR       | 01         |
| 500.     | 150.  |         | RTNA         | 77GUI       | 03         |
| 530.     | 50.   | 11      | ICPES        | 82JON       | 01         |
| 535.     |       |         | NAA          | 80KOS       | 02         |
| 535.     | 30.   | 11      | RTNA         | 78BYR       | 01         |
| 540.     | 20.   | 11      | ICPES        | 82JON       | 01         |
| 570.     | 110.  |         | ITNA         | 81HAB       | 01         |
| 570.     | 140.  | 6       | ITNA         | 74HOF       | 01         |
| 580.     | 130.  |         | ITNA         | 77HAM       | 01         |

TABLE H (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| 580.     | 70.    |         | ITNA         | 75RIC       | 01         |
| 580.     |        |         | ITNA         | 76BAT       | 01         |
| 598.     | 32.    |         | ITNA         | 80HEY       | 01         |
| 600.     | 20.    |         | RTNA         | 79BLO       | 01         |
| 600.     | 200.   |         | ITNA         | 78LAU       | 02         |
| 610.     | 23.    |         | ITNA         | 73PIE       | 01         |
| 622.     | 23.    | 11      | RTNA         | 72LEV       | 01         |
| 643.     | 129.   |         | RTNA         | 76GUI       | 01         |
| 700.     | 100.   |         | ITNA         | 79KOB       | 03         |
| 750.     | 110.   |         | VV           | 81NON       | 01         |
| 800.     |        | *       | ITNA         | 78CAP       | 01         |
| 900.     | 20.    | *       | ITNA         | 76GAL       | 01         |
| 2200.    | 100.   | *       | ICPES        | 79ABE       | 01         |
| 300.     |        | 35      | ITNA         | 81GLA       | 03         |
| 640.     | 310.   |         | UU           | 75GUI       | 01         |
| W (ppb)  |        |         |              |             |            |
|          | 2000.  | L*      | RTNA         | 72MOR       | 03         |
| 16.      | 4.     |         | RTNA         | 80SLO       | 01         |
| 20.      | 7.     |         | RTNA         | 77KUS       | 01         |
| Y (ppb)  |        |         |              |             |            |
|          | 1100.  | L*      | 14NAA        | 81WIL       | 02         |
|          | 1100.  | L*      | 14NAA        | 81WIL       | 01         |
|          | 1000.  | L*      | EXRF         | 79GIA       | 01         |
| 480.     |        |         | SSMS         | 78URE       | 01         |
| Yb (ppb) |        |         |              |             |            |
|          | 50.    | L*      | ITNA         | 78LAU       | 02         |
| 11.      |        |         | RTNA         | 80SLO       | 01         |
| 20.      |        |         | SSMS         | 78URE       | 01         |
| 21.      | 1.     |         | ITNA         | 77NAD       | 02         |
| 25.      |        | D*      | RTNA         | 82LAU       | 01         |
| 25.      |        |         | RTNA         | 77LAU       | 02         |
| 29.      | 3.     |         | ITNA         | 81KOS       | 01         |
| 31.      | 1.     |         | IENA         | 81KOS       | 01         |
| 40.      |        |         | NAA          | 77LAU       | 01         |
| Zn (ppm) |        |         |              |             |            |
|          | 40.    | L*      | 14NAA        | 81WIL       | 02         |
|          | 110.   | L*      | 14NAA        | 81WIL       | 01         |
|          | 10000. | L*      | ITNA         | 80TOU       | 01         |
| 12.      |        | *       | EXRF         | 82KEE       | 01         |
| 13.      |        | *       | OES          | 75BOL       | 02         |
| 15.      | 3.     | *       | CPXRF        | 77CAM       | 01         |
| 17.      |        | *       | AA           | 76KRI       | 03         |
| 17.1     | 2.     | *       | EXRF         | 77FLO       | 01         |
| 18.      |        | *       | OES          | 75JON       | 09         |
| 19.      | 4.     |         | ICPES        | 79HER       | 01         |
| 20.      | 3.     |         | ITNA         | 81KUL       | 01         |
| 20.      | 6.     |         | CPAA         | 77ZIK       | 01         |
| 21.      | 1.     |         | ICPES        | 79ABE       | 01         |
| 21.      | 2.     |         | ITNA         | 75RIC       | 01         |
| 21.7     | 2.8    |         | ITNA         | 81HAB       | 01         |
| 22.      | 3.1    |         | CPXRF        | 80KIR       | 01         |
| 22.      |        |         | ITNA         | 79KUC       | 01         |
| 22.      | 1.     |         | EXRF         | 80DYC       | 01         |
| 22.5     | 0.8    |         | AA           | 76GAL       | 01         |

TABLE H (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 23.   |       |         | AA           | 73LOO       | 03         |
| 23.   |       |         | EXRF         | 81BIS       | 01         |
| 23.   |       |         | OES          | 75JON       | 02         |
| 23.   | 1.    |         | RTNA         | 77MEL       | 01         |
| 23.   | 2.1   |         | XRF          | 78LIN       | 01         |
| 23.   |       |         | ITNA         | 78CAP       | 01         |
| 23.   | 1.    |         | RTNA         | 76MEL       | 03         |
| 23.   |       |         | AE+AF        | 79ULL       | 01         |
| 23.1  |       |         | ICPES        | 78CAP       | 01         |
| 23.3  | 2.7   |         | RTNA         | 74RAV       | 01         |
| 23.5  | 0.9   | 11      | ICPES        | 82JON       | 01         |
| 23.5  | 1.8   |         | AA           | 73THO       | 01         |
| 23.7  | 0.8   |         | EXRF         | 73GIA       | 01         |
| 23.75 |       |         | ITNA         | 82AKA       | 01         |
| 23.9  | 3.2   |         | PAA          | 80YAM       | 01         |
| 24.   | 0.4   |         | VV           | 81NON       | 01         |
| 24.   | 1.    |         | AA           | 83GLA       | 01         |
| 24.   |       | 1       | AA           | 77FRY       | 01         |
| 24.   |       |         | FAA          | 73SEG       | 01         |
| 24.   | 28.   | R*      | AA           | 75MAN       | 01         |
| 24.   | 2.    | 11      | AA           | 78GAI       | 01         |
| 24.   | 1.    |         | RTNA         | 74ORV       | 01         |
| 24.   |       |         | AA           | 81ARA       | 01         |
| 24.   | 1.    | 11      | AA           | 78GAI       | 01         |
| 24.   | 3.    |         | AA           | 77YAN       | 01         |
| 24.2  | 1.5   |         | PAA          | 74CHA       | 01         |
| 24.2  | 1.5   |         | NAA          | 77JER       | 01         |
| 24.3  | 0.3   | 11      | ICPES        | 82JON       | 01         |
| 24.5  | 0.6   |         | RTNA         | 80SLO       | 01         |
| 24.5  | 3.    |         | EXRF         | 77NIE       | 01         |
| 24.5  |       |         | XRF          | 78CAM       | 02         |
| 24.6  | 0.9   |         | SSMS         | 72MAG       | 01         |
| 24.6  |       |         | RTNA         | 79BYR       | 01         |
| 24.7  | 2.2   | 6       | EXRF         | 79MAT       | 01         |
| 24.8  | 1.1   |         | ITNA         | 78GIL       | 01         |
| 24.8  | 1.9   |         | ITNA         | 79SAT       | 01         |
| 25.   |       |         | ICPES        | 81WEI       | 01         |
| 25.   |       |         | ITNA         | 80CRE       | 01         |
| 25.   | 1.    | 11      | ICPES        | 82JON       | 01         |
| 25.   |       |         | RTNA         | 72MOR       | 03         |
| 25.   |       |         | ITNA         | 80SAT       | 01         |
| 25.   |       |         | OES          | 75JON       | 03         |
| 25.   | 3.    |         | FAA          | 82JEN       | 02         |
| 25.   | 1.6   |         | EXRF         | 73SPA       | 01         |
| 25.   | 1.    | 11      | ICPES        | 82JON       | 01         |
| 25.   | 3.    |         | ITNA         | 78LAU       | 02         |
| 25.   | 2.    | 9       | ITNA         | 78LAU       | 02         |
| 25.   | 1.    |         | AA           | 78RIT       | 01         |
| 25.07 | 0.76  |         | NAA          | 76GUZ       | 01         |
| 25.1  | 0.7   |         | AF           | 75EPS       | 01         |
| 25.1  | 0.8   |         | AA           | 75EPS       | 01         |
| 25.3  |       |         | SSMS         | 81VER       | 02         |
| 25.3  | 0.5   |         | AA           | 80AGE       | 01         |
| 25.3  | 2.5   | 6       | EXRF         | 79MAT       | 01         |
| 25.3  | 2.1   |         | EXRF         | 79GIA       | 01         |
| 25.5  | 1.1   | 6       | ITNA         | 74BEC       | 01         |
| 25.5  |       | 11      | AA           | 79HOE       | 02         |
| 25.6  | 3.4   |         | EXRF         | 75REU       | 01         |
| 25.6  | 7.64  |         | AA           | 79MON       | 01         |
| 25.9  |       |         | FAA          | 78CAP       | 01         |
| 26.   | 1.    | 11      | ICPES        | 82JON       | 01         |
| 26.   | 3.4   |         | ITNA         | 77HAM       | 01         |

TABLE H (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 26.   | 2.1   |         | AA           | 78LIN       | 01         |
| 26.   | 3.    |         | ICPES        | 80SCH       | 05         |
| 26.   | 1.    |         | ICPES        | 79MCQ       | 01         |
| 26.   | 1.    | 11      | ICPES        | 82JON       | 01         |
| 26.   | 5.    |         | AA           | 75ABU       | 01         |
| 26.   | 1.    |         | ICPES        | 79MCQ       | 02         |
| 26.   | 2.    | 11      | ICPES        | 82JON       | 01         |
| 26.   |       |         | NAA          | 74BEL       | 01         |
| 26.   | 3.    |         | EXRF         | 79KUE       | 01         |
| 26.   | 4.    |         | ITNA         | 76KUC       | 01         |
| 26.   |       |         | OES          | 75JON       | 11         |
| 26.   | 3.    |         | RTNA         | 74CAR       | 03         |
| 26.   |       |         | OES          | 75JON       | 05         |
| 26.   |       |         | OES          | 75JON       | 10         |
| 26.   | 1.3   | 11      | AA           | 75ISA       | 01         |
| 26.1  | 2.2   |         | ITNA         | 82COR       | 01         |
| 26.7  | 4.6   | 6       | ITNA         | 74BEC       | 01         |
| 26.8  | 1.2   |         | ITNA         | 81KOS       | 01         |
| 26.9  | 1.2   |         | RTNA         | 73TJI       | 01         |
| 27.   | 7.    |         | ITNA         | 77ZIK       | 01         |
| 27.   |       |         | AA           | 79HIL       | 01         |
| 27.   | 2.    |         | RTNA         | 77KUS       | 01         |
| 27.   | 1.    | 11      | ICPES        | 82JON       | 01         |
| 27.   |       |         | ICPES        | 78DAH       | 01         |
| 27.   | 4.    |         | PAA          | 76KAT       | 04         |
| 27.   |       |         | NAA          | 77LAU       | 01         |
| 27.   |       |         | OES          | 75JON       | 06         |
| 27.   |       | 1       | AA           | 77FRY       | 01         |
| 27.   | 2.    |         | RTNA         | 74GOE       | 01         |
| 27.   | 3.    |         | PAA          | 76KAT       | 02         |
| 27.   | 2.    |         | FAA          | 74TAL       | 01         |
| 27.   | 2.    | 7       | AA           | 73TAL       | 01         |
| 27.2  | 2.4   |         | ITNA         | 74RAN       | 02         |
| 27.3  | 2.1   |         | ITNA         | 82QUR       | 01         |
| 27.3  | 2.1   |         | ITNA         | 79AHM       | 01         |
| 27.4  | 2.7   |         | XRF          | 74REU       | 01         |
| 27.5  |       | 11      | AA           | 79HOE       | 02         |
| 27.6  | 1.3   |         | CPXRF        | 81ROB       | 02         |
| 28.   | 5.    |         | FAA          | 77LOR       | 01         |
| 28.   | 3.    |         | FAE          | 74TAL       | 01         |
| 28.   | 1.    | D*      | DCP          | 81REE       | 01         |
| 28.   | 1.    |         | DCP          | 79REE       | 01         |
| 28.   | 3.    | 7       | AE+AF        | 73TAL       | 01         |
| 28.   |       |         | OES          | 75ISA       | 01         |
| 28.1  |       |         | CPXRF        | 75CAM       | 01         |
| 28.3  | 2.6   | 6       | POL          | 72SIN       | 01         |
| 28.3  | 0.8   |         | ITNA         | 79KOB       | 03         |
| 28.5  | 0.8   |         | ICPES        | 81KNA       | 01         |
| 29.   | 5.    |         | NAA          | 78GAN       | 01         |
| 29.   | 2.    |         | ITNA         | 74GUI       | 01         |
| 29.   | 32.   | R*      | ITNA         | 79IMA       | 01         |
| 29.   | 0.87  | 11      | AA           | 75ISA       | 01         |
| 29.   | 32.   | R*      | ITNA         | 79IMA       | 03         |
| 29.   | 1.    |         | FAA          | 79KRA       | 01         |
| 29.3  | 2.5   |         | PAA          | 76WIL       | 01         |
| 29.5  |       | 6       | AA           | 72SIN       | 01         |
| 29.6  |       | 16      | AA           | 79ABO       | 01         |
| 29.6  |       | 16      | AA           | 79ABO       | 01         |
| 29.63 | 1.8   |         | ITNA         | 79REN       | 03         |
| 29.8  |       | 6       | POL          | 72SIN       | 01         |
| 30.   | 2.    | 5       | ITNA         | 80TOU       | 01         |
| 30.   | 2.    |         | AA           | 79MCQ       | 01         |

TABLE I

## NBS SRM 1572—COLLECTED DATA

| TABLE H (cont) |       |         |              |             |            | NBS SRM 1572—COLLECTED DATA |              |                |              |             |                      |
|----------------|-------|---------|--------------|-------------|------------|-----------------------------|--------------|----------------|--------------|-------------|----------------------|
| CONC           | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC                        | UNCER        | COMMENT        | ANAL<br>METH | REF<br>CODE | REF<br>NUM           |
| 30.            | 4.    |         | ITNA         | 78FUR       | 01         | Ca (%)                      | 3.07<br>3.14 | 0.005<br>0.005 | 11           | AA          | 75ISA 01<br>75ISA 01 |
| 30.            | 3.    |         | PAA          | 80SEG       | 01         |                             |              |                |              |             |                      |
| 30.5           | 1.2   |         | RTNA         | 76GAL       | 01         |                             |              |                |              |             |                      |
| 31.            |       |         | OES          | 75JON       | 04         | Cu (ppm)                    |              |                |              |             |                      |
| 32.            |       |         | OES          | 75JON       | 07         |                             |              |                |              |             |                      |
| 34.            | 3.    | *       | PAA          | 78HIS       | 01         |                             |              |                |              |             |                      |
| 35.6           | 11.4  | *       | XRF          | 77SMI       | 04         | 16.<br>17.                  | 0.56<br>0.14 | 11             | AA           |             | 75ISA 01<br>75ISA 01 |
| 38.            | 6.    | *       | FAA          | 77FUJ       | 01         |                             |              |                |              |             |                      |
| 41.            |       | *       | OES          | 75JON       | 08         | Fe (ppm)                    |              |                |              |             |                      |
| 45.            |       | *       | XRF          | 80SUZ       | 02         |                             |              |                |              |             |                      |
| 56.            |       | *       | CPAA         | 78MCG       | 01         |                             |              |                |              |             |                      |
| 56.            |       | *       | CPXRF        | 76ZEI       | 01         | 95.<br>96.                  | 7.6<br>8.6   | 11             | AA           |             | 75ISA 01<br>75ISA 01 |
| 77.            |       | *       | EXRF         | 81PAR       | 01         |                             |              |                |              |             |                      |
| 81.            |       | *       | OES          | 75JON       | 01         | K (ppm)                     |              |                |              |             |                      |
| Zr (ppm)       | 5.    | L*      | 14NAA        | 81WIL       | 01         |                             |              |                |              |             |                      |
|                | 3.    | L*      | EXRF         | 79GIA       | 01         |                             |              |                |              |             |                      |
|                | 1.3   | 0.3     |              | PAA         | 78HIS      | 01                          |              |                |              |             |                      |
|                | 1.6   | 0.2     | 9            | ITNA        | 78LAU      | 02                          |              |                |              |             |                      |
|                | 2.1   |         |              | NAA         | 77LAU      | 01                          |              |                |              |             |                      |
| 3.             | 1.    |         | 14NAA        | 81WIL       | 02         | 5600.<br>5700.              | 1.7<br>3.    | 11             | AA           |             | 75ISA 01<br>75ISA 01 |
| 3.8            |       |         | CPAA         | 77ZIK       | 01         |                             |              |                |              |             |                      |
| 210.           | 20.   | *       | PAA          | 74CHA       | 01         | Mn (ppm)                    |              |                |              |             |                      |
|                |       |         |              |             |            |                             |              |                |              |             |                      |
|                |       |         |              |             |            |                             |              |                |              |             |                      |
|                |       |         |              |             |            | 23.<br>25.                  | 0.12<br>0.5  | 11             | AA           |             | 75ISA 01<br>75ISA 01 |
|                |       |         |              |             |            |                             |              |                |              |             |                      |
|                |       |         |              |             |            | U (ppb)                     |              |                |              |             |                      |
|                |       |         |              |             |            |                             |              |                |              |             |                      |
|                |       |         |              |             |            | 41.                         |              |                | DNA          |             | 83GLA 01             |
|                |       |         |              |             |            | Zn (ppm)                    |              |                |              |             |                      |
|                |       |         |              |             |            |                             |              |                |              |             |                      |
|                |       |         |              |             |            | 30.                         | 1.5          | 11             | AA           |             | 75ISA 01             |
|                |       |         |              |             |            | 31.                         | 0.62         | 11             | AA           |             | 75ISA 01             |

TABLE J

NBS SRM 1573—COLLECTED DATA

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Ag (ppb)</b> |       |         |              |             |            |
| 180.            | 50.   |         | RTNA         | 80SLO 01    |            |
| <b>Al (ppm)</b> |       |         |              |             |            |
| 182.            |       |         | OES          | 75JON 02    |            |
| 228.            |       |         | OES          | 75JON 11    |            |
| 280.            |       |         | OES          | 75JON 07    |            |
| 286.            |       |         | OES          | 75JON 08    |            |
| 296.            |       |         | OES          | 75JON 06    |            |
| 356.            |       |         | OES          | 75JON 03    |            |
| 382.            |       |         | OES          | 75JON 04    |            |
| 391.            |       |         | OES          | 75JON 09    |            |
| 495.            |       |         | OES          | 75JON 05    |            |
| 835.            |       |         | OES          | 75JON 01    |            |
| 1170.           | 60.   | 11      | ICPES        | 82JON 01    |            |
| 1225.           | 239.  |         | ITNA         | 77NAD 02    |            |
| 1280.           |       |         | ITNA         | 82GLA 02    |            |
| 1300.           | 80.   |         | ITNA         | 80SLO 01    |            |
| <b>As (ppb)</b> |       |         |              |             |            |
| 118.            | 10.   | 7*      | FAA          | 82HOE 02    |            |
| 170.            | 10.   | 7*      | FAA          | 82HOE 02    |            |
| 200.            | 40.   |         | RTNA         | 80SLO 01    |            |
| 225.            | 3.    |         | RTNA         | 79HOE 01    |            |
| 230.            | 30.   | 11      | HAA          | 81RAP 01    |            |
| 240.            |       |         | IENA         | 83GLA 01    |            |
| 245.            | 5.    | 7       | FAA          | 82HOE 02    |            |
| 250.            | 30.   | 11      | HAA          | 81RAP 01    |            |
| 250.            | 30.   |         | HAA          | 81KNA 01    |            |
| 260.            | 30.   |         | ITNA         | 77NAD 02    |            |
| 260.            | 80.   |         | HAA          | 81YAN 01    |            |
| 260.            | 30.   | 11      | HAA          | 81RAP 01    |            |
| 260.            |       |         | HAA          | 81ARA 01    |            |
| 270.            |       | H       | ICPES        | 81PIC 01    |            |
| 290.            | 10.   | 11      | HAA          | 82JON 01    |            |
| 290.            | 10.   |         | COLOR        | 77BUR 01    |            |
| 290.            | 20.   | 11      | HAA          | 82JON 01    |            |
| 300.            | 30.   |         | FAA          | 80DUP 01    |            |
| 310.            | 10.   |         | HAA          | 80TAM 01    |            |
| 330.            | 30.   | *       | IENA         | 82GLA 02    |            |
| <b>Au (ppb)</b> |       |         |              |             |            |
| 0.8             | 0.1   |         | RTNA         | 80SLO 01    |            |
| <b>B (ppm)</b>  |       |         |              |             |            |
| 25.5            | 1.1   |         | ICPES        | 79HER 01    |            |
| 26.             |       |         | OES          | 75JON 10    |            |
| 28.             |       |         | OES          | 75JON 02    |            |
| 29.             |       |         | OES          | 75JON 07    |            |
| 30.             |       |         | OES          | 75JON 04    |            |
| 32.             | 3.    | 35      | TCGS         | 81GLA 04    |            |
| 32.             |       |         | OES          | 75JON 06    |            |
| 32.             |       |         | OES          | 75JON 01    |            |
| 32.             |       |         | OES          | 75JON 03    |            |
| 35.             |       |         | OES          | 75JON 09    |            |
| 36.             | 3.    |         | TCGS         | 82GLA 02    |            |
| 37.             |       |         | OES          | 75JON 05    |            |

TABLE J (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| 37.             |       |         |              |             |            |
| 42.             |       | *       | OES          |             | 75JON 08   |
|                 |       |         | OES          |             | 75JON 11   |
| <b>Ba (ppm)</b> |       |         |              |             |            |
| 40.             |       |         | OES          |             | 75JON 03   |
| 47.             |       |         | OES          |             | 75JON 04   |
| 49.             |       |         | OES          |             | 75JON 11   |
| 56.5            | 11.24 |         | NAA          |             | 76GUZ 01   |
| 58.             |       |         | OES          |             | 75JON 05   |
| 59.             |       |         | OES          |             | 75JON 01   |
| 63.             | 5.    |         | ITNA         |             | 77NAD 02   |
| 69.             | 14.   |         | ITNA         |             | 79REN 03   |
| <b>Br (ppm)</b> |       |         |              |             |            |
| 19.             | 1.5   | 5       | ITNA         |             | 80HOE 01   |
| 19.8            | 0.6   | 5       | IENA         |             | 79GLA 02   |
| 20.1            | 1.2   | 5       | ITNA         |             | 80HOE 01   |
| 20.8            | 2.4   |         | ITNA         |             | 80SLO 01   |
| 21.             | 3.    |         | ITNA         |             | 79REN 03   |
| 21.             | 1.2   | 5       | IENA         |             | 79GLA 02   |
| 21.9            | 0.2   |         | ITNA         |             | 77NAD 02   |
| 25.31           | 1.    |         | ITNA         |             | 77STE 02   |
| 29.             | 2.    | *35     | NAA          |             | 81GLA 03   |
| 54.             |       | *       | EXRF         |             | 81PAR 01   |
| <b>C (%)</b>    |       |         |              |             |            |
| 37.67           | 0.45  |         | CB           |             | 82GLA 02   |
| 37.92           | 0.26  |         | CB           |             | 80SCH 02   |
| <b>Ca (%)</b>   |       |         |              |             |            |
| 2.22            | 0.08  |         | ITNA         |             | 80SLO 01   |
| 2.38            |       | *       | OES          |             | 75JON 04   |
| 2.4             | 0.07  |         | ITNA         |             | 79REN 03   |
| 2.42            |       |         | OES          |             | 75JON 07   |
| 2.43            |       |         | OES          |             | 75JON 03   |
| 2.55            |       |         | OES          |             | 75JON 02   |
| 2.62            |       |         | OES          |             | 75JON 08   |
| 2.64            |       |         | OES          |             | 75JON 10   |
| 2.65            | 0.07  | 6       | EXRF         |             | 79MAT 01   |
| 2.705           | 0.206 |         | NAA          |             | 76GUZ 01   |
| 2.75            | 0.005 | 11      | AA           |             | 75ISA 01   |
| 2.8             |       |         | OES          |             | 75JON 11   |
| 2.87            | 0.005 | 11      | AA           |             | 75ISA 01   |
| 2.91            |       |         | OES          |             | 75JON 05   |
| 2.92            | 0.08  | 6       | EXRF         |             | 79MAT 01   |
| 2.92            |       |         | OES          |             | 75JON 09   |
| 2.99            | 0.05  | 11      | ICPES        |             | 82JON 01   |
| 3.04            | 0.05  | 11      | ICPES        |             | 82JON 01   |
| 3.08            | 0.05  | 11      | ICPES        |             | 82JON 01   |
| 3.1             |       |         | ITNA         |             | 82GLA 02   |
| 3.1             | 0.03  | 11      | ICPES        |             | 82JON 01   |
| 3.19            |       |         | OES          |             | 75JON 06   |
| 3.28            |       |         | OES          |             | 75JON 01   |
| 3.41            | 0.09  |         | ICPES        |             | 79HER 01   |
| 3.49            | 0.12  | *       | ITNA         |             | 77NAD 02   |
| 5.82            |       | *       | EXRF         |             | 81PAR 01   |

TABLE J (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cd (ppm) |       |         |              |             |            |
| 1.6      |       | *11     | FAA          | 80PRE       | 01         |
| 2.1      |       | 6       | POL          | 72SIN       | 01         |
| 2.2      |       | 11      | FAA          | 80PRE       | 01         |
| 2.3      | 0.1   |         | FAA          | 80LEG       | 01         |
| 2.3      |       | 11      | FAA          | 80PRE       | 01         |
| 2.3      |       | 11      | FAA          | 80PRE       | 01         |
| 2.3      |       | 11      | FAA          | 80PRE       | 01         |
| 2.3      |       |         | FAA          | 80PRE       | 01         |
| 2.4      | 0.01  | 11      | ICPES        | 82JON       | 01         |
| 2.4      | 0.22  | 6       | POL          | 72SIN       | 01         |
| 2.5      |       |         | FAA          | 82PRE       | 01         |
| 2.5      |       |         | ASV          | 82GAJ       | 01         |
| 2.55     | 0.09  | 11      | ICPES        | 82JON       | 01         |
| 2.56     | 0.06  | 11      | ICPES        | 82JON       | 01         |
| 2.6      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 2.7      | 0.4   |         | RTNA         | 80SLO       | 01         |
| 2.7      |       |         | ASV          | 74COP       | 01         |
| 2.74     | 0.2   |         | ASV          | 82SAT       | 02         |
| 2.8      | 0.2   |         | AA           | 80SCH       | 05         |
| 2.8      | 0.2   |         | FAA          | 83GLA       | 01         |
| 2.9      | 0.1   |         | FAA          | 81KNA       | 01         |
| 3.3      | 0.2   | *       | ICPES        | 79HER       | 01         |
| Ce (ppm) |       |         |              |             |            |
| 1.       | 0.1   |         | RTNA         | 80SLO       | 01         |
| Cl (%)   |       |         |              |             |            |
| 1.04     | 0.02  |         | ITNA         | 80SLO       | 01         |
| 1.05     | 0.072 |         | ITNA         | 77STE       | 02         |
| 1.085    | 0.12  |         | NAA          | 76GUZ       | 01         |
| 1.1      | 0.07  |         | ITNA         | 77NAD       | 02         |
| Co (ppb) |       |         |              |             |            |
| 400.     | 106.  |         | NAA          | 76GUZ       | 01         |
| 467.     | 25.   |         | ITNA         | 77GUZ       | 01         |
| 495.     |       |         | FAA          | 82HOE       | 01         |
| 510.     | 10.   | 11      | FAA          | 80FUD       | 01         |
| 540.     | 30.   |         | RTNA         | 80SLO       | 01         |
| 550.     | 10.   | 11      | FAA          | 80FUD       | 01         |
| 610.     | 30.   |         | ITNA         | 77NAD       | 02         |
| 680.     | 30.   |         | ITNA         | 79REN       | 03         |
| Cr (ppm) |       |         |              |             |            |
| 2.28     | 0.06  | *11     | ICPES        | 82JON       | 01         |
| 3.1      |       | 11      | AA           | 79HOE       | 02         |
| 3.107    | 1.08  |         | NAA          | 76GUZ       | 01         |
| 3.7      | 0.3   |         | ITNA         | 82GLA       | 02         |
| 3.8      | 0.3   | 35      | FAA          | 81GLA       | 03         |
| 3.8      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 3.9      | 0.3   |         | ITNA         | 77NAD       | 02         |
| 3.94     |       | 11      | AA           | 79HOE       | 02         |
| 4.3      |       |         | AA           | 81ARA       | 01         |
| 4.3      |       |         | FAA          | 82HOE       | 01         |
| 4.5      | 1.6   |         | ITNA         | 79REN       | 03         |
| 4.6      |       | 11      | AA           | 79HOE       | 02         |
| 5.9      | 0.2   | *       | ICPES        | 79HER       | 01         |

TABLE J (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cs (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 82GLA       | 02         |
| 43.      | 2.    |         | ITNA         | 77NAD       | 02         |
| 54.      | 4.    |         | ITNA         | 83GLA       | 01         |
| 56.      | 6.    |         | ITNA         | 77GUZ       | 01         |
| 140.     | 30.   | *       | ITNA         | 79REN       | 03         |
| Cu (ppm) |       |         |              |             |            |
| 3.       |       | *       | AA           | 81ARA       | 01         |
| 7.7      | 0.5   | 6       | POL          | 72SIN       | 01         |
| 7.7      |       | 6       | POL          | 72SIN       | 01         |
| 8.2      | 0.4   | 11      | ICPES        | 82JON       | 01         |
| 9.       |       |         | OES          | 75JON       | 02         |
| 9.4      |       | 6       | NAA          | 72SIN       | 01         |
| 9.5      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 9.8      | 0.4   | 11      | ICPES        | 82JON       | 01         |
| 10.      |       |         | OES          | 75JON       | 03         |
| 10.1     | 0.4   |         | RTNA         | 74RAV       | 01         |
| 10.4     | 0.6   |         | VV           | 80SCH       | 05         |
| 10.4     | 0.2   |         | ICPES        | 79HER       | 01         |
| 10.4     | 0.5   | 11      | ICPES        | 82JON       | 01         |
| 10.5     | 0.8   |         | RTNA         | 80SLO       | 01         |
| 10.8     | 0.1   |         | COLOR        | 76ZAN       | 02         |
| 10.81    | 0.02  |         | COLOR        | 77BUR       | 01         |
| 10.9     | 0.1   | D*      | AA           | 76ZAN       | 02         |
| 10.9     | 0.1   |         | AA           | 76ZAN       | 01         |
| 11.      |       |         | OES          | 75JON       | 04         |
| 11.2     |       | 11      | AA           | 79HOE       | 02         |
| 11.5     | 0.2   |         | AA           | 76EPS       | 02         |
| 12.      |       | 11      | AA           | 79HOE       | 02         |
| 12.      | 0.17  | 11      | AA           | 75ISA       | 01         |
| 12.      | 0.14  | 11      | AA           | 75ISA       | 01         |
| 12.2     | 1.3   | 6       | EXRF         | 79MAT       | 01         |
| 13.      |       |         | OES          | 75JON       | 10         |
| 13.5     | 0.4   |         | AA           | 77GUZ       | 01         |
| 14.1     | 5.64  |         | NAA          | 76GUZ       | 01         |
| 14.1     | 1.3   |         | ITNA         | 77GUZ       | 01         |
| 15.      |       |         | OES          | 75JON       | 09         |
| 15.      |       |         | OES          | 75JON       | 11         |
| 15.      |       |         | OES          | 75JON       | 06         |
| 17.      |       |         | OES          | 75JON       | 01         |
| 17.      |       |         | OES          | 75JON       | 05         |
| 20.      |       | *       | OES          | 75JON       | 08         |
| 25.      |       | *       | EXRF         | 81PAR       | 01         |
| Eu (ppb) |       |         |              |             |            |
| 15.      | 2.    |         | ITNA         | 77GUZ       | 01         |
| 25.      | 5.    |         | ITNA         | 77NAD       | 02         |
| 55.      | 8.    |         | RTNA         | 80SLO       | 01         |
| F (ppm)  |       |         |              |             |            |
| 5.       | 1.    |         | MS           | 77STE       | 02         |
| 5.7      | 0.2   |         | ISE          | 83KNA       | 01         |
| 6.       | 0.7   |         | ISE          | 83GLA       | 01         |

TABLE J (cont)

| CONC          | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------------|-------|---------|--------------|-------------|------------|
| Fe (ppm)      |       |         |              |             |            |
| 55.           |       | *       | OES          | 75JON       | 01         |
| 162.          |       | *       | OES          | 75JON       | 09         |
| 220.          |       | *       | AA           | 81ARA       | 01         |
| 266.          |       |         | OES          | 75JON       | 06         |
| 267.          |       |         | OES          | 75JON       | 03         |
| 340.          |       |         | OES          | 75JON       | 02         |
| 342.          |       |         | OES          | 75JON       | 04         |
| 350.          |       |         | OES          | 75JON       | 11         |
| 379.          |       |         | OES          | 75JON       | 08         |
| 442.          | 115.  | 11      | AA           | 75ISA       | 01         |
| 463.          | 157.  | 11      | AA           | 75ISA       | 01         |
| 469.25        | 118.3 |         | NAA          | 76GUZ       | 01         |
| 478.          |       |         | OES          | 75JON       | 05         |
| 507.6         | 14.3  |         | ITNA         | 77GUZ       | 01         |
| 531.          | 14.   | 11      | ICPES        | 82JON       | 01         |
| 534.          |       |         | OES          | 75JON       | 10         |
| 552.          |       |         | OES          | 75JON       | 07         |
| 568.          | 3.    |         | ICPES        | 79HER       | 01         |
| 575.          | 10.   | 11      | COLOR        | 82SCH       | 03         |
| 597.          |       | 11      | COLOR        | 82SCH       | 03         |
| 604.          | 11.   | 11      | COLOR        | 82SCH       | 03         |
| 623.          | 10.   | 6       | EXRF         | 79MAT       | 01         |
| 625.          | 14.   | 11      | ICPES        | 82JON       | 01         |
| 642.          | 17.   | 11      | ICPES        | 82JON       | 01         |
| 658.          | 18.   | 11      | ICPES        | 82JON       | 01         |
| 661.          | 14.   |         | ITNA         | 77NAD       | 02         |
| 665.          |       | 11      | AA           | 79HOE       | 02         |
| 670.          | 50.   | 35      | ITNA         | 81GLA       | 03         |
| 672.          |       | 11      | AA           | 79HOE       | 02         |
| 685.          | 20.   |         | ICPES        | 80SCH       | 05         |
| 698.          |       |         | VOLT         | 81SZY       | 01         |
| 706.          | 12.   |         | ITNA         | 79DAS       | 01         |
| 706.          | 12.   |         | RTNA         | 80SLO       | 01         |
| 730.          | 90.   |         | ITNA         | 79REN       | 03         |
| 831.          | 10.   | 6*      | EXRF         | 79MAT       | 01         |
| 1170.         |       | *       | EXRF         | 81PAR       | 01         |
| Fe(II) (ppm)  |       |         |              |             |            |
| 540.          |       |         | VOLT         | 81SZY       | 01         |
| Fe(III) (ppm) |       |         |              |             |            |
| 158.          |       |         | VOLT         | 81SZY       | 01         |
| Ga (ppb)      |       |         |              |             |            |
| 69.3          | 67.   |         | NAA          | 76GUZ       | 01         |
| H (%)         |       |         |              |             |            |
| 5.            | 0.1   | 35      | TCGS         | 79GLA       | 04         |
| 5.1           | 0.2   |         | CB           | 82GLA       | 02         |
| 5.14          | 0.07  |         | CB           | 80SCH       | 02         |
| Hg (ppb)      |       |         |              |             |            |
| 90.           | 8.    |         | ITNA         | 77NAD       | 02         |
| 91.           | 11.   |         | CVAA         | 82GLA       | 02         |
| 128.          | 118.  |         | NAA          | 76GUZ       | 01         |

TABLE J (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| I (ppb)  |       |         |              |             |            |
| 280.     | 30.   |         | ITNA         | 82SAT       | 01         |
| 300.     | 100.  |         | PAA          | 77WIL       | 01         |
| 390.     | 120.  |         | RTNA         | 77STE       | 02         |
| In (ppb) |       |         |              |             |            |
| 0.96     | 0.08  |         | RTNA         | 74RAV       | 01         |
| K (%)    |       |         |              |             |            |
| 3.       | 0.29  | *       | ICPES        | 79HER       | 01         |
| 3.8      |       |         | OES          | 75JON       | 02         |
| 3.81     |       |         | OES          | 75JON       | 10         |
| 3.85     |       |         | OES          | 75JON       | 07         |
| 4.055    |       | 1       | AA           | 78SZY       | 01         |
| 4.15     | 0.08  |         | ITNA         | 79REN       | 03         |
| 4.17     |       | 1       | AA           | 78SZY       | 01         |
| 4.25     |       |         | OES          | 75JON       | 04         |
| 4.3      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 4.33     |       |         | OES          | 75JON       | 08         |
| 4.4      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 4.4      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 4.427    | 0.281 |         | NAA          | 76GUZ       | 01         |
| 4.47     | 0.15  |         | ITNA         | 80SLO       | 01         |
| 4.47     | 0.24  |         | ITNA         | 77NAD       | 02         |
| 4.49     |       |         | ICPES        | 79COO       | 01         |
| 4.51     |       |         | OES          | 75JON       | 09         |
| 4.58     |       |         | OES          | 75JON       | 03         |
| 4.58     | 0.004 | 11      | AA           | 75ISA       | 01         |
| 4.6      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 4.6      | 0.008 | 11      | AA           | 75ISA       | 01         |
| 4.6      |       |         | OES          | 75JON       | 06         |
| 4.74     |       |         | OES          | 75JON       | 05         |
| 4.79     | 0.06  | 6       | EXRF         | 79MAT       | 01         |
| 4.8      |       |         | OES          | 75JON       | 11         |
| 5.16     | 0.06  | *6      | EXRF         | 79MAT       | 01         |
| 5.72     |       | *       | OES          | 75JON       | 01         |
| 9.24     |       | *       | EXRF         | 81PAR       | 01         |
| La (ppb) |       |         |              |             |            |
| 346.     | 79.   |         | NAA          | 76GUZ       | 01         |
| 640.     | 40.   |         | ITNA         | 77NAD       | 02         |
| 770.     | 110.  |         | RTNA         | 80SLO       | 01         |
| 800.     | 200.  |         | ITNA         | 79REN       | 03         |
| Lu (ppb) |       |         |              |             |            |
| 12.      | 2.    |         | RTNA         | 80SLO       | 01         |
| Mg (ppm) |       |         |              |             |            |
| 6000.    |       |         | OES          | 75JON       | 08         |
| 6000.    | 600.  |         | ITNA         | 80SLO       | 01         |
| 6100.    | 600.  |         | ICPES        | 79HER       | 01         |
| 6300.    |       |         | OES          | 75JON       | 09         |
| 6600.    |       |         | OES          | 75JON       | 07         |
| 6700.    | 200.  | 11      | ICPES        | 82JON       | 01         |
| 6700.    | 3.    | 11      | AA           | 75ISA       | 01         |
| 6700.    | 3.    | 11      | AA           | 75ISA       | 01         |

TABLE J (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 6800.    |       |         | OES          |             | 75JON 10   |
| 6900.    | 200.  | 11      | ICPES        |             | 82JON 01   |
| 6900.    |       |         | OES          |             | 75JON 04   |
| 6900.    | 200.  | 11      | ICPES        |             | 82JON 01   |
| 7000.    |       |         | OES          |             | 75JON 03   |
| 7000.    | 200.  | 11      | ICPES        |             | 82JON 01   |
| 7100.    |       |         | OES          |             | 75JON 02   |
| 7300.    | 100.  |         | ITNA         |             | 77NAD 02   |
| 7400.    |       |         | OES          |             | 75JON 05   |
| 7400.    |       |         | OES          |             | 75JON 06   |
| 7400.    |       |         | OES          |             | 75JON 11   |
| 7800.    |       | *       | OES          |             | 75JON 01   |
| Mn (ppm) |       |         |              |             |            |
| 138.     |       | *       | OES          |             | 75JON 07   |
| 189.     |       |         | OES          |             | 75JON 04   |
| 189.     |       |         | OES          |             | 75JON 10   |
| 197.     |       |         | OES          |             | 75JON 09   |
| 198.     |       |         | OES          |             | 75JON 06   |
| 200.     |       |         | ITNA         |             | 79REN 03   |
| 209.18   | 9.93  |         | NAA          |             | 76GUZ 01   |
| 209.2    | 11.9  |         | ITNA         |             | 77GUZ 01   |
| 210.     |       |         | OES          |             | 75JON 02   |
| 211.1    | 2.1   |         | AA           |             | 77GUZ 01   |
| 215.     |       |         | OES          |             | 75JON 11   |
| 216.     | 17.   | 11      | AA           |             | 75ISA 01   |
| 217.     | 5.    | 11      | ICPES        |             | 82JON 01   |
| 217.     |       | 11      | AA           |             | 79HOE 02   |
| 218.     | 13.   | 11      | AA           |             | 75ISA 01   |
| 221.     | 5.    | 11      | ICPES        |             | 82JON 01   |
| 222.     | 5.    | 11      | ICPES        |             | 82JON 01   |
| 223.     |       | 11      | AA           |             | 79HOE 02   |
| 223.     | 7.    | 6       | EXRF         |             | 79MAT 01   |
| 227.     |       |         | OES          |             | 75JON 05   |
| 230.     | 5.    | 11      | ICPES        |             | 82JON 01   |
| 230.     |       |         | OES          |             | 75JON 03   |
| 231.     | 10.   |         | ITNA         |             | 80SLO 01   |
| 234.     | 5.    |         | VV           |             | 80SCH 05   |
| 235.     | 5.    |         | ICPES        |             | 79HER 01   |
| 238.     | 17.   |         | ITNA         |             | 77NAD 02   |
| 241.     |       |         | OES          |             | 75JON 08   |
| 251.     |       |         | OES          |             | 75JON 01   |
| 266.     |       | *       | ITNA         |             | 82GLA 02   |
| 266.     | 8.    | *6      | EXRF         |             | 79MAT 01   |
| 414.     |       | *       | EXRF         |             | 81PAR 01   |
| Mo (ppm) |       |         |              |             |            |
| 0.4      | 0.2   | 11      | ICPES        |             | 82JON 01   |
| 0.5      | 0.1   | 11      | ICPES        |             | 82JON 01   |
| 0.5      | 0.1   | 11      | ICPES        |             | 82JON 01   |
| 0.5      | 0.3   | 11      | ICPES        |             | 82JON 01   |
| 0.62     | 0.04  |         | ITNA         |             | 77NAD 02   |
| 0.65     | 0.1   |         | RTNA         |             | 80SLO 01   |
| 2.8      |       | *       | OES          |             | 75JON 10   |
| 4.2      |       | *       | OES          |             | 75JON 11   |
| 4.5      |       | *       | OES          |             | 75JON 03   |
| 11.7     |       | *       | OES          |             | 75JON 01   |
| 14.6     |       | *       | OES          |             | 75JON 07   |
| 17.9     |       | *       | OES          |             | 75JON 02   |

TABLE J (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| N (%)    |       |         |              |             |            |
|          |       |         |              |             |            |
| 4.9      | 0.2   | 35      | TCGS         |             | 79GLA 04   |
| 4.94     | 0.11  |         | CB           |             | 80SCH 02   |
| 4.95     | 0.08  |         | CB           |             | 82GLA 02   |
| Na (ppm) |       |         |              |             |            |
|          |       |         |              |             |            |
| 350.     |       |         | OES          |             | 75JON 04   |
| 388.     |       |         | OES          |             | 75JON 02   |
| 459.     | 46.1  |         | NAA          |             | 76GUZ 01   |
| 475.     | 25.   |         | ITNA         |             | 80SLO 01   |
| 488.     |       | 1       | AA           |             | 78SZY 01   |
| 500.     | 200.  |         | ITNA         |             | 79REN 03   |
| 522.     | 13.   |         | ITNA         |             | 77NAD 02   |
| 531.     |       |         | OES          |             | 75JON 08   |
| 602.     |       | 1       | AA           |             | 78SZY 01   |
| 610.     |       |         | OES          |             | 75JON 06   |
| 650.     |       |         | OES          |             | 75JON 03   |
| 800.     |       |         | OES          |             | 75JON 01   |
| 820.     |       |         | OES          |             | 75JON 09   |
| 950.     |       |         | OES          |             | 75JON 05   |
| 1090.    | 70.   | *       | ITNA         |             | 82SCH 05   |
| 1600.    |       | *       | OES          |             | 75JON 11   |
| Nd (ppb) |       |         |              |             |            |
|          |       |         |              |             |            |
| 700.     | 100.  |         | RTNA         |             | 80SLO 01   |
| Ni (ppm) |       |         |              |             |            |
|          |       |         |              |             |            |
| 1.1      | 0.08  | 11      | ICPES        |             | 82JON 01   |
| 1.12     | 0.06  | 11      | ICPES        |             | 82JON 01   |
| 1.12     | 0.08  | 11      | ICPES        |             | 82JON 01   |
| 1.2      | 0.3   |         | ITNA         |             | 77NAD 02   |
| 1.3      | 0.2   | 11      | ICPES        |             | 82JON 01   |
| 5.9      | 0.6   | *       | ICPES        |             | 79HER 01   |
| 0.3      | 0.2   | *       | RTNA         |             | 80SLO 01   |
| P (ppm)  |       |         |              |             |            |
|          |       |         |              |             |            |
| 2400.    |       | *       | OES          |             | 75JON 04   |
| 2800.    |       |         | OES          |             | 75JON 10   |
| 3100.    |       |         | OES          |             | 75JON 07   |
| 3200.    | 200.  | 6       | FAA          |             | 81LAN 01   |
| 3200.    |       |         | OES          |             | 75JON 05   |
| 3300.    | 200.  | 6       | FAA          |             | 81LAN 01   |
| 3300.    |       |         | OES          |             | 75JON 09   |
| 3300.    |       |         | OES          |             | 75JON 11   |
| 3300.    |       |         | OES          |             | 75JON 06   |
| 3300.    |       |         | OES          |             | 75JON 08   |
| 3320.    | 160.  |         | ICPES        |             | 81OWE 01   |
| 3400.    | 100.  | 11      | ICPES        |             | 82JON 01   |
| 3400.    |       |         | FAA          |             | 79EDI 01   |
| 3400.    |       |         | OES          |             | 75JON 03   |
| 3400.    |       |         | ICPES        |             | 79EDI 01   |
| 3420.    | 89.5  |         | NAA          |             | 76GUZ 01   |
| 3500.    | 200.  | 6       | FAA          |             | 81LAN 01   |
| 3500.    | 100.  | 11      | ICPES        |             | 82JON 01   |
| 3500.    | 100.  | 11      | ICPES        |             | 82JON 01   |
| 3500.    | 100.  | 11      | ICPES        |             | 82JON 01   |
| 3700.    | 100.  |         | ICPES        |             | 79HER 01   |

TABLE J (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 3800.    |       |         | OES          | 75JON       | 02         |
| 5000.    |       | *       | OES          | 75JON       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 3.2      |       | *6      | POL          | 72SIN       | 01         |
| 4.       |       |         | ASV          | 74COP       | 01         |
| 4.3      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 4.5      | 0.1   | 6       | POL          | 72SIN       | 01         |
| 4.9      |       | 11      | FAA          | 80PRE       | 01         |
| 5.       | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 5.4      |       | 6       | FAA          | 81JAC       | 01         |
| 5.5      | 0.4   |         | FAA          | 80LEG       | 01         |
| 5.5      |       | 11      | FAA          | 79HOE       | 02         |
| 5.6      |       | 6       | FAA          | 81JAC       | 01         |
| 5.6      | 0.2   |         | ASV          | 82SAT       | 02         |
| 5.7      |       | 11      | FAA          | 79HOE       | 02         |
| 5.8      |       | 6       | FAA          | 81HIN       | 01         |
| 5.8      |       | 6       | FAA          | 82KOI       | 01         |
| 5.8      |       | 6       | FAA          | 81HIN       | 01         |
| 5.8      | 0.8   |         | HAA          | 82WEI       | 01         |
| 5.8      |       | 6       | FAA          | 82KOI       | 01         |
| 5.9      |       | 11      | FAA          | 80PRE       | 01         |
| 5.95     | 0.06  |         | FAA          | 79DAB       | 02         |
| 6.       |       | 11      | FAA          | 80PRE       | 01         |
| 6.       |       |         | ASV          | 82GAJ       | 01         |
| 6.       |       |         | FAA          | 82HOE       | 01         |
| 6.1      | 0.3   |         | AA           | 80SCH       | 05         |
| 6.1      |       | 11      | FAA          | 79HOE       | 02         |
| 6.2      | 0.3   |         | FAA          | 81KNA       | 01         |
| 6.2      |       |         | FAA          | 80PRE       | 01         |
| 6.3      |       | 11      | FAA          | 80PRE       | 01         |
| 6.55     | 0.22  |         | ASV          | 80SZY       | 01         |
| 6.6      |       |         | FAA          | 82PRE       | 01         |
| 7.1      | 0.9   |         | FAA          | 82WEI       | 01         |
| 7.5      |       | 11      | FAA          | 80PRE       | 01         |
| 8.3      | 1.1   | *       | ICPES        | 79HER       | 01         |
| 15.      |       | *       | EXRF         | 81PAR       | 01         |
| Pr (ppb) |       |         |              |             |            |
| 190.     | 40.   |         | RTNA         | 80SLO       | 01         |
| Rb (ppm) |       |         |              |             |            |
| 15.16    | 1.35  |         | NAA          | 76GUZ       | 01         |
| 15.21    | 2.3   |         | ITNA         | 79REN       | 03         |
| 16.4     | 0.5   |         | ITNA         | 77GUZ       | 01         |
| 16.5     | 0.7   |         | ITNA         | 77NAD       | 02         |
| 22.      | 3.    | 35      | ITNA         | 81GLA       | 03         |
| 40.      |       | *       | EXRF         | 81PAR       | 01         |
| Sb (ppb) |       |         |              |             |            |
| 30.      | 1.    |         | RTNA         | 79HOE       | 01         |
| 30.      | 2.    |         | RTNA         | 80KOS       | 02         |
| 34.      |       |         | HAA          | 82KUE       | 03         |
| 40.      | 2.    |         | ITNA         | 77NAD       | 02         |
| 120.     | 50.   | *       | ITNA         | 79REN       | 03         |

TABLE J (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Sc (ppb) |       |         |              |             |            |
| 138.     | 7.    |         | ITNA         | 77GUZ       | 01         |
| 160.     | 30.   |         | ITNA         | 79REN       | 03         |
| 170.     | 3.    |         | ITNA         | 77NAD       | 02         |
| 208.     | 89.   |         | NAA          | 76GUZ       | 01         |
| 220.     | 30.   |         | RTNA         | 80SLO       | 01         |
| Se (ppb) |       |         |              |             |            |
|          | 100.  | L*      | HAA          | 82JON       | 01         |
|          | 100.  | L*      | HAA          | 82JON       | 01         |
| 49.      | 5.    |         | ITNA         | 77NAD       | 02         |
| 50.      | 20.   |         | RTNA         | 80KNA       | 01         |
| 57.      | 3.    | 11      | GC           | 81UCH       | 02         |
| 61.      | 2.    | 11      | GC           | 81UCH       | 02         |
| 84.      | 15.   | 9       | ITNA         | 80WAN       | 01         |
| Sm (ppb) |       |         |              |             |            |
| 110.     | 15.   |         | RTNA         | 80SLO       | 01         |
| 200.     | 90.   |         | ITNA         | 79REN       | 03         |
| Sr (ppm) |       |         |              |             |            |
| 36.      | 0.6   |         | ICPES        | 79HER       | 01         |
| 38.      |       |         | OES          | 75JON       | 03         |
| 38.      |       |         | OES          | 75JON       | 04         |
| 45.      | 1.    |         | ITNA         | 77NAD       | 02         |
| 54.      |       |         | OES          | 75JON       | 01         |
| 65.5     | 5.84  |         | NAA          | 76GUZ       | 01         |
| 102.     |       | *       | EXRF         | 81PAR       | 01         |
| Ta (ppb) |       |         |              |             |            |
| 430.     | 300.  |         | ITNA         | 79REN       | 03         |
| Tb (ppb) |       |         |              |             |            |
| 4.       | 1.    |         | RTNA         | 80SLO       | 01         |
| Th (ppb) |       |         |              |             |            |
| 190.     | 20.   |         | ITNA         | 77NAD       | 02         |
| 220.     | 30.   |         | RTNA         | 80SLO       | 01         |
| Ti (ppm) |       |         |              |             |            |
| 68.      | 9.    |         | ITNA         | 77NAD       | 02         |
| U (ppb)  |       |         |              |             |            |
| 20.      | 20.   | *       | RTNA         | 80SLO       | 01         |
| 50.2     | 2.3   |         | RTNA         | 78DER       | 01         |
| 54.      |       |         | DNA          | 83GLA       | 01         |
| 60.      | 120.  | R*      | DNA          | 81GLA       | 03         |
| 63.      | 3.    | 35      | DNA          | 80GLA       | 04         |

TABLE K

## NBS SRM 1575—COLLECTED DATA

| TABLE J (cont) |       |         |           |          |         |          |       |         |           |          |         |
|----------------|-------|---------|-----------|----------|---------|----------|-------|---------|-----------|----------|---------|
| CONC           | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM | CONC     | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM |
| V (ppm)        |       |         |           |          |         | Ag (ppb) |       |         |           |          |         |
| 1.19           | 0.01  | 11      | ICPES     | 82JON 01 |         | 150.     | 50.   |         | RTNA      | 80SLO 01 |         |
| 1.27           | 0.035 |         | RTNA      | 78BYR 01 |         | Al (ppm) |       |         |           |          |         |
| 1.3            | 0.2   |         | ITNA      | 77NAD 02 |         | 255.     |       | *       | OES       | 75JON 11 |         |
| 1.42           | 0.08  | 11      | ICPES     | 82JON 01 |         | 287.     |       | *       | OES       | 75JON 02 |         |
| W (ppb)        |       |         |           |          |         | 405.     |       |         | OES       | 75JON 06 |         |
|                | 40.   | L*      | RTNA      | 80SLO 01 |         | 449.     |       |         | OES       | 75JON 07 |         |
| Yb (ppb)       |       |         |           |          |         | 465.     |       |         | OES       | 75JON 05 |         |
|                |       |         |           |          |         | 473.     |       |         | OES       | 75JON 08 |         |
| Zn (ppm)       |       |         |           |          |         | 483.     |       |         | OES       | 75JON 04 |         |
| 80.            | 20.   |         | RTNA      | 80SLO 01 |         | 521.     |       |         | OES       | 75JON 03 |         |
|                |       |         |           |          |         | 526.     | 17.   | 11      | ICPES     | 82JON 01 |         |
|                |       |         |           |          |         | 565.     | 44.   |         | ITNA      | 77NAD 02 |         |
|                |       |         |           |          |         | 582.     | 47.   |         | CPXRF     | 80KIR 01 |         |
| 26.            |       | *       | OES       | 75JON 09 |         | 585.     |       |         | AA        | 81ARA 01 |         |
| 29.            |       | *       | ASV       | 74COP 01 |         | 620.     |       | 35      | ITNA      | 81GLA 03 |         |
| 48.            |       | *       | OES       | 75JON 10 |         | 750.     | 200.  | *       | ITNA      | 80SLO 01 |         |
| 50.            |       |         | OES       | 75JON 03 |         | 1243.    |       | *       | OES       | 75JON 01 |         |
| 52.            | 1.    | 11      | ICPES     | 82JON 01 |         | As (ppb) |       |         |           |          |         |
| 54.            | 4.    |         | RTNA      | 80SLO 01 |         | 150.     | 50.   |         | RTNA      | 80SLO 01 |         |
| 56.            | 2.    | 11      | ICPES     | 82JON 01 |         | 154.     | 5.    | 7       | FAA       | 82HOE 02 |         |
| 57.            | 2.    | 11      | ICPES     | 82JON 01 |         | 180.     | 15.   | 7       | FAA       | 82HOE 02 |         |
| 58.            |       |         | OES       | 75JON 06 |         | 181.     | 3.    |         | RTNA      | 79HOE 01 |         |
| 58.            |       |         | OES       | 75JON 01 |         | 187.     | 6.    | 7       | FAA       | 82HOE 02 |         |
| 58.03          | 3.33  |         | NAA       | 76GUZ 01 |         | 190.     | 10.   | 11      | HAA       | 82JON 01 |         |
| 58.9           |       | 11      | AA        | 79HOE 02 |         | 190.     | 30.   | 11      | HAA       | 82JON 01 |         |
| 59.            | 2.    | 11      | ICPES     | 82JON 01 |         | 200.     | 30.   |         | ITNA      | 77NAD 02 |         |
| 59.            |       |         | OES       | 75JON 11 |         | 200.     | 20.   | 7       | RTNA      | 77GIL 03 |         |
| 59.            | 3.    | 11      | ICPES     | 82JON 01 |         | 210.     | 10.   |         | COLOR     | 77BUR 01 |         |
| 60.            | 3.    | 11      | OES       | 75JON 02 |         | 215.     | 6.    |         | HAA       | 81UTH 01 |         |
| 60.            |       |         | ICPES     | 82JON 01 |         | 220.     | 40.   |         | IENA      | 82GLA 02 |         |
| 61.            |       | 6       | AA        | 72SIN 01 |         | 230.     | 20.   |         | FAA       | 80DUP 01 |         |
| 62.            | 4.    |         | ITNA      | 77NAD 02 |         | 230.     |       |         | HAA       | 81ARA 01 |         |
| 62.            | 4 6   |         | ITNA      | 79REN 03 |         | 240.     | 20.   | 7       | RTNA      | 77GIL 03 |         |
| 62.            | 3.    | 11      | ICPES     | 82JON 01 |         | Au (ppb) |       |         |           |          |         |
| 62.5           |       |         | AA        | 81ARA 01 |         | 0.3      | 0.08  |         | ITNA      | 79REN 03 |         |
| 62.9           |       | 6       | POL       | 72SIN 01 |         | 0.9      | 0.1   |         | RTNA      | 80SLO 01 |         |
| 62.9           | 1.7   | 6       | POL       | 72SIN 01 |         | B (ppm)  |       |         |           |          |         |
| 63.            | 2.5   | 11      | AA        | 75ISA 01 |         | 13.      |       |         | OES       | 75JON 08 |         |
| 64.            | 3.    | 11      | ICPES     | 82JON 01 |         | 13.      |       |         | OES       | 75JON 09 |         |
| 65.            | 7.    |         | ICPES     | 80SCH 05 |         | 13.3     | 0.7   |         | ICPES     | 79HER 01 |         |
| 65.            |       |         | OES       | 75JON 07 |         | 15.      |       |         | OES       | 75JON 05 |         |
| 65.            |       |         | OES       | 75JON 05 |         | 15.      |       |         | OES       | 75JON 02 |         |
| 65.            | 3.25  | 11      | AA        | 75ISA 01 |         | 16.      | 4.    |         | ITNA      | 82SCH 05 |         |
| 68.            |       | 11      | AA        | 79HOE 02 |         | 16.1     | 0.1   |         | TCGS      | 82GLA 02 |         |
| 72.8           | 2.    | 6       | EXRF      | 79MAT 01 |         | 17.      | 1.    | 35      | TCGS      | 81GLA 04 |         |
| 73.            | 3.    |         | ICPES     | 79HER 01 |         | 17.      |       |         | OES       | 75JON 01 |         |
| 75.            |       | *       | OES       | 75JON 08 |         | 18.      |       |         | OES       | 75JON 07 |         |
| 78.            | 2.1   | *6      | EXRF      | 79MAT 01 |         | 19.      |       |         | OES       | 75JON 06 |         |
| 86.            |       | *       | OES       | 75JON 04 |         | 20.      |       |         | OES       | 75JON 03 |         |
| 124.           |       | *       | EXRF      | 81PAR 01 |         | 20.      |       |         | OES       | 75JON 11 |         |
|                |       |         |           |          |         | 20.      |       |         | OES       | 75JON 04 |         |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ba (ppm) |       |         |              |             |            |
| 3.       |       |         | OES          | 75JON       | 03         |
| 6.       |       |         | OES          | 75JON       | 05         |
| 6.1      | 0.4   |         | ITNA         | 77NAD       | 02         |
| 7.       |       |         | OES          | 75JON       | 11         |
| 7.       |       |         | OES          | 75JON       | 04         |
| 8.       |       |         | OES          | 75JON       | 01         |
| Br (ppm) |       |         |              |             |            |
| 5.4      | 1.2   |         | CPXRF        | 80KIR       | 01         |
| 6.1      | 0.09  |         | ITNA         | 79REN       | 03         |
| 6.25     | 0.2   |         | ITNA         | 80HOE       | 01         |
| 6.4      | 0.8   | 5       | IENA         | 79GLA       | 02         |
| 6.43     | 0.08  |         | ITNA         | 77NAD       | 02         |
| 6.8      | 0.5   | 5       | IENA         | 79GLA       | 02         |
| 7.4      | 0.3   |         | ITNA         | 77STE       | 02         |
| 8.       |       |         | ITNA         | 83GLA       | 01         |
| 30.      |       | *       | EXRF         | 81PAR       | 01         |
| C (%)    |       |         |              |             |            |
| 50.37    | 0.16  |         | CB           | 80SCH       | 02         |
| 50.4     | 1.5   | 35      | CB           | 79GLA       | 04         |
| 50.7     | 0.9   |         | CB           | 82GLA       | 02         |
| 54.      | 2.    | 35      | TCGS         | 79GLA       | 04         |
| Ca (ppm) |       |         |              |             |            |
| 3100.    | 200.  | *       | ITNA         | 80SLO       | 01         |
| 3300.    |       | *       | OES          | 75JON       | 07         |
| 3700.    | 500.  |         | CPXRF        | 80KIR       | 01         |
| 3800.    |       |         | OES          | 75JON       | 05         |
| 3800.    |       |         | OES          | 75JON       | 02         |
| 3800.    |       |         | OES          | 75JON       | 11         |
| 3900.    |       |         | OES          | 75JON       | 09         |
| 4000.    | 100.  | 11      | ICPES        | 82JON       | 01         |
| 4000.    |       |         | OES          | 75JON       | 06         |
| 4090.    | 20.   | 11      | ICPES        | 82JON       | 01         |
| 4100.    | 30.   | 11      | ICPES        | 82JON       | 01         |
| 4110.    | 30.   | 11      | ICPES        | 82JON       | 01         |
| 4290.    | 60.   |         | ICPES        | 79HER       | 01         |
| 4290.    | 40.   |         | NM           | 81YUZ       | 01         |
| 4300.    | 600.  |         | ITNA         | 79REN       | 03         |
| 4500.    | 400.  |         | ITNA         | 77NAD       | 02         |
| 4600.    |       |         | OES          | 75JON       | 03         |
| 4660.    |       |         | AA           | 83GLA       | 01         |
| 4800.    |       |         | OES          | 75JON       | 04         |
| 4900.    |       |         | OES          | 75JON       | 01         |
| 5300.    |       | *       | OES          | 75JON       | 08         |
| 13100.   |       | *       | EXRF         | 81PAR       | 01         |
| Cd (ppb) |       |         |              |             |            |
| 140.     | 70.   | 11      | ICPES        | 82JON       | 01         |
| 160.     | 90.   | 11      | ICPES        | 82JON       | 01         |
| 180.     | 30.   |         | RTNA         | 80SLO       | 01         |
| 180.     | 90.   | 11      | ICPES        | 82JON       | 01         |
| 200.     |       |         | FAA          | 80PRE       | 01         |
| 206.     | 10.   |         | RTNA         | 77DER       | 01         |
| 210.     |       |         | FAA          | 82PRE       | 01         |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 220.     |       |         |              |             |            |
| 30.      |       |         |              |             |            |
| 250.     |       |         |              |             |            |
| 10.      |       |         |              |             |            |
| 260.     |       |         |              |             |            |
| 10.      |       |         |              |             |            |
| 300.     |       |         |              |             |            |
| 40.      |       |         |              |             |            |
| 300.     |       |         |              |             |            |
| 100.     |       |         |              |             |            |
| 310.     |       |         |              |             |            |
| 30.      |       |         |              |             |            |
| 11       |       |         |              |             |            |
| ICPES    |       |         |              |             |            |
| 82JON    |       |         |              |             |            |
| 01       |       |         |              |             |            |
| FAA      |       |         |              |             |            |
| 81KNA    |       |         |              |             |            |
| 01       |       |         |              |             |            |
| Ce (ppb) |       |         |              |             |            |
| 150.     | 30.   |         | RTNA         | 80SLO       | 01         |
| Cl (ppm) |       |         |              |             |            |
| 243.     | 20.   |         | ITNA         | 77NAD       | 02         |
| 280.     | 30.   |         | ITNA         | 80SLO       | 01         |
| 510.     | 120.  |         | CPXRF        | 79REN       | 02         |
| 551.     | 37.   |         | ITNA         | 77STE       | 02         |
| Co (ppb) |       |         |              |             |            |
| 110.     |       |         | FAA          | 82HOE       | 01         |
| 110.     |       |         | RTNA         | 80SLO       | 01         |
| 130.     | 20.   |         | ITNA         | 77NAD       | 02         |
| 134.     | 6.    |         | ITNA         | 77GUZ       | 01         |
| 340.     | 180.  | *       | ITNA         | 79REN       | 03         |
| Cr (ppm) |       |         |              |             |            |
| 1.3      | 0.2   | *11     | ICPES        | 82JON       | 01         |
| 2.25     |       | 11      | AA           | 79HOE       | 02         |
| 2.25     |       | 11      | AA           | 79HOE       | 02         |
| 2.39     |       | 11      | AA           | 79HOE       | 02         |
| 2.41     | 0.11  |         | ITNA         | 77NAD       | 02         |
| 2.6      | 0.2   |         | ICPES        | 81KNA       | 01         |
| 2.6      | 0.1   |         | ITNA         | 82GLA       | 02         |
| 2.8      |       |         | FAA          | 82HOE       | 01         |
| 2.9      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 3.1      | 0.6   |         | ICPES        | 79HER       | 01         |
| 3.93     | 0.05  | *       | ITNA         | 79REN       | 03         |
| Cs (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 82GLA       | 02         |
| 101.     | 3.    |         | ITNA         | 77NAD       | 02         |
| 104.     | 4.    |         | ITNA         | 83GLA       | 01         |
| 115.     | 7.    |         | ITNA         | 77GUZ       | 01         |
| 160.     | 60.   |         | ITNA         | 79REN       | 03         |
| Cu (ppm) |       |         |              |             |            |
| 0.7      |       | *       | OES          | 75JON       | 09         |
| 2.       |       |         | OES          | 75JON       | 02         |
| 2.41     | 0.09  |         | RTNA         | 77DER       | 01         |
| 2.5      | 0.3   | 11      | ICPES        | 82JON       | 01         |
| 2.7      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 2.8      | 0.3   |         | FAE          | 76EPS       | 01         |
| 2.9      | 0.1   |         | COLOR        | 76ZAN       | 02         |
| 2.9      | 0.2   | 11      | ICPES        | 82JON       | 01         |
| 2.9      | 0.1   |         | COLOR        | 76EPS       | 01         |
| 2.94     | 0.01  |         | COLOR        | 77BUR       | 01         |
| 3.       | 0.15  |         | ICPES        | 81KNA       | 01         |
| 3.       |       | 11      | ICPES        | 82JON       | 01         |
| 3.       | 0.5   |         | CPXRF        | 80KIR       | 01         |
| 3.       | 0.52  |         |              |             |            |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM |
|----------|-------|---------|-----------|----------|---------|
| 3.       | 0.3   |         | VV        | 80SCH 05 |         |
| 3.       | 0.3   | D*      | AA        | 76ZAN 02 |         |
| 3.       | 0.3   |         | AA        | 76ZAN 01 |         |
| 3.2      | 0.2   | D*      | DCP       | 81REE 01 |         |
| 3.2      | 0.2   |         | DCP       | 79REE 01 |         |
| 3.2      | 0.4   |         | AA        | 76EPS 02 |         |
| 3.2      | 0.4   |         | AA        | 76EPS 01 |         |
| 3.27     | 0.05  |         | RTNA      | 80SLO 01 |         |
| 3.45     |       | 11      | AA        | 79HOE 02 |         |
| 3.55     |       | 22      | AA        | 79HOE 02 |         |
| 3.6      | 0.3   |         | FAA       | 82KRI 01 |         |
| 4.       |       |         | OES       | 75JON 04 |         |
| 4.1      | 0.8   |         | ICPES     | 79HER 01 |         |
| 4.5      |       |         | OES       | 75JON 07 |         |
| 5.       |       |         | OES       | 75JON 06 |         |
| 6.       |       |         | OES       | 75JON 08 |         |
| 8.       |       | *       | OES       | 75JON 03 |         |
| 8.       |       | *       | OES       | 75JON 01 |         |
| 8.       |       | *       | OES       | 75JON 05 |         |
| 8.       |       | *       | OES       | 75JON 11 |         |
| 11.      |       | *       | AA        | 81ARA 01 |         |
| 53.      |       | *       | XRF       | 80SUZ 02 |         |
| Eu (ppb) |       |         |           |          |         |
| 6.       | 2.6   |         | ITNA      | 77GUZ 01 |         |
| 6.5      | 0.8   |         | ITNA      | 77NAD 02 |         |
| F (ppm)  |       |         |           |          |         |
| 2.5      | 0.3   |         | ISE       | 83KNA 01 |         |
| 2.9      | 0.8   |         | ISE       | 83GLA 01 |         |
| 3.7      | 0.6   |         | MS        | 77STE 02 |         |
| Fe (ppm) |       |         |           |          |         |
| 47.      |       | *       | OES       | 75JON 09 |         |
| 106.     |       | *       | OES       | 75JON 06 |         |
| 118.     |       |         | OES       | 75JON 02 |         |
| 120.     |       |         | OES       | 75JON 03 |         |
| 142.     |       |         | OES       | 75JON 11 |         |
| 156.     | 10.   |         | OES       | 75JON 01 |         |
| 170.     | 10.   |         | RTNA      | 80SLO 01 |         |
| 170.     | 10.   |         | ITNA      | 79DAS 01 |         |
| 174.     | 0.9   | 11      | COLOR     | 82SCH 03 |         |
| 174.     | 6.    | 11      | COLOR     | 82SCH 03 |         |
| 175.     | 7.    | 11      | ICPES     | 82JON 01 |         |
| 177.     | 4.    | 11      | ICPES     | 82JON 01 |         |
| 182.     |       |         | OES       | 75JON 08 |         |
| 183.     | 3.    |         | ICPES     | 79HER 01 |         |
| 185.     |       | 11      | AA        | 79HOE 02 |         |
| 185.     |       | 11      | AA        | 79HOE 02 |         |
| 188.     | 17.   |         | CPXRF     | 80KIR 01 |         |
| 193.     |       |         | OES       | 75JON 07 |         |
| 194.     | 10.   |         | ICPES     | 80SCH 05 |         |
| 194.     | 6.    | 11      | COLOR     | 82SCH 03 |         |
| 194.     | 4.    | 11      | ICPES     | 82JON 01 |         |
| 195.     | 10.   | 11      | ICPES     | 82JON 01 |         |
| 195.7    | 5.4   |         | ITNA      | 77GUZ 01 |         |
| 196.     | 7.    |         | ITNA      | 77NAD 02 |         |
| 198.     | 8.    |         | AF        | 81HOR 01 |         |
| 204.     | 12.   |         | ICPES     | 81KNA 01 |         |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM |
|----------|-------|---------|-----------|----------|---------|
| 254.     |       |         | OES       | 75JON 05 |         |
| 260.     |       | *       | OES       | 75JON 04 |         |
| 280.     | 50.   | *       | ITNA      | 79REN 03 |         |
| 595.     |       | *       | AA        | 81ARA 01 |         |
| 790.     |       | *       | EXRF      | 81PAR 01 |         |
| R (Z)    |       |         |           |          |         |
| 6.39     | 0.07  |         | CB        | 80SCH 02 |         |
| 6.5      | 0.1   | 35      | TCGS      | 79GLA 04 |         |
| 6.54     | 0.08  |         | CB        | 82GLA 02 |         |
| Hf (ppb) |       |         |           |          |         |
| 10.      |       |         | RTNA      | 80SLO 01 |         |
| Hg (ppb) |       |         |           |          |         |
| 121.     | 6.    |         | ITNA      | 77NAD 02 |         |
| 133.     |       | 11      | CVAA      | 79HOE 02 |         |
| 147.     | 8.    |         | CVAA      | 82GLA 02 |         |
| 157.     | 18.   |         | CVAA      | 80DUM 01 |         |
| 160.     | 20.   |         | RTNA      | 80SLO 01 |         |
| I (ppb)  |       |         |           |          |         |
| 140.     | 200.  | L*      | FAA       | 77WIL 01 |         |
| 150.     | 20.   |         | ITNA      | 82SAT 01 |         |
|          | 50.   |         | RTNA      | 77STE 02 |         |
| K (ppm)  |       |         |           |          |         |
| 2700.    |       |         | OES       | 75JON 05 |         |
| 3200.    |       |         | OES       | 75JON 09 |         |
| 3300.    | 100.  |         | ICPES     | 79HER 01 |         |
| 3400.    | 200.  | 11      | ICPES     | 82JON 01 |         |
| 3500.    | 500.  |         | CPXRF     | 80KIR 01 |         |
| 3530.    | 80.   | 11      | ICPES     | 82JON 01 |         |
| 3600.    | 100.  |         | ITNA      | 77NAD 02 |         |
| 3600.    |       |         | ICPES     | 79DUM 01 |         |
| 3620.    | 40.   | 11      | ICPES     | 82JON 01 |         |
| 3700.    | 200.  |         | ITNA      | 79REN 03 |         |
| 3700.    |       |         | OES       | 75JON 03 |         |
| 3800.    |       |         | OES       | 75JON 04 |         |
| 3850.    | 80.   | 11      | ICPES     | 82JON 01 |         |
| 4000.    | 100.  |         | ITNA      | 80SLO 01 |         |
| 4000.    |       |         | OES       | 75JON 01 |         |
| 4400.    |       | *       | OES       | 75JON 02 |         |
| 5100.    |       | *       | OES       | 75JON 06 |         |
| 5800.    |       | *       | OES       | 75JON 11 |         |
| 6500.    |       | *       | OES       | 75JON 07 |         |
| 9100.    |       | *       | EXRF      | 81PAR 01 |         |
| La (ppb) |       |         |           |          |         |
| 130.     | 20.   |         | RTNA      | 80SLO 01 |         |
| 140.     | 10.   |         | ITNA      | 77NAD 02 |         |
| 210.     | 30.   |         | ITNA      | 79REN 03 |         |
| Lu (ppb) |       |         |           |          |         |
| 1.3      | 0.3   |         | RTNA      | 80SLO 01 |         |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Mg (ppm) |       |         |              |             |            |
| 900.     |       |         | OES          | 75JON       | 09         |
| 1100.    | 100.  |         | ICPES        | 79HER       | 01         |
| 1180.    | 30.   | 11      | ICPES        | 82JON       | 01         |
| 1190.    | 20.   | 11      | ICPES        | 82JON       | 01         |
| 1200.    | 200.  |         | ITNA         | 80SLO       | 01         |
| 1200.    |       |         | OES          | 75JON       | 07         |
| 1200.    | 20.   | 11      | ICPES        | 82JON       | 01         |
| 1200.    |       |         | OES          | 75JON       | 01         |
| 1200.    | 30.   | 11      | ICPES        | 82JON       | 01         |
| 1200.    |       |         | OES          | 75JON       | 06         |
| 1200.    |       |         | OES          | 75JON       | 02         |
| 1300.    |       |         | OES          | 75JON       | 03         |
| 1400.    |       |         | OES          | 75JON       | 08         |
| 1500.    | 200.  |         | ITNA         | 77NAD       | 02         |
| 1500.    |       |         | OES          | 75JON       | 11         |
| 1600.    |       |         | OES          | 75JON       | 05         |
| 1700.    |       | *       | OES          | 75JON       | 04         |
| 2200.    | 600.  | *       | CPXRF        | 80KIR       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 430.     |       | *       | OES          | 75JON       | 09         |
| 448.     |       | *       | OES          | 75JON       | 01         |
| 567.     |       | *       | OES          | 75JON       | 06         |
| 570.     |       | *       | OES          | 75JON       | 02         |
| 580.     |       |         | OES          | 75JON       | 04         |
| 588.     |       |         | OES          | 75JON       | 03         |
| 652.     | 14.   | 11      | ICPES        | 82JON       | 01         |
| 652.     | 15.   | 11      | ICPES        | 82JON       | 01         |
| 654.     | 20.   |         | AA           | 77GUZ       | 01         |
| 655.     | 13.   | 11      | ICPES        | 82JON       | 01         |
| 657.     | 7.    | 11      | ICPES        | 82JON       | 01         |
| 660.     | 28.   |         | ITNA         | 77NAD       | 02         |
| 668.     |       |         | OES          | 75JON       | 05         |
| 670.     | 6.    |         | ICPES        | 79HER       | 01         |
| 673.     | 10.   | D*      | DCP          | 81REE       | 01         |
| 673.     | 10.   |         | DCP          | 79REE       | 01         |
| 677.     | 12.   |         | VV           | 80SCH       | 05         |
| 678.     | 7.    |         | ICPES        | 81KNA       | 01         |
| 685.     | 15.   |         | ITNA         | 80SLO       | 01         |
| 688.     |       | 11      | AA           | 79HOE       | 02         |
| 698.     |       | 11      | AA           | 79HOE       | 02         |
| 700.     | 100.  |         | ITNA         | 79REN       | 03         |
| 727.     |       |         | XRF          | 80SUZ       | 02         |
| 738.     |       |         | OES          | 75JON       | 08         |
| 885.     |       | *       | OES          | 75JON       | 07         |
| 2200.    |       | *       | EXRF         | 81PAR       | 01         |
| Mo (ppm) |       |         |              |             |            |
| 0.1      |       |         | RTNA         | 80SLO       | 01         |
| 0.1      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 0.13     | 0.06  | 11      | ICPES        | 82JON       | 01         |
| 0.2      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 0.2      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 1.5      |       |         | OES          | 75JON       | 11         |
| 1.7      |       |         | OES          | 75JON       | 01         |
| 2.5      |       |         | OES          | 75JON       | 07         |
| 3.6      |       | *       | OES          | 75JON       | 03         |
| 18.5     |       | *       | OES          | 75JON       | 02         |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| N (%)    |       |         |              |             |            |
| 1.11     | 0.01  |         | CB           | 80SCH       | 02         |
| 1.2      | 0.14  |         | CB           | 82GLA       | 02         |
| 1.3      | 0.2   | 35      | TCGS         | 79GLA       | 04         |
| Na (ppm) |       |         |              |             |            |
|          | 45.   | L*      | ITNA         | 80SLO       | 01         |
| 18.      |       |         | OES          | 75JON       | 06         |
| 20.      |       |         | OES          | 75JON       | 03         |
| 26.      | 4.    |         | ITNA         | 77NAD       | 02         |
| 30.      |       |         | OES          | 75JON       | 09         |
| 40.      |       |         | ITNA         | 79REN       | 03         |
| 70.      |       |         | OES          | 75JON       | 11         |
| 71.      |       |         | ITNA         | 83GLA       | 01         |
| 78.      |       |         | OES          | 75JON       | 08         |
| 100.     |       |         | OES          | 75JON       | 01         |
| 100.     |       |         | OES          | 75JON       | 05         |
| 190.     |       | *       | OES          | 75JON       | 04         |
| Nd (ppb) |       |         |              |             |            |
| 200.     | 100.  |         | RTNA         | 80SLO       | 01         |
| Ni (ppm) |       |         |              |             |            |
| 2.07     | 0.07  | 11      | ICPES        | 82JON       | 01         |
| 2.2      | 0.2   |         | ITNA         | 77NAD       | 02         |
| 2.2      | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 2.24     | 0.06  | 11      | ICPES        | 82JON       | 01         |
| 2.3      | 0.2   |         | RTNA         | 80SLO       | 01         |
| 2.3      | 0.2   |         | ICPES        | 79HER       | 01         |
| 2.39     | 0.09  | 11      | ICPES        | 82JON       | 01         |
| 2.63     |       |         | VOLT         | 81PIH       | 01         |
| 2.7      | 1.1   |         | CPXRF        | 80KIR       | 01         |
| 2.9      | 0.1   | *       | DCP          | 79REE       | 01         |
| 2.9      | 0.1   | D*      | DCP          | 81REE       | 01         |
| 4.       |       | *       | FAA          | 82HOE       | 01         |
| P (ppm)  |       |         |              |             |            |
| 1000.    | 300.  |         | CPXRF        | 80KIR       | 01         |
| 1000.    |       |         | OES          | 75JON       | 04         |
| 1100.    |       |         | FAA          | 79EDI       | 01         |
| 1100.    |       |         | OES          | 75JON       | 09         |
| 1100.    |       |         | ICPES        | 79EDI       | 01         |
| 1170.    | 50.   |         | ICPES        | 81OWE       | 01         |
| 1170.    | 40.   | 11      | ICPES        | 82JON       | 01         |
| 1180.    | 10.   |         | ICPES        | 79HER       | 01         |
| 1190.    | 50.   | 11      | ICPES        | 82JON       | 01         |
| 1190.    | 20.   | 11      | ICPES        | 82JON       | 01         |
| 1200.    |       |         | OES          | 75JON       | 05         |
| 1260.    | 20.   | 11      | ICPES        | 82JON       | 01         |
| 1300.    |       |         | OES          | 75JON       | 08         |
| 1300.    |       |         | OES          | 75JON       | 06         |
| 1400.    |       |         | OES          | 75JON       | 07         |
| 1400.    |       |         | OES          | 75JON       | 11         |
| 1600.    |       |         | OES          | 75JON       | 02         |
| 1800.    |       | *       | OES          | 75JON       | 03         |
| 2100.    |       | *       | OES          | 75JON       | 01         |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Pb (ppm) |       |         |              |             |            |
| 7.4      | 1.3   | *       | CPXRF        | 80KIR       | 01         |
| 9.6      | 0.4   | 11      | ICPES        | 82JON       | 01         |
| 9.8      |       |         | FAA          | 80PRE       | 01         |
| 9.8      | 0.3   | 11      | ICPES        | 82JON       | 01         |
| 10.4     |       |         | FAA          | 82PRE       | 01         |
| 10.4     |       |         | ASV          | 82GAJ       | 01         |
| 10.5     |       | 6       | FAA          | 81HIN       | 01         |
| 10.5     |       | 6       | FAA          | 82KOI       | 01         |
| 10.8     | 0.6   |         | FAA          | 80LEG       | 01         |
| 10.9     | 0.3   |         | FAA          | 81KNA       | 01         |
| 10.93    | 0.91  |         | ASV          | 80SZY       | 01         |
| 11.      | 1.    |         | ICPES        | 79HER       | 01         |
| 11.      |       | 6       | FAA          | 81HIN       | 01         |
| 11.      | 0.6   |         | FAA          | 79DAB       | 02         |
| 11.      |       | 6       | FAA          | 82KOI       | 01         |
| 11.      |       | 11      | FAA          | 79HOE       | 02         |
| 11.1     | 0.3   |         | AA           | 80SCH       | 05         |
| 11.2     | 1.1   |         | HAA          | 82WEI       | 01         |
| 11.2     |       |         | FAA          | 82HOE       | 01         |
| 11.2     |       | 11      | FAA          | 79HOE       | 02         |
| 13.9     | 1.2   | *       | FAA          | 82WEI       | 01         |
| 33.      |       | *       | EXRF         | 81PAR       | 01         |
| Pd (ppb) |       |         |              |             |            |
|          | 2.    | L*      | RTNA         | 81BYR       | 01         |
| Pr (ppb) |       |         |              |             |            |
|          | 70.   | L*      | RTNA         | 80SLO       | 01         |
| Rb (ppm) |       |         |              |             |            |
| 11.      | 0.2   |         | ITNA         | 77NAD       | 02         |
| 12.22    | 0.85  |         | ITNA         | 77GUZ       | 01         |
| 12.5     | 3.9   |         | ITNA         | 79REN       | 03         |
| 13.1     | 2.6   |         | CPXRF        | 80KIR       | 01         |
| 35.      |       | *       | EXRF         | 81PAR       | 01         |
| S (ppm)  |       |         |              |             |            |
| 580.     | 140.  |         | CPXRF        | 79REN       | 02         |
| 1500.    | 300.  |         | CPXRF        | 80KIR       | 01         |
| Sb (ppb) |       |         |              |             |            |
| 180.     | 14.   |         | HAA          | 79VIJ       | 01         |
| 180.     | 10.   |         | ITNA         | 77NAD       | 02         |
| 185.     | 2.    |         | RTNA         | 79HOE       | 01         |
| 187.     | 7.    |         | HAA          | 78KUB       | 02         |
| 190.     | 10.   |         | RTNA         | 80SLO       | 01         |
| 198.     | 3.    |         | RTNA         | 80KOS       | 02         |
| 220.     | 10.   | 7       | RTNA         | 77GIL       | 03         |
| 220.     | 20.   | 7       | RTNA         | 77GIL       | 03         |
| 1140.    | 440.  | *       | ITNA         | 79REN       | 03         |
| Sc (ppb) |       |         |              |             |            |
| 27.      | 4.    |         | ITNA         | 77GUZ       | 01         |
| 42.      | 2.    |         | ITNA         | 77NAD       | 02         |

TABLE K (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 53.      | 8.    |         | ITNA         | 79REN       | 03         |
| 130.     |       | *       | RTNA         | 80SLO       | 01         |
| Se (ppb) |       |         |              |             |            |
|          | 100.  | L*      | HAA          | 82JON       | 01         |
|          | 100.  | L*      | HAA          | 82JON       | 01         |
| 43.      | 1.    | 11      | GC           | 81UCH       | 02         |
| 43.      | 1.    | 11      | GC           | 81UCH       | 02         |
| 44.      | 8.    |         | ITNA         | 77NAD       | 02         |
| 50.      | 10.   |         | RTNA         | 80KNA       | 01         |
| 53.      | 10.   | 9       | ITNA         | 80WAN       | 01         |
| 96.      | 16.   | *       | RTNA         | 82POL       | 01         |
| Si (ppm) |       |         |              |             |            |
| 248.     | 36.   |         | CPXRF        | 80KIR       | 01         |
| Sm (ppb) |       |         |              |             |            |
| 20.      | 2.    |         | RTNA         | 80SLO       | 01         |
| 130.     | 120.  |         | ITNA         | 79REN       | 03         |
| Sr (ppm) |       |         |              |             |            |
| 4.7      | 0.2   |         | AF           | 81HOR       | 01         |
| 4.9      | 0.1   |         | ICPES        | 79HER       | 01         |
| 5.       |       |         | OES          | 75JON       | 03         |
| 5.5      | 0.57  |         | CPXRF        | 80KIR       | 01         |
| 10.      |       |         | OES          | 75JON       | 04         |
| 20.      |       | *       | OES          | 75JON       | 01         |
| Ta (ppm) |       |         |              |             |            |
| 1.74     | 0.27  |         | ITNA         | 79REN       | 03         |
| Tb (ppb) |       |         |              |             |            |
| 60.      | 10.   |         | RTNA         | 80SLO       | 01         |
| Th (ppb) |       |         |              |             |            |
| 34.      | 1.    |         | ITNA         | 77NAD       | 02         |
| 35.      | 5.    |         | RTNA         | 80SLO       | 01         |
| U (ppb)  |       |         |              |             |            |
| 13.      | 2.    |         | RTNA         | 80SLO       | 01         |
| 15.      |       |         | DNA          | 83GLA       | 01         |
| 15.      | 0.5   |         | RTNA         | 78DER       | 01         |
| 18.      | 6.    | 35      | DNA          | 80GLA       | 04         |
| 20.      | 48.   | R*      | DNA          | 81GLA       | 03         |
| V (ppb)  |       |         |              |             |            |
| 346.     | 18.   |         | RTNA         | 78BYR       | 01         |
| 370.     | 90.   | 11      | ICPES        | 82JON       | 01         |
| 410.     | 60.   | 11      | ICPES        | 82JON       | 01         |
| 470.     | 80.   |         | ITNA         | 77NAD       | 02         |
| W (ppb)  |       |         |              |             |            |
| 50.      | 10.   |         | RTNA         | 80SLO       | 01         |

TABLE L

## NBS SRM 1577—COLLECTED DATA

| TABLE K (cont) |       |         |           |          |         | NBS SRM 1577—COLLECTED DATA |       |         |           |          |         |
|----------------|-------|---------|-----------|----------|---------|-----------------------------|-------|---------|-----------|----------|---------|
| CONC           | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM | CONC                        | UNCER | COMMENT | ANAL METH | REF CODE | REF NUM |
| Zn (ppm)       |       |         |           |          |         | Ag (ppb)                    |       |         |           |          |         |
| 5.             |       | *       | OES       | 75JON 09 |         | 5.                          | 130.  | L*      | RTNA      | 76GAU 01 |         |
| 51.            | 9.    |         | CPXRF     | 79REN 02 |         | 40.                         | 8.    | *17     | UU        | 74MAS 01 |         |
| 52.            | 1.    |         | ITNA      | 77NAD 02 |         | 51.                         | 11.   |         | RTNA      | 79WAR 02 |         |
| 53.5           | 2.    |         | RTNA      | 80SLO 01 |         | 51.                         | 11.   |         | RTNA      | 77LIE 01 |         |
| 57.            |       |         | OES       | 75JON 11 |         | 60.                         |       |         | RTNA      | 75LIE 01 |         |
| 60.            | 3.    | 11      | ICPES     | 82JON 01 |         | 60.                         | 1.    |         | ITNA      | 77OSB 01 |         |
| 60.3           | 1.3   |         | RTNA      | 77DER 01 |         | 65.                         | 5.    |         | FAA       | 75PIC 01 |         |
| 61.            | 4.    | 11      | ICPES     | 82JON 01 |         | 65.                         | 10.   |         | RTNA      | 80SLO 01 |         |
| 63.            | 3.    | 11      | ICPES     | 82JON 01 |         | 66.                         | 21.   |         | SSMS      | 77PAU 01 |         |
| 64.            | 7.    |         | ICPES     | 79HER 01 |         | 68.                         | 6.    |         | ITNA      | 79CHA 04 |         |
| 64.            | 4.    | 11      | ICPES     | 82JON 01 |         | 72.                         | 13.   |         | ITNA      | 78BEH 01 |         |
| 65.            |       |         | AA        | 81ARA 01 |         | 80.                         | 6.    |         | AA        | 80JAC 01 |         |
| 65.            | 6.    |         | ITNA      | 79REN 03 |         | 91.                         | 26.   | *       | ITNA      | 79CHA 02 |         |
| 65.            | 4.    | 11      | ICPES     | 82JON 01 |         | 194.                        |       | *17     | UU        | 73COR 01 |         |
| 66.            |       |         | OES       | 75JON 06 |         | 300.                        | 100.  | *34     | CPXRF     | 74MAS 01 |         |
| 67.            |       |         | XRF       | 80SUZ 02 |         | 400.                        |       | *       | OES       | 78JOL 01 |         |
| 68.            | 5.    | 11      | ICPES     | 82JON 01 |         | 2000.                       | 600.  | *       | RTNA      | 75BOL 02 |         |
| 68.            |       |         | OES       | 75JON 08 |         |                             |       |         |           | 74SCH 03 |         |
| 71.            | 1.    | D*      | DCP       | 81REE 01 |         | Al (ppm)                    |       |         |           |          |         |
| 71.            | 1.    |         | DCP       | 79REE 01 |         | 15.                         |       | L*      | ICPES     | 78CAP 01 |         |
| 71.            | 10.   | 11      | ICPES     | 82JON 01 |         | 80.                         |       | L*      | 14NAA     | 81WIL 02 |         |
| 72.            |       |         | OES       | 75JON 02 |         | 80.                         |       | L*      | 14NAA     | 81WIL 01 |         |
| 74.            | 9.    | 11      | ICPES     | 82JON 01 |         | 1.8                         | 0.2   | *       | ITNA      | 77GOO 01 |         |
| 74.            |       |         | OES       | 75JON 03 |         | 2.21                        | 0.15  | *       | ITNA      | 82EHM 01 |         |
| 82.            |       |         | OES       | 75JON 05 |         | 5.                          |       |         | ICPES     | 79MCQ 01 |         |
| 85.            |       |         | OES       | 75JON 07 |         | 6.                          | 3.    |         | ITNA      | 83GLA 01 |         |
| 87.            |       |         | OES       | 75JON 01 |         | 6.                          | 2.    |         | ICPES     | 79ABE 01 |         |
| 99.            | 10.   | *       | ICPES     | 80SCH 05 |         | 7.                          |       | 17      | UU        | 74MAS 01 |         |
| 110.           | 12.   | *       | CPXRF     | 80KIR 01 |         | 8.                          | 0.6   | 11      | ICPES     | 81BLA 02 |         |
| 141.           |       | *       | OES       | 75JON 04 |         | 8.2                         | 0.8   | 11      | ICPES     | 81BLA 02 |         |
|                |       |         |           |          |         | 11.3                        | 2.9   | 6       | ITNA      | 74HOF 01 |         |
|                |       |         |           |          |         | 15.3                        | 1.1   |         | ITNA      | 80SLO 01 |         |
|                |       |         |           |          |         | 20.4                        | 2.9   | 6       | ITNA      | 74HOF 01 |         |
|                |       |         |           |          |         | 20.8                        | 0.7   |         | RTNA      | 77BUO 01 |         |
|                |       |         |           |          |         | 23.4                        | 0.6   |         | RTNA      | 79WAR 02 |         |
|                |       |         |           |          |         | 23.6                        | 2.    |         | ITNA      | 79CHA 02 |         |
|                |       |         |           |          |         | 30.                         | 65.   | R*      | ITNA      | 79IMA 01 |         |
|                |       |         |           |          |         | 30.                         | 65.   | R*      | ITNA      | 79IMA 03 |         |
|                |       |         |           |          |         | 37.                         | 6.    |         | ITNA      | 77ZIK 01 |         |
|                |       |         |           |          |         | 42.                         | 13.   |         | ITNA      | 77HAM 01 |         |
|                |       |         |           |          |         | 45.6                        |       | *       | ITNA      | 73NAD 01 |         |
|                |       |         |           |          |         | 65.                         |       | *       | ITNA      | 78CAP 01 |         |
|                |       |         |           |          |         | As (ppb)                    |       |         |           |          |         |
|                |       |         |           |          |         | 100.                        |       | L*      | HAA       | 82JON 01 |         |
|                |       |         |           |          |         | 1300.                       |       | L*      | 14NAA     | 81WIL 02 |         |
|                |       |         |           |          |         | 200.                        |       | L*      | EXRF      | 77NIE 01 |         |
|                |       |         |           |          |         | 104.                        |       | L*      | ITNA      | 74NAD 02 |         |
|                |       |         |           |          |         | 100.                        |       | L*      | ITNA      | 73NAD 01 |         |
|                |       |         |           |          |         | 700.                        |       | L*      | CPXRF     | 77WIL 02 |         |
|                |       |         |           |          |         | 300.                        |       | L*      | EXRF      | 79GIA 01 |         |
|                |       |         |           |          |         | 1300.                       |       | L*      | 14NAA     | 81WIL 01 |         |
|                |       |         |           |          |         | 100.                        |       | L*      | HAA       | 82JON 01 |         |
|                |       |         |           |          |         | 23.                         | 12.   |         | HAA       | 82TAM 01 |         |
|                |       |         |           |          |         | 30.                         | 15.   |         | IENA      | 78WAN 01 |         |
|                |       |         |           |          |         | 40.                         | 10.   |         | RTNA      | 80SLO 01 |         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 40.      | 10.   |         | RTNA         | 75ABU       | 01         |
| 41.      |       |         | HAA          | 79EVA       | 01         |
| 43.3     |       |         | HAA          | 77IHN       | 01         |
| 46.      | 2.    |         | RTNA         | 79HOE       | 01         |
| 47.      | 5.    |         | HAA          | 82SUB       | 01         |
| 49.      | 6.    |         | HAA          | 76FIO       | 01         |
| 50.      | 10.   |         | HAA          | 80AGE       | 02         |
| 50.      | 10.   |         | HAA          | 74LOO       | 01         |
| 50.      |       |         | HAA          | 78WEL       | 01         |
| 52.      | 3.    | 34      | HAA          | 78FLA       | 01         |
| 52.      | 7.    |         | ITNA         | 79CHA       | 02         |
| 52.      | 3.    |         | AA           | 79FLA       | 02         |
| 52.9     | 1.9   | H       | RTNA         | 79ORV       | 01         |
| 53.      | 2.    | 7       | RTNA         | 81KUC       | 01         |
| 54.      | 4.    |         | RTNA         | 78GAL       | 01         |
| 54.      | 4.    |         | RTNA         | 82BYR       | 01         |
| 54.      | 5.    |         | RTNA         | 74HEN       | 01         |
| 54.      | 2.    |         | RTNA         | 79WAR       | 02         |
| 54.      |       | H       | FAE          | 79FEL       | 01         |
| 54.      | 5.    |         | RTNA         | 79MAY       | 01         |
| 55.      | 3.    |         | NAA          | 77GIL       | 01         |
| 55.      | 3.    |         | RTNA         | 77GIL       | 03         |
| 56.      | 3.    |         | HAA          | 81UTH       | 01         |
| 56.      | 4.    |         | RTNA         | 75LIE       | 01         |
| 56.      | 4.    |         | RTNA         | 77LIE       | 01         |
| 56.6     | 1.2   |         | NAA          | 74HEY       | 01         |
| 57.      |       |         | ASV          | 78DAV       | 01         |
| 58.      | 3.    |         | RTNA         | 79HEI       | 04         |
| 58.      | 3.    |         | RTNA         | 79ROS       | 02         |
| 58.5     | 9.    |         | NAA          | 76GUZ       | 01         |
| 59.      |       | 7       | RTNA         | 81KUC       | 01         |
| 59.      |       |         | RTNA         | 75STE       | 02         |
| 63.      | 4.    |         | RTNA         | 74ORV       | 01         |
| 64.      |       | 17      | UU           | 74MAS       | 01         |
| 66.      |       |         | ASV          | 81LEE       | 01         |
| 66.      | 23.   |         | RTNA         | 74SCH       | 03         |
| 69.      |       | 17      | UU           | 74MAS       | 01         |
| 80.      | 30.   |         | RTNA         | 77TJI       | 01         |
| 100.     | 10.   |         | GCMES        | 75TAL       | 01         |
| 100.     |       |         | ITNA         | 77OSB       | 01         |
| 150.     |       |         | ICPES        | 80HAA       | 01         |
| 200.     | 300.  | *6      | CPXRF        | 77WIL       | 03         |
| 280.     | 100.  | *34     | CPXRF        | 78JOL       | 01         |
| 500.     |       | *       | FAA          | 78CAP       | 01         |
| 600.     | 500.  | 6*      | CPXRF        | 77WIL       | 03         |
| 290.     | 110.  |         | ICPES        | 80HAA       | 01         |
| Au (ppb) |       |         |              |             |            |
|          | 0.5   | L*      | RTNA         | 80SLO       | 01         |
| 0.23     | 0.16  | *       | RTNA         | 77TJI       | 01         |
| 1.7      | 0.4   |         | RTNA         | 77KUS       | 01         |
| 4.9      | 0.8   |         | RTNA         | 74SCH       | 03         |
| 6.       | 1.    |         | ITNA         | 79CHA       | 02         |
| 7.       | 0.8   |         | RTNA         | 79WAR       | 02         |
| 29.2     | 2.1   | *       | RTNA         | 77NAD       | 01         |
| B (ppm)  |       |         |              |             |            |
| 2.24     |       | 6       | AE+AF        | 74DAU       | 01         |
| 2.34     |       | 6       | AE+AF        | 74DAU       | 01         |
| 3.2      | 0.2   |         | TCGS         | 79FAI       | 01         |
| 4.       | 1.    |         | ICPES        | 79ABE       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ba (ppm) |       |         |              |             |            |
|          | 20.   | L*      | 14NAA        | 81WIL       | 02         |
|          | 30.   | L*      | ITNA         | 78CAP       | 01         |
| 0.12     | 0.13  |         | RTNA         | 76GAU       | 01         |
| 0.13     |       |         | ICPES        | 78DAH       | 01         |
| 0.22     | 0.02  |         | RTNA         | 79WAR       | 02         |
| 1.8      | 0.39  |         | RTNA         | 77GUI       | 03         |
| 2.92     |       |         | ITNA         | 73NAD       | 01         |
| Be (ppb) |       |         |              |             |            |
|          | 3.    | L*      | ICPES        | 82SCH       | 01         |
|          | 60.   | L*      | ICPES        | 78CAP       | 01         |
| 3.       | 1.    | 6       | ICPES        | 82SCH       | 01         |
| 5.       | 3.    |         | FAA          | 75OWE       | 01         |
| 17.      | 4.    |         | FLUOR        | 77WIC       | 01         |
| Br (ppm) |       |         |              |             |            |
|          | 9.9   | L*      | ITNA         | 80TOU       | 01         |
| 4.3      |       | *17     | UU           | 74MAS       | 01         |
| 4.7      | 0.8   | *       | CPXRF        | 77RIN       | 01         |
| 6.1      | 0.6   |         | CPXRF        | 77WIL       | 02         |
| 7.35     |       | 17      | UU           | 74MAS       | 01         |
| 7.4      | 0.5   |         | EXRF         | 80DYC       | 01         |
| 7.7      | 0.5   | 5       | ITNA         | 80HOE       | 01         |
| 7.8      | 0.1   | 5       | IENA         | 79GLA       | 02         |
| 8.       | 1.    |         | RTNA         | 77TJI       | 01         |
| 8.       | 0.5   |         | RTNA         | 76GAU       | 01         |
| 8.       | 0.1   | 5       | IENA         | 79GLA       | 02         |
| 8.22     | 0.4   |         | RTNA         | 79WAR       | 02         |
| 8.4      | 0.6   |         | ITNA         | 83GLA       | 01         |
| 8.5      | 1.    |         | ITNA         | 79CHA       | 02         |
| 8.5      | 9.9   | R*      | ITNA         | 79IMA       | 03         |
| 8.5      | 9.9   | R*      | ITNA         | 79IMA       | 01         |
| 8.6      | 0.4   |         | NAA          | 78GAN       | 01         |
| 8.8      | 0.4   |         | EXRF         | 79GIA       | 01         |
| 8.8      | 0.3   | 5       | ITNA         | 80HOE       | 01         |
| 8.8      | 1.4   |         | EXRF         | 77NIE       | 01         |
| 8.9      | 2.1   |         | ITNA         | 77HAM       | 01         |
| 9.       | 1.    |         | CPXRF        | 78VIS       | 01         |
| 9.       | 0.6   |         | ITNA         | 78BEH       | 01         |
| 9.       | 0.6   |         | ITNA         | 77JUR       | 02         |
| 9.3      |       | 1       | IENA         | 79KUC       | 01         |
| 9.3      | 0.8   |         | ITNA         | 80MAE       | 01         |
| 9.3      | 3.    |         | CPXRF        | 79REN       | 02         |
| 9.34     | 0.82  |         | ITNA         | 74DON       | 01         |
| 9.37     |       |         | ITNA         | 73NAD       | 01         |
| 9.4      | 0.4   |         | XRF          | 77SMY       | 01         |
| 9.5      |       |         | ITNA         | 80CRE       | 01         |
| 9.5      | 1.    | 6       | CPXRF        | 77WIL       | 03         |
| 9.7      |       | 1       | IENA         | 79KUC       | 01         |
| 9.8      |       |         | ITNA         | 79KUC       | 01         |
| 10.      | 1.    |         | CPXRF        | 80MAE       | 01         |
| 10.      | 0.7   |         | CPXRF        | 82ROE       | 02         |
| 10.4     |       |         | ITNA         | 82AKA       | 01         |
| 11.      | 2.3   |         | CPXRF        | 80KIR       | 01         |
| 11.      |       |         | ITNA         | 78CAP       | 01         |
| 11.      | 1.    | 5       | ITNA         | 80TOU       | 01         |
| 11.1     | 1.6   |         | RTNA         | 74SCH       | 03         |
| 12.      | 4.    |         | ITNA         | 77ZIK       | 01         |
| 13.4     |       | *17     | UU           | 74MAS       | 01         |
| 22.      | 10.   | *       | ITNA         | 77ZIK       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| C (x)    |       |         |              |             |            |
| 49.6     | 1.5   | 35      | CB           | 79GLA       | 04         |
| 49.87    | 0.07  |         | CB           | 80SCH       | 02         |
| 51.      | 2.    | 35      | TCGS         | 79GLA       | 04         |
| 52.      | 2.    |         | TCGS         | 79FAI       | 01         |
| Ca (ppm) |       |         |              |             |            |
|          | 1000. | L*      | 14NAA        | 81WIL       | 02         |
|          | 420.  | L*      | 14NAA        | 77VAN       | 01         |
|          | 200.  | L*      | ITNA         | 73NAD       | 01         |
|          | 5000. | L*      | 14NAA        | 81WIL       | 01         |
| 30.      |       | *       | AE+AF        | 79ULL       | 01         |
| 71.      | 23.   | *       | EXRF         | 77NIE       | 01         |
| 80.      | 30.   |         | ITNA         | 74WES       | 01         |
| 90.      | 13.   |         | CPXRF        | 80MAE       | 01         |
| 94.      | 112.  |         | AA           | 79MAN       | 01         |
| 100.     | 26.   |         | ITNA         | 78FUR       | 01         |
| 100.     | 20.   |         | RTNA         | 76GAU       | 01         |
| 100.     |       |         | CPXRF        | 77WIL       | 02         |
| 101.     |       |         | AA           | 79LOC       | 01         |
| 103.     | 12.   |         | CPXRF        | 79MAN       | 01         |
| 104.     |       | 17      | UU           | 74MAS       | 01         |
| 106.     | 3.2   |         | AA           | 74WES       | 01         |
| 107.     |       |         | ITNA         | 82AKA       | 01         |
| 107.     | 232.  | R*      | ITNA         | 79IMA       | 03         |
| 107.     | 232.  | R*      | ITNA         | 79IMA       | 01         |
| 108.     | 9.    |         | CPAA         | 77ZIK       | 01         |
| 114.     | 2.    | 1       | ICPES        | 78SUD       | 01         |
| 115.     | 12.   |         | RTNA         | 80CAN       | 01         |
| 116.     | 2.    | 1       | AA           | 77UCH       | 02         |
| 116.     | 2.    |         | AA           | 80LID       | 01         |
| 118.     | 9.    | 1       | ICPES        | 78SUD       | 01         |
| 119.     | 2.    | 1       | AA           | 77UCH       | 02         |
| 120.     | 2.    | 11      | ICPES        | 82JON       | 01         |
| 121.     | 3.    | 11      | ICPES        | 82JON       | 01         |
| 122.     |       |         | ICPES        | 80HAA       | 01         |
| 122.     | 7.    |         | ICPES        | 79MCQ       | 01         |
| 123.     | 17.   |         | AA           | 79MCQ       | 01         |
| 124.     | 10.   |         | ITNA         | 79CHA       | 02         |
| 124.67   | 8.48  |         | NAA          | 76GUZ       | 01         |
| 125.     | 13.   |         | RTNA         | 79WAR       | 02         |
| 125.     | 8.    |         | ITNA         | 75PIE       | 01         |
| 127.     | 7.    |         | AA           | 80UCH       | 01         |
| 127.     | 12.   |         | ICPES        | 79MCQ       | 02         |
| 127.     | 5.    |         | AA           | 75HIN       | 01         |
| 130.     | 10.   |         | ITNA         | 77ZIK       | 01         |
| 130.     | 30.   |         | ITNA         | 83GLA       | 01         |
| 131.     | 9.    |         | CPXRF        | 80KIR       | 01         |
| 131.     | 8.    |         | CPXRF        | 78VIS       | 01         |
| 131.     |       |         | RTNA         | 75STE       | 02         |
| 134.     | 18.   |         | ICPES        | 79ABE       | 01         |
| 135.     |       |         | ICPES        | 78DAH       | 01         |
| 137.5    | 18.   |         | PAA          | 76KAT       | 04         |
| 140.     |       |         | ICPES        | 78CAP       | 01         |
| 151.     | 7.4   | *       | CPXRF        | 81ROB       | 02         |
| 158.     | 15.   | *       | EXRF         | 80DYC       | 01         |
| 309.     |       | *       | ITNA         | 78CAP       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cd (ppb) |       |         |              |             |            |
| 1600.    |       | L*      | OES          | 75BOL       | 02         |
| 100.     |       | L*      | POL          | 72SIN       | 01         |
| 2500.    |       | L*      | ICPES        | 78CAP       | 01         |
| 100.     |       | L*      | POL          | 72SIN       | 01         |
| 210.     | 42.   | *       | ASV          | 79STO       | 01         |
| 230.     |       | *11     | FAA          | 75BLO       | 01         |
| 240.     | 10.   |         | FAA          | 82SUZ       | 01         |
| 240.     |       | 17      | UU           | 74MAS       | 01         |
| 246.     | 56.   |         | NAA          | 76GUZ       | 01         |
| 250.     |       |         | AA           | 78EVA       | 01         |
| 250.     | 30.   |         | VV           | 79CHA       | 02         |
| 250.     | 20.   |         | AF           | 75EPS       | 01         |
| 250.     |       | 11      | FAA          | 75BLO       | 01         |
| 253.     | 24.   |         | AE+AF        | 74RAI       | 02         |
| 260.     |       | 11      | ASV          | 81DAN       | 01         |
| 260.     |       |         | FAA          | 82AKA       | 01         |
| 260.     | 30.   |         | RTNA         | 80SLO       | 01         |
| 260.     |       |         | FAA          | 75SLA       | 01         |
| 260.     | 30.   |         | FAA          | 78PIE       | 01         |
| 260.     | 20.   |         | AA           | 74ULL       | 01         |
| 260.     | 10.   |         | RTNA         | 74ORV       | 01         |
| 260.     | 20.   |         | FAA          | 79DAB       | 02         |
| 260.     | 30.   |         | RTNA         | 74SCH       | 03         |
| 266.     | 27.   |         | RTNA         | 79MAY       | 01         |
| 266.     | 20.   |         | FAA          | 74RAI       | 02         |
| 269.     | 13.   |         | RTNA         | 74ROO       | 01         |
| 270.     | 50.   |         | FAA          | 81KNA       | 01         |
| 270.     |       |         | AA           | 77FRI       | 01         |
| 270.     | 20.   |         | AA           | 79WAR       | 01         |
| 270.     | 10.   | 11      | AA           | 81BLA       | 03         |
| 270.     | 20.   |         | AA           | 75EPS       | 01         |
| 270.     | 30.   |         | AA           | 79LAK       | 01         |
| 270.     | 60.   |         | TCGS         | 79FAI       | 01         |
| 270.     |       | 17      | UU           | 74MAS       | 01         |
| 270.     | 80.   |         | FAA          | 74GRO       | 01         |
| 270.     |       | 17      | UU           | 74MAS       | 01         |
| 270.     |       | 17      | UU           | 74MAS       | 01         |
| 280.     | 20.   |         | SSMS         | 77PAU       | 01         |
| 280.     |       |         | FAA          | 82HOE       | 01         |
| 280.     | 50.   | 11      | AA           | 81BLA       | 03         |
| 280.     |       |         | ASV          | 74COO       | 01         |
| 280.     | 30.   |         | AA           | 80SCH       | 05         |
| 283.     | 50.   |         | FAA          | 79STO       | 01         |
| 283.     |       |         | RTNA         | 75HAL       | 01         |
| 283.     |       | 17      | UU           | 74MAS       | 01         |
| 288.     | 29.   |         | RTNA         | 80GRE       | 01         |
| 288.     | 26.   |         | FAA          | 81ZAU       | 01         |
| 288.     | 35.   |         | RTNA         | 77LIE       | 01         |
| 288.     | 35.   |         | RTNA         | 75LIE       | 01         |
| 290.     | 10.   |         | FAA          | 80LEG       | 01         |
| 290.     | 30.   |         | FAA          | 83GLA       | 01         |
| 290.     |       |         | FAA          | 80JAR       | 01         |
| 290.     | 30.   |         | FAA          | 79WAR       | 01         |
| 290.     | 10.   |         | RTNA         | 77BAJ       | 02         |
| 290.     | 20.   |         | NAA          | 76DER       | 01         |
| 290.     |       | 11      | ASV          | 81DAN       | 01         |
| 290.     | 20.   |         | AA           | 79FLA       | 02         |
| 290.     |       | 17      | UU           | 74MAS       | 01         |
| 290.     | 30.   |         | RTNA         | 79DER       | 01         |
| 290.     | 13.   | 7       | AA           | 73TAL       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 290.     |       | 17      | UU           | 74MAS       | 01         |
| 290.     | 30.   |         | RTNA         | 74HEN       | 01         |
| 300.     | 40.   | 7       | RTNA         | 81KUC       | 01         |
| 300.     | 20.   |         | RTNA         | 77TJI       | 01         |
| 300.     |       |         | ASV          | 82GAJ       | 01         |
| 300.     |       |         | ICPES        | 80HAA       | 01         |
| 300.     | 70.   |         | AA           | 80AGE       | 01         |
| 300.     | 20.   |         | RTNA         | 78GAL       | 01         |
| 300.     | 50.   |         | AA           | 75HIN       | 01         |
| 300.     | 23.   |         | AF           | 75WOR       | 01         |
| 300.     | 25.   |         | FAA          | 74TAL       | 01         |
| 300.     | 700.  |         | AA           | 76LAN       | 01         |
| 300.     | 25.   | 7       | AA           | 73TAL       | 01         |
| 300.     | 30.   |         | RTNA         | 76GAU       | 01         |
| 300.     | 18.   | 7       | AA           | 73TAL       | 01         |
| 300.     | 800.  | 6       | FAA          | 76LAN       | 01         |
| 300.     | 18.   |         | FAA          | 74TAL       | 01         |
| 310.     |       | 7       | RTNA         | 81KUC       | 01         |
| 310.     | 50.   |         | FAA          | 80POL       | 01         |
| 310.     |       |         | RTNA         | 75STE       | 02         |
| 310.     | 20.   |         | FAA          | 78GRO       | 01         |
| 310.     |       | 11      | FAA          | 81DAN       | 01         |
| 320.     | 130.  | 6       | FAA          | 76LAN       | 01         |
| 320.     | 40.   | 11      | AA           | 81BLA       | 03         |
| 320.     |       | 11      | FAA          | 81DAN       | 01         |
| 337.     | 58.   | *       | RTNA         | 79PIA       | 01         |
| 350.     | 50.   | *11     | ICPES        | 82JON       | 01         |
| 390.     | 70.   | *11     | ICPES        | 82JON       | 01         |
| 550.     | 450.  | *       | AA           | 79MON       | 01         |
| 560.     | 130.  | *34     | CPXRF        | 78JOL       | 01         |
| Ce (ppb) |       |         |              |             |            |
|          | 3000. | L*      | 14NAA        | 81WIL       | 01         |
| 13.      |       | 17      | UU           | 74MAS       | 01         |
| 18.      | 4.    |         | RTNA         | 80SLO       | 01         |
| 21.5     |       |         | RTNA         | 77LAU       | 02         |
| 22.      |       |         | RTNA         | 82LAU       | 01         |
| 46.      | 14.   |         | RTNA         | 76GAU       | 01         |
| Cl (ppm) |       |         |              |             |            |
|          | 5400. | L*      | 14NAA        | 81WIL       | 01         |
| 1880.    |       | *17     | UU           | 74MAS       | 01         |
| 2155.    | 170.  | *34     | CPXRF        | 78JOL       | 01         |
| 2410.    | 600.  |         | EXRF         | 77NIE       | 01         |
| 2460.    |       | 35      | ITNA         | 81GLA       | 04         |
| 2480.    |       | 17      | UU           | 74MAS       | 01         |
| 2500.    | 130.  | 35      | ITNA         | 81GLA       | 03         |
| 2530.    |       |         | ITNA         | 78CAP       | 01         |
| 2542.    | 300.  |         | ITNA         | 77ZIK       | 01         |
| 2550.    | 100.  |         | ITNA         | 74WES       | 01         |
| 2570.    | 3110. | R*      | ITNA         | 79IMA       | 01         |
| 2570.    | 3110. | R*      | ITNA         | 79IMA       | 03         |
| 2590.    |       | 17      | UU           | 74MAS       | 01         |
| 2610.    | 200.  |         | ITNA         | 79CHA       | 02         |
| 2610.    |       | 17      | UU           | 74MAS       | 01         |
| 2615.    | 192.  |         | RTNA         | 74SCH       | 03         |
| 2632.    | 67.   |         | ITNA         | 77GUI       | 02         |
| 2632.    | 67.   |         | NAA          | 76MIL       | 02         |
| 2650.    | 100.  |         | ITNA         | 80SLO       | 01         |
| 2680.    | 80.   |         | RTNA         | 79WAR       | 02         |
| 2685.    | 165.  |         | PAA          | 76KAT       | 04         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 2690.    | 170.  |         | EXRF         | 80DYC       | 01         |
| 2700.    | 70.   |         | ITNA         | 83GLA       | 01         |
| 2750.    |       |         | ITNA         | 73NAD       | 01         |
| 2750.    | 110.  |         | ITNA         | 78FUR       | 01         |
| 2760.    |       |         | ITNA         | 82AKA       | 01         |
| 2793.    | 294.4 |         | NAA          | 76GUZ       | 01         |
| 2830.    | 200.  |         | NAA          | 78GAN       | 01         |
| 2900.    |       |         | ITNA         | 80CRE       | 01         |
| 3000.    | 100.  |         | TCGS         | 79FAI       | 01         |
| 3000.    | 190.  |         | ITNA         | 77HAM       | 01         |
| 3200.    | 800.  |         | CPXRF        | 79REN       | 02         |
| 3500.    | 200.  | *       | 14NAA        | 81WIL       | 02         |
| 11663.   |       | *17     | UU           | 74MAS       | 01         |
| Co (ppb) |       |         |              |             |            |
|          | 6000. | L*      | EXRF         | 79GIA       | 01         |
|          |       | *17     | UU           | 74MAS       | 01         |
| 120.     |       |         | NAA          | 78GAN       | 01         |
| 170.     | 10.   |         | ITNA         | 73NAD       | 01         |
| 170.     | 20.   |         | ITNA         | 79CHA       | 02         |
| 170.     |       | 17      | UU           | 74MAS       | 01         |
| 174.     | 5.    |         | RTNA         | 79WAR       | 02         |
| 178.     | 10.   |         | RTNA         | 77GIL       | 03         |
| 180.     | 30.   |         | ITNA         | 79WAR       | 01         |
| 180.     | 10.   |         | NAA          | 77GIL       | 01         |
| 188.     | 27.   |         | NAA          | 76GUZ       | 01         |
| 190.     |       | 1       | IENA         | 79KUC       | 01         |
| 190.     | 20.   | 6       | ITNA         | 74BEC       | 01         |
| 200.     | 16.   |         | FAA          | 74WES       | 01         |
| 203.     |       |         | RTNA         | 75STE       | 02         |
| 210.     |       |         | ITNA         | 79KUC       | 01         |
| 210.     | 30.   |         | AA           | 79FLA       | 02         |
| 210.     | 40.   |         | FAA          | 79WAR       | 01         |
| 210.     | 20.   |         | ITNA         | 74WES       | 01         |
| 217.     | 13.   |         | ITNA         | 81KRI       | 01         |
| 220.     |       |         | RTNA         | 75ABU       | 01         |
| 223.     | 11.   |         | RTNA         | 77LIE       | 01         |
| 223.     | 11.   |         | RTNA         | 75LIE       | 01         |
| 225.     | 7.    |         | COLOR        | 82KIR       | 01         |
| 225.     |       | 17      | UU           | 74MAS       | 01         |
| 230.     | 20.   |         | RTNA         | 80SLO       | 01         |
| 230.     | 20.   | 6       | ITNA         | 74BEC       | 01         |
| 230.     | 100.  |         | ITNA         | 77ZIK       | 01         |
| 233.     | 5.    |         | RTNA         | 79DER       | 01         |
| 240.     | 10.   |         | ITNA         | 73COR       | 01         |
| 240.     |       |         | ITNA         | 80CRE       | 01         |
| 240.     |       |         | CHEML        | 79MIL       | 01         |
| 240.     | 37.   |         | ITNA         | 77HAM       | 01         |
| 240.     | 14.   |         | IENA         | 75MAZ       | 01         |
| 240.     | 30.   |         | ITNA         | 78BEH       | 01         |
| 240.     | 20.   |         | RTNA         | 74HEN       | 01         |
| 245.     |       | 7       | RTNA         | 81KUC       | 01         |
| 247.     | 31.   |         | ITNA         | 81MOL       | 01         |
| 248.     | 25.   |         | ITNA         | 79ZEI       | 01         |
| 250.     | 30.   |         | CHEML        | 81MAR       | 01         |
| 250.     |       |         | ITNA         | 82AKA       | 01         |
| 257.     | 2.    |         | ITNA         | 74LIN       | 01         |
| 260.     | 7.    | 7       | RTNA         | 81KUC       | 01         |
| 260.     | 10.   |         | ITNA         | 79SAT       | 01         |
| 260.     | 21.   |         | RTNA         | 76GAU       | 01         |
| 260.     |       | 17      | UU           | 74MAS       | 01         |
| 265.     |       |         | AA           | 79ABU       | 01         |

TALBE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 269.     | 30.   |         | AA           | 80JAC       | 01         |
| 275.     |       |         | FAA          | 82HOE       | 01         |
| 280.     |       |         | NAA          | 79MIL       | 01         |
| 290.     |       |         | ITNA         | 78CAP       | 01         |
| 300.     |       |         | ICPES        | 80HAA       | 01         |
| 300.     |       |         | ITNA         | 77OSB       | 01         |
| 310.     | 120.  |         | 14NAA        | 81WIL       | 02         |
| 310.     | 60.   |         | RTNA         | 74SCH       | 03         |
| 310.     | 120.  |         | 14NAA        | 81WIL       | 01         |
| 340.     |       | 17      | UU           | 74MAS       | 01         |
| 360.     | 60.   |         | ITNA         | 78FUR       | 01         |
| 370.     | 60.   | *       | RTNA         | 77MEL       | 01         |
| 390.     |       | *17     | UU           | 74MAS       | 01         |
| 400.     |       | *       | FAA          | 75SLA       | 01         |
| 410.     | 120.  | *       | RTNA         | 77KUS       | 01         |
| 246.     | 14.   |         | RTNA         | 77TJI       | 01         |
| Cr (ppb) |       |         |              |             |            |
|          | 300.  | L*      | 14NAA        | 81WIL       | 01         |
|          | 3400. | L*      | AA           | 79MON       | 01         |
|          | 100.  | L*      | RTNA         | 77MEL       | 01         |
|          | 300.  | L*      | 14NAA        | 81WIL       | 02         |
|          | 4000. | L*      | EXRF         | 79GIA       | 01         |
|          | 400.  | L*      | ITNA         | 78CAP       | 01         |
| 5.       | 1600. | R*      | VV           | 77PAR       | 01         |
| 22.      | 10.   |         | ICPES        | 81BLA       | 01         |
| 35.      | 4.    | 11      | FAA          | 80KUM       | 01         |
| 35.      | 3.    |         | GC           | 81BLA       | 01         |
| 44.9     | 5.    | 11      | RTNA         | 76PIE       | 01         |
| 51.      |       | 17      | UU           | 74MAS       | 01         |
| 53.      | 9.    |         | FAA          | 74WOL       | 01         |
| 60.      | 12.   |         | AA           | 80JAC       | 01         |
| 60.      | 30.   |         | RTNA         | 74SCH       | 03         |
| 72.      | 8.    | 11      | ICPES        | 81BLA       | 02         |
| 74.      | 5.    |         | RTNA         | 77LIE       | 01         |
| 78.9     |       | 11      | NAA          | 79VER       | 01         |
| 80.6     |       | 11      | NAA          | 79VER       | 01         |
| 85.      | 9.    |         | RTNA         | 78GAL       | 01         |
| 88.      |       | 7       | RTNA         | 81KUC       | 01         |
| 88.      | 8.    | 11      | FAA          | 80KUM       | 01         |
| 92.      | 10.   | 7       | RTNA         | 81KUC       | 01         |
| 92.      | 9.    | 11      | ICPES        | 81BLA       | 02         |
| 94.      | 8.    | 7       | FAA          | 80CHA       | 01         |
| 94.8     | 19.5  | 11      | RTNA         | 76PIE       | 01         |
| 98.      | 5.    |         | RTNA         | 75LIE       | 01         |
| 115.     | 42.   |         | RTNA         | 79FLA       | 01         |
| 120.     | 70.   |         | ITNA         | 78BEH       | 01         |
| 120.     | 40.   |         | AA           | 79FLA       | 02         |
| 123.     | 6.    |         | RTNA         | 77LIE       | 01         |
| 130.     |       | 17      | UU           | 74MAS       | 01         |
| 130.     |       |         | ITNA         | 80CRE       | 01         |
| 130.     | 50.   |         | RTNA         | 77TJI       | 01         |
| 130.     | 30.   |         | RTNA         | 78GOE       | 01         |
| 140.     |       | 17      | UU           | 74MAS       | 01         |
| 144.     | 23.   | 7       | FAA          | 80CHA       | 01         |
| 150.     | 30.   |         | ITNA         | 74DON       | 01         |
| 150.     | 10.   |         | NAA          | 78GAN       | 01         |
| 150.     |       | 17      | UU           | 74MAS       | 01         |
| 160.     | 60.   |         | RTNA         | 76GAU       | 01         |
| 160.     | 5.    | 11      | RTNA         | 78MCC       | 01         |
| 163.     | 10.   |         | RTNA         | 74MCC       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 180.     | 100.  |         | CPXRF        | 78VIS       | 01         |
| 190.     | 10.   |         | FAA          | 79WAR       | 01         |
| 200.     | 20.   | D*      | DCP          | 81REE       | 01         |
| 200.     | 20.   |         | DCP          | 79REE       | 01         |
| 210.     | 31.   |         | ITNA         | 74MCC       | 01         |
| 210.     | 40.   |         | ITNA         | 79WAR       | 01         |
| 210.     | 30.   |         | ITNA         | 78MCC       | 01         |
| 210.     | 70.   |         | RTNA         | 79WAR       | 02         |
| 210.     | 2.    | 11      | RTNA         | 78MCC       | 01         |
| 280.     | 200.  |         | ITNA         | 79SAT       | 01         |
| 400.     | 500.  | 11      | ICPES        | 82JON       | 01         |
| 400.     | 500.  | 11      | ICPES        | 82JON       | 01         |
| 490.     |       | 17      | UU           | 74MAS       | 01         |
| 500.     | 3500. | R*      | ITNA         | 73NAD       | 01         |
| 540.     |       | 17      | UU           | 74MAS       | 01         |
| 600.     |       |         | ITNA         | 79KUC       | 01         |
| 870.     | 60.   |         | CHEML        | 74LI        | 01         |
| 1000.    | 600.  | *11     | RTNA         | 76STE       | 01         |
| 1160.    | 600.  |         | ITNA         | 76STE       | 01         |
| 1300.    |       | *17     | UU           | 74MAS       | 01         |
| 1400.    | 800.  | *11     | RTNA         | 76STE       | 01         |
| 1570.    |       | *17     | UU           | 74MAS       | 01         |
| 1600.    | 800.  | *11     | RTNA         | 76STE       | 01         |
| 1700.    | 900.  | *11     | RTNA         | 76STE       | 01         |
| 1900.    | 1000. | *11     | RTNA         | 76STE       | 01         |
| 2400.    | 700.  |         | CPXRF        | 77WIL       | 02         |
| 61000.   | 3000. | *11     | FAA          | 80KUM       | 01         |
| Cs (ppb) |       |         |              |             |            |
|          | 200.  | L*      | 14NAA        | 81WIL       | 02         |
| 11.5     | 1.    |         | ITNA         | 81KRI       | 01         |
| 12.      |       |         | ITNA         | 81MOL       | 01         |
| 13.      | 1.    |         | ITNA         | 77JUR       | 02         |
| 13.      | 1.    |         | ITNA         | 78BEH       | 01         |
| 14.      | 2.    |         | RTNA         | 75LIE       | 01         |
| 14.9     | 2.2   |         | RTNA         | 77LIE       | 01         |
| 15.      | 2.    |         | RTNA         | 79WAR       | 02         |
| 15.      |       | 17      | UU           | 74MAS       | 01         |
| 16.      | 3.    |         | ITNA         | 79SAT       | 01         |
| 16.      | 4.    |         | RTNA         | 76GAU       | 01         |
| 18.      | 9.    |         | ITNA         | 73COR       | 01         |
| 19.2     |       | 17      | UU           | 74MAS       | 01         |
| 24.      |       | *       | ITNA         | 80CRE       | 01         |
| 35.      |       | *       | ITNA         | 73NAD       | 01         |
| 44.      |       | *17     | UU           | 74MAS       | 01         |
| 130.     | 30.   | *       | RTNA         | 77MEL       | 01         |
| Cu (ppm) |       |         |              |             |            |
|          | 6500. | L*      | ITNA         | 80TOU       | 01         |
| 93.      | 12.   | *6      | ITNA         | 74HOF       | 01         |
| 138.     | 18.8  | *       | FAA          | 74GRO       | 01         |
| 146.     | 40.   | *       | ITNA         | 77ZIK       | 01         |
| 148.     | 19.   | *       | FAA          | 77FUJ       | 01         |
| 151.     | 191.  | R*      | ITNA         | 79IMA       | 03         |
| 151.     | 191.  | R*      | ITNA         | 79IMA       | 01         |
| 153.     |       | *       | CPXRF        | 78UEM       | 01         |
| 154.     | 43.   | *       | CPAA         | 77ZIK       | 01         |
| 161.     | 12.   | *       | RTNA         | 77KUS       | 01         |
| 167.     |       | 17      | UU           | 74MAS       | 01         |
| 167.     |       |         | XRF          | 80SUZ       | 02         |
| 168.     | 8.    | 1       | ICPES        | 78SUD       | 01         |

TABLE L (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 170.  | 8.    |         | RTNA         | 80SLO       | 01         |
| 173.  |       | 17      | UU           | 74MAS       | 01         |
| 173.5 | 13.9  | 34      | CPXRF        | 78JOL       | 01         |
| 174.  | 2.    |         | EXRF         | 80DYC       | 01         |
| 175.  |       | 17      | UU           | 74MAS       | 01         |
| 176.  | 9.    | 6       | ITNA         | 74HOF       | 01         |
| 177.  | 19.   | 5       | ITNA         | 80TOU       | 01         |
| 177.  | 1.    |         | AA           | 79MCQ       | 01         |
| 177.  | 7.    |         | RTNA         | 77TJI       | 01         |
| 180.  |       | 17      | UU           | 74MAS       | 01         |
| 180.  | 8.    | 11      | ICPES        | 81BLA       | 02         |
| 180.  | 3.    |         | AA           | 73TAL       | 01         |
| 181.  | 124.  |         | ITNA         | 82KIM       | 01         |
| 181.  |       | 17      | UU           | 74MAS       | 01         |
| 182.  | 8.    | 7       | RTNA         | 81KUC       | 01         |
| 182.  | 6.    | 1       | ICPES        | 78SUD       | 01         |
| 183.  | 8.    | 35      | RTNA         | 77GLA       | 01         |
| 183.  | 19.   |         | CPXRF        | 79MAN       | 01         |
| 183.  | 8.    |         | PAA          | 76WIL       | 01         |
| 184.  | 5.    |         | SSMS         | 77PAU       | 01         |
| 185.  | 9.    | 11      | ICPES        | 82JON       | 01         |
| 185.  | 7.    |         | RTNA         | 78GAL       | 01         |
| 185.  | 6.8   | 11      | RTNA         | 74WES       | 01         |
| 185.  |       |         | FAA          | 78CAP       | 01         |
| 186.  | 2.    |         | ICPES        | 79MCQ       | 02         |
| 186.  | 16.   |         | EXRF         | 77NIE       | 01         |
| 186.  | 5.5   | 11      | FAA          | 74WES       | 01         |
| 186.  | 5.5   | 6       | CPXRF        | 77WIL       | 03         |
| 187.  |       | 7       | RTNA         | 81KUC       | 01         |
| 187.  | 2.3   |         | AA           | 80AGE       | 01         |
| 187.  | 4.    | 11      | ICPES        | 81BLA       | 02         |
| 187.  | 8.    |         | RTNA         | 75LIE       | 01         |
| 187.  | 8.    |         | RTNA         | 77LIE       | 01         |
| 187.  | 13.   |         | ITNA         | 74DON       | 01         |
| 187.  | 6.    |         | ITNA         | 78FUR       | 01         |
| 187.4 | 15.5  |         | AA           | 79MON       | 01         |
| 188.  | 6.    |         | AA           | 79FLA       | 02         |
| 188.  | 10.   |         | RTNA         | 79WAR       | 02         |
| 188.  | 9.    |         | AA           | 75HIN       | 01         |
| 188.  | 1.    |         | ICPES        | 79MCQ       | 01         |
| 188.  | 9.8   | 11      | FAA          | 74WES       | 01         |
| 188.  | 10.   |         | ITNA         | 79WAR       | 01         |
| 188.  | 3.    |         | RTNA         | 74HEN       | 01         |
| 189.  |       |         | ITNA         | 82AKA       | 01         |
| 189.  | 12.   |         | CPXRF        | 80KIR       | 01         |
| 189.  | 4.    | 11      | ICPES        | 82JON       | 01         |
| 189.  | 4.    |         | CPXRF        | 81ROB       | 02         |
| 189.  | 6.    |         | FAA          | 81CLE       | 01         |
| 189.  | 2.    | 1       | AA           | 77UCH       | 02         |
| 189.  | 2.    |         | AA           | 80IID       | 01         |
| 189.  | 2.    | 1       | AA           | 77UCH       | 02         |
| 189.  | 7.    |         | ICPES        | 78JAC       | 01         |
| 190.  | 3.    |         | FAA          | 79WAR       | 01         |
| 190.  |       | 11      | AA           | 81MOH       | 01         |
| 190.  | 24.   |         | ITNA         | 77HAM       | 01         |
| 190.  | 10.   |         | ICPES        | 79ABE       | 01         |
| 190.  | 8.    |         | VV           | 80SCH       | 05         |
| 190.  | 15.   |         | ASV          | 81DOG       | 01         |
| 191.  |       | 6       | NAA          | 72SIN       | 01         |
| 191.  | 10.5  |         | NAA          | 76GUZ       | 01         |
| 191.  | 34.   |         | XRF          | 77SMI       | 04         |
| 191.  | 6.2   | 11      | RTNA         | 74WES       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 191.     |       | 11      | FAA          | 81DAN       | 01         |
| 192.     | 4.    |         | EXRF         | 79GIA       | 01         |
| 192.     | 4.    |         | FAA          | 81CLE       | 02         |
| 192.     | 9.    | 6       | FAA          | 76LAN       | 01         |
| 193.     | 14.   |         | RTNA         | 77GIL       | 03         |
| 193.     |       | 11      | FAA          | 81DAN       | 01         |
| 193.     | 14.   |         | NAA          | 77GIL       | 01         |
| 194.     | 31.   |         | AA           | 79LAK       | 01         |
| 194.     | 13.   | 6       | CPXRF        | 77WIL       | 03         |
| 194.     |       |         | FAA          | 75SLA       | 01         |
| 194.     |       | 17      | UU           | 74MAS       | 01         |
| 194.     | 1.    |         | AA           | 75ABU       | 01         |
| 194.     |       | 17      | UU           | 74MAS       | 01         |
| 195.     | 10.   |         | ICPES        | 81KNA       | 01         |
| 195.     | 4.    |         | AA           | 80UCH       | 01         |
| 195.     | 3.    |         | AA           | 79WAR       | 01         |
| 195.     |       | 6       | POL          | 72SIN       | 01         |
| 195.     | 5.    |         | RTNA         | 76GAU       | 01         |
| 195.     |       |         | AE+AF        | 79ULL       | 01         |
| 196.     | 8.    |         | CPXRF        | 77WIL       | 02         |
| 196.     | 9.    |         | AA           | 81KRI       | 01         |
| 196.     | 28.   |         | RTNA         | 82KIM       | 01         |
| 196.     | 9.    |         | FAA          | 75SME       | 01         |
| 196.     | 14.7  |         | RTNA         | 79PLA       | 01         |
| 196.     | 6.    | 6       | FAA          | 76LAN       | 01         |
| 197.     | 16.   |         | CPXRF        | 80MAE       | 01         |
| 197.     | 13.   | 6       | POL          | 72SIN       | 01         |
| 197.     | 4.    |         | ITNA         | 79SAT       | 01         |
| 197.     |       |         | NAA          | 78GAN       | 01         |
| 198.     | 9.    |         | ITNA         | 79CHA       | 02         |
| 198.     |       |         | AA           | 80EVA       | 01         |
| 199.     | 12.   |         | ITNA         | 83GLA       | 01         |
| 199.     | 6.    |         | ITNA         | 80MAE       | 01         |
| 200.     |       | 11      | AA           | 81MOH       | 01         |
| 200.     | 2.    |         | RTNA         | 79DER       | 01         |
| 201.     |       |         | ICPES        | 78DAH       | 01         |
| 201.7    | 7.9   |         | RTNA         | 77BUO       | 01         |
| 204.     | 9.    |         | CPXRF        | 78VIS       | 01         |
| 204.     |       |         | ICPES        | 80HAA       | 01         |
| 205.     |       | 6       | AA           | 72SIN       | 01         |
| 206.     | 5.    |         | RTNA         | 74RAV       | 01         |
| 207.     |       | 11      | ASV          | 81DAN       | 01         |
| 208.     | 11.   |         | AA           | 76LAN       | 01         |
| 208.     | 27.   |         | RTNA         | 74SCH       | 03         |
| 210.     |       |         | ICPES        | 78CAP       | 01         |
| 210.     | 12.5  |         | FAA          | 75PIC       | 01         |
| 213.     |       | 17      | UU           | 74MAS       | 01         |
| 216.     | 22.   | 32      | CPXRF        | 77CRO       | 01         |
| 216.     |       | 11      | ASV          | 81DAN       | 01         |
| 241.     | 45.   | *       | CPAA         | 78MCG       | 01         |
| 241.     | 54.   | *32     | CPXRF        | 77CRO       | 01         |
| 241.     | 65.   | *       | CPXRF        | 76ZEI       | 01         |
| 270.     | 90.   | *       | 14NAA        | 81WIL       | 02         |
| 277.     | 14.   | *       | AA           | 79MAT       | 02         |
| 394.     | 3.    | *       | AA           | 81UCH       | 01         |
| Dy (ppb) |       |         |              |             |            |
| 2.4      | 0.8   |         | RTNA         | 76GAU       | 01         |

TABLE L (cont)

| CONC     | UNCER   | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|---------|---------|--------------|-------------|------------|
| Er (ppb) |         |         |              |             |            |
|          | 0.5     | L*      | RTNA         | 82LAU 01    |            |
|          | 0.5     | L*      | RTNA         | 76GAU 01    |            |
| 0.5      |         |         | RTNA         | 77LAU 02    |            |
| Eu (ppb) |         |         |              |             |            |
| 0.235    | 0.024   |         | RTNA         | 76GAU 01    |            |
| 0.35     |         |         | RTNA         | 77LAU 02    |            |
| 0.35     |         |         | RTNA         | 82LAU 01    |            |
| 3.       |         |         | ITNA         | 78CAP 01    |            |
| 140.     |         | *       | ITNA         | 80CRE 01    |            |
| 310.     |         | *       | ITNA         | 73NAD 01    |            |
| F (ppb)  |         |         |              |             |            |
|          | 350000. | L*      | 14NAA        | 81WIL 01    |            |
| 40.      | 20.     |         | ISE          | 83KNA 01    |            |
| 120.     |         |         | ISE          | 83GLA 01    |            |
| Fe (ppm) |         |         |              |             |            |
| 110.     | 5.      | *       | AA           | 75HIN 01    |            |
| 132.     |         | *17     | UU           | 74MAS 01    |            |
| 137.     | 5.      | *       | 14NAA        | 81WIL 01    |            |
| 155.     | 49.     | *11     | AA           | 78GOR 01    |            |
| 186.     | 37.     | *       | AA           | 79MAN 01    |            |
| 205.     |         | *       | CPXRF        | 78UEM 01    |            |
| 209.     | 28.     | *11     | ICPES        | 82JON 01    |            |
| 220.     | 16.     |         | RTNA         | 77MEL 01    |            |
| 226.     |         | 17      | UU           | 74MAS 01    |            |
| 229.     |         | 17      | UU           | 74MAS 01    |            |
| 230.     | 37.     |         | FAA          | 77FUJ 01    |            |
| 236.     | 5.      |         | RTNA         | 75LIE 01    |            |
| 236.     | 5.      |         | RTNA         | 77LIE 01    |            |
| 240.     |         | 17      | UU           | 74MAS 01    |            |
| 240.     | 7.      |         | EXRF         | 80DYC 01    |            |
| 240.     | 12.     |         | RTNA         | 77TJI 01    |            |
| 241.     | 8.      | 1       | ICPES        | 78SUD 01    |            |
| 242.     |         | 17      | UU           | 74MAS 01    |            |
| 243.     | 14.     |         | FAA          | 81CLE 02    |            |
| 244.     | 6.      |         | ICPES        | 79MCQ 01    |            |
| 244.     | 2.      |         | ICPES        | 79MCQ 02    |            |
| 244.     | 10.     |         | AA           | 79MCQ 01    |            |
| 247.3    |         |         | AA           | 79LOC 01    |            |
| 248.     | 16.     |         | CPXRF        | 80MAE 01    |            |
| 249.     |         |         | RTNA         | 75STE 02    |            |
| 250.     | 22.     |         | ITNA         | 77HAM 01    |            |
| 250.     | 12.     |         | CPXRF        | 78VIS 01    |            |
| 252.     | 25.     |         | ICPES        | 81BLA 01    |            |
| 252.     |         |         | ITNA         | 79KUC 01    |            |
| 253.     |         |         | FAA          | 78CAP 01    |            |
| 254.     |         |         | ICPES        | 78CAP 01    |            |
| 255.     | 8.      |         | ITNA         | 79SAT 01    |            |
| 255.     | 30.     |         | ITNA         | 78FUR 01    |            |
| 255.     | 15.     |         | ITNA         | 79ZEI 01    |            |
| 256.     | 3.      |         | AA           | 80IID 01    |            |
| 256.     |         |         | OES          | 75BOL 02    |            |
| 256.     | 3.      | 1       | AA           | 77UCH 02    |            |
| 256.     | 32.     |         | CPXRF        | 79MAN 01    |            |
| 257.     | 30.     | 32      | CPXRF        | 77CRO 01    |            |

TABLE L (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 257.  |       |         | ITNA         | 78CAP 01    |            |
| 258.  |       | 7       | RTNA         | 81KUC 01    |            |
| 258.  | 10.   | 11      | ICPES        | 82JON 01    |            |
| 259.  | 12.   | 11      | ICPES        | 81BLA 02    |            |
| 260.9 | 12.89 |         | NAA          | 76GUZ 01    |            |
| 262.  |       |         | ITNA         | 73NAD 01    |            |
| 262.  | 7.    |         | ICPES        | 78JAC 01    |            |
| 262.  | 13.   |         | ICPES        | 79ABE 01    |            |
| 262.  | 10.   |         | FAA          | 81CLE 01    |            |
| 263.  | 12.   |         | CPXRF        | 81ROB 02    |            |
| 264.  | 3.    | 11      | ICPES        | 82JON 01    |            |
| 264.  | 29.   |         | ITNA         | 78BEH 01    |            |
| 264.  | 6.    | 11      | ICPES        | 82JON 01    |            |
| 265.  | 19.   |         | ITNA         | 81KRI 01    |            |
| 265.  | 5.    |         | GC           | 81BLA 01    |            |
| 265.  | 11.   |         | RTNA         | 79WAR 02    |            |
| 265.  | 25.   |         | NAA          | 78GAN 01    |            |
| 265.  | 16.   |         | ITNA         | 74WES 01    |            |
| 265.  | 30.   |         | ITNA         | 79CHA 02    |            |
| 266.  | 9.    |         | ICPES        | 80SCH 05    |            |
| 266.  | 10.   | 11      | AA           | 74WES 01    |            |
| 266.  | 10.   | 11      | AA           | 78GOR 01    |            |
| 266.  | 5.    | 11      | ICPES        | 81BLA 02    |            |
| 267.  | 5.    |         | EXRF         | 79GIA 01    |            |
| 268.  | 24.   |         | EXRF         | 77NIE 01    |            |
| 268.  | 38.   |         | VV           | 79LAK 01    |            |
| 268.  | 25.   | 1       | ICPES        | 78SUD 01    |            |
| 269.  | 10.   |         | ICPES        | 81KNA 01    |            |
| 270.  |       |         | ICPES        | 78DAH 01    |            |
| 270.  | 47.   |         | ITNA         | 74DON 01    |            |
| 270.  | 12.   |         | ITNA         | 73COR 01    |            |
| 270.  | 20.   |         | NAA          | 77GIL 01    |            |
| 270.  | 12.   |         | COLOR        | 78GOR 01    |            |
| 271.  | 27.   |         | ITNA         | 81MOL 01    |            |
| 271.5 | 11.5  | 34      | CPXRF        | 78JOL 01    |            |
| 272.  | 3.    |         | AA           | 82TIN 01    |            |
| 272.  | 15.   | 7       | RTNA         | 81KUC 01    |            |
| 272.  | 71.   |         | KRF          | 77SMI 04    |            |
| 272.  | 27.   |         | RTNA         | 76GAU 01    |            |
| 272.  | 9.5   | 11      | AA           | 74WES 01    |            |
| 273.  | 9.    |         | FAA          | 81CHA 01    |            |
| 273.  | 8.5   | 6       | CPXRF        | 77WIL 03    |            |
| 273.  | 5.    |         | ITNA         | 80MAE 01    |            |
| 274.  | 5.    |         | AA           | 80UCH 01    |            |
| 274.5 | 28.   |         | PAA          | 76KAT 04    |            |
| 276.  | 2.    | 1       | AA           | 77UCH 02    |            |
| 276.  |       |         | FAA          | 75SLA 01    |            |
| 277.  | 2.    |         | ITNA         | 74LIN 01    |            |
| 277.9 | 16.7  | 6       | ITNA         | 74BEC 01    |            |
| 278.  |       |         | AA           | 80EVA 01    |            |
| 278.  | 14.   |         | CPAA         | 77ZIK 01    |            |
| 279.  | 20.   |         | RTNA         | 77GIL 03    |            |
| 280.  | 30.   |         | ITNA         | 77ZIK 01    |            |
| 282.  |       |         | ICPES        | 80HAA 01    |            |
| 283.  | 60.   |         | CPAA         | 78MCG 01    |            |
| 283.  | 68.   |         | CPXRF        | 76ZEI 01    |            |
| 285.  |       | 17      | UU           | 74MAS 01    |            |
| 287.  | 17.   |         | CPXRF        | 77WIL 02    |            |
| 289.  | 52.   | 32      | CPXRF        | 77CRO 01    |            |
| 290.  |       |         | ITNA         | 80CRE 01    |            |
| 293.  | 8.    |         | ITNA         | 79DAS 01    |            |
| 293.  | 8.    |         | RTNA         | 80SLO 01    |            |

TABLE L (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| 293.     |        | 17      | UU           | 74MAS       | 01         |
| 293.     | 21.    | 6       | CPXRF        | 77WIL       | 03         |
| 310.     | 28.    | *       | RTNA         | 74SCH       | 03         |
| 315.     |        | *       | ITNA         | 77OSB       | 01         |
| 331.     |        | *17     | UU           | 74MAS       | 01         |
| 334.     | 10.    | *       | 14NAA        | 81WIL       | 02         |
| 350.     | 64.    | *       | RTNA         | 77KUS       | 01         |
| 364.     |        | *17     | UU           | 74MAS       | 01         |
| 1395.    |        | *       | AE+AF        | 79ULL       | 01         |
| 1433.    |        | *17     | UU           | 74MAS       | 01         |
| Ga (ppb) |        |         |              |             |            |
|          | 20000. | L*      | 14NAA        | 81WIL       | 02         |
|          | 500.   | L*      | EXRF         | 79GIA       | 01         |
| 4.       | 240.   | L*      | IENA         | 78WAN       | 01         |
| 1100.    | 700.   |         | RTNA         | 74HEN       | 01         |
|          |        |         | CPXRF        | 77WIL       | 02         |
| Cd (ppb) |        |         |              |             |            |
|          | 1.4    | L*      | RTNA         | 76GAU       | 01         |
| 1.8      |        |         | RTNA         | 82LAU       | 01         |
| 2.4      |        |         | RTNA         | 77LAU       | 02         |
| Ge (ppb) |        |         |              |             |            |
|          | 400.   | L*      | EXRF         | 79GIA       | 01         |
| H (%)    |        |         |              |             |            |
| 6.8      | 0.3    |         | TCGS         | 79FAI       | 01         |
| 7.       | 0.1    | 35      | TCGS         | 79GLA       | 04         |
| 7.12     | 0.1    |         | CB           | 80SCH       | 02         |
| Hf (ppb) |        |         |              |             |            |
| 1.       |        |         | RTNA         | 80SLO       | 01         |
| 7.3      |        |         | ITNA         | 80CRE       | 01         |
| Hg (ppb) |        |         |              |             |            |
|          | 20.    | L*      | ITNA         | 73NAD       | 01         |
|          | 200.   | L*      | ITNA         | 74GUI       | 01         |
|          | 400.   | L*      | CPXRF        | 78JOL       | 01         |
|          | 800.   | L*      | EXRF         | 79GIA       | 01         |
| 13.7     | 1.4    | 14      | FAA          | 74CHU       | 01         |
| 14.      | 2.     |         | FAA          | 79STO       | 01         |
| 14.      | 2.     |         | CVAA         | 78MAT       | 01         |
| 14.5     | 1.7    |         | RTNA         | 72RAI       | 01         |
| 14.5     | 3.4    |         | RTNA         | 72ROO       | 01         |
| 14.5     | 3.4    |         | RTNA         | 72ROO       | 02         |
| 14.7     |        |         | RTNA         | 75STE       | 02         |
| 15.      | 2.     |         | MPOES        | 81TAN       | 01         |
| 15.      | 4.     |         | RTNA         | 74SCH       | 03         |
| 15.8     | 5.1    | 14      | FAA          | 74CHU       | 03         |
| 16.      | 2.     |         | FAA          | 77GLA       | 03         |
| 16.      | 1.2    |         | FAA          | 72ROO       | 01         |
| 16.      |        |         | CVAA         | 82GLA       | 02         |
| 16.      | 3.     |         | CVAA         | 80TON       | 01         |
| 16.      | 3.     | 7       | RTNA         | 81KUC       | 01         |
| 16.      | 1.6    |         | RTNA         | 79MAY       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 16.      | 5.    |         | CVAA         | 80KOR       | 01         |
| 16.      |       | 7       | RTNA         | 81KUC       | 01         |
| 16.      | 2.    |         | AA           | 79FLA       | 02         |
| 16.      | 2.    |         | RTNA         | 77TJI       | 01         |
| 16.      |       |         | CVAA         | 79TAG       | 01         |
| 16.      | 1.    |         | RTNA         | 74BYR       | 03         |
| 16.2     | 3.    | 14      | FAA          | 74CHU       | 03         |
| 16.4     | 4.3   |         | NAA          | 76GUZ       | 01         |
| 16.4     | 0.4   |         | RTNA         | 74HEN       | 01         |
| 16.5     | 0.8   |         | CVAA         | 72RAI       | 01         |
| 16.8     | 1.8   | 5       | RTNA         | 80CRE       | 01         |
| 17.      | 2.    |         | RTNA         | 79WAR       | 02         |
| 17.      | 2.    |         | RTNA         | 74ORV       | 01         |
| 17.      | 4.    | 2       | CVAA         | 79KNE       | 01         |
| 17.3     | 2.8   | 5       | RTNA         | 80CRE       | 01         |
| 17.4     | 2.    |         | RTNA         | 82GRI       | 01         |
| 18.      | 3.    |         | RTNA         | 75LIT       | 01         |
| 18.      | 2.    |         | RTNA         | 79CHA       | 02         |
| 20.      | 2.    |         | CVAA         | 77AND       | 01         |
| 20.      |       |         | UU           | 74FEL       | 01         |
| 20.      |       | 17      | UU           | 74MAS       | 01         |
| 22.      | 1.    | *       | RTNA         | 75LIE       | 01         |
| 22.1     | 6.3   | *14     | FAA          | 74CHU       | 03         |
| 22.3     | 1.3   | *       | RTNA         | 77LIE       | 01         |
| 30.      | 10.   | *       | FAA          | 78EGA       | 01         |
| 41.      |       | *17     | UU           | 74MAS       | 01         |
| 47.      | 4.    | *       | RTNA         | 77MEL       | 01         |
| 200.     | 21.   | *       | ITNA         | 75LIT       | 01         |
| Ho (ppb) |       |         |              |             |            |
|          | 0.94  | L*      | RTNA         | 76GAU       | 01         |
| 0.2      |       |         | RTNA         | 82LAU       | 01         |
| 0.25     |       |         | RTNA         | 77LAU       | 02         |
| I (ppb)  |       |         |              |             |            |
| 180.     | 12.   |         | RTNA         | 77ROO       | 01         |
| 200.     | 10.   |         | RTNA         | 79WAR       | 02         |
| 220.     | 30.   |         | ITNA         | 79CHA       | 02         |
| 221.8    | 14.8  |         | RTNA         | 80GVA       | 01         |
| 246.     | 11.   | 35      | RTNA         | 81ALL       | 01         |
| 249.     | 12.   |         | RTNA         | 81STR       | 01         |
| 249.     | 12.   | 34      | RTNA         | 81ALL       | 01         |
| 270.     | 30.   |         | IENA         | 82SAT       | 01         |
| 280.     |       |         | NAA          | 79HEC       | 01         |
| In (ppb) |       |         |              |             |            |
| 0.05     | 1000. | L*      | RTNA         | 76GAU       | 01         |
| 0.09     | 0.01  |         | RTNA         | 74RAV       | 01         |
|          |       |         | RTNA         | 78KOB       | 01         |
| K (%)    |       |         |              |             |            |
| 0.5      | 0.07  | *       | CPXRF        | 80MAE       | 01         |
| 0.63     | 0.11  | *       | 14NAA        | 81WIL       | 01         |
| 0.667    | 0.066 | *       | RTNA         | 74SCH       | 03         |
| 0.7      |       | *       | CPXRF        | 78UEM       | 01         |
| 0.725    | 0.789 | R*      | ITNA         | 79IMA       | 03         |
| 0.725    | 0.789 | R*      | ITNA         | 79IMA       | 01         |
| 0.742    |       |         | ITNA         | 78CAP       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 0.753    |       | 17      | UU           | 74MAS       | 01         |
| 0.821    |       | 17      | UU           | 74MAS       | 01         |
| 0.84     | 0.13  | 32      | CPXRF        | 77CRO       | 01         |
| 0.87     | 0.13  |         | ITNA         | 83GLA       | 01         |
| 0.875    |       |         | ITNA         | 80CRE       | 01         |
| 0.904    |       | 17      | UU           | 74MAS       | 01         |
| 0.91     | 0.08  |         | RTNA         | 79WAR       | 02         |
| 0.92     | 0.028 |         | CPXRF        | 81ROB       | 02         |
| 0.92     |       | 1       | ITNA         | 79KUC       | 01         |
| 0.93     | 0.05  |         | CPXRF        | 77WIL       | 02         |
| 0.93     | 0.11  |         | EXRF         | 77NIE       | 01         |
| 0.935    |       |         | ITNA         | 82AKA       | 01         |
| 0.94     | 0.05  |         | ITNA         | 80MAE       | 01         |
| 0.948    |       | 17      | UU           | 74MAS       | 01         |
| 0.948    |       | 17      | UU           | 74MAS       | 01         |
| 0.95     | 0.05  |         | CPXRF        | 80KIR       | 01         |
| 0.96     |       |         | ITNA         | 73NAD       | 01         |
| 0.96     |       |         | ITNA         | 79KUC       | 01         |
| 0.96     | 0.06  |         | AA           | 74WES       | 01         |
| 0.964    |       |         | CPXRF        | 76ZEI       | 01         |
| 0.964    | 0.004 |         | CPAA         | 78MCG       | 01         |
| 0.969    | 0.022 |         | FE           | 80UCH       | 01         |
| 0.969    | 0.091 |         | PAA          | 76KAT       | 04         |
| 0.969    | 0.078 |         | ITNA         | 74DON       | 01         |
| 0.969    | 0.09  |         | ITNA         | 79CHA       | 02         |
| 0.97     | 0.05  | 11      | ICPES        | 82JON       | 01         |
| 0.98     |       | 17      | UU           | 74MAS       | 01         |
| 0.98     | 0.1   |         | ITNA         | 82EHM       | 01         |
| 0.987    |       | 17      | UU           | 74MAS       | 01         |
| 0.99     | 0.02  | 11      | ICPES        | 82JON       | 01         |
| 0.992    | 0.022 |         | AA           | 75SHIN      | 01         |
| 0.998    | 0.064 |         | NAA          | 76GUZ       | 01         |
| 1.       |       |         | ITNA         | 77OSB       | 01         |
| 1.       | 0.03  |         | TCGS         | 79FAI       | 01         |
| 1.006    |       | 1       | AA           | 78SZY       | 01         |
| 1.01     | 0.18  |         | ITNA         | 77HAM       | 01         |
| 1.015    |       | 1       | AA           | 78SZY       | 01         |
| 1.02     | 0.012 |         | ITNA         | 78FUR       | 01         |
| 1.021    | 0.048 | 34      | CPXRF        | 78JOL       | 01         |
| 1.032    | 0.025 |         | RTNA         | 75LIE       | 01         |
| 1.032    | 0.025 |         | RTNA         | 77LIE       | 01         |
| 1.04     | 0.03  |         | ITNA         | 74WES       | 01         |
| 1.06     |       | 35      | ITNA         | 81GLA       | 04         |
| 1.06     | 0.08  |         | NAA          | 78GAN       | 01         |
| 1.087    | 0.124 |         | CPXRF        | 79MAN       | 01         |
| 1.12     | 0.02  |         | ITNA         | 80SLO       | 01         |
| 1.13     | 0.04  |         | EXRF         | 80DYC       | 01         |
| 1.18     | 0.1   | *       | 14NAA        | 81WIL       | 02         |
| La (ppb) |       |         |              |             |            |
| 10.      | 1.    |         | RTNA         | 74HEN       | 01         |
| 12.      | 9.    |         | RTNA         | 74SCH       | 03         |
| 14.      | 5.    |         | RTNA         | 80SLO       | 01         |
| 17.      |       |         | RTNA         | 82LAU       | 01         |
| 17.      |       |         | RTNA         | 77LAU       | 02         |
| 17.      |       |         | RTNA         | 75LIE       | 01         |
| 17.3     | 0.4   |         | RTNA         | 77LIE       | 01         |
| 20.      |       |         | ITNA         | 73NAD       | 01         |
| 24.5     | 1.2   | *       | RTNA         | 76GAU       | 01         |
| 62.      | 5.    | *       | ITNA         | 79CHA       | 02         |
| 70.      |       | *       | ITNA         | 78CAP       | 01         |
| 72.      |       | *       | ITNA         | 80CRE       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Lu (ppb) |       |         |              |             |            |
|          | 0.1   | L*      | RTNA         | 76GAU       | 01         |
| 0.039    |       |         | RTNA         | 77LAU       | 02         |
| 0.039    |       |         | RTNA         | 82LAU       | 01         |
| Mg (ppm) |       |         |              |             |            |
|          | 550.  | L*      | ITNA         | 80SLO       | 01         |
| 290.     | 40.   | *       | 14NAA        | 81WIL       | 01         |
| 332.     | 541.  | R*      | ITNA         | 79IMA       | 01         |
| 332.     | 541.  | R*      | ITNA         | 79IMA       | 03         |
| 516.     |       | *17     | UU           | 74MAS       | 01         |
| 517.     |       | *17     | UU           | 74MAS       | 01         |
| 555.     | 21.   | 1       | ICPES        | 78SUD       | 01         |
| 566.     |       |         | FAA          | 78CAP       | 01         |
| 566.     | 10.   |         | AA           | 79MCQ       | 01         |
| 567.     |       |         | AA           | 79LOC       | 01         |
| 573.     | 4.    |         | ICPES        | 79MCQ       | 02         |
| 573.     | 17.   |         | ICPES        | 79MCQ       | 01         |
| 580.     | 20.   |         | CPXRF        | 80KIR       | 01         |
| 590.     | 40.   |         | ICPES        | 79ABE       | 01         |
| 593.     | 10.   | 1       | AA           | 77UCH       | 02         |
| 593.     | 10.   |         | AA           | 80IID       | 01         |
| 595.     | 6.    | 6       | AA           | 76HOW       | 01         |
| 596.5    | 13.5  |         | PAA          | 76KAT       | 04         |
| 597.     | 10.   |         | AA           | 75SHIN      | 01         |
| 598.     | 50.   |         | ITNA         | 77ZIK       | 01         |
| 598.     | 14.   |         | ITNA         | 75PIE       | 01         |
| 600.     | 9.    | 1       | AA           | 77UCH       | 02         |
| 601.     | 6.    | 6       | AA           | 76HOW       | 01         |
| 602.     | 11.   |         | AA           | 80UCH       | 01         |
| 604.6    | 26.84 |         | NAA          | 76GUZ       | 01         |
| 605.     | 32.   |         | AA           | 74WES       | 01         |
| 608.     | 6.    |         | RTNA         | 79WAR       | 02         |
| 608.     | 6.    |         | ITNA         | 79WAR       | 01         |
| 609.     |       |         | AE+AF        | 79ULL       | 01         |
| 610.     | 15.   |         | FAA          | 79WAR       | 01         |
| 613.     |       |         | ICPES        | 78CAP       | 01         |
| 620.     | 20.   |         | ITNA         | 79CHA       | 02         |
| 636.     |       |         | ICPES        | 78DAH       | 01         |
| 657.     | 9.    | 11      | ICPES        | 82JON       | 01         |
| 659.     | 82.   |         | ITNA         | 74WES       | 01         |
| 660.     | 20.   | 11      | ICPES        | 82JON       | 01         |
| 668.     | 42.   |         | AA           | 79LAK       | 01         |
| 674.     |       | 17      | UU           | 74MAS       | 01         |
| 684.     | 110.  |         | ITNA         | 78FUR       | 01         |
| 700.     | 20.   |         | 14NAA        | 81WIL       | 02         |
| 700.     | 130.  |         | ITNA         | 77HAM       | 01         |
| 712.     | 98.   | *1      | ICPES        | 78SUD       | 01         |
| 949.     |       | *       | ITNA         | 78CAP       | 01         |
| 1040.    |       | *       | ITNA         | 73NAD       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 5.3      | 0.72  | *6      | ITNA         | 74HOF       | 01         |
| 8.       | 1.    | *       | CPXRF        | 80MAE       | 01         |
| 8.4      | 2.1   |         | CPXRF        | 80KIR       | 01         |
| 8.73     |       |         | FAA          | 77SHE       | 02         |
| 9.       | 0.37  |         | FAA          | 74GRO       | 01         |
| 9.       | 0.7   |         | VV           | 80SCH       | 05         |
| 9.       | 2.2   | 6       | CPXRF        | 77WIL       | 03         |
| 9.12     |       | 17      | UU           | 74MAS       | 01         |
| 9.14     |       |         | ITNA         | 73NAD       | 01         |

TABLE L (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 9.2   | 0.9   | 11      | ICPES        | 81BLA       | 02         |
| 9.2   | 0.7   |         | AA           | 79FLA       | 02         |
| 9.2   | 1.8   | 6       | CPXRF        | 77WIL       | 03         |
| 9.26  | 0.85  |         | RTNA         | 79PLA       | 01         |
| 9.3   |       |         | ITNA         | 82AKA       | 01         |
| 9.4   | 1.1   |         | EXRF         | 79GIA       | 01         |
| 9.42  |       | 17      | UU           | 74MAS       | 01         |
| 9.5   | 0.7   | 11      | ICPES        | 81BLA       | 02         |
| 9.5   | 0.5   |         | ITNA         | 82KIM       | 01         |
| 9.5   | 1.4   |         | CPXRF        | 77WIL       | 02         |
| 9.5   |       | 17      | UU           | 74MAS       | 01         |
| 9.6   | 0.5   |         | RTNA         | 77KUS       | 01         |
| 9.6   | 0.4   |         | RTNA         | 74HEN       | 01         |
| 9.6   | 0.6   | 11      | FAA          | 74WES       | 01         |
| 9.7   |       |         | ICPES        | 78CAP       | 01         |
| 9.7   | 0.8   | 11      | ICPES        | 82JON       | 01         |
| 9.7   | 0.3   | 1       | ICPES        | 78SUD       | 01         |
| 9.77  | 0.79  |         | ITNA         | 74DON       | 01         |
| 9.8   | 1.1   |         | FAA          | 82GRO       | 01         |
| 9.9   |       |         | ICPES        | 78DAH       | 01         |
| 9.9   |       | 17      | UU           | 74MAS       | 01         |
| 9.9   | 0.47  |         | ITNA         | 74WES       | 01         |
| 10.   |       | 35      | ITNA         | 81GLA       | 04         |
| 10.   | 2.    |         | EXRF         | 80DYC       | 01         |
| 10.   | 1.    |         | ICPES        | 79MCQ       | 01         |
| 10.   |       | 11      | AA           | 81MOH       | 01         |
| 10.   | 0.5   |         | NAA          | 78GAN       | 01         |
| 10.   |       |         | FAA          | 75SLA       | 01         |
| 10.   | 1.    |         | ICPES        | 79MCQ       | 02         |
| 10.   | 5.    |         | AA           | 76LAN       | 01         |
| 10.   | 0.7   |         | ITNA         | 79WAR       | 01         |
| 10.   | 1.3   |         | ICPES        | 79ABE       | 01         |
| 10.   | 0.7   |         | RTNA         | 79WAR       | 02         |
| 10.   | 0.6   | 6       | ITNA         | 74HOF       | 01         |
| 10.1  | 1.2   |         | CPXRF        | 81ROB       | 02         |
| 10.1  | 0.2   |         | ITNA         | 80SLO       | 01         |
| 10.1  | 1.1   |         | ITNA         | 79SAT       | 01         |
| 10.1  | 0.1   |         | AA           | 82CLE       | 01         |
| 10.1  | 3.6   |         | EXRF         | 77NIE       | 01         |
| 10.1  | 0.5   | 11      | RTNA         | 74WES       | 01         |
| 10.15 | 2.15  |         | PAA          | 76KAT       | 04         |
| 10.17 | 0.69  |         | NAA          | 76GUZ       | 01         |
| 10.2  | 0.1   |         | AA           | 80IID       | 01         |
| 10.2  |       |         | ASV          | 80CHR       | 01         |
| 10.2  | 1.    | 1       | AA           | 77UCH       | 02         |
| 10.2  | 0.2   |         | AA           | 75HIN       | 01         |
| 10.2  |       | 17      | UU           | 74MAS       | 01         |
| 10.2  | 0.45  | 11      | RTNA         | 74WES       | 01         |
| 10.2  |       | 17      | UU           | 74MAS       | 01         |
| 10.23 | 0.43  |         | RTNA         | 74RAV       | 01         |
| 10.3  | 0.3   |         | FAA          | 82CLE       | 01         |
| 10.3  | 0.3   |         | FAA          | 81CLE       | 02         |
| 10.3  | 0.2   |         | ITNA         | 82EHM       | 01         |
| 10.3  | 0.77  |         | ITNA         | 77HAM       | 01         |
| 10.3  | 0.8   |         | RTNA         | 76GAU       | 01         |
| 10.3  | 0.36  | 11      | FAA          | 74WES       | 01         |
| 10.4  |       |         | AA           | 82CLE       | 01         |
| 10.4  | 0.3   | 1       | AA           | 77UCH       | 02         |
| 10.4  | 0.4   | 11      | ICPES        | 82JON       | 01         |
| 10.4  | 0.2   |         | FAA          | 82CLE       | 01         |
| 10.4  | 0.4   |         | RTNA         | 77BUO       | 01         |
| 10.4  | 0.6   | 11      | FAA          | 75SME       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 10.4     |       |         | FAA          | 78CAP       | 01         |
| 10.4     | 1.1   |         | RTNA         | 74SCH       | 03         |
| 10.4     | 0.23  |         | FAA          | 75PIC       | 01         |
| 10.5     | 0.6   |         | ITNA         | 83GLA       | 01         |
| 10.5     | 0.3   | 11      | ICPES        | 82JON       | 01         |
| 10.5     | 1.1   |         | ITNA         | 79CHA       | 02         |
| 10.5     | 16.   | 6       | FAA          | 76LAN       | 01         |
| 10.6     | 0.7   |         | FAA          | 81CLE       | 01         |
| 10.6     | 1.1   |         | ITNA         | 78FUR       | 01         |
| 10.7     | 0.3   |         | ITNA         | 80MAE       | 01         |
| 10.8     | 0.8   |         | FAA          | 79WAR       | 01         |
| 10.8     | 0.3   |         | RTNA         | 82KIM       | 01         |
| 10.8     | 20.   | 6       | FAA          | 76LAN       | 01         |
| 10.9     | 2.    |         | XRF          | 77SMI       | 04         |
| 10.9     | 1.2   |         | CPXRF        | 79MAN       | 01         |
| 10.9     | 1.5   | 34      | CPXRF        | 78JOL       | 01         |
| 11.      |       | 11      | AA           | 81MOH       | 01         |
| 11.      |       | 17      | UU           | 74MAS       | 01         |
| 11.      | 0.4   |         | FAA          | 81CHA       | 01         |
| 11.      |       |         | AA           | 80EVA       | 01         |
| 11.2     | 0.5   |         | RTNA         | 75LIE       | 01         |
| 11.2     | 0.5   |         | RTNA         | 77LIE       | 01         |
| 11.2     | 1.4   | 1       | ICPES        | 78SUD       | 01         |
| 11.4     | 0.8   | 11      | FAA          | 75SME       | 01         |
| 11.5     |       |         | ITNA         | 78CAP       | 01         |
| 11.5     | 13.7  | R*      | ITNA         | 79IMA       | 03         |
| 11.5     |       | 17      | UU           | 74MAS       | 01         |
| 11.5     | 13.7  | R*      | ITNA         | 79IMA       | 01         |
| 11.7     | 0.7   | MD      | FAA          | 79WES       | 01         |
| 12.5     | 2.    | D*      | DCP          | 81REE       | 01         |
| 12.5     | 2.    | *       | DCP          | 79REE       | 01         |
| 13.      | 3.    | *       | ITNA         | 77ZIK       | 01         |
| 13.      | 6.    | *       | TCGS         | 79FAI       | 01         |
| 13.      |       | *       | AE+AF        | 79ULL       | 01         |
| 14.      | 1.    | *       | AA           | 79MCQ       | 01         |
| 14.2     | 1.8   | *       | FAA          | 77FUJ       | 01         |
| 19.      | 9.    | *       | CPXRF        | 78VIS       | 01         |
| 19.      |       | *       | XRF          | 80SUZ       | 02         |
| Mo (ppm) |       |         |              |             |            |
|          | 5.    | L*      | ICPES        | 78CAP       | 01         |
|          | 510.  | L*      | ITNA         | 80TOU       | 01         |
| 2.       |       | *       | ICPES        | 79MCQ       | 02         |
| 2.       | 1.    | *       | CPAA         | 77ZIK       | 01         |
| 2.2      | 0.9   |         | CPXRF        | 80KIR       | 01         |
| 2.5      |       | 17      | UU           | 74MAS       | 01         |
| 2.5      | 0.1   |         | ITNA         | 78FUR       | 01         |
| 2.6      | 0.4   |         | 14NAA        | 81WIL       | 01         |
| 2.8      |       | 17      | UU           | 74MAS       | 01         |
| 2.95     | 0.27  |         | RTNA         | 76GAU       | 01         |
| 2.97     |       | 17      | UU           | 74MAS       | 01         |
| 3.       | 0.3   |         | RTNA         | 77GIL       | 03         |
| 3.       |       |         | ITNA         | 73NAD       | 01         |
| 3.       | 0.3   |         | NAA          | 77GIL       | 01         |
| 3.04     | 0.18  |         | IENA         | 75MAZ       | 01         |
| 3.06     | 0.7   | 34      | CPXRF        | 78JOL       | 01         |
| 3.1      | 0.5   | 11      | ICPES        | 82JON       | 01         |
| 3.1      | 0.03  |         | RTNA         | 80KUL       | 01         |
| 3.1      |       | 1       | IENA         | 79KUC       | 01         |
| 3.1      |       |         | FAA          | 79BEN       | 01         |
| 3.12     | 0.26  |         | RTNA         | 78NAD       | 01         |
| 3.19     | 0.14  |         | RTNA         | 77LIE       | 01         |

TABLE L (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 3.19 | 0.14  |         | RTNA         | 75LIE       | 01         |
| 3.2  | 0.1   |         | RTNA         | 77DIK       | 01         |
| 3.2  |       |         | ITNA         | 79KUC       | 01         |
| 3.23 | 0.09  |         | SSMS         | 77PAU       | 01         |
| 3.3  | 0.3   | 11      | RTNA         | 74WES       | 01         |
| 3.3  | 0.2   |         | RTNA         | 79WAR       | 02         |
| 3.33 |       |         | RTNA         | 75STE       | 02         |
| 3.4  | 0.2   | 7       | RTNA         | 81KUC       | 01         |
| 3.4  | 0.7   | 5       | ITNA         | 80TOU       | 01         |
| 3.4  | 0.1   | 11      | ICPES        | 82JON       | 01         |
| 3.4  | 0.36  |         | RTNA         | 82BYR       | 01         |
| 3.4  | 0.2   |         | RTNA         | 80SLO       | 01         |
| 3.4  |       | 1       | IENA         | 79KUC       | 01         |
| 3.4  | 0.15  |         | FAA          | 74WES       | 01         |
| 3.42 | 0.11  | 11      | RTNA         | 81COR       | 01         |
| 3.5  | 0.2   | 11      | RTNA         | 74WES       | 01         |
| 3.5  | 1.5   |         | CPXRF        | 77WIL       | 02         |
| 3.5  | 0.6   |         | CPXRF        | 77RIN       | 01         |
| 3.6  | 0.7   |         | RTNA         | 74SCH       | 03         |
| 3.6  | 0.9   |         | CPXRF        | 80MAE       | 01         |
| 3.6  | 0.14  | 11      | RTNA         | 81COR       | 01         |
| 3.7  | 0.4   |         | 14NAA        | 81WIL       | 02         |
| 3.71 | 0.25  |         | RTNA         | 77TJI       | 01         |
| 3.78 | 0.356 |         | NAA          | 76GUZ       | 01         |
| 3.8  |       | 7       | RTNA         | 81KUC       | 01         |
| 3.8  |       |         | ICPES        | 80HAA       | 01         |
| 4.1  | 0.4   |         | CPXRF        | 78VIS       | 01         |
| 4.3  | 1.2   | *       | ITNA         | 79ZEI       | 01         |
| 4.9  |       | *17     | UU           | 74MAS       | 01         |
| 5.8  | 0.3   | *       | AA           | 79FLA       | 02         |

N (%)

|       |      |    |      |       |    |
|-------|------|----|------|-------|----|
| 10.35 | 0.3  |    | TCGS | 79FAI | 01 |
| 10.4  | 0.8  | 35 | TCGS | 79GLA | 04 |
| 10.42 | 0.11 |    | CB   | 80SCH | 02 |
| 10.59 | 0.04 |    | GRAV | 74CAR | 01 |
| 10.59 | 0.04 | D* | GRAV | 74CAR | 05 |
| 10.81 | 0.24 | D* | NT   | 74CAR | 05 |
| 10.82 | 0.24 |    | NT   | 74CAR | 01 |

Na (ppm)

|       |       |     |       |       |    |
|-------|-------|-----|-------|-------|----|
| 1019. |       | *17 | UU    | 74MAS | 01 |
| 1152. | 119.  | *6  | ITNA  | 74HOF | 01 |
| 1600. | 100.  | *   | 14NAA | 81WIL | 01 |
| 1940. | 30.   |     | ITNA  | 80SLO | 01 |
| 1980. | 60.   |     | ITNA  | 78FUR | 01 |
| 2000. | 150.  |     | 14NAA | 81WIL | 02 |
| 2000. | 500.  |     | CPXRF | 80KIR | 01 |
| 2040. |       |     | ITNA  | 80CRE | 01 |
| 2176. | 77.   | 6   | ITNA  | 74HOF | 01 |
| 2220. |       | 17  | UU    | 74MAS | 01 |
| 2227. | 200.  |     | ITNA  | 77ZIK | 01 |
| 2230. | 210.  |     | ITNA  | 77HAM | 01 |
| 2250. |       |     | ITNA  | 83GLA | 01 |
| 2250. |       | 17  | UU    | 74MAS | 01 |
| 2260. | 370.  |     | ITNA  | 77JUR | 02 |
| 2280. |       | 1   | IENA  | 79KUC | 01 |
| 2280. | 300.  |     | ITNA  | 82SCH | 05 |
| 2300. | 2850. | R*  | ITNA  | 79IMA | 03 |
| 2300. | 2850. | R*  | ITNA  | 79IMA | 01 |

TABLE L (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 2310. |       |         | ITNA         | 79KUC       | 01         |
| 2320. | 300.  |         | ICPES        | 79ABE       | 01         |
| 2320. | 40.   |         | AA           | 75HIN       | 01         |
| 2330. | 60.   |         | ITNA         | 74WES       | 01         |
| 2340. |       | 17      | UU           | 74MAS       | 01         |
| 2355. |       |         | ITNA         | 82AKA       | 01         |
| 2370. | 40.   |         | PAA          | 76KAT       | 04         |
| 2370. |       | 17      | UU           | 74MAS       | 01         |
| 2400. |       |         | ITNA         | 73NAD       | 01         |
| 2400. | 200.  |         | AA           | 74WES       | 01         |
| 2400. |       | 35      | ITNA         | 81GLA       | 03         |
| 2410. | 10.   |         | RTNA         | 74HEN       | 01         |
| 2420. | 50.   |         | FE           | 80UCH       | 01         |
| 2425. |       | 17      | UU           | 74MAS       | 01         |
| 2426. | 130.  |         | ITNA         | 74DON       | 01         |
| 2430. | 150.  |         | ITNA         | 79CHA       | 02         |
| 2438. |       |         | ITNA         | 78CAP       | 01         |
| 2440. | 160.  |         | RTNA         | 79WAR       | 02         |
| 2455. |       | 1       | AA           | 78SZY       | 01         |
| 2530. | 120.  |         | NAA          | 78GAN       | 01         |
| 2540. |       | 1       | AA           | 78SZY       | 01         |
| 2550. |       | 35      | ITNA         | 81GLA       | 04         |
| 2550. | 190.  |         | ITNA         | 78BEH       | 01         |
| 2570. |       | 1       | IENA         | 79KUC       | 01         |
| 2570. |       | 17      | UU           | 74MAS       | 01         |
| 2609. | 142.  |         | NAA          | 76GUZ       | 01         |
| 2632. | 29.   |         | RTNA         | 77LIE       | 01         |
| 2632. | 29.   |         | RTNA         | 75LIE       | 01         |
| 2768. | 156.  |         | RTNA         | 74SCH       | 03         |
| 3100. |       | *       | ITNA         | 77OSB       | 01         |
| 3100. | 600.  | *       | TCGS         | 79FAI       | 01         |

Nd (ppb)

|      |     |  |      |       |    |
|------|-----|--|------|-------|----|
| 9.   |     |  | RTNA | 82LAU | 01 |
| 14.5 |     |  | RTNA | 77LAU | 02 |
| 170. | 40. |  | RTNA | 76GAU | 01 |

Ni (ppb)

|       |      |    |       |       |    |
|-------|------|----|-------|-------|----|
| 9000. |      | L* | 14NAA | 81WIL | 01 |
| 500.  |      | L* | EXRF  | 77NIE | 01 |
| 60.   |      | L* | ICPES | 82JON | 01 |
| 720.  |      | L* | RTNA  | 81KUC | 01 |
| 1000. |      | L* | RTNA  | 77MEL | 01 |
| 500.  |      | L* | ITNA  | 75PIE | 01 |
| 60.   |      | L* | ICPES | 82JON | 01 |
| 800.  |      | L* | EXRF  | 79GLA | 01 |
| 500.  |      | L* | NAA   | 76GUZ | 01 |
| 500.  |      | L* | ICPES | 79ABE | 01 |
| 700.  |      | L* | RTNA  | 76GAU | 01 |
| 50.   |      |    | AA    | 78EVA | 01 |
| 62.   | 18.  |    | IENA  | 75MAZ | 01 |
| 70.   | 30.  |    | AA    | 79FLA | 02 |
| 155.  | 19.  |    | FAA   | 80DOR | 01 |
| 180.  | 20.  |    | PAA   | 79CHA | 02 |
| 200.  | 30.  |    | RTNA  | 79WAR | 02 |
| 210.  |      |    | ITNA  | 73NAD | 01 |
| 227.  |      |    | VOLT  | 81PIH | 01 |
| 270.  | 120. |    | RTNA  | 77TJI | 01 |
| 470.  |      | *7 | RTNA  | 81KUC | 01 |
| 600.  | 400. | *  | CPXRF | 78VIS | 01 |
| 700.  | 500. | *  | CPXRF | 77WIL | 02 |

TABLE L (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| 1000.    | 690.   | *       | AA           | 79MON       | 01         |
| 1000.    | 500.   | *       | RTNA         | 80SLO       | 01         |
| 1200.    | 100.   | *       | EXRF         | 80DYC       | 01         |
| 1300.    | 200.   | *       | CPXRF        | 79REN       | 02         |
| P (%)    |        |         |              |             |            |
| 0.31     | 0.1    | *       | CPXRF        | 79REN       | 02         |
| 0.64     | 0.06   | *       | 14NAA        | 81WIL       | 01         |
| 0.816    | 0.64   | *       | EXRF         | 77NIE       | 01         |
| 0.905    |        |         | NAA          | 78GAN       | 01         |
| 0.98     |        |         | ICPES        | 78CAP       | 01         |
| 0.989    | 0.046  | 1       | ICPES        | 78SUD       | 01         |
| 1.       | 0.026  | 1       | ICPES        | 78SUD       | 01         |
| 1.04     | 0.06   | 6       | FAA          | 81LAN       | 01         |
| 1.1      | 0.006  |         | COLOR        | 79MCQ       | 01         |
| 1.1      | 0.02   | 6       | FAA          | 81LAN       | 01         |
| 1.1      | 0.15   |         | 14NAA        | 81WIL       | 02         |
| 1.13     | 0.03   |         | ICPES        | 79MCQ       | 01         |
| 1.16     | 0.03   |         | ICPES        | 79ABE       | 01         |
| 1.18     | 0.03   | 11      | ICPES        | 82JON       | 01         |
| 1.21     | 0.01   | 11      | ICPES        | 82JON       | 01         |
| 1.3      | 0.1    | *       | CPXRF        | 80KIR       | 01         |
| 1.349    | 0.029  | *       | NAA          | 76GUZ       | 01         |
| Pb (ppb) |        |         |              |             |            |
|          | 11000. | L*      | 14NAA        | 81WIL       | 02         |
|          | 1000.  | L*      | EXRF         | 77NIE       | 01         |
|          | 500.   | L*      | AA           | 79MON       | 01         |
|          | 3500.  | L*      | ICPES        | 78CAP       | 01         |
|          | 1000.  | L*      | EXRF         | 79GIA       | 01         |
|          | 500.   | L*      | ICPES        | 79ABE       | 01         |
| 240.     | 80.    |         | FAA          | 77FUJ       | 01         |
| 250.     |        |         | AA           | 78EVA       | 01         |
| 262.     |        | 17      | UU           | 74MAS       | 01         |
| 280.     | 40.    |         | AA           | 80AGE       | 01         |
| 300.     | 40.    |         | FAA          | 78GRO       | 01         |
| 300.     | 300.   | 11      | ICPES        | 82JON       | 01         |
| 300.     | 100.   |         | CPXRF        | 78VIS       | 01         |
| 300.     |        |         | FAA          | 79YAS       | 01         |
| 320.     | 13.    |         | FAA          | 75PIC       | 01         |
| 320.     | 60.    |         | FAA          | 79WAR       | 01         |
| 328.     | 16.    | 11      | IDMS         | 74CHO       | 02         |
| 330.     | 10.    |         | FAA          | 80POL       | 01         |
| 330.     | 700.   |         | AA           | 76LAN       | 01         |
| 330.     |        |         | AA           | 77FRI       | 01         |
| 330.     | 10.    |         | FAA          | 79DAB       | 02         |
| 333.     | 67.    | 11      | IDMS         | 74CHO       | 02         |
| 340.     |        | 11      | FAA          | 81DAN       | 01         |
| 340.     | 40.    |         | FAA          | 76HAD       | 01         |
| 340.     | 20.    |         | AA           | 79FLA       | 02         |
| 343.     | 23.    |         | AA           | 76ZAN       | 02         |
| 343.     | 23.    |         | FAA          | 76KOI       | 01         |
| 350.     | 50.    |         | FAA          | 81KNA       | 01         |
| 350.     | 50.    |         | AA           | 80SCH       | 05         |
| 350.     | 40.    |         | AA           | 79WAR       | 01         |
| 350.     | 15.    |         | FAA          | 81CHA       | 01         |
| 350.     | 50.    |         | FAA          | 75BEH       | 01         |
| 350.     | 22000. | 6       | FAA          | 76LAN       | 01         |
| 360.     | 25.    | 6       | POL          | 72SIN       | 01         |
| 360.     | 30.    |         | SSMS         | 77PAU       | 01         |
| 360.     | 30.    |         | FAA          | 79STO       | 01         |

TABLE L (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| 360.     |        | 11      | FAA          | 81DAN       | 01         |
| 360.     | 12000. | 6       | FAA          | 76LAN       | 01         |
| 370.     |        |         | ASV          | 82GAJ       | 01         |
| 380.     |        |         | ICPES        | 80HAA       | 01         |
| 380.     |        |         | FAA          | 82VAN       | 01         |
| 380.     | 76.    |         | ASV          | 79STO       | 01         |
| 380.     |        |         | ASV          | 74COO       | 01         |
| 380.     |        |         | FAA          | 82HOE       | 01         |
| 390.     |        | 6       | POL          | 72SIN       | 01         |
| 390.     |        | 11      | ASV          | 81DAN       | 01         |
| 390.     |        | 11      | ASV          | 81DAN       | 01         |
| 400.     | 50.    |         | PAA          | 79CHA       | 02         |
| 400.     | 300.   | 11      | ICPES        | 82JON       | 01         |
| 400.     | 100.   |         | PAA          | 74LUT       | 01         |
| 420.     | 140.   | 34      | CPXRF        | 78JOL       | 01         |
| 450.     | 30.    |         | FAA          | 80LEG       | 01         |
| 460.     | 130.   |         | FAA          | 74GRO       | 01         |
| 490.     |        | 6       | FAA          | 81HIN       | 01         |
| 490.     |        | 6       | FAA          | 82KOI       | 01         |
| 500.     |        | *6      | FAA          | 81HIN       | 01         |
| 500.     |        | *       | OES          | 75BOL       | 02         |
| 500.     |        | *6      | FAA          | 82KOI       | 01         |
| 520.     |        | *17     | UU           | 74MAS       | 01         |
| 3900.    | 1000.  | *       | CPXRF        | 77WIL       | 02         |
| 5000.    |        | *       | 14NAA        | 81WIL       | 01         |
| 43000.   | 4000.  | *       | FAA          | 79WES       | 01         |
| Pr (ppb) |        |         |              |             |            |
|          | 3.     | L*      | RTNA         | 82LAU       | 01         |
| 4.       |        |         | RTNA         | 77LAU       | 02         |
| 4.6      | 0.3    |         | RTNA         | 76CAU       | 01         |
| Rb (ppm) |        |         |              |             |            |
| 9.9      | 1.6    | *       | CPXRF        | 80MAE       | 01         |
| 15.      | 2.     | *       | 14NAA        | 81WIL       | 02         |
| 15.      | 2.5    | *34     | CPXRF        | 78JOL       | 01         |
| 15.1     | 4.4    | *       | XRF          | 77SMI       | 04         |
| 16.5     | 1.2    | 5       | ITNA         | 80TOU       | 01         |
| 16.6     | 2.8    |         | RTNA         | 74SCH       | 03         |
| 16.7     | 3.2    |         | CPXRF        | 81ROB       | 02         |
| 16.8     | 1.9    | 6       | CPXRF        | 77WIL       | 03         |
| 16.8     |        | 1       | IENA         | 79KUC       | 01         |
| 16.9     |        |         | ITNA         | 79KUC       | 01         |
| 17.      | 1.     |         | EXRF         | 80DYC       | 01         |
| 17.      | 3.     |         | ITNA         | 77ZIK       | 01         |
| 17.4     | 1.8    |         | NAA          | 78GAN       | 01         |
| 17.72    | 1.8    |         | ITNA         | 81MOL       | 01         |
| 17.8     |        |         | ITNA         | 78CAP       | 01         |
| 17.97    | 0.6    |         | RTNA         | 75LIE       | 01         |
| 17.97    | 0.6    |         | RTNA         | 77LIE       | 01         |
| 18.      | 0.8    |         | ITNA         | 79SAT       | 01         |
| 18.      | 1.     |         | CPXRF        | 77WIL       | 02         |
| 18.      | 0.3    |         | RTNA         | 79WAR       | 02         |
| 18.      |        |         | ITNA         | 77OSB       | 01         |
| 18.1     | 0.6    |         | 14NAA        | 81WIL       | 01         |
| 18.4     | 0.4    |         | EXRF         | 79GIA       | 01         |
| 18.4     | 2.     |         | ITNA         | 81KRI       | 01         |
| 18.5     | 0.4    |         | ITNA         | 74LIN       | 01         |
| 18.62    | 0.95   |         | NAA          | 76GUZ       | 01         |
| 18.7     | 0.9    | 5       | ITNA         | 80TOU       | 01         |
| 18.7     | 1.     |         | ITNA         | 73QOR       | 01         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 18.7     | 1.5   |         | ITNA         | 79CHA       | 02         |
| 18.7     | 0.5   |         | ITNA         | 78FUR       | 01         |
| 18.7     |       | 17      | UU           | 74MAS       | 01         |
| 18.7     | 3.6   |         | EXRF         | 77NIE       | 01         |
| 18.8     | 1.4   |         | ITNA         | 79LAK       | 01         |
| 18.8     | 1.3   |         | RTNA         | 76GAU       | 01         |
| 18.95    | 1.65  |         | PAA          | 76KAT       | 04         |
| 19.      | 1.6   |         | ITNA         | 78BEH       | 01         |
| 19.      |       |         | ITNA         | 80CRE       | 01         |
| 19.      | 1.6   |         | ITNA         | 77JUR       | 02         |
| 19.      | 2.5   |         | ITNA         | 77HAM       | 01         |
| 19.      | 1.    |         | RTNA         | 77MEL       | 01         |
| 19.2     | 1.4   |         | ITNA         | 80MAE       | 01         |
| 19.3     | 2.8   |         | CPXRF        | 79MAN       | 01         |
| 19.5     | 2.1   |         | ITNA         | 79ZEI       | 01         |
| 19.8     | 1.4   | 6       | ITNA         | 74BEC       | 01         |
| 19.9     |       | 17      | UU           | 74MAS       | 01         |
| 20.      | 2.4   |         | CPXRF        | 80KIR       | 01         |
| 20.      | 3.    |         | CPXRF        | 78VIS       | 01         |
| 20.1     |       |         | ITNA         | 73NAD       | 01         |
| 20.9     | 2.5   | 6       | CPXRF        | 77WIL       | 03         |
| 23.3     |       | *17     | UU           | 74MAS       | 01         |
| 23.4     |       | *17     | UU           | 74MAS       | 01         |
| 28.      |       | *       | CPXRF        | 76ZEI       | 01         |
| 28.      |       | *17     | UU           | 74MAS       | 01         |
| 29.      | 4.    | *       | CPAA         | 78MCG       | 01         |
| S (ppm)  |       |         |              |             |            |
| 3300.    | 1000. | *       | CPXRF        | 79REN       | 02         |
| 7200.    | 400.  |         | TCGS         | 77JUR       | 01         |
| 7200.    | 200.  |         | TCGS         | 79FAI       | 01         |
| 9500.    | 700.  |         | CPXRF        | 80KIR       | 01         |
| 16200.   | 2000. | *       | ITNA         | 79CHA       | 02         |
| Sb (ppb) |       |         |              |             |            |
|          | 7.    | L*      | RTNA         | 81KUC       | 01         |
|          | 20.   | L*      | ITNA         | 78CAP       | 01         |
|          | 9.    | L*      | RTNA         | 81KUC       | 01         |
|          | 50.   | L*      | RTNA         | 77GIL       | 03         |
|          | 500.  | L*      | 14NAA        | 81WIL       | 02         |
| 4.       |       |         | RTNA         | 79MAY       | 01         |
| 4.       | 1.    |         | RTNA         | 80SLO       | 01         |
| 4.       |       |         | RTNA         | 75LIE       | 01         |
| 4.8      | 0.5   |         | RTNA         | 77LIE       | 01         |
| 4.8      | 1.2   |         | RTNA         | 79ROS       | 02         |
| 5.       |       |         | HAA          | 79EVA       | 01         |
| 5.       | 2.    |         | RTNA         | 79HOE       | 01         |
| 7.       | 5.    |         | ITNA         | 78BEH       | 01         |
| 9.       | 3.    |         | RTNA         | 74HEN       | 01         |
| 10.      | 2.    |         | RTNA         | 78GAL       | 01         |
| 11.      | 9.    |         | RTNA         | 74SCH       | 03         |
| 12.      |       |         | ITNA         | 80CRE       | 01         |
| 14.      | 10.   |         | ITNA         | 77ZIK       | 01         |
| 14.      | 5.    |         | NAA          | 78GAN       | 01         |
| 15.      | 4.    |         | RTNA         | 77TJI       | 01         |
| 16.      | 7.    |         | ITNA         | 73COR       | 01         |
| 16.      | 2.    |         | ITNA         | 79CHA       | 02         |
| 18.      |       | 17      | UU           | 74MAS       | 01         |
| 22.9     |       | 17      | UU           | 74MAS       | 01         |
| 26.      | 1.    | *       | RTNA         | 79WAR       | 02         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 34.      |       | *       | ITNA         | 73NAD       | 01         |
| 50.      |       | *       | ITNA         | 79KUC       | 01         |
| 55.      | 9.    | *6      | ITNA         | 74BEC       | 01         |
| 69.      | 24.   | *6      | ITNA         | 74BEC       | 01         |
| 70.      |       | *1      | ITNA         | 79KUC       | 01         |
| 130.     | 170.  | R*      | ITNA         | 79IMA       | 01         |
| 130.     | 170.  | R*      | ITNA         | 79IMA       | 03         |
| Sc (ppb) |       |         |              |             |            |
|          | 1.    | L*      | RTNA         | 80SLO       | 01         |
|          | 800.  | L*      | 14NAA        | 81WIL       | 02         |
|          |       | L*      | RTNA         | 75LIE       | 01         |
|          | 0.5   | L*      | RTNA         | 77LIE       | 01         |
|          | 1.    | L*      | RTNA         | 75STE       | 02         |
|          | 4.    | L*      | ITNA         | 78CAP       | 01         |
|          | 1.    | L*      | NAA          | 78GAN       | 01         |
| 0.4      |       | 17      | UU           | 74MAS       | 01         |
| 0.6      | 0.1   |         | RTNA         | 74HEN       | 01         |
| 1.       |       |         | ITNA         | 73NAD       | 01         |
| 1.       | 0.9   |         | RTNA         | 76GAU       | 01         |
| 1.1      | 0.3   |         | ITNA         | 78BEH       | 01         |
| 1.1      | 0.1   |         | RTNA         | 79WAR       | 02         |
| 20.      | 6.    | *       | RTNA         | 77MEL       | 01         |
| Se (ppm) |       |         |              |             |            |
|          | 2.    | L*      | 14NAA        | 81WIL       | 01         |
|          | 2.    | L*      | ITNA         | 74GUI       | 01         |
|          | 1.55  | L*      | ITNA         | 80TOU       | 01         |
| 0.228    | 0.011 | *       | FLUOR        | 74IHN       | 02         |
| 0.4      | 0.27  | *       | FAA          | 81MEY       | 01         |
| 0.69     | 0.06  | *       | NAA          | 78GAN       | 01         |
| 0.75     |       | *       | FAA          | 74IHN       | 01         |
| 0.774    |       | *       | HAA          | 77IHN       | 01         |
| 0.9      |       | 11      | FAA          | 82VER       | 03         |
| 0.91     |       |         | FLUOR        | 78EGA       | 01         |
| 0.92     | 0.18  | 6       | ITNA         | 74BEC       | 01         |
| 0.92     | 0.04  |         | HAA          | 82SUB       | 01         |
| 0.95     | 0.03  |         | HAA          | 78EGA       | 01         |
| 0.97     | 0.03  |         | ICPES        | 80HAA       | 01         |
| 0.972    |       |         | FLUOR        | 79TAM       | 01         |
| 0.98     | 0.03  |         | DCP          | 81CAR       | 02         |
| 0.98     | 0.05  |         | ITNA         | 76DIK       | 01         |
| 0.98     | 0.15  | 34      | CPXRF        | 78JOL       | 01         |
| 0.98     | 0.06  |         | AA           | 79PAV       | 02         |
| 0.98     | 0.03  |         | GCMES        | 74TAL       | 02         |
| 0.98     | 0.01  |         | HAA          | 76FIO       | 01         |
| 1.       | 0.2   |         | CPXRF        | 80MAE       | 01         |
| 1.       | 0.1   | 11      | HAA          | 82JON       | 01         |
| 1.       |       | 11      | FAA          | 82VER       | 03         |
| 1.       | 0.01  |         | ITNA         | 79SAT       | 01         |
| 1.       |       |         | HAA          | 78WEL       | 01         |
| 1.       |       | 17      | UU           | 74MAS       | 01         |
| 1.       | 0.02  |         | FAA          | 76IHN       | 02         |
| 1.       | 0.4   |         | CPXRF        | 78VIS       | 01         |
| 1.       | 0.1   |         | RTNA         | 75ABU       | 01         |
| 1.       | 0.04  |         | FAA          | 76IHN       | 01         |
| 1.01     | 0.04  |         | ITNA         | 79CHA       | 04         |
| 1.02     |       |         | ITNA         | 81HAN       | 01         |
| 1.02     | 0.03  |         | RTNA         | 77LIE       | 01         |
| 1.02     | 0.438 | 5       | RTNA         | 82TIN       | 01         |
| 1.02     |       |         | ITNA         | 81MEY       | 01         |

TABLE L (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 1.02  | 0.04  |         | HAA          | 80AGE       | 02         |
| 1.02  | 0.03  | 9       | ITNA         | 81SUZ       | 01         |
| 1.02  | 0.03  |         | RTNA         | 75LIE       | 01         |
| 1.02  |       | 17      | UU           | 74MAS       | 01         |
| 1.03  |       | 6       | FAA          | 77SHU       | 01         |
| 1.03  | 0.09  |         | ITNA         | 81MDL       | 01         |
| 1.03  | 0.04  | 11      | HAA          | 82JON       | 01         |
| 1.03  | 0.03  |         | RTNA         | 77RAI       | 01         |
| 1.03  | 0.03  |         | ITNA         | 79RAI       | 01         |
| 1.04  | 0.1   |         | RTNA         | 80KNA       | 01         |
| 1.04  | 0.07  |         | ITNA         | 74WES       | 01         |
| 1.04  |       |         | FLUOR        | 74IHN       | 01         |
| 1.045 | 0.04  |         | ITNA         | 77EGA       | 01         |
| 1.05  | 0.19  |         | ITNA         | 79LAK       | 01         |
| 1.05  | 0.12  |         | RTNA         | 80SLO       | 01         |
| 1.05  |       | 6       | FAA          | 77SHU       | 01         |
| 1.05  | 0.05  |         | HAA          | 80VIJ       | 01         |
| 1.053 | 0.051 |         | COLOR        | 79SZY       | 02         |
| 1.06  |       |         | FAA          | 78CAP       | 01         |
| 1.06  | 0.11  | 11      | RTNA         | 82POL       | 01         |
| 1.06  | 0.1   |         | RTNA         | 77TJI       | 01         |
| 1.06  | 0.06  |         | RTNA         | 78GAL       | 01         |
| 1.069 | 0.016 |         | ITNA         | 82DAM       | 01         |
| 1.07  |       |         | RTNA         | 75STE       | 02         |
| 1.07  | 0.11  |         | ITNA         | 78HIR       | 01         |
| 1.07  | 0.04  |         | GC-MS        | 81REA       | 02         |
| 1.07  | 0.19  |         | RTNA         | 79ROS       | 02         |
| 1.07  | 0.06  | 5       | ITNA         | 81SUZ       | 01         |
| 1.07  | 0.1   |         | RTNA         | 79MAY       | 01         |
| 1.07  | 0.18  |         | RTNA         | 79PLA       | 01         |
| 1.08  | 0.12  |         | ITNA         | 77GUI       | 02         |
| 1.08  | 0.01  |         | ITNA         | 74LIN       | 01         |
| 1.08  | 0.015 |         | FAA          | 80NEV       | 01         |
| 1.08  | 0.2   |         | FAA          | 79RAI       | 01         |
| 1.08  | 0.05  |         | ASV          | 76AND       | 01         |
| 1.08  | 0.13  | 6       | ITNA         | 74BEC       | 01         |
| 1.09  | 0.06  |         | HAA          | 81HAN       | 01         |
| 1.09  | 0.02  | 34      | HAA          | 78FLA       | 01         |
| 1.09  | 0.08  |         | RTNA         | 79WAR       | 02         |
| 1.09  | 0.02  |         | AA           | 79FLA       | 02         |
| 1.09  | 0.05  |         | RTNA         | 74ORV       | 01         |
| 1.1   | 0.06  | 11      | GC           | 81UCH       | 02         |
| 1.1   | 0.06  |         | FLUOR        | 80KOH       | 01         |
| 1.1   | 0.2   |         | HAA          | 82MAY       | 01         |
| 1.1   | 0.05  | 11      | GC           | 81UCH       | 02         |
| 1.1   | 0.1   |         | GC           | 77POO       | 01         |
| 1.1   |       | 11      | FAA          | 82VER       | 03         |
| 1.1   | 0.02  |         | XRF          | 81KNA       | 01         |
| 1.1   | 0.1   | 9       | ITNA         | 80WAN       | 01         |
| 1.1   |       |         | ITNA         | 80CRE       | 01         |
| 1.1   | 0.17  | 9       | ITNA         | 77VOB       | 01         |
| 1.1   | 0.2   |         | EXRF         | 79GIA       | 01         |
| 1.1   |       |         | ITNA         | 77OSB       | 01         |
| 1.1   | 0.13  | 11      | RTNA         | 82POL       | 01         |
| 1.1   | 0.4   | 5       | ITNA         | 80TOU       | 01         |
| 1.1   | 0.3   |         | ITNA         | 79ZEI       | 01         |
| 1.1   |       |         | FAA          | 77YAS       | 01         |
| 1.1   | 0.17  | 9       | ITNA         | 79PAV       | 02         |
| 1.1   | 0.17  | 9       | ITNA         | 77VOB       | 01         |
| 1.1   |       |         | ITNA         | 78CAP       | 01         |
| 1.107 | 0.15  |         | NAA          | 76GUZ       | 01         |
| 1.11  | 0.08  | 13      | ITNA         | 73BLO       | 02         |
| 1.11  | 0.04  |         | SSMS         | 77ROO       | 02         |

TABLE L (cont)

| CONC   | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------|-------|---------|--------------|-------------|------------|
| 1.11   | 0.05  |         | RTNA         | 74BYR       | 03         |
| 1.11   | 0.02  |         | SSMS         | 77PAU       | 01         |
| 1.11   | 0.1   |         | ITNA         | 79CHA       | 02         |
| 1.11   | 0.06  |         | HAA          | 76IHN       | 02         |
| 1.12   | 0.1   |         | ASV          | 81POS       | 01         |
| 1.12   | 0.08  |         | RTNA         | 77ROO       | 02         |
| 1.12   | 0.08  | 11      | RTNA         | 82POL       | 01         |
| 1.12   | 0.08  |         | RTNA         | 72ROO       | 03         |
| 1.12   | 0.12  | 6       | FLUOR        | 75OLS       | 01         |
| 1.12   | 0.075 |         | HAA          | 81MEY       | 01         |
| 1.12   | 0.03  |         | ASV          | 75AND       | 01         |
| 1.12   | 0.09  | 7       | RTNA         | 81KUC       | 01         |
| 1.13   |       | 17      | UU           | 74MAS       | 01         |
| 1.13   | 0.09  |         | ITNA         | 73COR       | 01         |
| 1.133  | 0.122 |         | ITNA         | 82MOR       | 02         |
| 1.14   | 0.05  |         | ITNA         | 80MAE       | 01         |
| 1.14   | 0.11  |         | ITNA         | 79PAV       | 02         |
| 1.14   | 0.11  |         | ITNA         | 77VOB       | 01         |
| 1.14   | 0.091 |         | HAA          | 82TAM       | 01         |
| 1.14   | 0.11  |         | ITNA         | 77JUR       | 02         |
| 1.14   | 0.04  |         | ITNA         | 78MCK       | 01         |
| 1.14   | 0.11  |         | ITNA         | 78BEH       | 01         |
| 1.16   |       |         | CSV          | 81HAN       | 01         |
| 1.17   | 0.06  | 6       | FLUOR        | 75OLS       | 01         |
| 1.18   | 0.14  |         | RTNA         | 74HEN       | 01         |
| 1.19   | 0.11  | 13      | ITNA         | 73BLO       | 02         |
| 1.2    | 0.1   |         | ITNA         | 80WAN       | 01         |
| 1.2    |       | 1       | ITNA         | 79KUC       | 01         |
| 1.2    | 0.1   |         | ITNA         | 81KRI       | 01         |
| 1.2    |       |         | ICPES        | 80HAA       | 01         |
| 1.2    |       |         | ITNA         | 79KUC       | 01         |
| 1.2    | 0.16  |         | HAA          | 81REA       | 01         |
| 1.2    | 0.155 |         | ITNA         | 77HAM       | 01         |
| 1.2    |       | 7       | RTNA         | 81KUC       | 01         |
| 1.2    |       |         | FAA          | 77YAS       | 01         |
| 1.2    | 0.2   |         | HAA          | 81COX       | 01         |
| 1.2    | 0.1   |         | NAA          | 77GIL       | 01         |
| 1.2    | 0.1   |         | CPXRF        | 77WIL       | 02         |
| 1.2    | 0.11  |         | RTNA         | 77OMI       | 01         |
| 1.2    | 0.1   |         | RTNA         | 77GIL       | 03         |
| 1.2    | 0.1   |         | RTNA         | 77MEL       | 01         |
| 1.204  | 0.124 |         | HAA          | 77IHN       | 03         |
| 1.22   | 0.04  |         | COLOR        | 81TOE       | 01         |
| 1.23   |       | 17      | UU           | 74MAS       | 01         |
| 1.24   | 0.04  |         | GC           | 81TOE       | 01         |
| 1.26   |       | 17      | UU           | 74MAS       | 01         |
| 1.26   | 0.15  | 5       | FLUOR        | 81SUZ       | 01         |
| 1.3    | 0.4   | *       | RTNA         | 74SCH       | 03         |
| 1.4    | 0.1   | *       | EXRF         | 80DYC       | 01         |
| 1.4    |       | *       | FAA          | 82INU       | 01         |
| 1.4    | 0.5   | *6      | CPXRF        | 77WIL       | 03         |
| 1.7    |       | *       | ITNA         | 73NAD       | 01         |
| 1.7    | 0.1   | *       | ITNA         | 78FUR       | 01         |
| 7.65   | 0.277 | 5*      | RTNA         | 82TIN       | 01         |
| 13.376 | 0.926 | 5*      | RTNA         | 82TIN       | 01         |

Se(VI) (ppm)

|      |      |       |       |    |
|------|------|-------|-------|----|
| 0.3  | 0.07 | GC    | 81TOE | 01 |
| 0.31 | 0.11 | COLOR | 81TOE | 01 |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Si (ppm) |       |         |              |             |            |
| 16.7     | 0.67  |         | ITNA         | 75PIE       | 01         |
| 16.79    | 1.84  |         | NAA          | 76GUZ       | 01         |
| Sm (ppb) |       |         |              |             |            |
| 1.       | 0.2   |         | RTNA         | 74HEN       | 01         |
| 1.3      | 0.4   |         | RTNA         | 80SLO       | 01         |
| 1.6      |       |         | RTNA         | 82LAU       | 01         |
| 1.6      |       |         | RTNA         | 77LAU       | 02         |
| 1.9      | 0.2   |         | RTNA         | 76GAU       | 01         |
| 2.8      |       | *       | ITNA         | 80CRE       | 01         |
| 35.      | 24.   | *       | RTNA         | 74SCH       | 03         |
| Sn (ppb) |       |         |              |             |            |
|          | 240.  | L*      | RTNA         | 81KUC       | 01         |
|          | 1500. | L*      | ICPES        | 78CAP       | 01         |
|          | 600.  | L*      | RTNA         | 75LIE       | 01         |
|          | 600.  | L*      | RTNA         | 77LIE       | 01         |
| 10.      |       |         | HAA          | 79EVA       | 01         |
| 21.      | 3.    |         | RTNA         | 77BYR       | 01         |
| 220.     | 180.  |         | ICPES        | 80HAA       | 01         |
| Sr (ppb) |       |         |              |             |            |
|          | 1000. | L*      | EXRF         | 79GIA       | 01         |
|          | 9000. | L*      | 14NAA        | 77VAN       | 01         |
| 150.     | 20.   |         | RTNA         | 76GAU       | 01         |
| 160.     |       |         | ICPES        | 78DAH       | 01         |
| 160.     | 20.   |         | FAA          | 82SUZ       | 03         |
| 300.     | 60.   |         | ICPES        | 79ABE       | 01         |
| 500.     | 180.  | *34     | CPXRF        | 78JOL       | 01         |
| 2000.    | 800.  | *       | 14NAA        | 81WIL       | 02         |
| Ta (ppb) |       |         |              |             |            |
| 3.       |       |         | ITNA         | 80CRE       | 01         |
| Tb (ppb) |       |         |              |             |            |
|          | 1.6   | L*      | RTNA         | 76GAU       | 01         |
| 0.17     |       |         | RTNA         | 82LAU       | 01         |
| 0.18     |       |         | RTNA         | 77LAU       | 02         |
| 2.       |       |         | ITNA         | 80CRE       | 01         |
| Te (ppb) |       |         |              |             |            |
| 90.      | 15.   |         | RTNA         | 77DIK       | 01         |
| Th (ppb) |       |         |              |             |            |
|          | 1000. | L*      | EXRF         | 79GIA       | 01         |
| 3.       | 6.    | R*      | RTNA         | 80SLO       | 01         |
| 6.8      |       |         | ITNA         | 80CRE       | 01         |
| Ti (ppm) |       |         |              |             |            |
|          | 4.    | L*      | 14NAA        | 81WIL       | 02         |
|          | 0.15  | L*      | ICPES        | 78CAP       | 01         |
|          | 11.   | L*      | EXRF         | 79GIA       | 01         |
| 0.7      | 0.2   |         | COLOR        | 82KIR       | 02         |

TABLE L (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.7      | 0.2   |         | ICPES        | 79ABE       | 01         |
| 2.       | 1.    |         | CPAA         | 77ZIK       | 01         |
| 3.2      | 1.    |         | 14NAA        | 81WIL       | 01         |
| Tl (ppb) |       |         |              |             |            |
| 48.      | 3.    |         | SSMS         | 77PAU       | 01         |
| Tm (ppb) |       |         |              |             |            |
|          | 0.3   | L*      | RTNA         | 76GAU       | 01         |
| 0.1      |       |         | RTNA         | 82LAU       | 01         |
| 0.15     |       |         | RTNA         | 77LAU       | 02         |
| U (ppb)  |       |         |              |             |            |
|          | 20.   | L*      | ITNA         | 74WEA       | 01         |
|          | 2000. | L*      | EXRF         | 79GIA       | 01         |
|          | 100.  | L*      | RTNA         | 76GAU       | 01         |
| 0.99     | 0.25  | 35      | DNA          | 80GLA       | 04         |
| 1.       | 1.6   |         | DNA          | 83GLA       | 01         |
| 20.      | 48.   | R*      | DNA          | 81GLA       | 03         |
| V (ppb)  |       |         |              |             |            |
|          | 20.   | L*      | RTNA         | 77BUO       | 01         |
|          | 40.   | L*      | ITNA         | 74HOF       | 01         |
|          | 6000. | L*      | EXRF         | 79GIA       | 01         |
|          | 20.   | L*      | ITNA         | 74HOF       | 01         |
| 15.      | 5.    | *       | COLOR        | 82KIR       | 01         |
| 33.      | 3.    |         | RTNA         | 79WAR       | 02         |
| 55.      | 1.    |         | FAA          | 77MYR       | 01         |
| 56.      | 7.    |         | UU           | 73STE       | 01         |
| 56.      |       | 17      | UU           | 74MAS       | 01         |
| 58.6     | 1.6   |         | RTNA         | 78BYR       | 01         |
| 59.      |       |         | NAA          | 80KOS       | 02         |
| 60.      | 5.    |         | RTNA         | 79CHA       | 02         |
| 60.      |       |         | ICPES        | 80HAA       | 01         |
| 61.5     | 2.    |         | RTNA         | 79COR       | 01         |
| 61.5     | 2.    |         | RTNA         | 81COR       | 02         |
| 65.      | 2.    |         | RTNA         | 82BYR       | 01         |
| 66.2     | 4.9   |         | RTNA         | 78ALL       | 04         |
| 90.      | 60.   | *11     | ICPES        | 82JON       | 01         |
| 320.     | 80.   | *       | RTNA         | 77GUI       | 03         |
| 460.     |       | *       | ITNA         | 78CAP       | 01         |
| 500.     | 100.  | *       | ITNA         | 77ZIK       | 01         |
| 600.     | 100.  | *       | ICPES        | 79ABE       | 01         |
| W (ppb)  |       |         |              |             |            |
| 5.       | 3.    |         | RTNA         | 74SCH       | 03         |
| 5.       |       | 17      | UU           | 74MAS       | 01         |
| 12.      |       |         | RTNA         | 76GAU       | 01         |
| 15.      |       |         | RTNA         | 75STE       | 02         |
| 30.      |       | 17      | UU           | 74MAS       | 01         |
| 700.     | 100.  | *       | RTNA         | 80SLO       | 01         |
| Y (ppm)  |       |         |              |             |            |
|          | 14.   | L*      | 14NAA        | 81WIL       | 01         |
|          | 1.    | L*      | EXRF         | 79GIA       | 01         |

TABLE L (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| Yb (ppb) |        |         |              |             |            |
| 0.28     |        |         | RTNA         | 82LAU       | 01         |
| 0.285    |        |         | RTNA         | 77LAU       | 02         |
| 0.48     | 0.09   |         | RTNA         | 76GAU       | 01         |
| 830.     |        | *       | ITNA         | 73NAD       | 01         |
| Zn (ppm) |        |         |              |             |            |
|          | 12000. | L*      | ITNA         | 80TOU       | 01         |
| 13.17    | 17.59  | *       | AA           | 79MON       | 01         |
| 32.      |        | *       | ASV          | 74COP       | 01         |
| 65.      | 15.    | *       | FAA          | 77FUJ       | 01         |
| 78.      | 25.    | *       | 14NAA        | 81WIL       | 01         |
| 98.      | 122.   | R*      | ITNA         | 79IMA       | 01         |
| 98.      | 122.   | R*      | ITNA         | 79IMA       | 03         |
| 101.     |        | *17     | UU           | 74MAS       | 01         |
| 104.     |        | *       | CPXRF        | 78UEM       | 01         |
| 112.     |        |         | XRF          | 80SUZ       | 02         |
| 112.     | 15.    |         | ICPES        | 81BLA       | 01         |
| 112.6    | 1.1    |         | FAA          | 81CLE       | 02         |
| 116.     |        |         | ITNA         | 73NAD       | 01         |
| 116.     | 18.    |         | CPXRF        | 80MAE       | 01         |
| 117.     | 13.    |         | AA           | 79MAN       | 01         |
| 118.     | 4.     | 6       | POL          | 72STN       | 01         |
| 118.     |        | 11      | ASV          | 81DAN       | 01         |
| 118.     | 21.    |         | RTNA         | 82KIM       | 01         |
| 118.2    | 7.8    |         | IENA         | 75MAZ       | 01         |
| 119.     |        | 6       | POL          | 72SIN       | 01         |
| 120.     | 6.     | 11      | ICPES        | 81BLA       | 02         |
| 120.     |        | 17      | UU           | 74MAS       | 01         |
| 121.9    |        |         | RTNA         | 74RAV       | 01         |
| 122.     | 3.     |         | NAA          | 78GAN       | 01         |
| 122.     | 9.     |         | ITNA         | 79LAK       | 01         |
| 122.     | 3.     |         | EXRF         | 80DYC       | 01         |
| 122.     |        | 11      | FAA          | 81DAN       | 01         |
| 123.     | 5.     |         | ITNA         | 74WES       | 01         |
| 123.     | 25.    |         | ITNA         | 78FUR       | 01         |
| 123.8    | 1.2    |         | FAA          | 74GRO       | 01         |
| 124.     |        | 6       | POL          | 72SIN       | 01         |
| 124.     | 10.    |         | ICPES        | 80SCH       | 05         |
| 124.     | 14.    |         | CPXRF        | 79MAN       | 01         |
| 124.     |        |         | ITNA         | 78CAP       | 01         |
| 124.     |        | 17      | UU           | 74MAS       | 01         |
| 124.     | 7.     |         | FAA          | 74TAL       | 01         |
| 124.     | 7.     | 7       | AA           | 73TAL       | 01         |
| 124.     | 7.3    | 11      | RTNA         | 74WES       | 01         |
| 124.4    |        |         | RTNA         | 75HAL       | 01         |
| 125.     | 5.     |         | NAA          | 77GIL       | 01         |
| 125.     |        |         | ITNA         | 79KUC       | 01         |
| 125.     | 5.     |         | RTNA         | 77GIL       | 03         |
| 125.     | 2.     |         | AA           | 79FLA       | 02         |
| 125.     | 16.    |         | ITNA         | 77HAM       | 01         |
| 125.     |        |         | RTNA         | 75STE       | 02         |
| 125.7    | 10.6   | 34      | CPXRF        | 78JOL       | 01         |
| 126.     | 5.     |         | ITNA         | 81MOL       | 01         |
| 126.     | 71.    |         | ITNA         | 82KIM       | 01         |
| 126.     | 2.     |         | ITNA         | 80MAE       | 01         |
| 126.     | 8.     |         | FAA          | 79WAR       | 01         |
| 126.     | 4.     |         | SSMS         | 77PAU       | 01         |
| 126.     | 9.     |         | RTNA         | 74ORV       | 01         |

TABLE L (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 126.  |       |         | FAA          | 75SLA       | 01         |
| 126.  | 4.    |         | FAA          | 74TAL       | 01         |
| 126.  | 4.    | 7       | AA           | 73TAL       | 01         |
| 127.  | 9.    |         | ITNA         | 81KRI       | 01         |
| 127.  |       | 11      | FAA          | 81DAN       | 01         |
| 127.  |       | 1       | IENA         | 79KUC       | 01         |
| 127.  | 1.    |         | RTNA         | 80SLO       | 01         |
| 127.  | 8.    | 11      | RTNA         | 74WES       | 01         |
| 127.  | 4.    |         | AA           | 80UCH       | 01         |
| 127.9 | 9.1   | 6       | ITNA         | 74BEC       | 01         |
| 128.  |       | 7       | RTNA         | 81KUC       | 01         |
| 128.  | 14.   |         | CPAA         | 77ZIK       | 01         |
| 128.  | 5.    |         | ITNA         | 79SAT       | 01         |
| 128.  | 10.   |         | CPXRF        | 80KIR       | 01         |
| 128.  | 7.    |         | RTNA         | 79DER       | 01         |
| 128.  | 14.   |         | EXRF         | 77NIE       | 01         |
| 128.  | 3.6   | 11      | AA           | 74WES       | 01         |
| 128.  | 3.    |         | FAA          | 81CLE       | 01         |
| 128.  | 12.   |         | ITNA         | 79CHA       | 02         |
| 128.  | 6.    |         | AA           | 75SHIN      | 01         |
| 128.  |       |         | DCP          | 78NAK       | 01         |
| 128.6 | 0.7   |         | ITNA         | 82DAM       | 01         |
| 128.6 |       |         | AA           | 79LOC       | 01         |
| 129.  |       |         | ICPES        | 80HAA       | 01         |
| 129.  | 3.    |         | ITNA         | 74DON       | 01         |
| 129.  | 16.   | 32      | CPXRF        | 77CRO       | 01         |
| 129.  |       |         | ITNA         | 80CRE       | 01         |
| 129.  |       | 1       | IENA         | 79KUC       | 01         |
| 129.  | 4.    |         | ITNA         | 79WAR       | 01         |
| 129.  | 4.    |         | RTNA         | 79WAR       | 02         |
| 130.  |       | 11      | AA           | 81MOH       | 01         |
| 130.  | 4.    | 11      | ICPES        | 81BLA       | 02         |
| 130.  | 5.    | 1       | ICPES        | 78SUD       | 01         |
| 130.  |       |         | OES          | 75BOL       | 02         |
| 130.  | 7.    |         | CPXRF        | 78VIS       | 01         |
| 131.  | 1.4   |         | AA           | 80AGE       | 01         |
| 131.  | 13.5  |         | PAA          | 76KAT       | 04         |
| 131.  | 2.    |         | ICPES        | 79MCQ       | 01         |
| 131.  |       | 17      | UU           | 74MAS       | 01         |
| 131.  | 1.    |         | ICPES        | 79MCQ       | 02         |
| 131.  | 1.    |         | AA           | 75ABU       | 01         |
| 131.  | 1.    |         | AA           | 75EPS       | 01         |
| 131.8 | 6.5   |         | ITNA         | 73COR       | 01         |
| 132.  | 3.3   | 6       | CPXRF        | 77WIL       | 03         |
| 132.  | 5.    |         | AA           | 79MCQ       | 01         |
| 132.  | 6.    | 7       | RTNA         | 81KUC       | 01         |
| 132.  | 7.    |         | AA           | 80IID       | 01         |
| 132.  | 1.    |         | AF           | 75EPS       | 01         |
| 132.  | 3.    |         | GC           | 81BLA       | 01         |
| 132.  | 7.    | 1       | AA           | 77UCH       | 02         |
| 133.  | 7.    |         | ITNA         | 77JUR       | 02         |
| 133.  |       | 11      | ASV          | 81DAN       | 01         |
| 133.  | 7.    |         | ITNA         | 78BEH       | 01         |
| 133.  | 6.    |         | ICPES        | 78JAC       | 01         |
| 133.9 | 6.8   |         | ITNA         | 79ZEI       | 01         |
| 134.  | 2.    |         | RTNA         | 77MEL       | 01         |
| 134.  | 7.    | 11      | ICPES        | 82JON       | 01         |
| 134.  | 4.    | 1       | AA           | 77UCH       | 02         |
| 134.  | 2.    |         | EXRF         | 79GIA       | 01         |
| 134.  | 5.    |         | RTNA         | 77TJI       | 01         |
| 134.  | 7.2   |         | RTNA         | 79PLA       | 01         |

TABLE L (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 134.  | 6.    | 11      | ICPES        | 82JON       | 01         |
| 134.  | 10.   |         | FAE          | 74TAL       | 01         |
| 134.  | 3.    |         | AA           | 79WAR       | 01         |
| 134.  | 5.    | 7       | AE+AF        | 73TAL       | 01         |
| 134.  | 5.    |         | FAE          | 74TAL       | 01         |
| 134.  | 10.   | 7       | AE+AF        | 73TAL       | 01         |
| 134.  |       | 17      | UU           | 74MAS       | 01         |
| 135.  | 5.    |         | RTNA         | 77LIE       | 01         |
| 135.  | 2.    | 11      | ICPES        | 82JON       | 01         |
| 135.  |       |         | ICPES        | 78CAP       | 01         |
| 135.  |       |         | AE+AF        | 79ULL       | 01         |
| 135.  | 5.    |         | RTNA         | 75LIE       | 01         |
| 135.  | 4.    | 11      | ICPES        | 82JON       | 01         |
| 135.  |       | 17      | UU           | 74MAS       | 01         |
| 135.  | 1.    |         | ITNA         | 74LIN       | 01         |
| 136.  | 6.    |         | RTNA         | 76GAU       | 01         |
| 136.  | 9.    |         | RTNA         | 74HEN       | 01         |
| 136.  |       | 17      | UU           | 74MAS       | 01         |
| 137.  | 9.    | 5       | ITNA         | 80TOU       | 01         |
| 137.  | 4.    |         | ITNA         | 74GUI       | 01         |
| 137.2 | 5.75  |         | NAA          | 76GUZ       | 01         |
| 139.  |       | 17      | UU           | 74MAS       | 01         |
| 140.  |       | 11      | AA           | 81MDH       | 01         |
| 140.  |       |         | ITNA         | 77OSB       | 01         |
| 140.  |       |         | ICPES        | 78DAH       | 01         |
| 140.  | 16.   |         | RTNA         | 77KUS       | 01         |
| 140.  | 29.   |         | XRF          | 77SMI       | 04         |
| 141.  | 2.    |         | DCP          | 79REE       | 01         |
| 141.  | 2.    | D*      | DCP          | 81REE       | 01         |
| 141.  | 16.   | 5       | RTNA         | 74SCH       | 03         |
| 141.7 | 5.3   | 6       | ITNA         | 74BEC       | 01         |
| 142.  |       |         | AA           | 80EVA       | 01         |
| 142.  | 11.   |         | ITNA         | 77ZIK       | 01         |
| 143.  | 19.   |         | ICPES        | 79ABE       | 01         |
| 144.  | 12.   | 6       | CPXRF        | 77WIL       | 03         |
| 145.  |       |         | FAA          | 78CAP       | 01         |
| 145.  | 5.    |         | CPXRF        | 77WIL       | 02         |
| 145.5 |       |         | ITNA         | 82AKA       | 01         |
| 147.  | 7.3   | 11      | AA           | 74WES       | 01         |
| 148.  | 74.   |         | CPXRF        | 76ZEI       | 01         |
| 148.  | 15.   |         | CPAA         | 78MCG       | 01         |
| 150.  | 10.   |         | PAA          | 76WIL       | 01         |
| 156.  | 6.2   | *       | CPXRF        | 81ROB       | 02         |
| 157.  | 20.   | *       | ICPES        | 78SUD       | 01         |
| 159.  | 8.    | *       | RTNA         | 74SCH       | 03         |
| 160.  |       | *17     | UU           | 74MAS       | 01         |
| 160.  |       | *17     | UU           | 74MAS       | 01         |
| 162.  | 31.   | *32     | CPXRF        | 77CRO       | 01         |
| 200.  | 40.   | *       | 14NAA        | 81WIL       | 02         |

Zr (ppm)

|     |     |       |       |    |
|-----|-----|-------|-------|----|
| 3.  | L*  | EXRF  | 79GIA | 01 |
| 0.5 | L*  | 14NAA | 81WIL | 02 |
| 3.  | L*  | 14NAA | 81WIL | 01 |
| 3.4 | 0.4 | PAA   | 79CHA | 02 |
| 4.  | 3.  | CPAA  | 77ZIK | 01 |

TABLE M

## NBS SRM 1621—COLLECTED DATA

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| S (%) |       |         |              |             |            |
| 0.9   | 0.1   |         | MECA         | 80MCC       | 01         |
| 0.99  | 0.03  |         | IC           | 80MCC       | 01         |
| 1.05  | 0.03  |         | TITR         | 80MCC       | 01         |
| 1.06  |       |         | XRF          | 80MCC       | 01         |

TABLE N

## NBS SRM 1621A—COLLECTED DATA

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| S (%) |       |         |              |             |            |
| 0.89  | 0.07  |         | POL          | 81REL       | 01         |
| 0.93  | 0.02  |         | ICPES        | 81WAL       | 02         |
| 0.931 | 0.01  |         | IC           | 82VIS       | 01         |
| 0.945 | 0.014 |         | TITR         | 82VIS       | 01         |
| 0.97  | 0.009 | 6       | EXRF         | 81CHR       | 01         |
| 0.973 | 0.008 | 6       | EXRF         | 81CHR       | 01         |

TABLE O

## NBS SRM 1622A—COLLECTED DATA

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| S (%) |       |         |              |             |            |
| 1.6   | 0.1   |         | POL          | 81REL       | 01         |
| 1.948 | 0.018 | 6       | EXRF         | 81CHR       | 01         |
| 2.011 | 0.015 | 6       | EXRF         | 81CHR       | 01         |
| 2.02  | 0.02  |         | ICPES        | 81WAL       | 02         |

TABLE P

## NBS SRM 1623—COLLECTED DATA

| CONC    | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------|-------|---------|--------------|-------------|------------|
| S (ppm) |       |         |              |             |            |
| 2600.   | 200.  |         | MECA         | 80MCC       | 01         |
| 2650.   | 40.   |         | IC           | 80MCC       | 01         |
| 2700.   |       |         | XRF          | 80MCC       | 01         |
| 2900.   | 500.  |         | TITR         | 80MCC       | 01         |

TABLE Q

## NBS SRM 1624—COLLECTED DTA

| CONC    | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------|-------|---------|--------------|-------------|------------|
| S (ppm) |       |         |              |             |            |
| 1900.   | 100.  |         | ICPES        | 81WAL 02    |            |
| 2030.   | 50.   |         | TITR         | 82VIS 01    |            |
| 2080.   | 210.  |         | IC           | 82VIS 01    |            |
| 2200.   | 200.  |         | POL          | 81REL 01    |            |

TABLE R

## NBS SRM 1630—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Al (ppm) |       |         |              |             |            |
| 5300.    |       |         | VV           | 77GLU 01    |            |
| As (ppm) |       |         |              |             |            |
| 19.      |       |         | VV           | 77GLU 01    |            |
| Ash (%)  |       |         |              |             |            |
| 2.2      |       |         | CB           | 77GLU 01    |            |
| B (ppm)  |       |         |              |             |            |
| 5.       |       |         | VV           | 77GLU 01    |            |
| Be (ppm) |       |         |              |             |            |
| 1.       |       |         | VV           | 77GLU 01    |            |
| Br (ppm) |       |         |              |             |            |
| 29.      |       |         | VV           | 77GLU 01    |            |
| 37.      |       |         | ITNA         | 74TAM 01    |            |
| Ca (ppm) |       |         |              |             |            |
| 700.     |       |         | VV           | 77GLU 01    |            |
| Cd (ppm) |       |         |              |             |            |
|          | 0.2   | L*      | VV           | 77GLU 01    |            |
| Cl (ppm) |       |         |              |             |            |
| 2220.    |       |         | VV           | 77GLU 01    |            |
| Co (ppm) |       |         |              |             |            |
| 3.6      | 0.18  |         | ITNA         | 74TAM 01    |            |
| 6.       |       |         | VV           | 77GLU 01    |            |
| Cr (ppm) |       |         |              |             |            |
| 7.1      | 0.35  |         | ITNA         | 74TAM 01    |            |
| 8.       |       |         | VV           | 77GLU 01    |            |

TABLE R (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cu (ppm) |       |         |              |             |            |
| 16.      |       |         | VV           | 77GLU 01    |            |
| F (ppm)  |       |         |              |             |            |
| 25.      |       |         | VV           | 77GLU 01    |            |
| Fe (%)   |       |         |              |             |            |
| 0.51     | 0.02  |         | ITNA         | 74TAM 01    |            |
| 1.04     |       |         | VV           | 77GLU 01    |            |
| Ga (ppm) |       |         |              |             |            |
| 1.07     | 0.04  |         | RTNA         | 72SAN 01    |            |
| 1.1      |       |         | VV           | 77GLU 01    |            |
| Ge (ppm) |       |         |              |             |            |
| 1.       |       |         | VV           | 77GLU 01    |            |
| H2O- (%) |       |         |              |             |            |
| 0.4      |       |         | GRAV         | 77GLU 01    |            |
| Hg (ppb) |       |         |              |             |            |
| 104.     | 6.    |         | CVAA         | 80NAD 01    |            |
| 105.     |       |         | RTNA         | 74RIC 01    |            |
| 105.     | 30.   |         | RTNA         | 72LYO 01    |            |
| 106.     |       |         | ITNA         | 74RIC 01    |            |
| 118.     | 11.   |         | FAE          | 76CAV 01    |            |
| 120.     | 10.   |         | CVAA         | 73LO 01     |            |
| 124.     | 11.   |         | CVAA         | 82DOO 01    |            |
| 125.     | 10.   |         | CVAA         | 75WIM 01    |            |
| 127.     | 6.    |         | RTNA         | 72RAI 01    |            |
| 127.     | 5.    |         | RTNA         | 74ORV 01    |            |
| 127.     | 12.   |         | RTNA         | 72ROO 01    |            |
| 130.     | 10.   |         | RTNA         | 75LIT 01    |            |
| 130.     | 10.   |         | ITNA         | 74TAM 01    |            |
| 135.     |       |         | OES          | 75PEC 01    |            |
| 136.     | 7.    |         | FAA          | 82UCH 02    |            |
| 139.     | 12.   |         | FAA          | 72ROO 01    |            |
| 139.     | 7.    |         | CVAA         | 72RAI 01    |            |
| 140.     |       |         | VV           | 77GLU 01    |            |
| 150.     |       |         | CVAA         | 75MUR 01    |            |
| 486.     | 60.   | *       | ITNA         | 75LIT 01    |            |
| K (ppm)  |       |         |              |             |            |
| 800.     |       |         | VV           | 77GLU 01    |            |
| La (ppm) |       |         |              |             |            |
| 4.4      |       |         | ITNA         | 74TAM 01    |            |
| Mg (ppm) |       |         |              |             |            |
| 200.     |       |         | VV           | 77GLU 01    |            |

TABLE R (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Mn (ppm) |       |         |              |             |            |
| 6.       |       |         | VV           | 77GLU 01    |            |
| Mo (ppm) |       |         |              |             |            |
| 2.       |       |         | VV           | 77GLU 01    |            |
| Na (ppm) |       |         |              |             |            |
| 320.     |       |         | VV           | 77GLU 01    |            |
| 490.     |       |         | ITNA         | 74TAM 01    |            |
| Ni (ppm) |       |         |              |             |            |
| 10.      |       |         | VV           | 77GLU 01    |            |
| P (ppm)  |       |         |              |             |            |
| 17.      |       |         | VV           | 77GLU 01    |            |
| Pb (ppm) |       |         |              |             |            |
| 4.       |       |         | VV           | 77GLU 01    |            |
| S (%)    |       |         |              |             |            |
| 1.07     |       |         | CB           | 77GLU 01    |            |
| 1.37     |       |         | XRF          | 77GLU 01    |            |
| Sb (ppm) |       |         |              |             |            |
| 0.6      |       |         | VV           | 77GLU 01    |            |
| 1.7      | 0.51  |         | ITNA         | 74TAM 01    |            |
| Sc (ppm) |       |         |              |             |            |
| 1.4      | 0.06  |         | ITNA         | 74TAM 01    |            |
| Se (ppm) |       |         |              |             |            |
| 2.       |       |         | VV           | 77GLU 01    |            |
| 2.09     | 0.06  |         | RTNA         | 74ORV 01    |            |
| 2.11     | 0.09  |         | RTNA         | 72ROO 03    |            |
| 2.11     | 0.09  |         | RTNA         | 77ROO 02    |            |
| 2.12     | 0.09  |         | ICPES        | 80HAA 01    |            |
| 2.6      | 0.21  |         | ITNA         | 74TAM 01    |            |
| Si (ppm) |       |         |              |             |            |
| 7200.    |       |         | VV           | 77GLU 01    |            |
| Sn (ppm) |       |         |              |             |            |
| 6.       |       |         | VV           | 77GLU 01    |            |
| Ti (ppm) |       |         |              |             |            |
| 500.     |       |         | VV           | 77GLU 01    |            |
| V (ppm)  |       |         |              |             |            |
| 24.      |       |         | VV           | 77GLU 01    |            |

TABLE R (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Zn (ppm) |       |         |              |             |            |
| 6.       |       |         | VV           | 77GLU 01    |            |
| Zr (ppm) |       |         |              |             |            |
| 21.      |       |         | VV           | 77GLU 01    |            |

TABLE S

## NBS SRM 1631A—COLLECTED DATA

| CONC    | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------|-------|---------|--------------|-------------|------------|
| S (ppm) |       |         |              |             |            |
| 5260.   | 350.  |         | TITR         | 80ARO 01    |            |
| 5460.   |       |         | IC           | 77SMI 05    |            |
| 5490.   |       |         | TITR         | 74HIC 01    |            |
| 5900.   | 400.  |         | TCGS         | 77JUR 01    |            |

TABLE T

## NBS SRM 1631B—COLLECTED DATA

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| S (%) |       |         |              |             |            |
| 1.92  |       |         | TITR         | 74HIC 01    |            |
| 1.97  |       |         | IC           | 77SMI 05    |            |
| 2.02  | 0.05  |         | TCGS         | 77JUR 01    |            |
| 2.042 | 0.067 |         | TITR         | 80ARO 01    |            |

TABLE U

## NBS SRM 1631C—COLLECTED DATA

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| S (%) |       |         |              |             |            |
| 2.98  | 0.02  |         | TCGS         | 77JUR 01    |            |
| 2.99  |       |         | TITR         | 74HIC 01    |            |
| 3.09  |       |         | IC           | 77SMI 05    |            |
| 3.117 | 0.097 |         | TITR         | 80ARO 01    |            |

TABLE V

## NBS SRM 1632—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ICPES        | 81CHU       | 01         |
|          | 2500. | *34     | WXRF         | 82MIL       | 01         |
|          | 200.  | L*      | ITNA         | 77CAH       | 01         |
|          | 220.  | L*      | ITNA         | 82SUZ       | 02         |
|          | 140.  | L*      | ITNA         | 77MAE       | 01         |
|          | 400.  | L*      | PAA          | 76CHA       | 01         |
|          | 100.  | L*      | ITNA         | 75RUC       | 01         |
|          | 150.  | L*      | OES          | 76WEW       | 01         |
| 45.      | 5.    |         | RTNA         | 77NAD       | 02         |
| 60.      | 30.   |         | ITNA         | 73ABE       | 01         |
| 60.      | 30.   |         | ITNA         | 75OND       | 01         |
| 70.      | 34.   |         | SSMS         | 77PAU       | 01         |
| 80.      |       |         | AA           | 76WEW       | 01         |
| 1050.    | 100.  | *       | PAA          | 74CHA       | 01         |
| Al (%)   |       |         |              |             |            |
| 1.51     | 0.08  |         | NAA          | 76HAN       | 01         |
| 1.57     | 0.155 |         | ITNA         | 73SHE       | 01         |
| 1.57     |       | 4       | AA           | 79REI       | 01         |
| 1.59     | 0.2   |         | ITNA         | 76RAG       | 01         |
| 1.6      |       |         | ICPES        | 80NAD       | 01         |
| 1.6      | 0.2   | 35      | ITNA         | 81GLA       | 03         |
| 1.62     | 0.13  |         | ITNA         | 78MAC       | 01         |
| 1.64     |       |         | ICPES        | 80NAD       | 01         |
| 1.66     |       |         | ICPES        | 80NAD       | 01         |
| 1.68     | 0.04  | D*      | TCGS         | 80AND       | 01         |
| 1.68     | 0.04  |         | TCGS         | 79FAI       | 01         |
| 1.71     | 0.05  |         | ITNA         | 77MAE       | 01         |
| 1.71     | 0.07  |         | ITNA         | 78LAU       | 02         |
| 1.72     | 0.09  |         | ITNA         | 75RIC       | 01         |
| 1.73     | 0.04  |         | ITNA         | 76BLO       | 01         |
| 1.74     | 0.04  |         | ITNA         | 77ROW       | 03         |
| 1.74     | 0.4   |         | ITNA         | 76STE       | 05         |
| 1.76     | 0.31  |         | ITNA         | 78NAD       | 02         |
| 1.76     | 0.31  |         | ITNA         | 75NAD       | 02         |
| 1.78     | 0.08  |         | ITNA         | 73ABE       | 01         |
| 1.8      | 0.18  |         | ITNA         | 76WEW       | 01         |
| 1.82     | 0.06  |         | ICPES        | 81CHU       | 01         |
| 1.85     | 0.08  |         | ITNA         | 79GRE       | 01         |
| 1.85     |       |         | ITNA         | 77WEA       | 01         |
| 1.85     | 0.13  |         | ITNA         | 75OND       | 01         |
| 1.85     | 0.13  |         | FAA          | 77PIL       | 01         |
| 1.86     |       |         | ICPES        | 80NAD       | 01         |
| 1.9      | 0.19  |         | ITNA         | 81WAN       | 01         |
| 1.9      |       |         | ITNA         | 75KLE       | 01         |
| 2.1      | 1.05  | *       | OES          | 76WEW       | 01         |
| 2.21     |       | *       | ITNA         | 77GLU       | 01         |
| 3.       | 0.1   | *       | ITNA         | 82SUZ       | 02         |
| As (ppm) |       |         |              |             |            |
|          | 10.   | L*      | ICPES        | 81CHU       | 01         |
|          | 6.    | L*      | ICPES        | 80NAD       | 01         |
|          | 6.    | L*      | ICPES        | 80NAD       | 01         |
| 3.       | 2.    | *       | EXRF         | 73SPA       | 01         |
| 4.5      | 0.4   | *       | ITNA         | 75RIC       | 01         |
| 4.6      | 0.3   |         | ITNA         | 78NAD       | 02         |
| 4.61     | 0.32  |         | ITNA         | 75NAD       | 02         |
| 4.7      | 0.5   |         | ITNA         | 78MAC       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 4.7      | 1.    |         | EXRF         | 79GIA       | 01         |
| 5.       | 0.6   |         | OES          | 80CLA       | 01         |
| 5.1      | 0.5   | H       | ITNA         | 76KUC       | 01         |
| 5.31     |       |         | ICPES        | 81NAD       | 01         |
| 5.4      | 0.5   |         | COLOR        | 77ARU       | 01         |
| 5.4      | 0.3   |         | FAE          | 80DSI       | 01         |
| 5.4      | 0.1   |         | IENA         | 78WAN       | 01         |
| 5.5      |       |         | ITNA         | 75KLE       | 01         |
| 5.58     | 0.73  |         | FAA          | 82BEN       | 01         |
| 5.6      |       |         | FAA          | 78GUI       | 01         |
| 5.6      | 0.36  |         | FAA          | 77ARU       | 01         |
| 5.6      | 0.2   |         | ITNA         | 77ARU       | 01         |
| 5.7      | 0.2   | H       | FAE          | 79FEL       | 01         |
| 5.7      | 0.5   |         | ITNA         | 73ABE       | 01         |
| 5.7      |       |         | ITNA         | 77WEA       | 01         |
| 5.7      | 0.13  |         | RTNA         | 75RUC       | 01         |
| 5.7      |       |         | ITNA         | 77GLU       | 01         |
| 5.7      | 0.2   |         | FAA          | 78HAY       | 01         |
| 5.75     | 0.37  |         | PAA          | 74CHA       | 01         |
| 5.8      | 0.3   |         | ITNA         | 77MAE       | 01         |
| 5.8      | 0.3   |         | ITNA         | 76RAG       | 01         |
| 5.8      | 0.3   |         | PAA          | 77JER       | 01         |
| 5.8      | 0.5   |         | ITNA         | 76BLO       | 01         |
| 5.8      | 0.4   |         | RTNA         | 74ORV       | 01         |
| 5.8      | 0.3   |         | PAA          | 76CHA       | 01         |
| 5.9      | 0.4   |         | ITNA         | 81WAN       | 01         |
| 5.9      | 0.3   |         | ITNA         | 79GRE       | 01         |
| 5.9      | 0.5   |         | ITNA         | 73SHE       | 01         |
| 6.       | 0.3   |         | ITNA         | 78LAU       | 02         |
| 6.1      | 0.3   |         | GCMS         | 75TAL       | 01         |
| 6.1      | 0.55  |         | ITNA         | 77JER       | 01         |
| 6.1      | 1.4   |         | ITNA         | 75OND       | 01         |
| 6.1      | 0.4   |         | ITNA         | 77ROW       | 04         |
| 6.2      | 0.8   | 6       | PAA          | 82SEG       | 01         |
| 6.2      | 1.3   |         | ITNA         | 77CAH       | 01         |
| 6.27     | 0.89  |         | RTNA         | 77JER       | 01         |
| 6.3      | 1.    | 6       | PAA          | 82SEG       | 01         |
| 6.3      | 1.    |         | PAA          | 80SEG       | 01         |
| 6.3      | 0.2   |         | IENA         | 77ROW       | 04         |
| 6.4      | 0.2   |         | IENA         | 77ROW       | 03         |
| 6.5      | 1.4   | D*      | NAA          | 74OND       | 01         |
| 6.5      | 0.5   |         | ICPES        | 80HAA       | 01         |
| 6.5      | 1.2   |         | IENA         | 76STE       | 05         |
| 6.5      | 0.3   |         | NAA          | 76HAN       | 01         |
| 6.6      |       | 34      | WXRF         | 82MIL       | 01         |
| 6.6      | 1.3   |         | ITNA         | 76WEW       | 01         |
| 7.       |       | *       | AA           | 76WEW       | 01         |
| 8.       | 2.    | *       | PAA          | 75OND       | 01         |
| 8.9      | 0.2   | *       | ITNA         | 82SUZ       | 02         |
| 8.9      | 0.5   | *       | ITNA         | 75RUC       | 01         |
| Ash (%)  |       |         |              |             |            |
| 13.2     |       | 34      | CB           | 82MIL       | 01         |
| Au (ppb) |       |         |              |             |            |
| 30.      |       | L*      | ITNA         | 73ABE       | 01         |
| 300.     |       | L*      | ICPES        | 81CHU       | 01         |
| 5000.    |       | L*      | OES          | 76WEW       | 01         |
| 1.       |       |         | ITNA         | 77CAH       | 01         |
| 20.      |       |         | ITNA         | 75RUC       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 0.85     | 0.03  |         | RTNA         | 77NAD       | 02         |
| 0.99     | 0.16  |         | RTNA         | 77NAD       | 01         |
| 146.     | 48.   |         | ITNA         | 73SHE       | 01         |
| 200.     |       |         | ITNA         | 77WEA       | 01         |
| B (ppm)  |       |         |              |             |            |
| 29.      |       |         | ICPES        | 81NAD       | 01         |
| 30.      | 1.1   |         | OES          | 76WEW       | 01         |
| 42.1     | 0.7   | D*      | TCGS         | 80AND       | 01         |
| 42.1     | 0.7   |         | TCGS         | 79FAI       | 01         |
| 43.      |       |         | VV           | 77GLU       | 01         |
| 47.      | 1.6   | 6       | TCGS         | 76GLA       | 01         |
| 47.7     | 1.8   | 6       | TCGS         | 76GLA       | 01         |
| 47.7     | 1.6   | 6       | TCGS         | 76GLA       | 01         |
| 118.     |       | *       | ITNA         | 77GLU       | 01         |
| Ba (ppm) |       |         |              |             |            |
| 87.      | 5.    | *9      | ITNA         | 82SUZ       | 02         |
| 104.     | 5.    | *       | ITNA         | 82SUZ       | 02         |
| 183.     |       | *       | ICPES        | 80NAD       | 01         |
| 256.     |       |         | ICPES        | 80NAD       | 01         |
| 274.     | 31.   |         | ITNA         | 76STE       | 05         |
| 280.     |       |         | ITNA         | 75MIL       | 01         |
| 300.     | 60.   |         | ITNA         | 78LAU       | 02         |
| 301.     |       | 34      | WXRF         | 82MIL       | 01         |
| 302.     | 8.    |         | ITNA         | 76RAG       | 01         |
| 306.     | 20.   |         | IENA         | 77ROW       | 04         |
| 309.     | 24.   |         | ITNA         | 77ROW       | 04         |
| 310.     |       | 35      | ITNA         | 81GLA       | 03         |
| 310.     | 30.   |         | ITNA         | 78MAC       | 01         |
| 311.     | 25.   |         | ITNA         | 78NAD       | 02         |
| 311.     | 25.   |         | ITNA         | 75NAD       | 02         |
| 314.     | 43.   |         | ITNA         | 81WAN       | 01         |
| 314.     | 20.   |         | PAA          | 74CHA       | 01         |
| 315.     | 20.   |         | PAA          | 76CHA       | 01         |
| 320.     | 20.   |         | NAA          | 76HAN       | 01         |
| 322.     | 20.   |         | IENA         | 77ROW       | 03         |
| 337.     | 42.   |         | ITNA         | 73SHE       | 01         |
| 338.     | 13.8  |         | IENA         | 76STE       | 05         |
| 345.     | 70.   |         | ITNA         | 76WEW       | 01         |
| 350.     |       |         | ITNA         | 77WEA       | 01         |
| 350.     | 30.   |         | ITNA         | 79GRE       | 01         |
| 350.     | 20.   |         | ITNA         | 77MAE       | 01         |
| 352.     | 30.   |         | ITNA         | 75OND       | 01         |
| 354.     | 84.   |         | ITNA         | 79ROS       | 03         |
| 360.     | 20.   | 9       | ITNA         | 78LAU       | 02         |
| 366.     | 34.   |         | ITNA         | 75RUC       | 01         |
| 385.     | 40.   |         | ITNA         | 77CAH       | 01         |
| 390.     | 20.   |         | ITNA         | 73ABE       | 01         |
| 405.     |       |         | ITNA         | 75KLE       | 01         |
| 410.     | 82.   |         | OES          | 76WEW       | 01         |
| Be (ppm) |       |         |              |             |            |
| 1.2      | 0.07  | *       | OES          | 76WEW       | 01         |
| 1.49     | 0.03  |         | FLUOR        | 77WIC       | 01         |
| 1.5      | 0.1   |         | FAA          | 750WE       | 01         |
| 1.5      |       |         | AA           | 76WEW       | 01         |
| 1.52     | 0.11  | 6       | FAA          | 77GLA       | 02         |
| 1.57     | 0.12  | 6       | FAA          | 77GLA       | 02         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.7      |       | 4       | AA           | 79REI       | 01         |
| 1.7      | 0.03  |         | ICPES        | 81CHU       | 01         |
| 1.7      | 0.4   | 35      | FAA          | 76GLA       | 02         |
| 1.7      |       |         | ITNA         | 77GLU       | 01         |
| 1.77     |       |         | ICPES        | 80NAD       | 01         |
| 1.85     |       | *       | ICPES        | 80NAD       | 01         |
| Bi (ppm) |       |         |              |             |            |
|          | 1.    | L*      | WXRF         | 82MIL       | 01         |
|          | 1.    | L*      | PAA          | 76CHA       | 01         |
|          | 1.    | L*      | AA           | 76WEW       | 01         |
|          | 1.5   | L*      | OES          | 76WEW       | 01         |
| 1.05     |       |         | PAA          | 74CHA       | 01         |
| Br (ppm) |       |         |              |             |            |
| 7.8      | 5.8   | *       | ITNA         | 81WAN       | 01         |
| 14.      | 2.    |         | ITNA         | 76STE       | 05         |
| 14.2     |       |         | ITNA         | 75KLE       | 01         |
| 15.      | 1.    |         | ITNA         | 78MAC       | 01         |
| 15.2     | 1.4   |         | ITNA         | 78NAD       | 02         |
| 15.2     | 1.4   |         | ITNA         | 73NAD       | 02         |
| 16.2     | 1.    | 5       | IENA         | 79GLA       | 02         |
| 16.6     | 0.6   |         | NAA          | 76HAN       | 01         |
| 17.      | 2.    |         | ITNA         | 73ABE       | 01         |
| 17.      | 1.    |         | ITNA         | 78LAU       | 02         |
| 17.2     |       |         | ITNA         | 76RAG       | 01         |
| 17.4     | 1.1   |         | IENA         | 83GLA       | 01         |
| 17.5     | 0.3   |         | EXRF         | 79GLA       | 01         |
| 17.9     | 0.3   | 5       | IENA         | 79GLA       | 02         |
| 18.      |       | 34      | WXRF         | 82MIL       | 01         |
| 18.      | 2.    |         | ITNA         | 76RUC       | 01         |
| 18.2     | 2.3   |         | ITNA         | 75RUC       | 01         |
| 18.8     | 2.4   |         | ITNA         | 77CAH       | 01         |
| 19.      | 4.    |         | ITNA         | 75RIC       | 01         |
| 19.2     | 0.6   |         | ITNA         | 77ROW       | 04         |
| 19.2     | 1.2   |         | ITNA         | 77MAE       | 01         |
| 19.3     | 1.9   |         | ITNA         | 75OND       | 01         |
| 19.3     |       |         | ITNA         | 77WEA       | 01         |
| 19.5     | 0.3   |         | IENA         | 76STE       | 05         |
| 19.6     | 0.4   |         | IENA         | 77ROW       | 03         |
| 19.6     | 0.4   | D*      | IENA         | 77ROW       | 04         |
| 20.      | 3.    |         | ITNA         | 73SHE       | 01         |
| 20.      | 2.    |         | ITNA         | 79GRE       | 01         |
| 20.      |       |         | ITNA         | 77GLU       | 01         |
| 23.7     | 3.2   | *       | EXRF         | 73SPA       | 01         |
| 38.      | 1.    | *       | ITNA         | 82SUZ       | 02         |
| C (%)    |       |         |              |             |            |
| 68.93    | 0.11  |         | CB           | 80SCH       | 02         |
| 69.6     | 2.1   | 35      | CB           | 79GLA       | 04         |
| 70.      | 5.    | D*      | TCGS         | 80AND       | 01         |
| 70.      | 5.    |         | TCGS         | 79FAI       | 01         |
| 73.      | 3.    | 35      | TCGS         | 79GLA       | 04         |
| Ca (ppm) |       |         |              |             |            |
|          | 7000. | L*      | ITNA         | 78LAU       | 02         |
| 2400.    | 600.  | *       | ITNA         | 82SUZ       | 02         |
| 2840.    | 80.   |         | GAMMA        | 75OND       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 3300.    | 500.  | D*      | TCGS         | 80AND       | 01         |
| 3300.    | 500.  |         | TCGS         | 79FAI       | 01         |
| 3500.    | 2800. |         | ITNA         | 77ROW       | 03         |
| 3500.    | 300.  |         | ITNA         | 76STE       | 05         |
| 3700.    | 400.  |         | NAA          | 76HAN       | 01         |
| 4000.    |       |         | ICPES        | 80NAD       | 01         |
| 4030.    | 480.  |         | 14NAA        | 77VAN       | 01         |
| 4070.    | 560.  |         | ITNA         | 73SHE       | 01         |
| 4100.    | 400.  |         | ITNA         | 79GRE       | 01         |
| 4100.    | 500.  |         | ITNA         | 81WAN       | 01         |
| 4140.    | 140.  |         | ICPES        | 81CHU       | 01         |
| 4200.    | 400.  |         | PAA          | 76CHA       | 01         |
| 4200.    | 300.  |         | ITNA         | 77MAE       | 01         |
| 4200.    | 600.  |         | ITNA         | 76RAG       | 01         |
| 4200.    |       |         | ICPES        | 80NAD       | 01         |
| 4200.    | 500.  |         | ITNA         | 75OND       | 01         |
| 4300.    | 200.  |         | ITNA         | 78NAD       | 02         |
| 4300.    | 200.  |         | ITNA         | 75NAD       | 02         |
| 4400.    | 900.  |         | ITNA         | 76WEW       | 01         |
| 4400.    |       |         | ITNA         | 75KLE       | 01         |
| 4500.    |       |         | ICPES        | 80NAD       | 01         |
| 4700.    | 600.  |         | PAA          | 75OND       | 01         |
| 4950.    |       | 4       | AA           | 79RET       | 01         |
| 5000.    |       |         | ICPES        | 80NAD       | 01         |
| 5100.    | 1000. |         | OES          | 76WEW       | 01         |
| 5300.    |       | 35      | ITNA         | 81GLA       | 03         |
| 7000.    |       | *       | ITNA         | 77GLU       | 01         |
| Cd (ppb) |       |         |              |             |            |
|          | 3000. | L*      | WXRF         | 82MIL       | 01         |
|          | 2100. | L*      | ITNA         | 73ABE       | 01         |
|          | 200.  | L*      | ICPES        | 81CHU       | 01         |
|          | 340.  | L*      | ITNA         | 82SUZ       | 02         |
|          | 400.  | L*      | ITNA         | 77GLU       | 01         |
| 170.     | 36.   |         | SSMS         | 77PAU       | 01         |
| 180.     | 20.   | D*      | TCGS         | 80AND       | 01         |
| 180.     | 10.   |         | AF           | 75EPG       | 01         |
| 180.     | 40.   | 6       | PAA          | 82SEG       | 01         |
| 180.     | 20.   |         | TCGS         | 79FAI       | 01         |
| 180.     | 14.   |         | AF           | 74RAI       | 01         |
| 190.     |       |         | POL          | 74MAI       | 01         |
| 199.     | 20.   |         | PAA          | 74CHA       | 01         |
| 200.     | 20.   |         | PAA          | 77JER       | 01         |
| 200.     | 100.  | 6       | PAA          | 82SEG       | 01         |
| 200.     | 20.   |         | RTNA         | 77JER       | 01         |
| 200.     | 20.   |         | PAA          | 76CHA       | 01         |
| 200.     | 50.   | 6       | TCGS         | 76GLA       | 01         |
| 210.     | 10.   |         | FAA          | 77GLU       | 01         |
| 210.     | 20.   |         | FAA          | 74RAI       | 01         |
| 230.     | 21.   | 8       | SSMS         | 80KOP       | 01         |
| 230.     | 10.   |         | FAA          | 74TAL       | 01         |
| 230.     | 20.   |         | RTNA         | 74ORV       | 01         |
| 230.     | 10.   | 7       | AA           | 73TAL       | 01         |
| 240.     | 30.   |         | FAA          | 74TAL       | 01         |
| 240.     | 30.   | 7       | AA           | 73TAL       | 01         |
| 250.     |       |         | FAA          | 78GUI       | 01         |
| 250.     | 70.   |         | PAA          | 80SEG       | 01         |
| 310.     |       |         | IDMS         | 75KLE       | 01         |
| 310.     |       |         | AA           | 76WEW       | 01         |
| 400.     | 200.  | *       | SSMS         | 77DON       | 01         |
| 700.     | 350.  | *       | OES          | 76WEW       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ce (ppm) |       |         |              |             |            |
| 17.34    | 0.089 |         | ITNA         | 73SHE       | 01         |
| 18.5     |       |         | ITNA         | 75KLE       | 01         |
| 18.8     | 1.    |         | ITNA         | 76RAG       | 01         |
| 19.      | 1.    |         | ITNA         | 78LAU       | 02         |
| 19.5     | 1.    |         | ITNA         | 75OND       | 01         |
| 19.5     | 0.7   | D*      | ITNA         | 77ROW       | 04         |
| 19.5     | 0.7   |         | ITNA         | 77ROW       | 03         |
| 19.5     | 0.7   |         | ITNA         | 77MAE       | 01         |
| 19.7     | 0.6   |         | ITNA         | 78NAD       | 02         |
| 19.7     | 0.2   |         | ITNA         | 76WEW       | 01         |
| 19.7     | 0.56  |         | ITNA         | 75NAD       | 02         |
| 20.      |       |         | ITNA         | 75MIL       | 01         |
| 20.      | 1.2   |         | PAA          | 76CHA       | 01         |
| 20.1     | 3.7   |         | ITNA         | 77CAH       | 01         |
| 21.      | 1.    |         | ITNA         | 79GRE       | 01         |
| 21.2     | 3.5   |         | ITNA         | 81WAN       | 01         |
| 21.5     | 1.7   |         | NAA          | 76HAN       | 01         |
| 22.6     | 2.2   |         | ITNA         | 77ROW       | 04         |
| 22.8     | 0.5   |         | ICPES        | 81CHU       | 01         |
| 23.      |       |         | OES          | 82GUP       | 02         |
| 23.3     | 2.7   |         | ITNA         | 75RUC       | 01         |
| 24.      |       | 34      | WXRF         | 82MIL       | 01         |
| 26.      | 5.    |         | ITNA         | 78MAC       | 01         |
| 29.      | 1.    | *       | ITNA         | 82SUZ       | 02         |
| 29.      | 1.    | *12     | ITNA         | 82SUZ       | 02         |
| 30.      | 15.   | *       | OES          | 76WEW       | 01         |
| Cl (ppm) |       |         |              |             |            |
| 80.      | 20.   | *       | ITNA         | 73ABE       | 01         |
| 750.     | 75.   |         | ITNA         | 73SHE       | 01         |
| 760.     |       | 35      | ITNA         | 81GLA       | 03         |
| 800.     | 50.   |         | ITNA         | 78MAC       | 01         |
| 810.     |       | 34      | WXRF         | 82MIL       | 01         |
| 810.     | 30.   |         | ITNA         | 82SUZ       | 02         |
| 817.     | 96.   |         | ITNA         | 81WAN       | 01         |
| 828.     | 22.   |         | ITNA         | 76RAG       | 01         |
| 844.     | 37.   |         | ITNA         | 77ROW       | 03         |
| 844.     | 37.   |         | ITNA         | 76STE       | 05         |
| 846.     | 44.   |         | ITNA         | 75RUC       | 01         |
| 860.     | 54.   |         | ITNA         | 77CAH       | 01         |
| 866.     | 40.   |         | ITNA         | 75RIC       | 01         |
| 880.     |       |         | ITNA         | 83GLA       | 01         |
| 890.     |       |         | ITNA         | 77WEA       | 01         |
| 890.     | 50.   |         | ITNA         | 79GRE       | 01         |
| 890.     | 100.  |         | PAA          | 76CHA       | 01         |
| 890.     | 125.  |         | ITNA         | 75OND       | 01         |
| 895.     | 15.   | D*      | TCGS         | 80AND       | 01         |
| 895.     | 15.   |         | TCGS         | 79FAI       | 01         |
| 915.     |       |         | ISE          | 81NAD       | 01         |
| 920.     | 30.   |         | NAA          | 76HAN       | 01         |
| 930.     | 48.   |         | PAA          | 74CHA       | 01         |
| 945.     | 35.   |         | ITNA         | 75NAD       | 02         |
| 945.     | 35.   |         | ITNA         | 78NAD       | 02         |
| 990.     | 20.   |         | ITNA         | 77MAE       | 01         |
| 1000.    |       |         | ITNA         | 75KLE       | 01         |
| 1000.    |       |         | ITNA         | 77GLU       | 01         |
| 1177.    |       | *       | ISE          | 80NAD       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Co (ppm) |       |         |              |             |            |
| 3.9      | 0.2   | *       | ICPES        | 81CHU       | 01         |
| 4.7      | 0.32  |         | OES          | 76WEW       | 01         |
| 4.8      | 0.3   |         | ITNA         | 76BLO       | 01         |
| 4.9      |       |         | ICPES        | 80NAD       | 01         |
| 5.       |       | 34      | WXRF         | 82MIL       | 01         |
| 5.1      | 0.6   |         | ITNA         | 78NAD       | 02         |
| 5.13     | 0.57  |         | ITNA         | 75NAD       | 02         |
| 5.2      | 0.4   |         | ITNA         | 73ABE       | 01         |
| 5.3      | 0.4   |         | ITNA         | 76KUC       | 01         |
| 5.4      |       | 4       | AA           | 79REI       | 01         |
| 5.46     | 0.2   |         | ITNA         | 79ROS       | 03         |
| 5.48     | 0.15  |         | ITNA         | 73SHE       | 01         |
| 5.5      | 0.3   |         | ITNA         | 77CAH       | 01         |
| 5.5      | 0.4   |         | PAA          | 74CHA       | 01         |
| 5.51     | 0.6   |         | ITNA         | 76RAG       | 01         |
| 5.58     | 0.21  |         | ITNA         | 75RUC       | 01         |
| 5.6      | 0.4   |         | PAA          | 76CHA       | 01         |
| 5.7      | 0.1   |         | ITNA         | 78LAU       | 02         |
| 5.7      | 0.4   |         | ITNA         | 75OND       | 01         |
| 5.7      | 0.12  |         | IENA         | 77ROW       | 04         |
| 5.7      |       |         | ITNA         | 77WEA       | 01         |
| 5.7      | 0.12  |         | ITNA         | 77ROW       | 03         |
| 5.78     |       |         | ICPES        | 80NAD       | 01         |
| 5.8      | 0.6   |         | ITNA         | 76WEW       | 01         |
| 5.9      | 0.5   |         | AA           | 79ROS       | 03         |
| 5.9      |       |         | ITNA         | 75KLE       | 01         |
| 6.       | 0.02  |         | ITNA         | 78MAC       | 01         |
| 6.       | 0.2   |         | ITNA         | 79GRE       | 01         |
| 6.01     | 0.16  |         | ITNA         | 77ROW       | 04         |
| 6.1      | 0.1   |         | ITNA         | 77MAE       | 01         |
| 6.2      |       |         | ITNA         | 75MIL       | 01         |
| 6.39     | 0.74  |         | ITNA         | 81WAN       | 01         |
| 6.5      | 0.2   |         | ITNA         | 82SUZ       | 02         |
| 6.57     | 0.47  |         | NAA          | 76HAN       | 01         |
| 6.9      |       | *35     | ITNA         | 81GLA       | 03         |
| 7.       |       | *       | AA           | 76WEW       | 01         |
| 8.5      | 4.2   | *       | EXRF         | 79GIA       | 01         |
| 11.      |       | *       | ITNA         | 77GLU       | 01         |
| Cr (ppm) |       |         |              |             |            |
| 8.       |       | *       | EXRF         | 82KEE       | 01         |
| 15.      |       | *       | ICPES        | 80NAD       | 01         |
| 16.      | 1.2   | *       | OES          | 76WEW       | 01         |
| 17.      | 1.    |         | ITNA         | 75RIC       | 01         |
| 17.6     | 1.    |         | ITNA         | 76RAG       | 01         |
| 17.8     | 2.    |         | ITNA         | 77CAH       | 01         |
| 18.      |       |         | ICPES        | 80NAD       | 01         |
| 18.5     | 1.7   |         | ITNA         | 78MAC       | 01         |
| 18.8     | 1.1   |         | ITNA         | 76BLO       | 01         |
| 18.9     | 2.2   |         | ITNA         | 78NAD       | 02         |
| 18.9     | 2.2   |         | ITNA         | 75NAD       | 02         |
| 19.      | 2.    |         | ITNA         | 73ABE       | 01         |
| 19.      | 3.    |         | SSMS         | 77DON       | 01         |
| 19.      | 2.8   |         | ITNA         | 79ROS       | 03         |
| 19.      | 0.8   |         | ITNA         | 73SHE       | 01         |
| 19.      |       |         | AA           | 76WEW       | 01         |
| 19.5     | 0.8   |         | PAA          | 76CHA       | 01         |
| 19.6     | 0.5   |         | ITNA         | 77MAE       | 01         |
| 19.6     | 0.6   |         | AA           | 79ROS       | 03         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 19.7     | 0.9   | D*      | NAA          | 74OND       | 01         |
| 19.7     | 0.9   |         | ITNA         | 75OND       | 01         |
| 19.8     |       |         | FAA          | 78GUI       | 01         |
| 20.      | 1.    | 9       | ITNA         | 78LAU       | 02         |
| 20.      | 3.    |         | ITNA         | 78LAU       | 02         |
| 20.      |       |         | AA           | 78GUI       | 01         |
| 20.17    | 0.76  |         | RTNA         | 74MCC       | 01         |
| 20.2     | 0.4   |         | AA           | 74RAI       | 01         |
| 20.3     | 2.9   |         | ITNA         | 75RUC       | 01         |
| 20.5     | 0.6   |         | ITNA         | 79GRE       | 01         |
| 20.6     | 2.3   |         | IENA         | 77ROW       | 04         |
| 20.6     |       |         | ITNA         | 75MIL       | 01         |
| 20.8     | 0.6   |         | ICPES        | 81CHU       | 01         |
| 20.8     | 0.8   |         | ITNA         | 77ROW       | 03         |
| 20.8     | 0.8   | D*      | ITNA         | 77ROW       | 04         |
| 21.      | 2.    |         | ITNA         | 75KLE       | 01         |
| 21.5     |       |         | ITNA         | 77WEA       | 01         |
| 21.5     | 1.    |         | NAA          | 76HAN       | 01         |
| 21.6     | 2.1   |         | PAA          | 74CHA       | 01         |
| 21.6     | 2.    |         | ITNA         | 76WEW       | 01         |
| 22.      |       |         | ITNA         | 77GLU       | 01         |
| 22.      | 8.    |         | EXRF         | 79GIA       | 01         |
| 23.      |       | 4       | AA           | 79REI       | 01         |
| 24.      | 3.    | *       | ITNA         | 76KUC       | 01         |
| 25.2     | 3.8   | *       | ITNA         | 81WAN       | 01         |
| 32.3     | 0.9   | *       | ITNA         | 82SUZ       | 02         |
| 34.9     | 0.9   | *12     | ITNA         | 82SUZ       | 02         |
| Cs (ppm) |       |         |              |             |            |
| 0.35     | 0.04  | *       | PAA          | 74CHA       | 01         |
| 1.3      | 0.2   |         | ITNA         | 78LAU       | 02         |
| 1.3      | 0.1   |         | PAA          | 76CHA       | 01         |
| 1.32     | 0.11  |         | ITNA         | 78NAD       | 02         |
| 1.32     | 0.11  |         | ITNA         | 75NAD       | 02         |
| 1.36     | 0.1   |         | IENA         | 76STE       | 05         |
| 1.4      | 0.1   |         | ITNA         | 73ABE       | 01         |
| 1.4      | 0.1   | 9       | ITNA         | 78LAU       | 02         |
| 1.4      |       | 34      | WXRF         | 82MIL       | 01         |
| 1.4      |       |         | ITNA         | 77WEA       | 01         |
| 1.4      |       |         | ITNA         | 75KLE       | 01         |
| 1.4      | 0.3   |         | ITNA         | 76WEW       | 01         |
| 1.4      | 0.1   |         | ITNA         | 75OND       | 01         |
| 1.4      | 0.08  |         | ITNA         | 76RAG       | 01         |
| 1.46     | 0.11  |         | IENA         | 77ROW       | 03         |
| 1.49     | 0.22  |         | ITNA         | 77ROW       | 04         |
| 1.52     | 0.11  |         | IENA         | 77ROW       | 04         |
| 1.6      | 0.2   |         | ITNA         | 79GRE       | 01         |
| 1.71     | 0.04  |         | ITNA         | 77MAE       | 01         |
| 1.73     | 0.09  |         | ITNA         | 79ROS       | 03         |
| 1.8      |       | 35      | ITNA         | 81GLA       | 03         |
| 1.8      | 0.3   |         | ITNA         | 77CAH       | 01         |
| 1.8      | 0.3   |         | ITNA         | 75RUC       | 01         |
| 1.8      | 0.1   |         | NAA          | 76HAN       | 01         |
| 1.9      | 0.2   |         | ITNA         | 81WAN       | 01         |
| 2.3      | 0.1   | *       | ITNA         | 82SUZ       | 02         |
| 2.55     | 0.06  | *       | ITNA         | 73SHE       | 01         |
| 2.6      |       | *       | ITNA         | 75MIL       | 01         |
| 3.5      | 1.3   | *       | ITNA         | 78MAC       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cu (ppm) |       |         |              |             |            |
|          | 70.   | L*      | ITNA         | 73ABE       | 01         |
|          | 120.  | L*      | ITNA         | 82SUZ       | 02         |
| 13.      |       |         | EXRF         | 82KEE       | 01         |
| 14.1     | 0.9   |         | ITNA         | 73SHE       | 01         |
| 15.      | 1.2   |         | ITNA         | 77ROW       | 03         |
| 15.      | 1.2   |         | ITNA         | 76STE       | 05         |
| 15.      | 3.    |         | SSMS         | 77DON       | 01         |
| 15.7     | 2.7   |         | ITNA         | 81WAN       | 01         |
| 16.3     |       |         | FAA          | 78GUI       | 01         |
| 16.8     | 1.    | 8       | SSMS         | 80KOF       | 01         |
| 16.8     |       |         | AA           | 78GUI       | 01         |
| 17.      | 0.3   |         | AA           | 73TAL       | 01         |
| 17.      | 4.    |         | EXRF         | 81KIN       | 01         |
| 17.      | 1.    | 35      | RTNA         | 77GLA       | 01         |
| 17.      | 7.5   |         | OES          | 76WEW       | 01         |
| 17.2     | 0.5   |         | ICPES        | 81CHU       | 01         |
| 17.7     | 1.5   |         | EXRF         | 79GIA       | 01         |
| 17.9     | 0.2   |         | AA           | 74RAI       | 01         |
| 18.      |       |         | ICPES        | 80NAD       | 01         |
| 18.      |       | 34      | WXRF         | 82MIL       | 01         |
| 18.      |       |         | XRF          | 75KLE       | 01         |
| 18.1     | 0.8   |         | NAA          | 76HAN       | 01         |
| 18.4     | 1.1   |         | SSMS         | 77PAU       | 01         |
| 19.      |       |         | ICPES        | 80NAD       | 01         |
| 19.4     | 1.9   |         | PAA          | 74RAI       | 01         |
| 20.      |       | 4       | AA           | 79REI       | 01         |
| 21.      |       |         | AA           | 76WEW       | 01         |
| 22.6     | 3.    |         | EXRF         | 73SPA       | 01         |
| 23.      |       |         | ITNA         | 77GLU       | 01         |
| 24.      | 3.    | 6       | PAA          | 82SEG       | 01         |
| 30.      | 10.   | *       | PAA          | 80SEG       | 01         |
| 30.      | 10.   | *6      | PAA          | 82SEG       | 01         |
| Dy (ppm) |       |         |              |             |            |
|          | 2.5   | L*      | WXRF         | 82MIL       | 01         |
|          | 5.    | L*      | OES          | 76WEW       | 01         |
| 0.57     | 0.04  | *       | NAA          | 76HAN       | 01         |
| 0.85     | 0.06  |         | ITNA         | 73SHE       | 01         |
| 1.       | 0.1   |         | ITNA         | 78MAC       | 01         |
| 1.12     | 0.06  |         | ITNA         | 76STE       | 05         |
| 1.12     | 0.06  |         | ITNA         | 77ROW       | 03         |
| 1.3      |       |         | AA           | 82GUP       | 02         |
| 1.3      | 0.5   |         | ITNA         | 75RUC       | 01         |
| 1.38     | 0.09  |         | ITNA         | 75NAD       | 02         |
| 1.4      | 0.1   |         | ITNA         | 78NAD       | 02         |
| 1.4      |       |         | ITNA         | 75MIL       | 01         |
| 1.59     | 0.16  |         | ITNA         | 77CAH       | 01         |
| 2.4      | 0.2   | *       | ITNA         | 82SUZ       | 02         |
| Er (ppm) |       |         |              |             |            |
|          | 3.    | L*      | WXRF         | 82MIL       | 01         |
|          | 15.   | L*      | OES          | 76WEW       | 01         |
| 0.7      |       |         | AA           | 82GUP       | 02         |
| Eu (ppb) |       |         |              |             |            |
|          | 1000. | L*      | WXRF         | 82MIL       | 01         |
| 210.     |       | *       | ITNA         | 75KLE       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 270.     |       |         |              |             |            |
| 280.     | 10.   |         | ITNA         | 76RAG       | 01         |
| 299.     | 33.   |         | ITNA         | 73ABE       | 01         |
| 300.     | 100.  |         | ITNA         | 76STE       | 05         |
| 312.     | 37.   |         | ITNA         | 78MAC       | 01         |
| 330.     | 40.   |         | ITNA         | 73SHE       | 01         |
| 330.     |       |         | ITNA         | 75OND       | 01         |
| 340.     | 10.   |         | ITNA         | 77WEA       | 01         |
| 340.     | 40.   |         | NAA          | 76HAN       | 01         |
| 340.     | 40.   |         | ITNA         | 77ROW       | 03         |
| 340.     | 20.   |         | ITNA         | 78LAU       | 02         |
| 344.     | 15.   |         | ITNA         | 79ROS       | 03         |
| 360.     | 30.   |         | ITNA         | 77CAH       | 01         |
| 370.     | 20.   |         | ITNA         | 78NAD       | 02         |
| 370.     | 20.   |         | ITNA         | 75NAD       | 02         |
| 370.     | 40.   |         | ITNA         | 76WEW       | 01         |
| 380.     | 40.   |         | ITNA         | 77ROW       | 04         |
| 380.     | 40.   |         | ITNA         | 79GRE       | 01         |
| 400.     |       |         | AA           | 82GUP       | 02         |
| 400.     |       |         | ITNA         | 75MIL       | 01         |
| 410.     | 60.   |         | OES          | 76WEW       | 01         |
| 410.     | 30.   |         | ITNA         | 75RUC       | 01         |
| 420.     | 20.   |         | ICPES        | 81CHU       | 01         |
| 420.     | 10.   |         | ITNA         | 77MAE       | 01         |
| 480.     | 90.   | *       | ITNA         | 81WAN       | 01         |
| 500.     | 60.   | *       | ITNA         | 82SUZ       | 02         |
| F (ppm)  |       |         |              |             |            |
| 51.      |       |         | ITNA         | 77GLU       | 01         |
| 65.      |       |         | ISE          | 83KNA       | 01         |
| 71.      |       |         | ISE          | 81NAD       | 01         |
| 80.      | 4.    |         | ISE          | 74THO       | 01         |
| 81.      |       |         | VV           | 77GLU       | 01         |
| 87.      |       |         | ISE          | 74THO       | 01         |
| 100.     |       |         | AA           | 76WEW       | 01         |
| Fe (ppm) |       |         |              |             |            |
| 6500.    | 1300. | *       | OES          | 76WEW       | 01         |
| 7000.    | 400.  | *       | ITNA         | 76BLO       | 01         |
| 7150.    | 800.  | *       | EXRF         | 73SPA       | 01         |
| 7200.    |       | *       | EXRF         | 82KEE       | 01         |
| 7517.    | 119.  |         | ITNA         | 73SHE       | 01         |
| 7790.    | 360.  |         | EXRF         | 79GIA       | 01         |
| 7800.    | 200.  |         | ITNA         | 75RIC       | 01         |
| 8000.    |       |         | ICPES        | 80NAD       | 01         |
| 8100.    | 700.  |         | ITNA         | 73ABE       | 01         |
| 8200.    |       |         | ICPES        | 80NAD       | 01         |
| 8300.    | 700.  |         | ITNA         | 76KUC       | 01         |
| 8300.    |       |         | ICPES        | 80NAD       | 01         |
| 8350.    | 120.  |         | AA           | 79ROS       | 03         |
| 8400.    | 200.  |         | ITNA         | 78LAU       | 02         |
| 8400.    | 400.  | D*      | NAA          | 74OND       | 01         |
| 8400.    | 200.  | D*      | TCGS         | 80AND       | 01         |
| 8400.    | 400.  |         | ITNA         | 75OND       | 01         |
| 8400.    | 200.  |         | ITNA         | 76RAG       | 01         |
| 8410.    | 250.  |         | ITNA         | 75KLE       | 01         |
| 8420.    | 240.  |         | IENA         | 77ROW       | 04         |
| 8500.    | 60.   |         | TCGS         | 79FAI       | 01         |
| 8500.    | 600.  |         | ITNA         | 75NAD       | 02         |
| 8527.    |       |         | ITNA         | 78NAD       | 02         |
|          |       |         | AA           | 78GUI       | 01         |

TABLE V (cont)

| CONC   | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------|-------|---------|--------------|-------------|------------|
| 8600.  |       |         | POL          | 74MAI       | 01         |
| 8600.  |       |         | ITNA         | 77WEA       | 01         |
| 8630.  | 266.  |         | EXRF         | 81KIN       | 01         |
| 8690.  | 410.  |         | PAA          | 74CHA       | 01         |
| 8700.  |       | 35      | ITNA         | 81GLA       | 03         |
| 8700.  | 400.  |         | PAA          | 76CHA       | 01         |
| 8700.  | 200.  |         | ITNA         | 79GRE       | 01         |
| 8730.  |       |         | AA           | 76WEW       | 01         |
| 8800.  |       |         | ICPES        | 80NAD       | 01         |
| 8800.  | 200.  |         | ITNA         | 77MAE       | 01         |
| 8810.  | 210.  |         | ICPES        | 81CHU       | 01         |
| 8900.  | 300.  |         | ITNA         | 78MAC       | 01         |
| 9010.  | 190.  | D*      | ITNA         | 77ROW       | 04         |
| 9010.  | 150.  |         | ITNA         | 77ROW       | 03         |
| 9030.  |       |         | ITNA         | 75MIL       | 01         |
| 9130.  | 560.  |         | ITNA         | 79ROS       | 03         |
| 9200.  | 700.  |         | ITNA         | 81WAN       | 01         |
| 9200.  | 300.  |         | NAA          | 76HAN       | 01         |
| 9200.  |       | 4       | AA           | 79RET       | 01         |
| 9300.  | 800.  |         | ITNA         | 77CAH       | 01         |
| 9300.  | 800.  |         | ITNA         | 75RUC       | 01         |
| 9800.  | 1000. | *       | ITNA         | 76WEW       | 01         |
| 11100. |       | *       | ITNA         | 77GLU       | 01         |
| 11100. | 300.  | *12     | ITNA         | 82SUZ       | 02         |
| 11300. | 500.  | *       | ITNA         | 82SUZ       | 02         |

## Ga (ppm)

|      |     |    |       |       |    |
|------|-----|----|-------|-------|----|
|      |     |    |       |       |    |
|      | 3.  | L* | COLOR | 79LIX | 01 |
| 4.5  |     |    | ITNA  | 77GLU | 01 |
| 4.5  | 0.5 |    | RTNA  | 75RUC | 01 |
| 4.8  | 0.2 |    | IENA  | 78WAN | 01 |
| 5.   | 1.  |    | ITNA  | 78MAC | 01 |
| 5.15 | 0.3 |    | ITNA  | 75RUC | 01 |
| 5.3  | 0.5 |    | ITNA  | 77CAH | 01 |
| 5.4  | 0.8 |    | ITNA  | 73SHE | 01 |
| 5.5  | 0.7 |    | ITNA  | 81WAN | 01 |
| 5.8  |     | 34 | WXRF  | 82MIL | 01 |
| 5.8  | 0.4 |    | IENA  | 77ROW | 03 |
| 5.8  | 0.4 | 5  | IENA  | 76STE | 05 |
| 6.1  | 0.3 |    | EXRF  | 79GIA | 01 |
| 6.1  | 0.6 | 5  | IENA  | 76STE | 05 |
| 6.2  | 0.3 |    | OES   | 76WEW | 01 |
| 7.7  | 1.4 |    | ITNA  | 82SUZ | 02 |
| 8.5  |     |    | XRF   | 75KLE | 01 |
| 9.   | 2.  | *  | NAA   | 76HAN | 01 |

## Gd (ppm)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
|      |      |    |       |       |    |
|      | 15.  | L* | OES   | 76WEW | 01 |
| 1.2  | 0.06 |    | ICPES | 81CHU | 01 |
| 1.2  |      |    | AA    | 82GUP | 02 |
| 1.43 | 0.05 |    | TCGS  | 79FAI | 01 |
| 2.2  | 0.08 |    | TCGS  | 80AND | 01 |
| 2.5  |      |    | ITNA  | 75MIL | 01 |
| 3.   |      | 34 | WXRF  | 82MIL | 01 |
| 3.6  | 0.4  |    | ITNA  | 78NAD | 02 |
| 3.62 | 0.35 |    | ITNA  | 75NAD | 02 |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ge (ppm) |       |         |              |             |            |
| 2.       |       |         | ITNA         | 77GLU       | 01         |
| 2.7      | 0.22  |         | OES          | 76WEW       | 01         |
| 2.9      | 0.2   |         | EXRF         | 79GIA       | 01         |
| 3.       |       | 34      | WXRF         | 82MIL       | 01         |
| 70.      | 5.    | *       | ITNA         | 73SHE       | 01         |

## H (Z)

|      |      |    |      |       |    |
|------|------|----|------|-------|----|
| 4.02 | 0.05 | D* | TCGS | 80AND | 01 |
| 4.02 | 0.05 |    | TCGS | 79FAI | 01 |
| 4.28 | 0.03 |    | CB   | 80SCH | 02 |
| 4.3  | 0.1  | 35 | TCGS | 79GLA | 04 |

## H2O-T (Z)

|     |  |  |    |       |    |
|-----|--|--|----|-------|----|
| 2.6 |  |  | FD | 80KHA | 02 |
|-----|--|--|----|-------|----|

## Hf (ppm)

|      |       |    |      |       |    |
|------|-------|----|------|-------|----|
|      | 2.    | L* | WXRF | 82MIL | 01 |
| 0.72 | 0.071 | *  | ITNA | 79ROS | 03 |
| 0.81 | 0.1   |    | ITNA | 78LAU | 02 |
| 0.83 | 0.06  | D* | IENA | 77ROW | 04 |
| 0.83 | 0.06  |    | IENA | 77ROW | 03 |
| 0.89 | 0.02  |    | ITNA | 75NAD | 02 |
| 0.89 | 0.02  |    | ITNA | 78NAD | 02 |
| 0.91 | 0.11  |    | ITNA | 77ROW | 04 |
| 0.92 | 0.05  |    | ITNA | 73SHE | 01 |
| 0.95 |       |    | ITNA | 75KLE | 01 |
| 0.96 |       |    | ITNA | 77WEA | 01 |
| 0.96 | 0.06  |    | ITNA | 79GRE | 01 |
| 0.96 | 0.05  |    | ITNA | 75OND | 01 |
| 0.97 | 0.1   |    | ITNA | 73ABE | 01 |
| 1.   | 0.07  |    | ITNA | 76RAG | 01 |
| 1.02 | 0.03  |    | ITNA | 77MAE | 01 |
| 1.1  | 0.4   |    | ITNA | 81WAN | 01 |
| 1.1  | 0.15  |    | ITNA | 75RUC | 01 |
| 1.1  | 0.2   |    | ITNA | 77CAH | 01 |
| 1.1  | 0.07  |    | NAA  | 76HAN | 01 |
| 1.1  |       |    | ITNA | 75MIL | 01 |
| 1.15 | 0.12  |    | ITNA | 76WEW | 01 |
| 1.4  | 0.09  | *9 | ITNA | 82SUZ | 02 |
| 1.53 | 0.5   | *  | ITNA | 82SUZ | 02 |

## Hg (ppb)

|      |       |    |      |       |    |
|------|-------|----|------|-------|----|
|      | 1500. | L* | WXRF | 82MIL | 01 |
|      | 1100. | L* | EXRF | 79GIA | 01 |
|      | 220.  | L* | ITNA | 82SUZ | 02 |
| 88.  | 5.    |    | CVAA | 75KLE | 01 |
| 100. |       |    | PAA  | 77JER | 01 |
| 100. |       |    | PAA  | 74CHA | 01 |
| 100. |       |    | PAA  | 76CHA | 01 |
| 110. |       |    | ITNA | 77WEA | 01 |
| 110. | 10.   |    | RTNA | 74ORV | 01 |
| 110. | 50.   |    | ITNA | 77JER | 01 |
| 110. | 10.   |    | RTNA | 75RUC | 01 |
| 110. | 16.   |    | RTNA | 77JER | 01 |
| 111. | 10.   |    | FAA  | 77GLA | 03 |
| 117. | 13.   |    | FAA  | 75KOI | 01 |

TABLE V (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 120. |       |         | CVAA         | 81NAD       | 01         |
| 120. |       |         | CVAA         | 82NAD       | 01         |
| 122. | 29.   |         | CVAA         | 80DUM       | 01         |
| 126. | 6.    |         | CVAA         | 74RAI       | 01         |
| 136. | 9.    |         | FAA          | 82UCH       | 02         |
| 160. | 80.   |         | ITNA         | 76WEW       | 01         |
| 160. | 40.   | 12      | ITNA         | 82SUZ       | 02         |
| 180. |       |         | ITNA         | 77GLU       | 01         |
| 230. | 20.   | *       | ITNA         | 78NAD       | 02         |
| 230. | 20.   | *       | ITNA         | 75NAD       | 02         |
| 230. | 50.   | *       | ITNA         | 76BLO       | 01         |
| 510. | 170.  | *       | ITNA         | 75RIC       | 01         |
| 950. | 90.   | *       | ITNA         | 73SHE       | 01         |

Ho (ppb)

|      |       |    |      |       |    |
|------|-------|----|------|-------|----|
|      | 2000. | L* | WXRF | 82MIL | 01 |
|      | 1500. | L* | OES  | 76WEW | 01 |
| 240. | 30.   |    | IENA | 77ROW | 03 |
| 240. | 30.   |    | IENA | 76STE | 05 |
| 250. |       |    | FAA  | 82GUP | 02 |

I (ppm)

|      |      |    |      |       |    |
|------|------|----|------|-------|----|
|      | 1.7  | L* | ITNA | 82SUZ | 02 |
| 2.68 | 0.2  |    | RTNA | 77ROO | 01 |
| 2.78 | 0.38 |    | ITNA | 73SHE | 01 |
| 2.8  | 0.4  |    | ITNA | 75RUC | 01 |
| 2.8  |      |    | ITNA | 77WEA | 01 |
| 2.9  | 0.3  |    | ITNA | 76STE | 05 |
| 3.   |      | 34 | WXRF | 82MIL | 01 |
| 3.3  | 0.5  |    | ITNA | 77MAE | 01 |
| 3.3  | 0.4  |    | ITNA | 77CAH | 01 |
| 3.3  | 0.3  |    | PAA  | 78HIS | 01 |
| 3.3  | 0.3  |    | PAA  | 77WIL | 01 |
| 3.7  | 0.5  |    | IENA | 83GLA | 01 |
| 4.   | 1.   | *  | ITNA | 79GRE | 01 |
| 6.2  | 1.9  | *  | ITNA | 81WAN | 01 |
| 6.63 | 1.2  | *  | ITNA | 75NAD | 02 |

In (ppb)

|      |       |    |      |       |    |
|------|-------|----|------|-------|----|
|      | 1000. | L* | WXRF | 82MIL | 01 |
| 16.9 | 1.2   |    | IENA | 77ROW | 03 |
| 16.9 | 1.7   | 5  | IENA | 76STE | 05 |
| 17.8 | 1.    | 5  | IENA | 76STE | 05 |
| 30.  | 20.   |    | ITNA | 76RAG | 01 |
| 40.  | 10.   |    | ITNA | 73SHE | 01 |
| 56.  | 9.    |    | ITNA | 82SUZ | 02 |
| 70.  |       |    | ITNA | 75KLE | 01 |
| 180. | 20.   |    | ITNA | 77CAH | 01 |
| 200. | 120.  |    | ITNA | 75OND | 01 |
| 220. | 20.   |    | ITNA | 75RUC | 01 |
| 230. | 20.   |    | PAA  | 74CHA | 01 |
| 230. | 30.   |    | PAA  | 76CHA | 01 |

Ir (ppb)

|      |      |    |      |       |    |
|------|------|----|------|-------|----|
|      | 50.  | L* | OES  | 76WEW | 01 |
| 2.48 | 0.27 |    | ITNA | 73SHE | 01 |
| 2.5  |      |    | ITNA | 77WFA | 01 |
| 3.53 | 0.52 |    | RTNA | 77NAD | 02 |

TABLE V (cont)

| CONC    | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------|-------|---------|--------------|-------------|------------|
| K (ppm) |       |         |              |             |            |
| 2500.   |       |         | ICPES        | 80NAD       | 01         |
| 2570.   |       | 4       | AA           | 79REI       | 01         |
| 2600.   | 200.  |         | ITNA         | 76KUC       | 01         |
| 2650.   | 190.  |         | ITNA         | 76BLO       | 01         |
| 2660.   | 20.   |         | ITNA         | 75RIC       | 01         |
| 2700.   |       |         | ICPES        | 80NAD       | 01         |
| 2700.   | 300.  |         | NAA          | 76HAN       | 01         |
| 2700.   |       |         | ICPES        | 80NAD       | 01         |
| 2700.   | 100.  |         | PAA          | 76CHA       | 01         |
| 2700.   | 200.  |         | ITNA         | 76RAG       | 01         |
| 2750.   | 100.  | D*      | TCGS         | 80AND       | 01         |
| 2750.   | 100.  |         | TCGS         | 79FAI       | 01         |
| 2780.   | 230.  |         | ITNA         | 75NAD       | 02         |
| 2800.   | 100.  |         | ITNA         | 73ABE       | 01         |
| 2800.   | 200.  |         | ITNA         | 78LAU       | 02         |
| 2800.   | 500.  |         | ITNA         | 76WEW       | 01         |
| 2800.   | 200.  |         | ITNA         | 77MAE       | 01         |
| 2800.   | 200.  |         | ITNA         | 78NAD       | 02         |
| 2800.   |       |         | ITNA         | 77WEA       | 01         |
| 2800.   | 300.  |         | ITNA         | 75OND       | 01         |
| 2800.   | 300.  |         | ITNA         | 77CAH       | 01         |
| 2800.   | 200.  |         | ITNA         | 79GRE       | 01         |
| 2840.   | 80.   |         | GAMMA        | 73ABE       | 01         |
| 2900.   |       |         | ICPES        | 80NAD       | 01         |
| 2900.   |       |         | ITNA         | 75MIL       | 01         |
| 2900.   |       |         | ITNA         | 75KLE       | 01         |
| 2900.   | 200.  |         | ITNA         | 75RUC       | 01         |
| 2980.   | 240.  |         | ITNA         | 77ROW       | 03         |
| 2980.   | 200.  |         | ITNA         | 76STE       | 05         |
| 3000.   | 75.   |         | ICPES        | 81CHU       | 01         |
| 3000.   | 200.  |         | ITNA         | 78MAC       | 01         |
| 3100.   | 500.  |         | ITNA         | 81WAN       | 01         |
| 3100.   | 600.  |         | OES          | 76WEW       | 01         |
| 3300.   |       | *       | ITNA         | 77GLU       | 01         |
| 3500.   | 360.  | *       | ITNA         | 73SHE       | 01         |
| 4000.   | 200.  | *       | ITNA         | 82SUZ       | 02         |

La (ppm)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
| 6.   | 0.17 | *  | OES   | 76WEW | 01 |
| 7.89 | 0.15 | *  | ITNA  | 75NAD | 02 |
| 7.9  | 0.2  | *  | ITNA  | 78NAD | 02 |
| 8.3  | 0.2  |    | ITNA  | 78MAC | 01 |
| 9.1  | 0.4  |    | ITNA  | 76BLO | 01 |
| 9.3  | 0.3  |    | ICPES | 81CHU | 01 |
| 9.3  | 0.5  |    | ITNA  | 78LAU | 02 |
| 9.5  | 0.2  |    | ITNA  | 76RAG | 01 |
| 9.76 | 0.45 |    | NAA   | 76HAN | 01 |
| 10.  |      | 34 | WXRF  | 82MIL | 01 |
| 10.  |      |    | FAA   | 82GUP | 02 |
| 10.3 | 0.5  | D* | ITNA  | 77ROW | 04 |
| 10.3 | 1.1  |    | ITNA  | 76STE | 05 |
| 10.3 | 0.5  |    | ITNA  | 77ROW | 03 |
| 10.5 | 0.9  |    | ITNA  | 81WAN | 01 |
| 10.5 |      |    | ITNA  | 75KLE | 01 |
| 10.5 | 0.5  |    | ITNA  | 73ABE | 01 |
| 10.6 | 0.4  |    | ITNA  | 77CAH | 01 |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 10.7     |       |         | ITNA         | 77WEA       | 01         |
| 10.7     | 0.4   |         | ITNA         | 82SUZ       | 02         |
| 10.7     | 0.3   |         | ITNA         | 77MAE       | 01         |
| 10.7     | 1.2   |         | ITNA         | 75OND       | 01         |
| 10.8     | 0.8   |         | IENA         | 77ROW       | 04         |
| 11.      |       |         | OES          | 82GUP       | 02         |
| 11.3     | 3.3   |         | ITNA         | 73SHE       | 01         |
| 11.3     | 0.4   |         | ITNA         | 75RUC       | 01         |
| 11.3     |       |         | ITNA         | 75MIL       | 01         |
| 11.4     | 0.5   |         | IENA         | 77ROW       | 03         |
| 11.4     | 0.5   |         | IENA         | 76STE       | 05         |
| 11.5     | 0.7   |         | ITNA         | 79GRE       | 01         |
| Li (ppm) |       |         |              |             |            |
| 24.      | 1.1   |         | OES          | 76WEW       | 01         |
| 25.      |       |         | AA           | 76WEW       | 01         |
| 28.7     | 0.6   |         | ICPES        | 81CHU       | 01         |
| Lu (ppb) |       |         |              |             |            |
|          | 1000. | L*      | WXRF         | 82MIL       | 01         |
|          | 7000. | L*      | OES          | 76WEW       | 01         |
| 100.     |       |         | FAA          | 82GUP       | 02         |
| 100.     |       |         | ITNA         | 75MIL       | 01         |
| 109.     | 11.   | D*      | ITNA         | 77ROW       | 04         |
| 109.     | 11.   |         | ITNA         | 77ROW       | 03         |
| 120.     | 10.   |         | ITNA         | 78NAD       | 02         |
| 120.     | 5.    |         | ITNA         | 75NAD       | 02         |
| 130.     | 5.    |         | ITNA         | 77MAE       | 01         |
| 130.     | 30.   |         | ITNA         | 77CAH       | 01         |
| 140.     | 70.   |         | ITNA         | 81WAN       | 01         |
| 140.     | 20.   |         | ITNA         | 78LAU       | 02         |
| 140.     | 10.   |         | ITNA         | 75OND       | 01         |
| 140.     | 20.   |         | NAA          | 76HAN       | 01         |
| 150.     | 10.   |         | ITNA         | 75RUC       | 01         |
| 150.     | 20.   |         | ITNA         | 76WEW       | 01         |
| 210.     | 20.   | *       | ITNA         | 82SUZ       | 02         |
| 416.     | 17.   | *       | ITNA         | 73SHE       | 01         |
| Mg (ppm) |       |         |              |             |            |
| 980.     | 250.  |         | ITNA         | 73SHE       | 01         |
| 1100.    | 300.  |         | ITNA         | 77MAE       | 01         |
| 1100.    |       |         | ITNA         | 77GLU       | 01         |
| 1200.    |       |         | ICPES        | 80NAD       | 01         |
| 1200.    |       |         | ICPES        | 80NAD       | 01         |
| 1340.    | 270.  |         | ITNA         | 82SUZ       | 02         |
| 1370.    | 40.   |         | ICPES        | 81CHU       | 01         |
| 1400.    |       |         | ICPES        | 80NAD       | 01         |
| 1500.    | 300.  |         | ITNA         | 78NAD       | 02         |
| 1500.    | 300.  |         | ITNA         | 75NAD       | 02         |
| 1600.    |       |         | ICPES        | 80NAD       | 01         |
| 1600.    | 150.  |         | PAA          | 74CHA       | 01         |
| 1600.    | 300.  |         | OES          | 76WEW       | 01         |
| 1600.    | 200.  |         | PAA          | 76CHA       | 01         |
| 1700.    | 300.  |         | ITNA         | 77ROW       | 03         |
| 1700.    | 200.  |         | ITNA         | 79GRE       | 01         |
| 1700.    | 300.  |         | ITNA         | 76STE       | 05         |
| 1900.    | 400.  |         | NAA          | 76HAN       | 01         |
| 2000.    | 500.  |         | ITNA         | 75OND       | 01         |
| 2000.    | 400.  |         | ITNA         | 76WEW       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 2300.    | 400.  |         | ITNA         | 81WAN       | 01         |
| 2300.    | 700.  |         | ITNA         | 73ABE       | 01         |
| 2480.    |       |         | ITNA         | 75KLE       | 01         |
| 2500.    | 800.  |         | ITNA         | 76RAG       | 01         |
| 4000.    | 2000. | *       | ITNA         | 78LAU       | 02         |
| 8200.    | 2000. | *       | ITNA         | 78MAC       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 27.5     | 2.4   | *       | ITNA         | 82SUZ       | 02         |
| 36.      | 1.8   |         | OES          | 76WEW       | 01         |
| 36.8     |       |         | FAA          | 78GUI       | 01         |
| 37.      | 2.    |         | EXRF         | 81KIN       | 01         |
| 37.      |       |         | EXRF         | 82KEE       | 01         |
| 38.      | 2.6   |         | ITNA         | 73SHE       | 01         |
| 38.      |       | 4       | AA           | 79REI       | 01         |
| 38.      | 8.    | 35      | ITNA         | 81GLA       | 03         |
| 38.5     |       |         | AA           | 78GUI       | 01         |
| 39.      | 3.    |         | EXRF         | 79GIA       | 01         |
| 39.      |       |         | ITNA         | 77GLU       | 01         |
| 39.      |       | 34      | WXRF         | 82MIL       | 01         |
| 39.5     | 0.7   |         | ITNA         | 76RAG       | 01         |
| 40.      | 7.    |         | ITNA         | 78NAD       | 02         |
| 40.      | 4.    |         | ITNA         | 76WEW       | 01         |
| 40.      |       |         | AA           | 76WEW       | 01         |
| 40.3     | 6.9   |         | ITNA         | 75NAD       | 02         |
| 41.      | 6.    |         | ITNA         | 73ABE       | 01         |
| 41.      |       |         | ITNA         | 77WEA       | 01         |
| 41.      | 6.    |         | ITNA         | 80BUA       | 01         |
| 41.      | 2.    |         | NAA          | 76HAN       | 01         |
| 41.      | 1.    |         | ITNA         | 75RIC       | 01         |
| 41.1     | 3.6   |         | ITNA         | 77ROW       | 03         |
| 41.1     | 3.6   |         | ITNA         | 76STE       | 05         |
| 41.7     | 0.5   |         | AA           | 79ROS       | 03         |
| 42.      |       |         | ICPES        | 80NAD       | 01         |
| 42.      | 1.    |         | ITNA         | 79GRE       | 01         |
| 42.5     | 5.8   |         | ITNA         | 81WAN       | 01         |
| 42.8     | 2.4   |         | ITNA         | 77CAH       | 01         |
| 43.      | 1.    |         | ITNA         | 78MAC       | 01         |
| 43.      | 4.    | D*      | NAA          | 74OND       | 01         |
| 43.      | 4.    |         | ITNA         | 75OND       | 01         |
| 43.      | 6.    |         | ITNA         | 76BLO       | 01         |
| 43.      | 3.    |         | PAA          | 76CHA       | 01         |
| 43.5     | 2.4   | D*      | TCGS         | 80AND       | 01         |
| 43.5     | 2.4   |         | TCGS         | 79FAI       | 01         |
| 43.7     | 1.8   |         | ITNA         | 75RUC       | 01         |
| 44.      | 2.    |         | ITNA         | 78LAU       | 02         |
| 44.5     | 0.9   |         | ITNA         | 77MAE       | 01         |
| 45.      | 3.    |         | ITNA         | 76KUC       | 01         |
| 45.      | 1.4   |         | ICPES        | 81CHU       | 01         |
| 45.      |       |         | ICPES        | 80NAD       | 01         |
| 46.      | 3.    |         | ITNA         | 75KLE       | 01         |
| 46.      |       |         | ITNA         | 75MIL       | 01         |
| 47.1     | 4.1   | *       | PAA          | 74CHA       | 01         |
| Mo (ppm) |       |         |              |             |            |
| 0.2      | 0.04  |         | PAA          | 76CHA       | 01         |
| 0.2      | 0.02  |         | PAA          | 74CHA       | 01         |
| 0.3      | 0.1   |         | PAA          | 80SEG       | 01         |
| 0.3      | 0.1   | 6       | PAA          | 82SEG       | 01         |

TABLE V (cont)

| CONC  | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------|-------|---------|--------------|-------------|------------|
| 0.3   | 0.1   | 6       | PAA          | 82SEG       | 01         |
| 0.41  | 0.1   |         | ITNA         | 82SUZ       | 02         |
| 3.08  | 0.12  | D*      | IENA         | 77ROW       | 04         |
| 3.08  | 0.12  |         | IENA         | 77ROW       | 03         |
| 3.14  | 0.28  |         | RTNA         | 78NAD       | 01         |
| 3.2   | 0.4   |         | ITNA         | 77CAH       | 01         |
| 3.3   |       |         | ICPES        | 80NAD       | 01         |
| 3.4   |       |         | ITNA         | 75KLE       | 01         |
| 3.6   | 0.16  |         | OES          | 76WEW       | 01         |
| 4.    |       | 34      | WXRF         | 82MIL       | 01         |
| 4.7   |       |         | ICPES        | 80NAD       | 01         |
| 5.    |       |         | ITNA         | 77GLU       | 01         |
| 5.    |       |         | ITNA         | 77WEA       | 01         |
| N (%) |       |         |              |             |            |
| 1.2   | 0.2   | 35      | TCGS         | 79GLA       | 04         |
| 1.3   | 0.02  |         | CB           | 80SGH       | 02         |
| 1.3   | 0.2   | D*      | TCGS         | 80AND       | 01         |
| 1.3   | 0.2   |         | TCGS         | 79FAI       | 01         |

## Na (ppm)

|       |      |    |       |       |    |
|-------|------|----|-------|-------|----|
| 325.  | 6.   |    | ITNA  | 75RIC | 01 |
| 335.  |      |    | ICPES | 80NAD | 01 |
| 340.  | 10.  |    | ITNA  | 78LAU | 02 |
| 347.  | 32.  |    | ITNA  | 75NAD | 02 |
| 350.  | 30.  |    | ITNA  | 78NAD | 02 |
| 350.  | 20.  |    | PAA   | 76CHA | 01 |
| 351.  | 30.  |    | PAA   | 74CHA | 01 |
| 352.  | 34.  |    | ITNA  | 77CAH | 01 |
| 353.  | 21.  |    | ITNA  | 76KUC | 01 |
| 360.  | 10.  |    | ITNA  | 79GRE | 01 |
| 360.  | 20.  |    | NAA   | 76HAN | 01 |
| 368.  | 9.   |    | ITNA  | 77MAE | 01 |
| 370.  | 33.  |    | ITNA  | 73SHE | 01 |
| 370.  |      |    | ICPES | 80NAD | 01 |
| 380.  | 12.  |    | ITNA  | 76RAG | 01 |
| 380.  | 3.   |    | ITNA  | 78MAC | 01 |
| 380.  | 25.  |    | ITNA  | 76STE | 05 |
| 380.  | 25.  |    | ITNA  | 77ROW | 03 |
| 380.  |      |    | ICPES | 80NAD | 01 |
| 383.  | 14.  |    | ITNA  | 75RUC | 01 |
| 387.  | 42.  |    | ITNA  | 81WAN | 01 |
| 390.  |      |    | ITNA  | 77GLU | 01 |
| 390.  |      | 34 | WXRF  | 82MIL | 01 |
| 390.  |      |    | ITNA  | 75KLE | 01 |
| 400.  | 900. | R* | ITNA  | 81GLA | 03 |
| 400.  | 7.   |    | ICPES | 81CHU | 01 |
| 400.  | 30.  |    | ITNA  | 76BLO | 01 |
| 409.  |      |    | ICPES | 80NAD | 01 |
| 410.  |      |    | ITNA  | 75MIL | 01 |
| 414.  |      |    | ITNA  | 77WEA | 01 |
| 414.  | 20.  |    | ITNA  | 75OND | 01 |
| 415.  | 42.  |    | ITNA  | 76WEW | 01 |
| 420.  | 30.  |    | ITNA  | 73ABE | 01 |
| 480.  |      | *4 | AA    | 79REI | 01 |
| 840.  | 30.  | *  | ITNA  | 82SUZ | 02 |
| 1200. | 240. | *  | OES   | 76WEW | 01 |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Nb (ppm) |       |         |              |             |            |
| 5.       | 15.   |         | L*           | OES         | 76WEW 01   |
|          |       |         | 34           | WXRF        | 82MIL 01   |
| Nd (ppm) |       |         |              |             |            |
| 6.4      | 15.   |         | L*           | OES         | 76WEW 01   |
| 7.       | 1.5   |         |              | ITNA        | 73SHE 01   |
| 8.       |       |         | 34           | WXRF        | 82MIL 01   |
| 8.7      |       |         | AA           | 82GUP       | 02         |
| 8.7      | 1.    | D*      | ITNA         | 77ROW       | 04         |
| 8.7      | 1.    |         | ITNA         | 77ROW       | 03         |
| 9.5      | 1.9   |         | ICPES        | 81CHU       | 01         |
| 10.7     |       |         | ITNA         | 75MIL       | 01         |
| 11.3     | 2.    | D*      | TCGS         | 80AND       | 01         |
| 11.3     | 2.    |         | TCGS         | 79FAI       | 01         |
| 16.9     | 1.4   | *       | ITNA         | 82SUZ       | 02         |
| 17.8     | 3.7   | *12     | ITNA         | 82SUZ       | 02         |

## Ni (ppm)

|      |     |    |       |       |    |
|------|-----|----|-------|-------|----|
| 10.  |     |    | EXRF  | 82KEE | 01 |
| 11.  |     |    | IENA  | 77ROW | 03 |
| 12.  | 0.7 |    | ITNA  | 78NAD | 02 |
| 12.1 | 0.7 |    | ITNA  | 75NAD | 02 |
| 13.  | 3.  | 9  | ITNA  | 78LAU | 02 |
| 13.5 | 1.2 |    | PAA   | 74CHA | 01 |
| 14.  | 1.  |    | PAA   | 80SEG | 01 |
| 14.  |     | 4  | AA    | 79REI | 01 |
| 14.  | 1.  | 6  | PAA   | 82SEG | 01 |
| 14.  | 2.  |    | PAA   | 76CHA | 01 |
| 14.  | 2.  | 6  | PAA   | 82SEG | 01 |
| 14.3 |     |    | AA    | 78GUI | 01 |
| 14.5 | 1.2 |    | EXRF  | 79GIA | 01 |
| 14.5 |     |    | XRF   | 75KLE | 01 |
| 14.7 | 0.6 | 6  | IDMS  | 74MOO | 01 |
| 14.7 | 0.6 | 6  | IDMS  | 74MOO | 01 |
| 14.8 |     |    | POL   | 74MAI | 01 |
| 14.8 | 0.7 | 6  | IDMS  | 74MOO | 01 |
| 15.  | 3.  |    | SSMS  | 77DON | 01 |
| 15.  |     | 34 | WXRF  | 82MIL | 01 |
| 15.  | 1.1 |    | OES   | 76WEW | 01 |
| 15.  |     |    | AA    | 76WEW | 01 |
| 15.2 | 0.5 |    | ICPES | 81CHU | 01 |
| 15.5 | 1.1 | 8  | SSMS  | 80KOP | 01 |
| 16.  | 4.  |    | ITNA  | 73ABE | 01 |
| 16.  | 5.  |    | ITNA  | 77CAH | 01 |
| 16.  |     |    | ICPES | 80NAD | 01 |
| 16.4 |     |    | IENA  | 77ROW | 04 |
| 17.1 |     |    | FAA   | 78GUI | 01 |
| 17.5 | 1.  |    | EXRF  | 81KIN | 01 |
| 18.  | 4.  |    | ITNA  | 75OND | 01 |
| 18.  | 4.  | D* | NAA   | 74OND | 01 |
| 18.  | 5.  |    | NAA   | 76HAN | 01 |
| 18.4 | 2.1 |    | ITNA  | 75RUC | 01 |
| 18.9 | 0.8 |    | ITNA  | 82SUZ | 02 |
| 19.  |     |    | ICPES | 80NAD | 01 |
| 20.  |     |    | ITNA  | 77GLU | 01 |
| 20.4 | 1.  | 12 | ITNA  | 82SUZ | 02 |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| O (%)    |       |         |              |             |            |
| 15.05    | 0.11  | 34      | 14NAA        | 80KHA       | 02         |
| Os (ppm) |       |         |              |             |            |
|          | 1.    | L*      | RTNA         | 77NAD       | 02         |
| P (ppm)  |       |         |              |             |            |
| 71.      |       |         | AA           | 76WEW       | 01         |
| 92.      |       |         | ICPES        | 80NAD       | 01         |
| 104.     |       |         | ICPES        | 80NAD       | 01         |
| 120.     |       |         | VV           | 77GLU       | 01         |
| 138.     |       |         | WXRF         | 82MIL       | 01         |
| 150.     | 9.    | 34      | ICPES        | 81CHU       | 01         |
| 156.     |       |         | ICPES        | 81NAD       | 01         |
| 250.     |       |         | COLOR        | 80NAD       | 01         |
| 270.     |       |         | COLOR        | 80NAD       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 12.      | 120.  | R*      | OES          | 76WEW       | 01         |
| 13.6     | 6.5   | *       | EXRF         | 79GIA       | 01         |
| 15.      |       | *       | ICPES        | 80NAD       | 01         |
| 19.1     |       |         | ICPES        | 81NAD       | 01         |
| 20.      |       |         | ICPES        | 80NAD       | 01         |
| 23.      | 0.9   |         | EXRF         | 73SPA       | 01         |
| 23.      |       |         | VV           | 77GLU       | 01         |
| 24.      |       | 4       | AA           | 79REI       | 01         |
| 26.      | 6.    |         | FAA          | 76BLO       | 01         |
| 26.1     |       |         | AA           | 78GUI       | 01         |
| 27.9     | 2.5   | 8       | SSMS         | 80KOP       | 01         |
| 28.      | 1.    | 6       | PAA          | 82SEG       | 01         |
| 28.      | 2.    |         | PAA          | 80SEG       | 01         |
| 28.      | 5.    |         | FAA          | 75BLO       | 02         |
| 28.      | 3.6   |         | SSMS         | 77PAU       | 01         |
| 28.      | 2.    | 6       | PAA          | 82SEG       | 01         |
| 28.      | 4.    |         | IDMS         | 78CAR       | 02         |
| 28.4     |       |         | POL          | 74MAI       | 01         |
| 28.5     | 1.5   |         | ICPES        | 81CHU       | 01         |
| 28.6     |       |         | FAA          | 78GUI       | 01         |
| 29.      | 0.5   |         | AA           | 73TAL       | 01         |
| 29.      | 2.    |         | PAA          | 77JER       | 01         |
| 29.4     |       |         | IDMS         | 75KLE       | 01         |
| 30.      |       |         | AA           | 76WEW       | 01         |
| 31.      | 3.    |         | EXRF         | 81KIN       | 01         |
| 32.      | 2.    |         | PAA          | 77JER       | 01         |
| 32.      |       | 34      | WXRF         | 82MIL       | 01         |
| 32.      | 2.    |         | PAA          | 76CHA       | 01         |
| 32.1     | 1.8   |         | PAA          | 74CHA       | 01         |
| 33.      | 3.    |         | SSMS         | 77DON       | 01         |
| 33.      | 2.    |         | AA           | 79ROS       | 03         |
| Pd (ppb) |       |         |              |             |            |
|          | 5.    | L*      | RTNA         | 77NAD       | 02         |
| Pr (ppm) |       |         |              |             |            |
|          | 2.    | L*      | FAA          | 82GUP       | 02         |
|          | 15.   | L*      | OES          | 76WEW       | 01         |

TABLE V (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| 2.       |        | 34      | WXRF         | 82MIL       | 01         |
| 3.6      | 0.4    |         | ITNA         | 82SUZ       | 02         |
| 4.6      | 0.5    | 12      | ITNA         | 82SUZ       | 02         |
| Pt (ppb) |        |         |              |             |            |
|          | 15000. | L*      | OES          | 76WEW       | 01         |
| 186.     | 2.3    |         | RTNA         | 77NAD       | 01         |
| 270.     | 20.    |         | RTNA         | 77NAD       | 02         |
| Rb (ppm) |        |         |              |             |            |
| 10.      | 3.     | *       | ITNA         | 81WAN       | 01         |
| 15.      |        | 35      | ITNA         | 81CLA       | 03         |
| 16.3     | 3.7    |         | ITNA         | 75NAD       | 02         |
| 16.3     | 3.7    |         | ITNA         | 78NAD       | 02         |
| 18.      |        | 34      | WXRF         | 82MIL       | 01         |
| 18.3     | 1.1    | D*      | IENA         | 77ROW       | 04         |
| 18.3     | 1.6    |         | IENA         | 77ROW       | 03         |
| 19.      | 1.9    |         | ITNA         | 73SHE       | 01         |
| 19.      | 1.5    |         | ITNA         | 76RAC       | 01         |
| 19.      | 2.     |         | ITNA         | 73ABE       | 01         |
| 19.      | 6.     |         | ITNA         | 76WEW       | 01         |
| 19.4     | 2.3    |         | ITNA         | 77ROW       | 04         |
| 19.5     |        |         | ITNA         | 75KLE       | 01         |
| 20.      | 2.     | 9       | ITNA         | 78LAU       | 02         |
| 20.      | 2.     |         | ITNA         | 79GRE       | 01         |
| 20.      | 4.     |         | ITNA         | 78LAU       | 02         |
| 20.      | 2.     |         | PAA          | 75OND       | 01         |
| 20.      | 2.     |         | PAA          | 76CHA       | 01         |
| 20.1     | 0.6    |         | EXRF         | 79GTA       | 01         |
| 21.      |        |         | ITNA         | 77WEA       | 01         |
| 21.      | 2.     |         | ITNA         | 75OND       | 01         |
| 22.      | 2.9    |         | OES          | 76WEW       | 01         |
| 22.5     | 0.7    |         | ITNA         | 77MAE       | 01         |
| 22.5     | 3.7    |         | ITNA         | 75RUC       | 01         |
| 22.8     | 4.8    |         | ITNA         | 77CAH       | 01         |
| 23.      | 7.     |         | ITNA         | 76KUC       | 01         |
| 23.      | 3.     |         | NAA          | 76HAN       | 01         |
| 24.      |        |         | XRF          | 75KLE       | 01         |
| 24.      |        |         | ITNA         | 75MIL       | 01         |
| 24.7     | 1.     |         | ITNA         | 79ROS       | 03         |
| 26.      | 1.     |         | ITNA         | 82SUZ       | 02         |
| 28.6     | 3.2    | *       | EXRF         | 73SPA       | 01         |
| 30.      | 1.     | *12     | ITNA         | 82SUZ       | 02         |
| Rh (ppm) |        |         |              |             |            |
|          | 5.     | L*      | OES          | 76WEW       | 01         |
| Ru (ppb) |        |         |              |             |            |
|          | 5000.  | L*      | OES          | 76WEW       | 01         |
| 18.      | 1.     |         | RTNA         | 77NAD       | 02         |
| S (%)    |        |         |              |             |            |
|          | 3.8    | L*      | ITNA         | 82SUZ       | 02         |
| 0.17     |        | *       | ICPES        | 80NAD       | 01         |
| 0.17     |        | *       | CB           | 80NAD       | 01         |
| 0.9      |        |         | ICPES        | 80NAD       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 0.9      |       |         | CB           | 80NAD       | 01         |
| 1.25     |       |         | XRF          | 77GLU       | 01         |
| 1.29     | 0.03  | D*      | TCGS         | 80AND       | 01         |
| 1.29     | 0.03  |         | TCGS         | 79FAI       | 01         |
| 1.32     |       |         | XRF          | 81NAD       | 01         |
| 1.32     | 0.07  |         | TCGS         | 77JUR       | 01         |
| 1.32     |       |         | XRF          | 82NAD       | 01         |
| 1.99     |       | *       | CB           | 77LAD       | 01         |
| 2.02     |       | *       | TITR         | 77LAD       | 01         |
| Sb (ppm) |       |         |              |             |            |
| 0.61     | 0.05  | *       | ITNA         | 82SUZ       | 02         |
| 1.8      | 0.9   | *       | FAA          | 77ARU       | 01         |
| 2.2      |       | *       | ITNA         | 75MIL       | 01         |
| 2.3      | 5.8   | R*      | COLOR        | 77ARU       | 01         |
| 2.6      | 2.    |         | ITNA         | 77ARU       | 01         |
| 2.7      |       | 5       | ITNA         | 77ROW       | 04         |
| 2.8      | 0.7   |         | ITNA         | 81WAN       | 01         |
| 2.8      |       | 5       | IENA         | 77ROW       | 04         |
| 3.       |       | 34      | WXRF         | 82MIL       | 01         |
| 3.       |       |         | ITNA         | 77GLU       | 01         |
| 3.       |       |         | RTNA         | 75RUC       | 01         |
| 3.       |       | 5       | ITNA         | 77ROW       | 04         |
| 3.       |       |         | IENA         | 77ROW       | 03         |
| 3.06     | 1.4   |         | ITNA         | 75NAD       | 02         |
| 3.09     | 0.26  |         | PAA          | 74CHA       | 01         |
| 3.1      | 1.4   |         | ITNA         | 78NAD       | 02         |
| 3.2      |       | 35      | ITNA         | 81GLA       | 03         |
| 3.2      |       | 5       | IENA         | 77ROW       | 04         |
| 3.4      | 0.1   |         | ITNA         | 76RAG       | 01         |
| 3.4      | 0.8   |         | ITNA         | 75RUC       | 01         |
| 3.6      | 1.2   |         | ITNA         | 77MAE       | 01         |
| 3.6      | 0.8   |         | ITNA         | 77CAH       | 01         |
| 3.7      | 2.    |         | ITNA         | 73ABE       | 01         |
| 3.8      | 0.2   |         | ITNA         | 78MAC       | 01         |
| 3.8      | 0.4   |         | NAA          | 76HAN       | 01         |
| 3.82     | 0.1   |         | ITNA         | 78LAU       | 02         |
| 3.9      | 1.3   |         | ITNA         | 75OND       | 01         |
| 3.9      | 0.24  |         | ITNA         | 77JER       | 01         |
| 3.9      | 0.3   |         | PAA          | 76CHA       | 01         |
| 3.9      |       |         | ITNA         | 77WEA       | 01         |
| 3.9      | 0.3   |         | PAA          | 77JER       | 01         |
| 4.1      | 1.2   |         | ITNA         | 76WEW       | 01         |
| 4.3      | 0.3   |         | ITNA         | 79GRE       | 01         |
| 4.4      | 0.3   |         | FAA          | 78HAY       | 01         |
| 4.45     |       |         | ITNA         | 75KLE       | 01         |
| 6.4      | 1.6   | *       | ITNA         | 73SHE       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 3.4      | 0.3   |         | ITNA         | 77CAH       | 01         |
| 3.4      | 0.3   |         | ITNA         | 73ABE       | 01         |
| 3.5      | 0.1   |         | ITNA         | 78NAD       | 02         |
| 3.5      | 0.08  |         | ITNA         | 75NAD       | 02         |
| 3.58     | 0.35  |         | PAA          | 74CHA       | 01         |
| 3.6      | 0.08  |         | OES          | 76WEW       | 01         |
| 3.6      | 0.3   |         | PAA          | 76CHA       | 01         |
| 3.68     | 0.08  |         | ITNA         | 76RAG       | 01         |
| 3.69     | 0.05  |         | ITNA         | 78LAU       | 02         |
| 3.7      | 0.3   |         | ITNA         | 75OND       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 3.7      |       |         | ITNA         | 77WEA       | 01         |
| 3.7      | 0.1   |         | ITNA         | 75RIC       | 01         |
| 3.75     | 0.24  |         | ITNA         | 79ROS       | 03         |
| 3.8      | 0.05  | D*      | ITNA         | 77ROW       | 04         |
| 3.8      | 0.4   |         | ITNA         | 76WEW       | 01         |
| 3.8      | 0.05  |         | ITNA         | 77ROW       | 03         |
| 3.81     | 0.47  |         | ITNA         | 75RUC       | 01         |
| 3.88     | 0.15  |         | NAA          | 76HAN       | 01         |
| 3.9      | 0.2   |         | ITNA         | 76KUC       | 01         |
| 3.95     | 0.06  |         | IENA         | 77ROW       | 04         |
| 3.98     | 0.04  |         | ITNA         | 78MAC       | 01         |
| 4.       | 0.2   |         | ITNA         | 79GRE       | 01         |
| 4.1      | 0.2   |         | ITNA         | 81WAN       | 01         |
| 4.1      |       | 34      | WXRF         | 82MIL       | 01         |
| 4.1      |       |         | ITNA         | 75MIL       | 01         |
| 4.2      | 0.1   |         | ITNA         | 77MAE       | 01         |
| 4.5      |       | *       | ITNA         | 75KLE       | 01         |
| 5.4      | 0.1   | *       | ITNA         | 82SUZ       | 02         |
| Se (ppm) |       |         |              |             |            |
|          | 10.   | L*      | ICPES        | 81CHU       | 01         |
| 1.1      | 0.08  | *       | CPXRF        | 80KIR       | 01         |
| 2.       |       | *       | HAA          | 74BYR       | 02         |
| 2.3      | 0.2   | *9      | ITNA         | 82SUZ       | 02         |
| 2.4      | 0.1   |         | ITNA         | 78NAD       | 02         |
| 2.44     | 0.08  |         | ITNA         | 75NAD       | 02         |
| 2.5      | 0.2   |         | ITNA         | 80WAN       | 01         |
| 2.51     | 0.13  | 8       | SSMS         | 80KOP       | 01         |
| 2.6      | 0.1   |         | ITNA         | 82SUZ       | 02         |
| 2.6      | 0.3   | 9       | ITNA         | 80WAN       | 01         |
| 2.6      | 0.16  |         | FAA          | 77ARU       | 01         |
| 2.7      | 0.2   |         | RTNA         | 74ORV       | 01         |
| 2.8      |       |         | ITNA         | 77GLU       | 01         |
| 2.8      | 0.11  |         | RTNA         | 75RUC       | 01         |
| 2.86     | 0.13  |         | DCP          | 81CAR       | 02         |
| 2.86     | 0.13  |         | GCMS         | 74TAL       | 02         |
| 2.86     | 0.13  |         | GCMS         | 75KLE       | 01         |
| 2.9      | 0.1   |         | ICPES        | 80HAA       | 01         |
| 2.9      | 0.2   |         | ITNA         | 79GRE       | 01         |
| 2.9      | 0.2   |         | XRF          | 77ARU       | 01         |
| 2.9      | 0.4   |         | ITNA         | 76RAG       | 01         |
| 2.99     | 0.07  |         | SSMS         | 77PAU       | 01         |
| 3.       | 0.3   | H       | OES          | 80CLA       | 01         |
| 3.       | 1.    |         | PAA          | 80SEG       | 01         |
| 3.       |       | 34      | WXRF         | 82MIL       | 01         |
| 3.       | 0.4   |         | RTNA         | 80KNA       | 01         |
| 3.       | 1.    | 6       | PAA          | 82SEG       | 01         |
| 3.       | 0.3   | D*      | IENA         | 77ROW       | 04         |
| 3.       | 0.3   |         | PAA          | 76CHA       | 01         |
| 3.       | 0.3   |         | IENA         | 77ROW       | 03         |
| 3.       | 0.4   | 6       | PAA          | 82SEG       | 01         |
| 3.03     | 0.28  |         | PAA          | 74CHA       | 01         |
| 3.05     |       |         | ITNA         | 75KLE       | 01         |
| 3.05     | 0.48  |         | ASV          | 76AND       | 01         |
| 3.1      |       |         | ITNA         | 77WEA       | 01         |
| 3.1      | 0.2   |         | EXRF         | 79GIA       | 01         |
| 3.1      | 0.6   |         | ITNA         | 78MAC       | 01         |
| 3.1      | 1.6   |         | ITNA         | 76WEW       | 01         |
| 3.2      | 0.4   |         | ITNA         | 76BLO       | 01         |
| 3.2      | 0.3   |         | ITNA         | 75RIC       | 01         |

TABLE V (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 3.3  | 0.4   |         | ITNA         | 73ABE       | 01         |
| 3.3  | 0.2   | 9       | ITNA         | 78LAU       | 02         |
| 3.3  | 0.6   |         | ITNA         | 78LAU       | 02         |
| 3.4  | 0.2   | D*      | NAA          | 74OND       | 01         |
| 3.4  | 0.2   |         | ITNA         | 75OND       | 01         |
| 3.5  | 0.3   |         | ITNA         | 77MAE       | 01         |
| 3.6  | 0.4   |         | ITNA         | 75RUC       | 01         |
| 3.7  | 0.7   | *       | ITNA         | 77ROW       | 04         |
| 3.8  | 0.51  | *       | ITNA         | 73SHE       | 01         |
| 3.8  | 0.7   | *       | ITNA         | 77CAH       | 01         |
| 3.9  | 0.4   | *       | ITNA         | 81WAN       | 01         |
| 4.7  |       | *       | COLOR        | 74BYR       | 02         |
| 5.5  | 0.5   | *       | EXRF         | 73SPA       | 01         |

S1 (%)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
| 2.1  | 0.42 | *  | OES   | 76WEW | 01 |
| 2.6  |      | *4 | AA    | 79REI | 01 |
| 2.95 | 0.06 |    | TCGS  | 79FAI | 01 |
| 2.95 | 0.06 | D* | TCGS  | 80AND | 01 |
| 3.   | 0.4  |    | PAA   | 76CHA | 01 |
| 3.14 |      |    | ICPES | 80NAD | 01 |
| 3.17 |      |    | ICPES | 80NAD | 01 |
| 3.19 |      |    | ICPES | 80NAD | 01 |
| 3.2  |      |    | AA    | 76WEW | 01 |
| 3.21 |      |    | ICPES | 80NAD | 01 |
| 3.5  | 0.8  |    | 14NAA | 76BLO | 01 |
| 3.92 |      | *  | VV    | 77GLU | 01 |

Sm (ppm)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
|      | 2.   | L* | WXRF  | 82MIL | 01 |
|      | 15.  | L* | OES   | 76WEW | 01 |
| 1.3  | 0.19 |    | ITNA  | 73SHE | 01 |
| 1.3  | 0.2  |    | ICPES | 81CHU | 01 |
| 1.38 | 0.1  |    | IENA  | 76STE | 05 |
| 1.38 | 0.09 |    | ITNA  | 77ROW | 04 |
| 1.4  |      |    | FAA   | 82GUP | 02 |
| 1.4  | 0.1  |    | ITNA  | 78MAC | 01 |
| 1.4  | 0.1  |    | IENA  | 77ROW | 03 |
| 1.41 | 0.06 |    | IENA  | 77ROW | 04 |
| 1.53 | 0.02 | D* | TCGS  | 80AND | 01 |
| 1.53 | 0.02 |    | TCGS  | 79FAI | 01 |
| 1.55 | 0.07 |    | NAA   | 76HAN | 01 |
| 1.6  |      |    | ITNA  | 75MIL | 01 |
| 1.6  | 0.2  |    | ITNA  | 77CAH | 01 |
| 1.66 | 0.16 |    | ITNA  | 75NAD | 02 |
| 1.7  | 0.3  |    | ITNA  | 73ABE | 01 |
| 1.7  |      |    | ITNA  | 77WEA | 01 |
| 1.7  | 0.2  |    | ITNA  | 75OND | 01 |
| 1.7  | 0.2  |    | ITNA  | 78NAD | 02 |
| 1.72 | 0.08 |    | ITNA  | 76RAG | 01 |
| 1.74 | 0.02 |    | ITNA  | 78LAU | 02 |
| 1.8  | 0.1  |    | ITNA  | 75RUC | 01 |
| 1.9  | 0.2  |    | ITNA  | 79GRE | 01 |
| 1.93 | 0.14 |    | ITNA  | 77MAE | 01 |
| 2.9  | 0.2  | *  | ITNA  | 82SUZ | 02 |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Sn (ppm) |       |         |              |             |            |
| 2.       | 10.   | R*      | OES          | 76WEW       | 01         |
| 4.       | 0.2   |         | ICPES        | 80HAA       | 01         |
| 5.       |       | 34      | WXRF         | 82MIL       | 01         |
| 8.       |       |         | ICPES        | 80NAD       | 01         |
| 9.7      |       |         | ICPES        | 80NAD       | 01         |
| 10.      | 1.    | 6       | PAA          | 82SEG       | 01         |
| 10.      | 1.    |         | PAA          | 80SEG       | 01         |
| 10.      | 1.    |         | PAA          | 76CHA       | 01         |
| 10.      |       |         | ITNA         | 77GLU       | 01         |
| 10.2     | 1.    |         | PAA          | 74CHA       | 01         |
| 11.      | 0.4   | 6       | PAA          | 82SEG       | 01         |
| 125.     | 20.   | *       | ITNA         | 73SHE       | 01         |

Sr (ppm)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
| 1.02 | 0.05 | *  | ITNA  | 75NAD | 02 |
| 1.33 | 0.1  | *  | PAA   | 74CHA | 01 |
| 91.  | 9.   | *  | ITNA  | 82SUZ | 02 |
| 93.  | 9.2  |    | ITNA  | 73SHE | 01 |
| 93.  | 7.   | 12 | ITNA  | 82SUZ | 02 |
| 99.  |      | 4  | AA    | 79REI | 01 |
| 112. | 26.  |    | ITNA  | 76RAG | 01 |
| 120. | 20.  |    | NAA   | 76HAN | 01 |
| 123. |      |    | ITNA  | 75KLE | 01 |
| 125. | 26.  |    | ITNA  | 78NAD | 02 |
| 129. |      |    | ITNA  | 75MIL | 01 |
| 131. | 23.  |    | ITNA  | 76STE | 05 |
| 140. | 2.8  |    | ICPES | 81CHU | 01 |
| 140. | 15.  |    | PAA   | 76CHA | 01 |
| 140. | 40.  |    | ITNA  | 78LAU | 02 |
| 144. |      |    | XRF   | 75KLE | 01 |
| 145. | 9.   |    | ITNA  | 75RUC | 01 |
| 151. |      | 34 | WXRF  | 82MIL | 01 |
| 151. | 4.   |    | EXRF  | 79GIA | 01 |
| 155. | 15.  |    | EXRF  | 73SPA | 01 |
| 155. | 6.   |    | ITNA  | 77CAH | 01 |
| 159. | 14.  |    | IENA  | 77ROW | 04 |
| 160. | 10.  |    | IENA  | 77ROW | 03 |
| 161. | 16.  |    | ITNA  | 75OND | 01 |
| 161. | 9.   | 5  | IENA  | 76STE | 05 |
| 164. | 25.  |    | ITNA  | 81WAN | 01 |
| 164. | 14.  |    | ITNA  | 77MAE | 01 |
| 165. | 21.  | 5  | IENA  | 76STE | 05 |
| 170. | 10.  |    | ITNA  | 73ABE | 01 |
| 170. | 20.  | 9  | ITNA  | 78LAU | 02 |
| 170. | 17.  |    | ITNA  | 76WEW | 01 |
| 170. | 20.  |    | ITNA  | 78MAC | 01 |
| 190. |      |    | ITNA  | 77ROW | 04 |
| 280. | 56.  | *  | OES   | 76WEW | 01 |

Ta (ppb)

|      |       |    |      |       |    |
|------|-------|----|------|-------|----|
|      | 1500. | L* | WXRF | 82MIL | 01 |
| 170. |       |    | ITNA | 75KLE | 01 |
| 210. |       | 35 | ITNA | 81GLA | 03 |
| 210. | 20.   |    | ITNA | 77CAH | 01 |
| 210. | 20.   |    | ITNA | 75RUC | 01 |
| 230. | 20.   |    | ITNA | 76RAG | 01 |
| 240. |       |    | ITNA | 77WEA | 01 |
| 240. | 40.   |    | ITNA | 75OND | 01 |

TABLE V (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| 240.     | 10.    |         | ITNA         | 78NAD       | 02         |
| 240.     | 10.    |         | ITNA         | 75NAD       | 02         |
| 250.     | 10.    |         | ITNA         | 77MAE       | 01         |
| 250.     | 30.    |         | NAA          | 76HAN       | 01         |
| 270.     | 20.    |         | ITNA         | 79ROS       | 03         |
| 273.     | 6.     |         | IENA         | 77ROW       | 03         |
| 273.     | 9.     | D*      | IENA         | 77ROW       | 04         |
| 290.     | 50.    |         | ITNA         | 78LAU       | 02         |
| 300.     |        |         | ITNA         | 75MIL       | 01         |
| 300.     |        |         | ITNA         | 77ROW       | 04         |
| 350.     | 20.    |         | ITNA         | 82SUZ       | 02         |
| 360.     | 28.    | *       | ITNA         | 73SHE       | 01         |
| 460.     | 50.    | *       | ITNA         | 73ABE       | 01         |
| Tb (ppb) |        |         |              |             |            |
|          |        |         |              |             |            |
|          | 500.   | L*      | ITNA         | 77ROW       | 04         |
|          | 2000.  | L*      | WXRF         | 82MIL       | 01         |
|          | 15000. | L*      | OES          | 76WEW       | 01         |
|          | 400.   | L*      | FAA          | 82GUP       | 02         |
| 30.      |        | *       | ITNA         | 73SHE       | 01         |
| 200.     | 40.    |         | ITNA         | 76WEW       | 01         |
| 200.     | 20.    |         | ITNA         | 76RAG       | 01         |
| 230.     | 10.    |         | ITNA         | 78LAU       | 02         |
| 230.     | 60.    |         | ITNA         | 73ABE       | 01         |
| 230.     | 50.    |         | ITNA         | 75OND       | 01         |
| 260.     | 20.    |         | ITNA         | 82SUZ       | 02         |
| 274.     | 12.    |         | IENA         | 77ROW       | 03         |
| 274.     | 12.    | D*      | IENA         | 77ROW       | 04         |
| 400.     | 20.    |         | ITNA         | 75NAD       | 02         |
| 400.     | 20.    |         | ITNA         | 78NAD       | 02         |
| 500.     |        | *       | ITNA         | 75MIL       | 01         |
| Te (ppb) |        |         |              |             |            |
|          |        |         |              |             |            |
|          | 600.   | L*      | WXRF         | 82MIL       | 01         |
|          | 690.   | L*      | ITNA         | 82SUZ       | 02         |
|          | 1000.  | L*      | PAA          | 76CHA       | 01         |
| 500.     |        |         | FAA          | 77GLU       | 01         |
| 600.     | 40.    | 35      | RTNA         | 75GLA       | 01         |
| 1020.    |        |         | PAA          | 74CHA       | 01         |
| Th (ppm) |        |         |              |             |            |
|          |        |         |              |             |            |
|          | 15.    | L*      | OES          | 76WEW       | 01         |
| 1.28     | 0.06   | *       | ITNA         | 75NAD       | 02         |
| 1.3      | 0.1    | *       | ITNA         | 78NAD       | 02         |
| 2.4      | 0.2    | *       | ITNA         | 76BLO       | 01         |
| 2.7      | 0.7    |         | EXRF         | 79GIA       | 01         |
| 2.87     | 0.09   |         | ITNA         | 77ROW       | 04         |
| 2.87     | 0.24   |         | ITNA         | 79ROS       | 03         |
| 2.9      | 0.1    |         | ITNA         | 76RAG       | 01         |
| 3.       | 0.2    |         | ITNA         | 78LAU       | 02         |
| 3.       |        | 34      | WXRF         | 82MIL       | 01         |
| 3.       |        |         | ITNA         | 75KLE       | 01         |
| 3.1      | 0.2    |         | ITNA         | 73SHE       | 01         |
| 3.1      | 0.2    |         | ITNA         | 75OND       | 01         |
| 3.12     | 0.1    |         | IENA         | 77ROW       | 03         |
| 3.12     | 0.1    | D*      | IENA         | 77ROW       | 04         |
| 3.2      | 0.2    |         | ITNA         | 79GRE       | 01         |
| 3.2      |        | 35      | ITNA         | 81GLA       | 03         |
| 3.2      | 0.3    |         | ITNA         | 76WEW       | 01         |
| 3.2      | 0.1    |         | ITNA         | 77MAE       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 3.2      |       |         | ITNA         | 75MIL       | 01         |
| 3.2      | 0.5   |         | NAA          | 76HAN       | 01         |
| 3.3      | 0.6   |         | ITNA         | 81WAN       | 01         |
| 3.4      | 0.6   |         | ITNA         | 73ABE       | 01         |
| 3.45     | 0.1   |         | GAMMA        | 75OND       | 01         |
| 3.45     | 0.1   |         | GAMMA        | 73ABE       | 01         |
| 3.5      | 0.6   |         | ITNA         | 77CAH       | 01         |
| 3.65     | 0.49  |         | ITNA         | 75RUC       | 01         |
| 4.1      | 0.1   | *       | ITNA         | 82SUZ       | 02         |
| 4.6      | 0.1   | *2      | ITNA         | 82SUZ       | 02         |
| 4.7      |       | *       | DNA          | 75MIL       | 01         |
| Ti (ppm) |       |         |              |             |            |
| 680.     |       |         | EXRF         | 82KEE       | 01         |
| 690.     |       | 4       | AA           | 79REI       | 01         |
| 790.     |       |         | POL          | 74MAI       | 01         |
| 800.     |       |         | ITNA         | 77WEA       | 01         |
| 800.     |       |         | AA           | 76WEW       | 01         |
| 839.     | 172.  |         | ITNA         | 75NAD       | 02         |
| 840.     | 200.  |         | ITNA         | 78NAD       | 02         |
| 885.     | 150.  |         | ITNA         | 76BLO       | 01         |
| 890.     | 50.   |         | ITNA         | 77ROW       | 03         |
| 890.     | 35.   | D*      | TCGS         | 80AND       | 01         |
| 890.     | 35.   |         | TCGS         | 79FAI       | 01         |
| 890.     | 50.   |         | ITNA         | 76STE       | 05         |
| 890.     | 200.  |         | PAA          | 75OND       | 01         |
| 900.     | 180.  |         | OES          | 76WEW       | 01         |
| 900.     | 100.  |         | PAA          | 76CHA       | 01         |
| 920.     | 50.   |         | NAA          | 76HAN       | 01         |
| 930.     |       |         | ICPES        | 80NAD       | 01         |
| 930.     |       | 34      | WXRF         | 82MIL       | 01         |
| 930.     |       |         | ITNA         | 75KLE       | 01         |
| 946.     | 24.   |         | ICPES        | 81CHU       | 01         |
| 951.     | 53.   |         | EXRF         | 79GIA       | 01         |
| 960.     |       |         | ICPES        | 80NAD       | 01         |
| 960.     |       |         | ICPES        | 80NAD       | 01         |
| 972.     |       |         | ICPES        | 80NAD       | 01         |
| 973.     | 50.   |         | PAA          | 74CHA       | 01         |
| 980.     | 60.   |         | ITNA         | 79GRE       | 01         |
| 995.     | 100.  |         | ITNA         | 78MAC       | 01         |
| 1000.    | 260.  |         | ITNA         | 76RAG       | 01         |
| 1028.    | 30.   |         | AA           | 79ROS       | 03         |
| 1060.    |       | 35      | NAA          | 81GLA       | 03         |
| 1075.    | 100.  |         | ITNA         | 75OND       | 01         |
| 1100.    | 100.  |         | ITNA         | 81WAN       | 01         |
| 1100.    |       |         | ITNA         | 77CLU       | 01         |
| 1100.    | 110.  |         | ITNA         | 76WEW       | 01         |
| 1100.    | 200.  |         | ITNA         | 73ABE       | 01         |
| 1200.    | 200.  |         | ITNA         | 78LAU       | 02         |
| 1312.    | 150.  | *       | ITNA         | 73SHE       | 01         |
| 1550.    | 130.  | *       | ITNA         | 82SUZ       | 02         |
| Tl (ppb) |       |         |              |             |            |
|          |       |         |              |             |            |
|          | 2000. | L*      | FAA          | 77GLU       | 01         |
|          | 1000. | L*      | WXRF         | 82MIL       | 01         |
|          | 1000. | L*      | AA           | 76WEW       | 01         |
|          | 5000. | L*      | OES          | 76WEW       | 01         |
| 500.     | 100.  |         | PAA          | 80SEG       | 01         |
| 500.     | 100.  | 6       | PAA          | 82SEG       | 01         |
| 512.     | 60.   |         | PAA          | 74CHA       | 01         |
| 520.     | 60.   |         | PAA          | 76CHA       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 590.     | 60.   |         | SSMS         | 77PAU       | 01         |
| 600.     | 100.  | 6       | PAA          | 82SEG       | 01         |
| 600.     | 200.  |         | SSMS         | 77DON       | 01         |
| 610.     | 37.   | 8       | SSMS         | 80KOP       | 01         |
| Tm (ppb) |       |         |              |             |            |
|          | 1000. | L*      | WXRF         | 82MIL       | 01         |
|          | 5000. | L*      | OES          | 76WEW       | 01         |
| 110.     |       |         | FAA          | 82GUP       | 02         |
| 300.     |       |         | ITNA         | 77GLU       | 01         |
| 300.     |       |         | ITNA         | 75MIL       | 01         |
| U (ppm)  |       |         |              |             |            |
|          | 2.3   | L*      | EXRF         | 79GIA       | 01         |
| 0.98     | 0.078 | *       | ITNA         | 73SHE       | 01         |
| 1.1      | 0.08  | 35      | RTNA         | 75GLA       | 01         |
| 1.2      | 0.1   |         | ITNA         | 78NAD       | 02         |
| 1.2      | 0.1   |         | ITNA         | 75NAD       | 02         |
| 1.2      | 0.05  |         | IDMS         | 78CAR       | 02         |
| 1.21     |       |         | IDMS         | 75KLE       | 01         |
| 1.24     | 0.05  |         | ITNA         | 76RAG       | 01         |
| 1.25     | 0.06  |         | ITNA         | 82SUZ       | 02         |
| 1.26     |       |         | ITNA         | 75KLE       | 01         |
| 1.3      | 0.1   |         | PAA          | 80SEG       | 01         |
| 1.3      | 0.1   | 6       | PAA          | 82SEG       | 01         |
| 1.33     | 0.05  |         | DNA          | 83GLA       | 01         |
| 1.34     | 0.5   |         | ITNA         | 78MAC       | 01         |
| 1.35     |       |         | ITNA         | 77WEA       | 01         |
| 1.37     | 0.08  |         | ITNA         | 74WEA       | 01         |
| 1.4      |       |         | ITNA         | 81WAN       | 01         |
| 1.4      | 0.1   | 6       | PAA          | 82SEG       | 01         |
| 1.41     | 0.07  |         | GAMMA        | 73ABE       | 01         |
| 1.41     | 0.07  |         | GAMMA        | 75OND       | 01         |
| 1.41     | 0.07  | D*      | NAA          | 74OND       | 01         |
| 1.43     |       |         | DNA          | 75MIL       | 01         |
| 1.45     | 0.04  |         | IENA         | 77ROW       | 04         |
| 1.46     | 0.02  |         | IENA         | 76STE       | 05         |
| 1.46     | 0.04  |         | IENA         | 77ROW       | 03         |
| 1.46     | 0.35  |         | ITNA         | 75RUC       | 01         |
| 1.49     |       | 35      | DNA          | 81GLA       | 03         |
| 1.5      | 0.1   | 13      | PAA          | 81SEG       | 01         |
| 1.5      |       |         | ITNA         | 75MIL       | 01         |
| 1.52     | 0.11  |         | ITNA         | 76STE       | 05         |
| 1.6      | 0.2   | 13      | PAA          | 81SEG       | 01         |
| 1.6      | 0.2   |         | NAA          | 76HAN       | 01         |
| 2.       |       | *34     | WXRF         | 82MIL       | 01         |
| 6.       |       | *       | AA           | 76WEW       | 01         |
| V (ppm)  |       |         |              |             |            |
| 24.      | 8.    | *       | EXRF         | 79GIA       | 01         |
| 30.      | 6.    | 35      | ITNA         | 81GLA       | 03         |
| 32.      |       | 34      | WXRF         | 82MIL       | 01         |
| 32.      | 4.    |         | ITNA         | 78LAU       | 02         |
| 32.      | 1.3   |         | OES          | 76WEW       | 01         |
| 32.5     | 1.5   |         | NAA          | 76HAN       | 01         |
| 32.7     | 3.4   |         | ITNA         | 75NAD       | 02         |
| 33.      | 4.    |         | ITNA         | 73ABE       | 01         |
| 33.      |       |         | ICPES        | 80NAD       | 01         |
| 33.      |       |         | ITNA         | 80BUA       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 33.      | 3.    |         | ITNA         | 78MAC       | 01         |
| 33.      | 1.    |         | ITNA         | 76BLO       | 01         |
| 33.      | 3.    |         | ITNA         | 78NAD       | 02         |
| 33.6     |       |         | AA           | 78GUY       | 01         |
| 33.9     | 3.    |         | PAA          | 74CHA       | 01         |
| 34.      |       |         | ICPES        | 80NAD       | 01         |
| 34.      | 3.    |         | PAA          | 76CHA       | 01         |
| 35.      | 2.9   |         | ITNA         | 77ROW       | 03         |
| 35.      | 2.9   |         | ITNA         | 76STE       | 05         |
| 35.      |       |         | ITNA         | 77WEA       | 01         |
| 35.2     | 1.5   |         | AA           | 79ROS       | 03         |
| 35.8     | 3.4   |         | ITNA         | 81WAN       | 01         |
| 36.      | 2.    |         | ITNA         | 79GRE       | 01         |
| 36.      | 4.    |         | ITNA         | 73SHE       | 01         |
| 36.      | 3.    | D*      | NAA          | 74OND       | 01         |
| 36.      | 3.    |         | ITNA         | 75OND       | 01         |
| 36.      |       |         | AA           | 76WEW       | 01         |
| 36.      | 4.    |         | ITNA         | 76WEW       | 01         |
| 36.2     |       |         | FAA          | 78GUY       | 01         |
| 37.      | 3.    |         | ITNA         | 75RIC       | 01         |
| 37.6     | 1.4   |         | ITNA         | 77MAE       | 01         |
| 38.      | 1.2   |         | ICPES        | 81CHU       | 01         |
| 40.      | 3.    |         | ITNA         | 75KLE       | 01         |
| 41.      | 10.   |         | ITNA         | 76RAG       | 01         |
| 42.      | 2.    | *       | ITNA         | 82SUZ       | 02         |
| 43.      |       | *4      | AA           | 79REI       | 01         |
| 50.      |       | *       | ITNA         | 77GLU       | 01         |
| W (ppb)  |       |         |              |             |            |
|          | 1500. | L*      | WXRF         | 82MIL       | 01         |
| 450.     | 90.   | *       | ITNA         | 81WAN       | 01         |
| 630.     | 60.   |         | ITNA         | 77MAE       | 01         |
| 650.     | 150.  |         | ITNA         | 76RAG       | 01         |
| 710.     | 70.   |         | IENA         | 77ROW       | 04         |
| 710.     | 80.   |         | ITNA         | 82SUZ       | 02         |
| 740.     | 300.  |         | ITNA         | 75RUC       | 01         |
| 750.     | 100.  |         | IENA         | 77ROW       | 03         |
| 750.     | 170.  |         | ITNA         | 75OND       | 01         |
| 750.     |       |         | ITNA         | 77WEA       | 01         |
| 780.     | 80.   |         | ITNA         | 79GRE       | 01         |
| 790.     | 170.  |         | IENA         | 76STE       | 05         |
| 870.     | 200.  |         | ITNA         | 77CAH       | 01         |
| 1900.    | 800.  | *       | ITNA         | 73SHE       | 01         |
| Y (ppm)  |       |         |              |             |            |
| 7.       |       |         | AA           | 82GUP       | 02         |
| 7.4      |       | 34      | WXRF         | 82MIL       | 01         |
| 7.6      | 0.81  |         | OES          | 76WEW       | 01         |
| 7.9      | 0.6   |         | EXRF         | 79GIA       | 01         |
| 8.       |       |         | OES          | 82GUP       | 02         |
| Yb (ppb) |       |         |              |             |            |
|          | 2000. | L*      | WXRF         | 82MIL       | 01         |
| 550.     | 40.   |         | ITNA         | 73SHE       | 01         |
| 550.     | 80.   |         | ITNA         | 76WEW       | 01         |
| 670.     | 20.   |         | ICPES        | 81CHU       | 01         |
| 690.     | 40.   |         | ITNA         | 75NAD       | 02         |
| 690.     | 40.   |         | ITNA         | 78NAD       | 02         |
| 700.     |       |         | AA           | 82GUP       | 02         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 700.     | 100.  |         | ITNA         | 78LAU       | 02         |
| 700.     | 100.  |         | ITNA         | 75OND       | 01         |
| 740.     | 90.   |         | ITNA         | 77CAH       | 01         |
| 760.     | 30.   |         | ITNA         | 76RAG       | 01         |
| 780.     | 70.   |         | ITNA         | 75RUC       | 01         |
| 800.     |       |         | ITNA         | 75MIL       | 01         |
| 810.     | 20.   |         | ITNA         | 77MAE       | 01         |
| 840.     | 70.   |         | ITNA         | 77ROW       | 03         |
| 840.     | 70.   | 5       | ITNA         | 77ROW       | 04         |
| 880.     | 90.   | 5       | ITNA         | 77ROW       | 04         |
| 910.     | 70.   |         | OES          | 76WEW       | 01         |
| 950.     | 50.   |         | IENA         | 77ROW       | 04         |
| 1000.    | 200.  |         | NAA          | 76HAN       | 01         |
| 1000.    | 200.  |         | ITNA         | 78MAC       | 01         |
| 1030.    | 80.   |         | ITNA         | 82SUZ       | 02         |
| 1200.    | 200.  | *       | ITNA         | 81WAN       | 01         |
| Zn (ppm) |       |         |              |             |            |
| 30.      | 10.   | D*      | NAA          | 74OND       | 01         |
| 30.      | 10.   |         | ITNA         | 75OND       | 01         |
| 32.      | 3.    |         | ITNA         | 78NAD       | 02         |
| 32.      | 8.    |         | SSMS         | 77DON       | 01         |
| 32.      | 3.    |         | ITNA         | 75NAD       | 02         |
| 33.      | 3.    | 9       | ITNA         | 78LAU       | 02         |
| 34.      | 1.    |         | EXRF         | 81KIN       | 01         |
| 34.      |       | 4       | AA           | 79REI       | 01         |
| 34.      |       |         | ITNA         | 77WEA       | 01         |
| 34.      | 9.    |         | ITNA         | 77CAH       | 01         |
| 34.      |       |         | XRF          | 75KLE       | 01         |
| 34.      | 17.   |         | ITNA         | 76WEW       | 01         |
| 35.      | 5.    |         | ITNA         | 77JER       | 01         |
| 35.      | 2.    | 12      | ITNA         | 82SUZ       | 02         |
| 35.7     | 9.9   |         | EXRF         | 79GIA       | 01         |
| 36.      |       |         | ICPES        | 80NAD       | 01         |
| 36.      | 7.    | 6       | PAA          | 82SEG       | 01         |
| 36.      | 0.6   |         | RTNA         | 74ORV       | 01         |
| 36.6     | 1.4   |         | EXRF         | 73SPA       | 01         |
| 37.      | 3.    |         | PAA          | 77JER       | 01         |
| 37.      | 3.    |         | PAA          | 76CHA       | 01         |
| 37.      | 6.    |         | IENA         | 77ROW       | 04         |
| 37.      |       |         | AA           | 76WEW       | 01         |
| 37.      | 10.   |         | NAA          | 76HAN       | 01         |
| 37.2     | 17.4  |         | ITNA         | 75RUC       | 01         |
| 37.5     | 2.8   |         | PAA          | 74CHA       | 01         |
| 38.      | 5.    |         | SSMS         | 77PAU       | 01         |
| 38.      |       | 34      | WXRf         | 82MIL       | 01         |
| 38.1     | 1.4   |         | RTNA         | 77JER       | 01         |
| 38.1     | 0.8   |         | AF           | 75EPS       | 01         |
| 38.4     | 1.    |         | AA           | 75EPS       | 01         |
| 38.4     | 0.9   |         | AA           | 74RAI       | 01         |
| 38.5     |       |         | AA           | 78GUI       | 01         |
| 39.      | 1.    | 7       | AA           | 73TAL       | 01         |
| 39.      | 2.    |         | ITNA         | 82SUZ       | 02         |
| 39.      | 3.    |         | PAA          | 80SEG       | 01         |
| 39.      |       |         | EXRF         | 82KEE       | 01         |
| 39.      |       |         | ICPES        | 80NAD       | 01         |
| 39.      | 1.    |         | FAA          | 74TAL       | 01         |
| 39.      | 6.    | D*      | ITNA         | 77ROW       | 04         |
| 39.      | 3.    | 6       | PAA          | 82SEG       | 01         |
| 39.      | 6.    |         | ITNA         | 77ROW       | 03         |
| 40.      | 1.2   |         | ICPES        | 81CHU       | 01         |

TABLE V (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 40.8     | 4.    |         | ITNA         | 81WAN       | 01         |
| 42.      |       |         | ITNA         | 77GLU       | 01         |
| 43.      | 2.    |         | ITNA         | 76RAG       | 01         |
| 45.      | 17.   |         | OES          | 76WEW       | 01         |
| 50.      | 10.   | *       | ITNA         | 78LAU       | 02         |
| 52.      | 4.    | *       | ITNA         | 78MAC       | 01         |
| 58.      | 7.    | *       | ITNA         | 77MAE       | 01         |
| Zr (ppm) |       |         |              |             |            |
|          | 100.  | L*      | IENA         | 77ROW       | 04         |
|          | 250.  | L*      | ITNA         | 77ROW       | 04         |
| 1.56     | 0.14  | *       | PAA          | 74CHA       | 01         |
| 16.      | 2.    |         | PAA          | 76CHA       | 01         |
| 25.      | 0.75  |         | ICPES        | 81CHU       | 01         |
| 25.      | 3.    |         | OES          | 76WEW       | 01         |
| 28.      | 24.   |         | ITNA         | 76RAG       | 01         |
| 33.      | 4.    |         | EXRF         | 79GIA       | 01         |
| 38.      |       | 34      | WXRf         | 82MIL       | 01         |
| 40.      | 4.    | 9       | ITNA         | 78LAU       | 02         |
| 41.      |       |         | ITNA         | 75MIL       | 01         |
| 45.      |       |         | ITNA         | 75KLE       | 01         |
| 46.      |       |         | AA           | 76WEW       | 01         |
| 85.      | 9.    | *12     | ITNA         | 82SUZ       | 02         |
| 90.      | 10.   | *       | ITNA         | 82SUZ       | 02         |

TABLE W

NBS SRM 1632A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppb) |       |         |              |             |            |
| 300.     | 3000. | L*      | WXRF         | 82MIL       | 01         |
|          |       |         | ITNA         | 79CAH       | 01         |
| Al (%)   |       |         |              |             |            |
| 2.8      | 0.27  |         | CPXRF        | 80KIR       | 01         |
| 2.9      | 0.05  |         | TCGS         | 79AND       | 01         |
| 2.9      | 0.3   |         | ITNA         | 80GER       | 01         |
| 2.93     | 0.03  |         | AA           | 82NAD       | 02         |
| 2.95     | 0.04  |         | XRF          | 79CAH       | 01         |
| 2.99     | 0.14  |         | ITNA         | 83GLA       | 01         |
| 2.99     | 0.06  |         | ITNA         | 82OBR       | 01         |
| 3.       | 0.05  |         | ICPES        | 82NAD       | 02         |
| 3.01     | 0.13  | D*      | TCGS         | 80GER       | 01         |
| 3.01     | 0.13  | D*      | TCGS         | 80AND       | 01         |
| 3.01     | 0.13  |         | TCGS         | 79FAI       | 01         |
| 3.07     | 0.13  |         | ITNA         | 80GAR       | 01         |
| 9.47     |       | *       | EXRF         | 82EBD       | 02         |
| As (ppm) |       |         |              |             |            |
| 6.4      | 2.1   | *       | CPXRF        | 80KIR       | 01         |
| 7.6      |       | *11     | FAA          | 82EBD       | 02         |
| 8.4      |       | 11      | FAA          | 82EBD       | 02         |
| 8.88     | 1.22  |         | ICPES        | 81NAD       | 01         |
| 9.       | 0.4   |         | ITNA         | 80KOS       | 01         |
| 9.       | 0.4   |         | ITNA         | 81KUL       | 01         |
| 9.       |       | 11      | FAA          | 82EBD       | 02         |
| 9.2      |       | 34      | WXRF         | 82MIL       | 01         |
| 9.27     |       |         | AF           | 82WIL       | 01         |
| 9.34     |       |         | FAA          | 82WIL       | 01         |
| 9.4      | 1.3   |         | ITNA         | 79CAH       | 01         |
| 9.4      | 1.3   |         | ITNA         | 82OBR       | 01         |
| 9.54     | 0.64  |         | HAA          | 82NAD       | 01         |
| 9.6      |       | 11      | FAA          | 82EBD       | 02         |
| 9.8      |       | 11      | FAA          | 82EBD       | 02         |
| 9.9      | 0.5   |         | PAA          | 80GER       | 01         |
| 10.2     | 0.4   |         | ITNA         | 81JIN       | 01         |
| 11.      | 2.    | *       | ITNA         | 80GER       | 01         |
| Ash (%)  |       |         |              |             |            |
| 21.7     |       |         | UU           | 82EBD       | 02         |
| 21.8     |       | 34      | CB           | 82MIL       | 01         |
| Au (ppb) |       |         |              |             |            |
| 3.       | 50.   | L*      | ITNA         | 79CAH       | 01         |
|          | 1.    |         | ITNA         | 80KOS       | 01         |
| B (ppm)  |       |         |              |             |            |
| 22.      | 3.    | *       | ICPES        | 81NAD       | 01         |
| 50.9     | 0.5   |         | TCGS         | 79AND       | 01         |
| 52.      | 19.   |         | ITNA         | 82SCH       | 05         |
| 52.7     | 1.8   |         | TCGS         | 79FAI       | 01         |
| 53.      | 2.    | D*      | TCGS         | 80GER       | 01         |
| 53.      | 2.    |         | TCGS         | 80AND       | 01         |
| 55.      | 4.    | 35      | TCGS         | 81GLA       | 04         |

TABLE W (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ba (ppm) |       |         |              |             |            |
| 7500.    |       | L*      | ITNA         | 80TOU       | 01         |
| 100.     | 13.   |         | ITNA         | 81JIN       | 01         |
| 116.     | 7.    | 5       | ITNA         | 80TOU       | 01         |
| 120.     | 10.   |         | ICPES        | 82NAD       | 02         |
| 122.     | 11.   |         | ITNA         | 80GER       | 01         |
| 125.     |       | 34      | WXRF         | 82MIL       | 01         |
| 138.     | 20.   |         | ITNA         | 79CAH       | 01         |
| 150.     | 26.   |         | ITNA         | 80GAR       | 01         |
| Bi (ppm) |       |         |              |             |            |
|          | 1.    | L*      | WXRF         | 82MIL       | 01         |
| Br (ppm) |       |         |              |             |            |
| 550.     |       | L*      | ITNA         | 80TOU       | 01         |
| 39.6     | 1.9   |         | ITNA         | 82OBR       | 01         |
| 40.      | 2.    |         | ITNA         | 83GLA       | 01         |
| 41.      | 4.    |         | ITNA         | 80GER       | 01         |
| 42.      |       | 34      | WXRF         | 82MIL       | 01         |
| 43.      | 0.6   |         | ITNA         | 81JIN       | 01         |
| 43.      | 7.    |         | ITNA         | 79CAH       | 01         |
| 43.      |       |         | ISE          | 81NAD       | 01         |
| 44.5     | 2.7   | 5       | IENA         | 79GLA       | 02         |
| 44.9     | 0.9   | 5       | IENA         | 79GLA       | 02         |
| 50.      | 4.    | *5      | ITNA         | 80TOU       | 01         |
| C (%)    |       |         |              |             |            |
| 62.7     | 0.06  |         | CB           | 80SCH       | 02         |
| 65.      | 4.    |         | TCGS         | 79AND       | 01         |
| 71.      | 4.    | D*      | TCGS         | 80GER       | 01         |
| 71.      | 4.    | D*      | TCGS         | 80AND       | 01         |
| 71.      | 4.    |         | TCGS         | 79FAI       | 01         |
| Ca (ppm) |       |         |              |             |            |
| 2100.    | 100.  |         | PAA          | 80GER       | 01         |
| 2200.    | 300.  |         | ITNA         | 83GLA       | 01         |
| 2300.    | 30.   |         | AA           | 82NAD       | 02         |
| 2300.    | 100.  |         | XRF          | 79CAH       | 01         |
| 2400.    | 200.  | D*      | TCGS         | 80GER       | 01         |
| 2400.    | 200.  | D*      | TCGS         | 80AND       | 01         |
| 2400.    | 200.  |         | ITNA         | 80GER       | 01         |
| 2400.    | 30.   |         | ICPES        | 82NAD       | 02         |
| 2400.    | 200.  |         | TCGS         | 79FAI       | 01         |
| 2400.    | 200.  | D*      | TCGS         | 79AND       | 01         |
| 2450.    | 140.  |         | ITNA         | 82OBR       | 01         |
| 2700.    | 175.  |         | ITNA         | 80GAR       | 01         |
| 46500.   |       | *       | EXRF         | 82EBD       | 02         |
| Cd (ppb) |       |         |              |             |            |
|          | 600.  | L*      | AA           | 79CAH       | 01         |
|          | 4000. | L*      | WXRF         | 82MIL       | 01         |
| 150.     | 30.   |         | TCGS         | 79AND       | 01         |
| 200.     | 50.   |         | ITNA         | 80KOS       | 01         |
| 210.     | 30.   | D*      | TCGS         | 80AND       | 01         |
| 210.     | 30.   | D*      | TCGS         | 80GER       | 01         |
| 210.     | 30.   |         | TCGS         | 79FAI       | 01         |

TABLE W (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ce (ppm) |       |         |              |             |            |
| 25.7     | 7.2   |         | CPXRF        | 80KIR       | 01         |
| 26.      | 1.7   |         | ITNA         | 79CAH       | 01         |
| 27.      | 4.    |         | ITNA         | 81KUL       | 01         |
| 27.      | 4.    |         | ITNA         | 80KOS       | 01         |
| 28.5     | 0.3   |         | ITNA         | 81JIN       | 01         |
| 28.5     | 0.4   |         | ICPES        | 82CRO       | 01         |
| 31.1     | 3.4   |         | ITNA         | 80GAR       | 01         |
| 32.      |       | 34      | WXRF         | 82MIL       | 01         |
| 32.      | 4.    |         | ITNA         | 80GER       | 01         |
| Cl (ppm) |       |         |              |             |            |
| 700.     | 100.  |         | XRF          | 79CAH       | 01         |
| 750.     | 60.   |         | ITNA         | 83GLA       | 01         |
| 760.     |       | 34      | WXRF         | 82MIL       | 01         |
| 766.     | 30.   |         | TCGS         | 79AND       | 01         |
| 770.     | 48.   |         | ISE          | 81NAD       | 01         |
| 776.     | 36.   |         | ITNA         | 82OBR       | 01         |
| 784.     | 17.   | D*      | TCGS         | 80GER       | 01         |
| 784.     | 17.   | D*      | TCGS         | 80AND       | 01         |
| 784.     | 17.   |         | TCGS         | 79FAI       | 01         |
| 800.     | 70.   |         | ITNA         | 80GER       | 01         |
| 897.     | 23.   | *       | ITNA         | 80GAR       | 01         |
| Co (ppm) |       |         |              |             |            |
|          | 250.  | L*      | ITNA         | 80TOU       | 01         |
| 5.86     | 0.21  |         | ITNA         | 81JIN       | 01         |
| 6.       |       | 34      | WXRF         | 82MIL       | 01         |
| 6.5      | 0.2   |         | ITNA         | 80GER       | 01         |
| 6.5      | 0.5   |         | ITNA         | 81KUL       | 01         |
| 6.6      | 0.5   | 5       | ITNA         | 80TOU       | 01         |
| 6.6      | 1.1   |         | ITNA         | 80GAR       | 01         |
| 6.8      | 0.3   |         | ITNA         | 80KOS       | 01         |
| 7.5      | 0.4   | *       | ITNA         | 79CAH       | 01         |
| Cr (ppm) |       |         |              |             |            |
| 26.      | 3.    |         | ITNA         | 81KUL       | 01         |
| 26.      | 6.    |         | ITNA         | 80KOS       | 01         |
| 33.3     | 1.6   |         | ITNA         | 81JIN       | 01         |
| 34.      | 2.    |         | ITNA         | 80GER       | 01         |
| 36.      | 2.    |         | ITNA         | 79CAH       | 01         |
| 36.      | 6.    |         | ITNA         | 80GAR       | 01         |
| 36.      | 3.5   |         | CPXRF        | 80KIR       | 01         |
| 39.      | 8.8   |         | AE+AF        | 82GOL       | 01         |
| 40.      |       | 34      | WXRF         | 82MIL       | 01         |
| Cs (ppm) |       |         |              |             |            |
| 1.9      | 0.6   |         | ITNA         | 79CAH       | 01         |
| 2.       | 0.3   |         | ITNA         | 80GER       | 01         |
| 2.3      | 0.11  |         | ITNA         | 81JIN       | 01         |
| 2.4      | 0.8   |         | ITNA         | 80GAR       | 01         |
| 2.4      | 0.2   |         | ITNA         | 81KUL       | 01         |
| 2.5      |       | 34      | WXRF         | 82MIL       | 01         |
| 2.5      | 0.2   |         | ITNA         | 80KOS       | 01         |

TABLE W (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cu (ppm) |       |         |              |             |            |
| 15.9     | 0.4   |         | AA           | 79CAH       | 01         |
| 16.      | 2.1   |         | CPXRF        | 80KIR       | 01         |
| 17.      |       | 34      | WXRF         | 82MIL       | 01         |
| 17.2     | 3.    |         | FAA          | 80LAN       | 01         |
| Dy (ppm) |       |         |              |             |            |
|          | 2.5   | L*      | WXRF         | 82MIL       | 01         |
| 1.83     | 0.11  |         | ITNA         | 82OBR       | 01         |
| 1.98     | 0.53  | 5       | ITNA         | 80TOU       | 01         |
| 2.1      | 0.1   |         | ICPES        | 82CRO       | 01         |
| 2.2      | 0.1   |         | ITNA         | 79CAH       | 01         |
| 2.2      | 0.3   |         | ITNA         | 80GER       | 01         |
| 2.56     | 0.26  |         | ITNA         | 80GAR       | 01         |
| Er (ppm) |       |         |              |             |            |
|          | 3.    | L*      | WXRF         | 82MIL       | 01         |
| 0.91     | 0.05  |         | ICPES        | 82CRO       | 01         |
| Eu (ppb) |       |         |              |             |            |
|          | 1000. | L*      | WXRF         | 82MIL       | 01         |
| 460.     | 20.   | *       | ITNA         | 82OBR       | 01         |
| 490.     | 10.   |         | ICPES        | 82CRO       | 01         |
| 510.     | 82.   |         | ITNA         | 80GAR       | 01         |
| 510.     | 30.   |         | ITNA         | 81JIN       | 01         |
| 540.     | 80.   |         | ITNA         | 80KOS       | 01         |
| 540.     | 80.   |         | ITNA         | 81KUL       | 01         |
| 550.     | 30.   |         | ITNA         | 79CAH       | 01         |
| 550.     | 30.   |         | ITNA         | 80GER       | 01         |
| F (ppm)  |       |         |              |             |            |
| 84.      | 8.    |         | ISE          | 81NAD       | 01         |
| 95.      |       |         | ISE          | 83KNA       | 01         |
| Fe (%)   |       |         |              |             |            |
| 1.07     | 0.03  | *       | XRF          | 79CAH       | 01         |
| 1.1      | 0.06  |         | ITNA         | 81KUL       | 01         |
| 1.1      | 0.02  |         | ITNA         | 81JIN       | 01         |
| 1.11     | 0.06  | D*      | TCGS         | 80GER       | 01         |
| 1.11     | 0.06  | D*      | TCGS         | 80AND       | 01         |
| 1.11     | 0.02  |         | AA           | 82NAD       | 02         |
| 1.11     | 0.06  |         | TCGS         | 79FAI       | 01         |
| 1.12     | 0.01  |         | ITNA         | 80KOS       | 01         |
| 1.12     | 0.01  |         | ICPES        | 82NAD       | 02         |
| 1.12     | 0.09  |         | ITNA         | 80GAR       | 01         |
| 1.14     | 0.01  |         | AA           | 79CAH       | 01         |
| 1.16     | 0.03  |         | ITNA         | 80GER       | 01         |
| 1.16     | 0.37  |         | ITNA         | 79CAH       | 01         |
| 1.17     | 0.04  | *       | TCGS         | 79AND       | 01         |
| 6.78     |       | *       | EXRF         | 82EBD       | 02         |
| Ga (ppm) |       |         |              |             |            |
| 7.2      | 2.5   |         | CPXRF        | 80KIR       | 01         |
| 7.84     | 0.6   |         | ITNA         | 82OBR       | 01         |
| 8.       | 0.8   |         | ITNA         | 80GER       | 01         |

TABLE W (cont)

| CONC      | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------|-------|---------|--------------|-------------|------------|
| 8.4       |       | 34      | WXRF         | 82MIL       | 01         |
| 8.5       | 0.8   |         | ITNA         | 79CAH       | 01         |
| Gd (ppm)  |       |         |              |             |            |
| 1.9       | 0.2   |         | TCGS         | 79AND       | 01         |
| 1.95      | 0.03  | D*      | TCGS         | 80GER       | 01         |
| 1.95      | 0.03  |         | TCGS         | 79FAI       | 01         |
| 2.4       | 0.2   |         | ICPES        | 82CRO       | 01         |
| 3.        | 0.05  |         | TCGS         | 80AND       | 01         |
| 3.        |       | 34      | WXRF         | 82MIL       | 01         |
| Ge (ppm)  |       |         |              |             |            |
| 2.5       |       | 34      | WXRF         | 82MIL       | 01         |
| H (%)     |       |         |              |             |            |
| 3.68      | 0.07  |         | TCGS         | 79AND       | 01         |
| 3.7       | 0.1   | D*      | TCGS         | 80GER       | 01         |
| 3.7       | 0.1   | D*      | TCGS         | 80AND       | 01         |
| 3.7       | 0.1   |         | TCGS         | 79FAI       | 01         |
| 4.17      | 0.01  |         | CB           | 80SCH       | 02         |
| H2O-T (%) |       |         |              |             |            |
| 1.62      |       |         | FD           | 80KHA       | 02         |
| Hf (ppm)  |       |         |              |             |            |
|           | 2.    | L*      | WXRF         | 82MIL       | 01         |
|           | 3.8   | L*      | ITNA         | 80TOU       | 01         |
| 1.44      | 0.09  |         | ITNA         | 81JIN       | 01         |
| 1.55      | 0.08  |         | ITNA         | 80GER       | 01         |
| 1.7       | 0.1   |         | ITNA         | 79CAH       | 01         |
| 1.8       | 0.3   |         | ITNA         | 80GAR       | 01         |
| 1.9       | 0.3   | 5       | ITNA         | 80TOU       | 01         |
| Hg (ppb)  |       |         |              |             |            |
|           | 1500. | L*      | WXRF         | 82MIL       | 01         |
| 118.      | 14.   |         | CVAA         | 80NAD       | 01         |
| 120.      | 50.   |         | ITNA         | 80KOS       | 01         |
| 134.1     | 3.1   |         | CVAA         | 82EBD       | 01         |
| 134.1     |       |         | AF           | 82WIL       | 01         |
| 135.      | 18.   |         | CVAA         | 82DOO       | 01         |
| 170.      | 20.   |         | CVAA         | 81NAD       | 01         |
| 210.      | 90.   |         | ITNA         | 81KUL       | 01         |
| Ho (ppb)  |       |         |              |             |            |
|           | 2000. | L*      | WXRF         | 82MIL       | 01         |
| 380.      | 50.   |         | ICPES        | 82CRO       | 01         |
| I (ppm)   |       |         |              |             |            |
| 0.9       |       | 34      | WXRF         | 82MIL       | 01         |
| 1.77      |       |         | IENA         | 83GLA       | 01         |
| 1.8       | 0.2   |         | ITNA         | 80GER       | 01         |

TABLE W (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| In (ppb) |       |         |              |             |            |
|          | 1000. | L*      | WXRF         | 82MIL       | 01         |
| 36.      | 4.    |         | ITNA         | 80GER       | 01         |
| 36.      | 3.    |         | ITNA         | 82OBR       | 01         |
| 40.      | 10.   |         | ITNA         | 79CAH       | 01         |
| K (ppm)  |       |         |              |             |            |
| 3700.    |       | *       | XRF          | 79CAH       | 01         |
| 3800.    | 50.   |         | ITNA         | 82OBR       | 01         |
| 4000.    | 200.  |         | ITNA         | 81JIN       | 01         |
| 4100.    | 100.  |         | TCGS         | 79AND       | 01         |
| 4100.    | 200.  |         | ICPES        | 82NAD       | 02         |
| 4200.    | 200.  | D*      | TCGS         | 80GER       | 01         |
| 4200.    | 200.  | D*      | TCGS         | 80AND       | 01         |
| 4200.    | 200.  |         | ITNA         | 80GER       | 01         |
| 4200.    | 200.  |         | TCGS         | 79FAI       | 01         |
| 4200.    | 150.  |         | AA           | 82NAD       | 02         |
| 4200.    | 200.  |         | ITNA         | 79CAH       | 01         |
| 4300.    | 645.  |         | ITNA         | 80GAR       | 01         |
| 14900.   |       | *       | EXRF         | 82EBD       | 02         |
| La (ppm) |       |         |              |             |            |
| 10.9     | 0.5   |         | ITNA         | 80KOS       | 01         |
| 12.8     | 0.5   |         | ITNA         | 82OBR       | 01         |
| 13.03    | 0.3   |         | ITNA         | 81JIN       | 01         |
| 14.5     | 0.2   |         | ICPES        | 82CRO       | 01         |
| 15.      | 2.6   |         | ITNA         | 80GAR       | 01         |
| 15.1     | 1.2   |         | ITNA         | 79CAH       | 01         |
| 18.      | 2.    |         | ITNA         | 80GER       | 01         |
| 19.      |       | 34      | WXRF         | 82MIL       | 01         |
| Li (ppm) |       |         |              |             |            |
| 36.2     | 0.1   |         | AA           | 79CAH       | 01         |
| Lu (ppb) |       |         |              |             |            |
|          | 2000. | L*      | WXRF         | 82MIL       | 01         |
| 134.     | 13.   |         | ITNA         | 80KOS       | 01         |
| 150.     | 10.   |         | ICPES        | 82CRO       | 01         |
| 180.     | 70.   |         | ITNA         | 80GAR       | 01         |
| 180.     | 30.   |         | ITNA         | 80GER       | 01         |
| 190.     | 20.   |         | ITNA         | 81JIN       | 01         |
| 220.     | 40.   |         | ITNA         | 79CAH       | 01         |
| Mg (ppm) |       |         |              |             |            |
| 600.     | 300.  | *       | XRF          | 79CAH       | 01         |
| 990.     | 40.   |         | AA           | 82NAD       | 02         |
| 1020.    | 10.   |         | ICPES        | 82NAD       | 02         |
| 1300.    | 300.  |         | ITNA         | 80GER       | 01         |
| 1400.    | 220.  |         | ITNA         | 80GAR       | 01         |
| 19900.   |       | *       | EXRF         | 82EBD       | 02         |
| Mn (ppm) |       |         |              |             |            |
| 20.      | 4.3   |         | CPXRF        | 80KIR       | 01         |
| 26.      | 6.    |         | AE+AF        | 82GOL       | 01         |
| 28.      |       | 34      | WXRF         | 82MIL       | 01         |

TABLE W (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 29.      | 5.    | D*      | TCGS         | 80GER 01    |            |
| 29.      | 1.    |         | ITNA         | 83GLA 01    |            |
| 29.      | 5.    | D*      | TCGS         | 80AND 01    |            |
| 29.      | 5.    |         | TCGS         | 79FAI 01    |            |
| 31.5     | 1.1   |         | ITNA         | 82OBR 01    |            |
| 32.      | 3.    |         | ITNA         | 80GER 01    |            |
| 32.      | 9.    |         | ITNA         | 79CAH 01    |            |
| 33.7     | 1.2   |         | ITNA         | 80GAR 01    |            |
| 34.      |       |         | ICPES        | 82NAD 02    |            |
| 720.     |       | *       | EXRF         | 82ERD 02    |            |
| Mo (ppm) |       |         |              |             |            |
|          | 4.    | L*      | ITNA         | 79CAH 01    |            |
| 2.       | 34    |         | WXRF         | 82MIL 01    |            |
| N (X)    |       |         |              |             |            |
| 1.19     | 0.08  |         | CHEML        | 81NAD 01    |            |
| 1.2      | 0.1   |         | TCGS         | 79AND 01    |            |
| 1.26     | 0.03  |         | CB           | 80SCH 02    |            |
| 1.27     | 0.08  | D*      | TCGS         | 80AND 01    |            |
| 1.27     | 0.08  | D*      | TCGS         | 80GER 01    |            |
| 1.27     | 0.08  |         | TCGS         | 79FAI 01    |            |
| Na (ppm) |       |         |              |             |            |
| 680.     | 38.   |         | ITNA         | 79CAH 01    |            |
| 720.     | 40.   |         | ITNA         | 82OBR 01    |            |
| 760.     | 160.  |         | ITNA         | 83GLA 01    |            |
| 800.     | 50.   |         | AA           | 82NAD 02    |            |
| 810.     | 30.   |         | ICPES        | 82NAD 02    |            |
| 825.     |       | 34      | WXRF         | 82MIL 01    |            |
| 850.     | 40.   |         | ITNA         | 80GER 01    |            |
| 860.     |       |         | ITNA         | 81JIN 01    |            |
| 884.     | 32.   |         | ITNA         | 80GAR 01    |            |
| 940.     | 260.  |         | XRF          | 79CAH 01    |            |
| 1025.    | 125.  |         | ITNA         | 82SCH 05    |            |
| 4450.    |       | *       | EXRF         | 82EBD 02    |            |
| Nb (ppm) |       |         |              |             |            |
| 4.       |       | 34      | WXRF         | 82MIL 01    |            |
| Nd (ppm) |       |         |              |             |            |
| 10.      | 2.    |         | ITNA         | 80GER 01    |            |
| 11.      |       | 34      | WXRF         | 82MIL 01    |            |
| 11.8     | 0.4   | D*      | TCGS         | 80AND 01    |            |
| 11.8     | 0.4   |         | TCGS         | 79FAI 01    |            |
| 13.      | 0.1   |         | ICPES        | 82CRO 01    |            |
| 15.6     | 3.7   | *       | ITNA         | 81JIN 01    |            |
| Ni (ppm) |       |         |              |             |            |
| 15.7     | 0.6   |         | AA           | 79CAH 01    |            |
| 18.      | 3.4   |         | CPXRF        | 80KIR 01    |            |
| 19.      | 3.5   |         | AE+AF        | 82GOL 01    |            |
| 19.4     | 1.4   |         | ITNA         | 81JIN 01    |            |
| 20.4     | 2.    |         | FAA          | 80LAN 01    |            |
| 22.      |       | 34      | WXRF         | 82MIL 01    |            |
| 23.      | 4.    |         | ITNA         | 79CAH 01    |            |
| 26.      | 4.    | *       | PAA          | 80GER 01    |            |

TABLE W (cont)

| CONC        | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------------|-------|---------|--------------|-------------|------------|
| O (X)       |       |         |              |             |            |
| 18.31       | 0.23  | 34      | 14NAA        | 80KHA 02    |            |
| 18.4        | 0.7   |         | 14NAA        | 80NAD 01    |            |
| 19.8        | 0.3   | 35      | 14NAA        | 80KHA 02    |            |
| P (ppm)     |       |         |              |             |            |
| 85.         | 17.   | *       | ICPES        | 81NAD 01    |            |
| 205.        |       | 34      | WXRF         | 82MIL 01    |            |
| 280.        | 80.   |         | XRF          | 79CAH 01    |            |
| 280.        |       |         | AA           | 82NAD 02    |            |
| 280.        | 50.   |         | ICPES        | 82NAD 02    |            |
| 1310.       |       | *       | EXRF         | 82EBD 02    |            |
| Pb (ppm)    |       |         |              |             |            |
| 6.9         | 0.9   |         | ICPES        | 81NAD 01    |            |
| 8.3         | 1.9   |         | CPXRF        | 80KIR 01    |            |
| 12.4        | 0.4   |         | HAA          | 82NAD 01    |            |
| 13.         |       | 34      | WXRF         | 82MIL 01    |            |
| 15.3        | 2.5   |         | AA           | 79CAH 01    |            |
| Pb-21 (PC1) |       |         |              |             |            |
| 0.449       | 0.024 | D*      | NM           | 81CAS 01    |            |
| 0.449       | 0.024 |         | NM           | 80CAS 01    |            |
| Pr (ppm)    |       |         |              |             |            |
| 3.          |       | 34      | WXRF         | 82MIL 01    |            |
| 3.3         | 0.1   |         | ICPES        | 82CRO 01    |            |
| Rb (ppm)    |       |         |              |             |            |
| 28.2        | 410.  | L*      | ITNA         | 80TOU 01    |            |
| 29.         | 1.1   |         | ITNA         | 81JIN 01    |            |
| 29.         |       | 34      | WXRF         | 82MIL 01    |            |
| 29.         | 1.    |         | ITNA         | 80GER 01    |            |
| 29.         | 5.    |         | ITNA         | 81KUL 01    |            |
| 29.         | 5.    | 5       | ITNA         | 80TOU 01    |            |
| 29.         | 5.    |         | IENA         | 80KOS 01    |            |
| 29.         | 1.    |         | PAA          | 80GER 01    |            |
| 30.         | 2.    |         | ITNA         | 79CAH 01    |            |
| 34.         | 4.6   | *       | CPXRF        | 80KIR 01    |            |
| S (X)       |       |         |              |             |            |
| 1.19        | 0.01  | *       | XRF          | 79CAH 01    |            |
| 1.48        | 0.07  |         | XRF          | 81NAD 01    |            |
| 1.59        | 0.02  | D*      | TCGS         | 80GER 01    |            |
| 1.59        | 0.02  | D*      | TCGS         | 80AND 01    |            |
| 1.59        | 0.09  |         | TCGS         | 79AND 01    |            |
| 1.59        | 0.02  |         | TCGS         | 79FAI 01    |            |
| 1.6         | 0.07  |         | CPXRF        | 80KIR 01    |            |
| 1.62        |       |         | UU           | 82EBD 02    |            |
| Sb (ppb)    |       |         |              |             |            |
| 410.        | 150.  |         | HAA          | 82NAD 01    |            |
| 530.        | 50.   |         | ITNA         | 80KOS 01    |            |
| 530.        | 50.   |         | ITNA         | 81KUL 01    |            |

TABLE W (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 600.     | 90.   |         | ITNA         | 80GER       | 01         |
| 620.     | 80.   |         | ITNA         | 81JIN       | 01         |
| 690.     | 50.   | 5       | ITNA         | 80TOU       | 01         |
| 800.     | 50.   |         | ITNA         | 79CAH       | 01         |
| 1000.    |       | *34     | WXRF         | 82MIL       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 5.3      | 1.2   | *       | CPXRF        | 80KIR       | 01         |
| 6.       | 0.3   |         | ITNA         | 81KUL       | 01         |
| 6.2      | 0.2   |         | ITNA         | 79CAH       | 01         |
| 6.2      |       | 34      | WXRF         | 82MIL       | 01         |
| 6.3      | 0.2   | 5       | ITNA         | 80TOU       | 01         |
| 6.3      | 0.1   |         | ITNA         | 80KOS       | 01         |
| 6.56     | 0.23  |         | ITNA         | 80GAR       | 01         |
| 6.7      | 0.05  |         | ITNA         | 81JIN       | 01         |
| 6.8      | 0.6   |         | ITNA         | 80GER       | 01         |
| 6.9      | 0.9   | 5       | ITNA         | 80TOU       | 01         |
| Se (ppm) |       |         |              |             |            |
| 2.4      |       | 34      | WXRF         | 82MIL       | 01         |
| 2.4      | 0.3   |         | RTNA         | 80KNA       | 01         |
| 2.57     | 0.05  |         | ITNA         | 80KOS       | 01         |
| 2.58     |       |         | FAA          | 82WIL       | 01         |
| 2.59     |       |         | AF           | 82WIL       | 01         |
| 2.6      | 0.3   |         | ITNA         | 80GER       | 01         |
| 3.       | 0.1   |         | ITNA         | 79CAH       | 01         |
| 3.12     | 0.17  | *       | HAA          | 82NAD       | 01         |
| Si (%)   |       |         |              |             |            |
| 3.1      | 0.14  | *       | CPXRF        | 80KIR       | 01         |
| 5.8      | 0.1   | D*      | TCGS         | 80AND       | 01         |
| 5.8      | 0.1   | D*      | TCGS         | 80GER       | 01         |
| 5.8      | 0.1   |         | TCGS         | 79FAI       | 01         |
| 5.92     | 0.01  |         | XRF          | 79CAH       | 01         |
| 6.05     | 0.2   |         | TCGS         | 79AND       | 01         |
| 6.09     | 0.07  |         | ICPES        | 82NAD       | 02         |
| 6.21     | 0.08  |         | AA           | 82NAD       | 02         |
| 27.79    |       | *       | EXRF         | 82EBD       | 02         |
| Sm (ppm) |       |         |              |             |            |
|          | 110.  | L*      | ITNA         | 80TOU       | 01         |
| 1.1      | 0.1   | *       | ITNA         | 80KOS       | 01         |
| 1.9      | 0.1   | 5       | ITNA         | 80TOU       | 01         |
| 2.       |       | 34      | WXRF         | 82MIL       | 01         |
| 2.1      | 0.07  | D*      | TCGS         | 80GER       | 01         |
| 2.1      | 0.07  | D*      | TCGS         | 80AND       | 01         |
| 2.1      | 0.07  |         | TCGS         | 79FAI       | 01         |
| 2.1      | 0.05  |         | TCGS         | 79AND       | 01         |
| 2.5      | 0.4   |         | ITNA         | 80GAR       | 01         |
| 2.57     | 0.09  |         | ITNA         | 81JIN       | 01         |
| 2.6      | 0.1   |         | ITNA         | 79CAH       | 01         |
| 2.6      | 0.1   |         | ICPES        | 82CRO       | 01         |
| 2.62     | 0.13  |         | ITNA         | 82OBR       | 01         |
| 2.8      | 0.3   |         | ITNA         | 80GER       | 01         |
| Sn (ppm) |       |         |              |             |            |
| 1.       |       | 34      | WXRF         | 82MIL       | 01         |
| 8.08     | 1.02  |         | HAA          | 82NAD       | 01         |

TABLE W (cont)

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| Sr (ppm)     |       |         |              |             |            |
| 83.6         | 7.8   |         | ITNA         | 82OBR       | 01         |
| 84.          | 9.    |         | ITNA         | 80GER       | 01         |
| 90.          |       | 34      | WXRF         | 82MIL       | 01         |
| 91.          | 18.   |         | ITNA         | 79CAH       | 01         |
| 95.5         | 11.8  |         | ITNA         | 81JIN       | 01         |
| Ta (ppb)     |       |         |              |             |            |
|              | 2000. | L*      | WXRF         | 82MIL       | 01         |
| 390.         | 50.   |         | ITNA         | 79CAH       | 01         |
| 400.         | 30.   |         | ITNA         | 80GER       | 01         |
| 450.         | 50.   |         | ITNA         | 81JIN       | 01         |
| Tb (ppb)     |       |         |              |             |            |
|              | 2000. | L*      | WXRF         | 82MIL       | 01         |
| 290.         | 30.   |         | ITNA         | 81JIN       | 01         |
| 300.         | 100.  |         | ICPES        | 82CRO       | 01         |
| 320.         | 50.   |         | ITNA         | 80GER       | 01         |
| 330.         | 40.   |         | ITNA         | 79CAH       | 01         |
| Te (ppb)     |       |         |              |             |            |
|              | 600.  | L*      | WXRF         | 82MIL       | 01         |
| 500.         | 50.   |         | HAA          | 82NAD       | 01         |
| Th (ppm)     |       |         |              |             |            |
|              | 1600. | L*      | ITNA         | 80TOU       | 01         |
| 3.1          | 0.5   | *       | CPXRF        | 80KIR       | 01         |
| 4.2          | 0.3   |         | ITNA         | 79CAH       | 01         |
| 4.2          | 0.2   | 5       | ITNA         | 80TOU       | 01         |
| 4.3          | 0.9   |         | ITNA         | 81KUL       | 01         |
| 4.3          | 0.3   |         | ITNA         | 80KOS       | 01         |
| 4.48         | 0.04  |         | ITNA         | 81JIN       | 01         |
| 4.8          | 0.2   |         | ITNA         | 80GER       | 01         |
| 4.8          | 0.6   |         | ITNA         | 80GAR       | 01         |
| 5.           |       | 34      | WXRF         | 82MIL       | 01         |
| Th (ppm)     |       |         |              |             |            |
|              | 1600. | L*      | ITNA         | 80TOU       | 01         |
| 3.1          | 0.5   | *       | CPXRF        | 80KIR       | 01         |
| 4.2          | 0.3   |         | ITNA         | 79CAH       | 01         |
| 4.2          | 0.2   | 5       | ITNA         | 80TOU       | 01         |
| 4.3          | 0.9   |         | ITNA         | 81KUL       | 01         |
| 4.3          | 0.3   |         | ITNA         | 80KOS       | 01         |
| 4.48         | 0.04  |         | ITNA         | 81JIN       | 01         |
| 4.8          | 0.2   |         | ITNA         | 80GER       | 01         |
| 4.8          | 0.6   |         | ITNA         | 80GAR       | 01         |
| 5.           |       | 34      | WXRF         | 82MIL       | 01         |
| Th-228 (PC1) |       |         |              |             |            |
| 0.499        | 0.011 | D*      | NM           | 81CAS       | 01         |
| 0.499        | 0.011 |         | NM           | 80CAS       | 01         |
| Th-230 (PC1) |       |         |              |             |            |
| 0.452        | 0.017 | D*      | NM           | 81CAS       | 01         |
| 0.452        | 0.017 |         | NM           | 80CAS       | 01         |

TABLE W (cont)

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| Th-232 (PC1) |       |         |              |             |            |
| 0.484        | 0.018 | D*      | NM           | 81CAS       | 01         |
| 0.484        | 0.018 |         | NM           | 80CAS       | 01         |
| Ti (ppm)     |       |         |              |             |            |
| 1480.        | 30.   | D*      | TCGS         | 79AND       | 01         |
| 1550.        | 40.   |         | TCGS         | 80GER       | 01         |
| 1550.        | 40.   | D*      | TCGS         | 80AND       | 01         |
| 1550.        | 40.   | 34      | TCGS         | 79FAI       | 01         |
| 1600.        | 40.   |         | ICPES        | 82NAD       | 02         |
| 1600.        | 45.   | 34      | WXRF         | 82MIL       | 01         |
| 1620.        |       |         | ITNA         | 82OBR       | 01         |
| 1630.        | 70.   | 300.    | ITNA         | 80GER       | 01         |
| 1700.        | 300.  |         | CPXRF        | 80KIR       | 01         |
| 1720.        | 170.  | 100.    | ITNA         | 80GAR       | 01         |
| 1760.        | 5990. |         | *            | AA          | 82NAD      |
| 1800.        |       | XRF     |              | 79CAH       | 01         |
| 5990.        |       | EXRF    |              | 82EBD       | 02         |
| Ti (ppm)     |       |         |              |             |            |
|              | 1.    | L*      | WXRF         | 82MIL       | 01         |
| Tm (ppb)     |       |         |              |             |            |
|              | 1000. | L*      | WXRF         | 82MIL       | 01         |
| 400.         | 100.  |         | ICPES        | 82CRO       | 01         |
| U (ppm)      |       |         |              |             |            |
|              | 62.   | L*      | ITNA         | 80TOU       | 01         |
| 1.           | 0.2   | *34     | WXRF         | 82MIL       | 01         |
| 1.1          |       |         | ITNA         | 79CAH       | 01         |
| 1.12         | 0.4   | 5       | ITNA         | 81KUL       | 01         |
| 1.16         | 0.11  |         | ITNA         | 81JIN       | 01         |
| 1.2          | 0.1   | 5       | ITNA         | 80TOU       | 01         |
| 1.21         | 0.1   |         | ITNA         | 80GER       | 01         |
| 1.24         | 0.1   | 35      | IENA         | 81KUL       | 02         |
| 1.24         | 0.04  |         | IENA         | 80KOS       | 01         |
| 1.26         | 0.08  | 35      | DNA          | 83GLA       | 01         |
| 1.28         | 0.08  |         | DNA          | 80GAR       | 01         |
| 1.3          | 0.1   | *35     | DNA          | 81GLA       | 04         |
| 1.3          | 0.11  |         | ITNA         | 82OBR       | 01         |
| 1.45         | 0.05  |         | DNA          | 81GLA       | 03         |
| U-234 (PC1)  |       |         |              |             |            |
| 0.448        | 0.012 | D*      | NM           | 80CAS       | 01         |
| 0.448        | 0.012 |         | NM           | 81CAS       | 01         |
| U-235 (FC1)  |       |         |              |             |            |
| 22.8         | 1.9   | D*      | NM           | 80CAS       | 01         |
| 22.8         | 1.9   |         | NM           | 81CAS       | 01         |

TABLE W (cont)

| CONC        | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------------|-------|---------|--------------|-------------|------------|
| U-238 (PG1) |       |         |              |             |            |
| 0.444       | 0.016 |         | NM           | 80CAS       | 01         |
| 0.444       | 0.016 | D*      | NM           | 81CAS       | 01         |
| V (ppm)     |       |         |              |             |            |
| 42.         | 4.2   |         | FAA          | 80LAN       | 01         |
| 43.         |       | 34      | WXRF         | 82MIL       | 01         |
| 43.4        | 1.8   |         | ITNA         | 82OBR       | 01         |
| 44.         | 3.    |         | ITNA         | 80GER       | 01         |
| 45.         | 2.    |         | ITNA         | 83GLA       | 01         |
| 46.         | 8.2   | 6       | AE+AF        | 82GOL       | 01         |
| 46.9        | 2.5   |         | CPXRF        | 80KIR       | 01         |
| 48.         | 7.    | 6       | ITNA         | 80GAR       | 01         |
|             |       |         | AE+AF        | 82GOL       | 01         |
| W (ppb)     |       |         |              |             |            |
|             | 1500. | L*      | WXRF         | 82MIL       | 01         |
| 600.        | 200.  |         | ITNA         | 80GER       | 01         |
| 780.        | 230.  |         | ITNA         | 82OBR       | 01         |
| 890.        | 150.  |         | ITNA         | 81JIN       | 01         |
| 1000.       | 300.  |         | ITNA         | 79CAH       | 01         |
| Y (ppm)     |       |         |              |             |            |
| 5.8         | 0.5   |         | PAA          | 80GER       | 01         |
| 8.3         | 0.5   |         | ICPES        | 82CRO       | 01         |
| 9.5         |       | 34      | WXRF         | 82MIL       | 01         |
| Yb (ppm)    |       |         |              |             |            |
|             | 2200. | L*      | ITNA         | 80TOU       | 01         |
|             | 2.    | L*      | WXRF         | 82MIL       | 01         |
| 0.9         | 0.01  |         | ICPES        | 82CRO       | 01         |
| 0.98        | 0.08  |         | ITNA         | 80GER       | 01         |
| 0.98        | 0.07  |         | ITNA         | 81JIN       | 01         |
| 1.1         | 0.1   | 5       | ITNA         | 80TOU       | 01         |
| 1.2         | 0.1   |         | ITNA         | 79CAH       | 01         |
| Zn (ppm)    |       |         |              |             |            |
| 24.3        | 4.    |         | AA           | 79CAH       | 01         |
| 27.         | 6.    |         | ITNA         | 79CAH       | 01         |
| 28.         | 3.7   |         | CPXRF        | 80KIR       | 01         |
| 28.         |       | 34      | WXRF         | 82MIL       | 01         |
| 30.         | 3.    |         | ITNA         | 80KOS       | 01         |
| 31.         | 6.    |         | ITNA         | 80GER       | 01         |
| Zr (ppm)    |       |         |              |             |            |
| 47.         | 6.    |         | ITNA         | 80GER       | 01         |
| 55.         |       | 34      | WXRF         | 82MIL       | 01         |
| 57.         | 5.    |         | PAA          | 80GER       | 01         |

TABLE X

NBS SRM 1633—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppb) |       |         |              |             |            |
|          | 400.  | L*      | PAA          | 76CHA 01    |            |
|          | 4000. | L*      | EXRF         | 77GIA 01    |            |
|          | 1000. | L*      | OES          | 76WEW 01    |            |
|          | 300.  | L*      | ICPES        | 81CHU 01    |            |
|          | 100.  | D*      | ITNA         | 78RYA 01    |            |
|          | 600.  | L*      | IENA         | 80GLA 03    |            |
|          | 100.  | L*      | ITNA         | 77CHA 01    |            |
|          | 500.  | L*      | UU           | 80HEN 01    |            |
|          | 400.  | D*      | PAA          | 77CHA 01    |            |
| 258.     | 20.   |         | RTNA         | 77NAD 02    |            |
| 350.     |       |         | AA           | 76WEW 01    |            |
| 1320.    | 130.  |         | PAA          | 74CHA 01    |            |
| Al (%)   |       |         |              |             |            |
| 10.4     | 0.6   | *       | ITNA         | 78MAC 01    |            |
| 10.96    | 0.402 | *       | ITNA         | 73SHE 01    |            |
| 11.6     |       |         | ICPES        | 80NAD 01    |            |
| 11.7     | 2.    |         | XRF          | 79SMI 01    |            |
| 11.8     | 0.8   |         | ITNA         | 76BLO 01    |            |
| 12.      | 1.    |         | ITNA         | 76OND 01    |            |
| 12.1     | 0.5   |         | ITNA         | 76RAG 01    |            |
| 12.2     | 0.5   |         | 14NAA        | 81WIL 02    |            |
| 12.2     | 0.3   |         | ITNA         | 77MAE 01    |            |
| 12.3     | 0.6   | D*      | ITNA         | 78RYA 01    |            |
| 12.3     |       | 35      | TCGS         | 78GLA 04    |            |
| 12.3     | 0.5   |         | ITNA         | 76WEW 01    |            |
| 12.3     | 0.6   |         | ITNA         | 77CHA 01    |            |
| 12.35    | 0.25  |         | ITNA         | 77ROW 03    |            |
| 12.35    | 0.25  |         | ITNA         | 76STE 05    |            |
| 12.4     | 0.7   | 35      | ITNA         | 81GLA 03    |            |
| 12.5     |       |         | ITNA         | 75KLE 01    |            |
| 12.5     | 0.3   |         | ICPES        | 80NAD 01    |            |
| 12.6     | 0.4   |         | ITNA         | 73ABE 01    |            |
| 12.6     | 0.2   | D*      | TCGS         | 80AND 01    |            |
| 12.6     | 0.1   | 35      | ITNA         | 81GLA 02    |            |
| 12.6     | 0.2   |         | TCGS         | 79FAI 01    |            |
| 12.6     | 0.7   |         | AA           | 76OND 01    |            |
| 12.7     | 0.05  |         | FAA          | 77PIL 01    |            |
| 12.7     |       |         | AA           | 79SIL 01    |            |
| 12.7     |       |         | UU           | 80HEN 01    |            |
| 12.7     | 0.5   |         | ITNA         | 75OND 01    |            |
| 12.7     |       |         | OES          | 80WAL 01    |            |
| 12.7     |       |         | ITNA         | 78WEA 01    |            |
| 12.8     | 0.3   |         | ITNA         | 78LAU 02    |            |
| 12.8     |       |         | ICPES        | 80FLO 01    |            |
| 12.99    | 0.47  |         | ICPES        | 81CHU 01    |            |
| 13.      | 2.6   |         | OES          | 76WEW 01    |            |
| 13.      | 0.2   |         | TCGS         | 79AND 01    |            |
| 13.6     | 0.5   |         | 14NAA        | 81WIL 01    |            |
| 14.      | 1.    |         | AA           | 80STO 02    |            |
| 14.      |       |         | OES          | 78SUG 01    |            |
| 14.1     | 2.8   | *       | ITNA         | 81WAN 01    |            |
| 14.3     | 1.1   | *       | ITNA         | 78NAD 02    |            |
| 14.3     | 1.1   | *       | ITNA         | 75NAD 02    |            |
| As (ppm) |       |         |              |             |            |
| 46.      |       | *       | ITNA         | 78KEL 02    |            |
| 49.      | 5.    | *       | ITNA         | 76KUC 01    |            |

TABLE X (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 50.  |       | *6      | SSMS         | 78GUI 01    |            |
| 54.  | 1.    |         | IENA         | 78WAN 01    |            |
| 54.  | 3.    |         | ITNA         | 78MAC 01    |            |
| 54.  |       |         | ITNA         | 75KLE 01    |            |
| 55.  | 10.   |         | ICPES        | 81CHU 01    |            |
| 55.  |       |         | FAA          | 78GUI 01    |            |
| 55.8 | 1.4   | H       | AE+AF        | 77FEL 01    |            |
| 56.  |       |         | ICPES        | 80FLO 01    |            |
| 56.  | 1.    | H       | FAE          | 79FEL 01    |            |
| 56.6 | 3.6   |         | ITNA         | 81WAN 01    |            |
| 57.  | 3.    | 35      | NAA          | 81GLA 03    |            |
| 57.  |       |         | ICPES        | 82NYG 01    |            |
| 57.  | 4.    |         | ITNA         | 75OND 01    |            |
| 58.  | 1.    | 35      | RTNA         | 78GLA 02    |            |
| 58.  | 4.    | D*      | NAA          | 74OND 01    |            |
| 58.  | 4.    |         | FAA          | 78HAY 01    |            |
| 58.  | 2.    |         | IENA         | 76STE 05    |            |
| 58.  | 1.    |         | ITNA         | 76BLO 01    |            |
| 58.1 | 1.6   |         | RTNA         | 81GAL 02    |            |
| 58.1 | 1.6   |         | RTNA         | 81GAL 01    |            |
| 59.  | 2.    | 35      | VV           | 81GLA 04    |            |
| 59.  | 4.    | D*      | ITNA         | 78RYA 01    |            |
| 59.  | 3.5   |         | HAA          | 77SMI 01    |            |
| 59.  | 4.    |         | ITNA         | 77CHA 01    |            |
| 59.  |       |         | ITNA         | 78WEA 01    |            |
| 59.1 | 4.8   |         | IENA         | 77ROW 04    |            |
| 59.8 | 2.    |         | IENA         | 77ROW 03    |            |
| 60.  | 3.    |         | GCMES        | 75TAL 01    |            |
| 60.  |       |         | UU           | 80HEN 01    |            |
| 60.  | 2.6   | D*      | PAA          | 77CHA 01    |            |
| 60.  | 2.6   |         | NAA          | 77JER 01    |            |
| 60.  | 2.6   |         | PAA          | 76CHA 01    |            |
| 60.4 | 0.8   | 35      | IENA         | 80GLA 03    |            |
| 60.7 | 2.6   |         | PAA          | 74CHA 01    |            |
| 61.  | 5.    |         | ITNA         | 73ABE 01    |            |
| 61.  | 4.    |         | ITNA         | 76OND 01    |            |
| 61.  | 3.    |         | RTNA         | 74ORV 01    |            |
| 61.5 | 2.4   |         | ITNA         | 77ROW 04    |            |
| 61.5 | 3.    |         | PAA          | 75OND 01    |            |
| 62.  |       |         | XRF          | 78CAM 02    |            |
| 63.  | 4.    |         | FAE          | 80DSI 01    |            |
| 63.  | 4.    |         | PAA          | 80SEG 01    |            |
| 63.  | 4.    | 6       | PAA          | 82SEG 01    |            |
| 63.  | 7.    |         | EXRF         | 77GIA 01    |            |
| 63.  | 4.    | 6       | PAA          | 82SEG 01    |            |
| 63.7 | 3.6   |         | HAA          | 82NAD 01    |            |
| 64.  | 2.    |         | ITNA         | 78LAU 02    |            |
| 64.  | 4.    |         | ITNA         | 76RAG 01    |            |
| 64.  | 1.    |         | PAA          | 76KAT 03    |            |
| 65.  | 1.    |         | PAA          | 76KAT 02    |            |
| 66.  | 1.    |         | XRF          | 79SMI 01    |            |
| 66.3 | 10.1  |         | FAA          | 82BEN 01    |            |
| 67.6 | 0.6   |         | ITNA         | 75NAD 02    |            |
| 68.  | 6.    |         | ITNA         | 78NAD 02    |            |
| 68.  | 12.   |         | 14NAA        | 81WIL 02    |            |
| 68.  | 15.   |         | ITNA         | 76WEW 01    |            |
| 68.  | 12.   |         | 14NAA        | 81WIL 01    |            |
| 69.5 | 7.6   |         | ITNA         | 73SHE 01    |            |
| 72.  |       | *6      | SSMS         | 78GUI 01    |            |

TABLE X (cont)

| CONC            | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|--------|---------|--------------|-------------|------------|
| <b>Au (ppb)</b> |        |         |              |             |            |
|                 | 30000. | L*      | OES          | 76WEW       | 01         |
|                 | 8000.  | L*      | 14NAA        | 81WIL       | 01         |
|                 | 300.   | L*      | ICPES        | 81CHU       | 01         |
|                 | 500.   | L*      | UU           | 80HEN       | 01         |
| 2.75            | 0.2    |         | RTNA         | 77NAD       | 02         |
| 4.84            | 0.13   |         | RTNA         | 77NAD       | 01         |
| 8.              | 2.     | D*      | ITNA         | 78RYA       | 01         |
| 8.              | 2.     |         | ITNA         | 77CHA       | 01         |
| 1700.           |        | *       | ITNA         | 78WEA       | 01         |
| <b>B (ppm)</b>  |        |         |              |             |            |
| 100.            |        | *       | UU           | 80HEN       | 01         |
| 320.            |        |         | COLOR        | 79DAL       | 01         |
| 340.            |        |         | OES          | 79DAL       | 01         |
| 407.            |        |         | ICPES        | 80NAD       | 01         |
| 433.            | 4.     | D*      | TCGS         | 80AND       | 01         |
| 433.            | 4.     |         | TCGS         | 79FAI       | 01         |
| 443.            | 5.     |         | TCGS         | 79AND       | 01         |
| 450.            | 20.    |         | ICPES        | 82OWE       | 01         |
| 490.            | 14.    | 6       | TCGS         | 76GLA       | 01         |
| 492.            | 13.    | 6       | TCGS         | 76GLA       | 01         |
| 497.            | 14.    | 6       | TCGS         | 76GLA       | 01         |
| 500.            | 29.    |         | OES          | 76WEW       | 01         |
| <b>Ba (ppm)</b> |        |         |              |             |            |
| 1800.           |        | *       | XRF          | 76WEW       | 01         |
| 2100.           | 100.   | *       | 14NAA        | 81WIL       | 01         |
| 2300.           | 100.   |         | AA           | 76OND       | 01         |
| 2370.           |        |         | ICPES        | 80NAD       | 01         |
| 2490.           |        |         | ITNA         | 75MIL       | 01         |
| 2500.           | 250.   |         | ITNA         | 81WAN       | 01         |
| 2500.           |        |         | UU           | 80HEN       | 01         |
| 2500.           | 300.   |         | ITNA         | 76WEW       | 01         |
| 2510.           | 50.    |         | IENA         | 77ROW       | 04         |
| 2510.           | 200.   |         | ITNA         | 76OND       | 01         |
| 2510.           | 160.   |         | ITNA         | 76RAG       | 01         |
| 2520.           |        |         | AA           | 79SIL       | 01         |
| 2540.           |        |         | XRF          | 78CAM       | 02         |
| 2540.           | 51.    |         | IENA         | 76STE       | 05         |
| 2540.           | 50.    |         | IENA         | 77ROW       | 03         |
| 2550.           | 110.   |         | 14NAA        | 81WIL       | 02         |
| 2550.           | 30.    |         | ITNA         | 77ROW       | 04         |
| 2580.           | 170.   |         | ITNA         | 76STE       | 05         |
| 2600.           | 170.   | 5       | IENA         | 80GLA       | 03         |
| 2600.           | 160.   |         | PAA          | 76CHA       | 01         |
| 2600.           | 300.   |         | ITNA         | 78LAU       | 02         |
| 2600.           | 160.   | D*      | PAA          | 77CHA       | 01         |
| 2610.           | 210.   |         | PAA          | 74CHA       | 01         |
| 2630.           | 20.    |         | XRF          | 79SMI       | 01         |
| 2660.           | 150.   |         | ITNA         | 83GLA       | 01         |
| 2670.           | 85.    |         | EXRF         | 77GIA       | 01         |
| 2700.           |        |         | ITNA         | 78WEA       | 01         |
| 2700.           | 200.   |         | ITNA         | 78NAD       | 02         |
| 2700.           | 200.   |         | ITNA         | 75OND       | 01         |
| 2700.           | 200.   |         | ITNA         | 75NAD       | 02         |
| 2710.           | 190.   |         | ITNA         | 77CHA       | 01         |
| 2710.           | 190.   | D*      | ITNA         | 78RYA       | 01         |
| 2720.           | 80.    | 5       | IENA         | 80GLA       | 03         |

TABLE X (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| 2734.           | 167.  |         | ITNA         | 73SHE       | 01         |
| 2750.           | 140.  | 5       | IENA         | 80GLA       | 03         |
| 2780.           |       |         | ITNA         | 75KLE       | 01         |
| 2800.           | 100.  | 35      | ITNA         | 81GLA       | 03         |
| 2800.           |       |         | ICPES        | 80FLO       | 01         |
| 2800.           | 100.  | 9       | ITNA         | 78LAU       | 02         |
| 2800.           | 200.  | 35      | ITNA         | 81GLA       | 02         |
| 2840.           | 180.  | 35      | NAA          | 81GLA       | 04         |
| 2880.           | 100.  |         | ITNA         | 77MAE       | 01         |
| 2900.           | 120.  |         | FAA          | 76WEW       | 01         |
| 2900.           | 200.  | 5       | IENA         | 80GLA       | 03         |
| 3000.           | 600.  |         | OES          | 76WEW       | 01         |
| 3200.           | 400.  | *       | ITNA         | 78MAC       | 01         |
| 3400.           | 400.  | *       | ITNA         | 73ABE       | 01         |
| <b>Be (ppm)</b> |       |         |              |             |            |
| 5.              |       | *       | UU           | 80HEN       | 01         |
| 10.1            |       | *6      | FAA          | 79GEL       | 01         |
| 10.9            |       |         | ICPES        | 80NAD       | 01         |
| 11.             |       |         | ICPES        | 80FLO       | 01         |
| 11.             |       |         | OES          | 78SUG       | 01         |
| 12.             |       |         | AA           | 79SIL       | 01         |
| 12.             | 1.    | 35      | FAA          | 76GLA       | 02         |
| 12.             |       |         | AA           | 76WEW       | 01         |
| 12.             | 0.8   |         | FAA          | 75OWE       | 01         |
| 12.1            |       | 6       | FAA          | 79GEL       | 01         |
| 12.3            | 0.3   |         | FAA          | 76OWE       | 01         |
| 12.4            | 0.31  |         | AA           | 74RAI       | 01         |
| 12.6            | 0.25  |         | ICPES        | 81CHU       | 01         |
| 12.6            |       | 6       | FAA          | 79GEL       | 01         |
| 12.6            | 0.5   |         | AA           | 76OND       | 01         |
| 13.2            |       | 6       | FAA          | 79GEL       | 01         |
| 13.5            |       | 6       | FAA          | 79GEL       | 01         |
| 14.             | 0.95  | *       | OES          | 76WEW       | 01         |
| <b>Bi (ppm)</b> |       |         |              |             |            |
|                 | 1.    | L*      | PAA          | 76CHA       | 01         |
|                 | 1.    | D*      | PAA          | 77CHA       | 01         |
|                 | 10.   | L*      | OES          | 76WEW       | 01         |
| 0.7             |       |         | UU           | 80HEN       | 01         |
| 1.08            |       |         | PAA          | 74CHA       | 01         |
| <b>Br (ppm)</b> |       |         |              |             |            |
|                 | 10.   | L*      | IENA         | 80GLA       | 03         |
| 5.8             | 0.8   | 35      | IENA         | 79GLA       | 02         |
| 6.              | 2.    |         | EXRF         | 77GIA       | 01         |
| 6.              |       |         | ITNA         | 75KLE       | 01         |
| 6.              | 1.    |         | ITNA         | 78MAC       | 01         |
| 6.4             | 0.2   | 35      | ITNA         | 81GLA       | 03         |
| 6.5             | 0.2   | 5       | IENA         | 80GLA       | 03         |
| 6.7             | 0.6   |         | ITNA         | 76RAG       | 01         |
| 6.9             | 0.3   | 35      | NAA          | 81GLA       | 04         |
| 7.              | 1.    |         | ITNA         | 78LAU       | 02         |
| 7.5             | 0.5   |         | ITNA         | 78NAD       | 02         |
| 7.52            | 0.46  |         | ITNA         | 75NAD       | 02         |
| 7.7             | 1.5   |         | IENA         | 76STE       | 05         |
| 8.4             | 1.5   |         | IENA         | 77ROW       | 03         |
| 9.2             | 0.6   |         | ITNA         | 77ROW       | 04         |
| 9.2             | 0.8   |         | IENA         | 77ROW       | 04         |
| 9.5             |       |         | XRF          | 78CAM       | 02         |

TABLE X (cont)

| CONC   | UNCER | COMMENT | ANAL<br>METHOD | REF<br>CODE | REF<br>NUM |
|--------|-------|---------|----------------|-------------|------------|
| 10.    |       |         | UU             | 80REN       | 01         |
| 11.2   | 3.5   | D*      | ITNA           | 78RCA       | 01         |
| 11.2   | 3.5   |         | ITNA           | 77TNA       | 01         |
| 12.    | 4.    |         | ITNA           | 73ABE       | 01         |
| 12.    |       |         | ITNA           | 75OND       | 01         |
| 12.    |       |         | ITNA           | 78MEA       | 01         |
| 12.1   | 1.5   |         | ITNA           | 73BSE       | 01         |
| C (%)  |       |         |                |             |            |
| 3.05   | 0.05  |         | CB             | 79SLL       | 01         |
| 3.3    |       |         | UU             | 80REN       | 01         |
| 3.45   | 0.02  |         | GRAY           | 79SLL       | 01         |
| Ce (%) |       |         |                |             |            |
| 3.5    |       | *       | XRF            | 76HEW       | 01         |
| 3.8    |       | *35     | TCGS           | 78GLA       | 04         |
| 3.92   | 0.28  |         | PAA            | 74GIA       | 01         |
| 4.1    | 0.36  |         | ITNA           | 73BSE       | 01         |
| 4.2    |       |         | UU             | 80REN       | 01         |
| 4.2    | 0.2   |         | ITNA           | 76HAG       | 01         |
| 4.21   | 0.09  |         | ITNA           | 75NAD       | 02         |
| 4.21   | 0.09  |         | ITNA           | 75NAD       | 02         |
| 4.3    | 0.3   |         | 35 ITNA        | 81GLA       | 02         |
| 4.3    |       |         | AA             | 79SLL       | 01         |
| 4.3    | 0.2   |         | AA             | 76OND       | 01         |
| 4.4    |       |         | ITNA           | 75KLE       | 01         |
| 4.4-24 |       |         | ANAL           | 81WIL       | 02         |
| 4.4    | 0.18  |         | PAA            | 77CIA       | 01         |
| 4.4    | 0.4   | D*      | PAA            | 76CIA       | 01         |
| 4.4    | 0.4   |         | ITNA           | 75OND       | 01         |
| 4.5    | 0.6   |         | 35 ITNA        | 80GLA       | 01         |
| 4.5    |       |         | ICPES          | 78OZO       | 01         |
| 4.5    | 0.5   | D*      | ITNA           | 78RYA       | 01         |
| 4.5    | 0.5   |         | ITNA           | 77CIA       | 01         |
| 4.6    |       |         | ITNA           | 78LAU       | 02         |
| 4.6    |       |         | EXRF           | 78BGC       | 01         |
| 4.62   | 0.06  |         | ICPES          | 80NAD       | 01         |
| 4.62   | 0.15  |         | EXRF           | 78PEL       | 01         |
| 4.65   | 0.15  |         | ICPES          | 81CHU       | 01         |
| 4.69   | 0.14  |         | ITNA           | 76STE       | 05         |
| 4.7    | 0.14  |         | ONS            | 77BOW       | 03         |
| 4.7    |       |         | ONS            | 80NAD       | 01         |
| 4.7    | 0.3   |         | ITNA           | 77MAE       | 01         |
| 4.73   | 0.42  |         | ITNA           | 81WAN       | 01         |
| 4.75   | 0.08  | D*      | TCGS           | 80AND       | 01         |
| 4.75   | 0.05  |         | TCGS           | 80AND       | 01         |
| 4.8    |       |         | ICPES          | 80NAD       | 01         |
| 4.8    | 0.96  |         | ONS            | 76WEN       | 01         |
| 4.9    | 0.2   |         | AA             | 80STO       | 02         |
| 4.9    | 0.2   |         | TCGS           | 79AND       | 01         |
| 5.     | 1.3   |         | ITNA           | 76OND       | 01         |
| 5.04   |       |         | XRF            | 78CAN       | 02         |
| 5.09   | 0.56  |         | 14NAA          | 77VAN       | 01         |
| 5.1    | 0.03  |         | PAA            | 76LKR       | 03         |
| 5.1    | 0.6   |         | ITNA           | 76WEN       | 01         |
| 5.1    | 0.03  |         | XRF            | 78KAT       | 02         |
| 5.11   | 0.13  |         | UU             | 79SLL       | 01         |
| 5.3    | 0.1   |         | EXRF           | 77NIE       | 01         |
| 5.3    | 0.5   |         | PAA            | 75OND       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cd (ppm) |       |         |              |             |            |
|          |       | 4.      | L*           | EXRF        | 77GIA 01   |
|          |       | 5.      | L*           | OES         | 76WNE 01   |
| 0.93     |       |         | *            | POT         | 82GRU 01   |
| 1.       |       |         | *            | ITNA        | 76WNE 01   |
| 1.2      | 0.2   |         | FAA          | 80BSE 01    |            |
| 1.2      | 0.04  | 7       | AA           | 73TAL 01    |            |
| 1.2      | 0.1   | 6       | FAA          | 92WNO 01    |            |
| 1.2      | 0.04  |         | FAA          | 74TAL 01    |            |
| 1.2      | 0.2   | 6       | FAA          | 82BSE 01    |            |
| 1.3      | 0.25  |         | FAA          | 76WNE 01    |            |
| 1.4      | 0.16  |         | TGGS         | 79AND 01    |            |
| 1.43     | 0.07  |         | RTNA         | 81CAL 01    |            |
| 1.43     | 0.04  |         | RTNA         | 74ORV 01    |            |
| 1.43     |       |         | FAA          | 78GUT 01    |            |
| 1.43     | 0.07  |         | RTNA         | 81CAL 02    |            |
| 1.45     | 0.04  |         | AA           | 75EPS 01    |            |
| 1.46     |       |         | AE+AF        | 77PEL 01    |            |
| 1.46     | 0.05  |         | AA           | 74RAI 01    |            |
| 1.5      | 0.09  |         | 73TAL        | 73TAL 01    |            |
| 1.5      | 0.1   |         | NAA          | 77ZER 01    |            |
| 1.5      | 0.07  | D*      | TGGS         | 80AND 01    |            |
| 1.5      | 0.5   |         | ICPES        | 81CHU 01    |            |
| 1.5      | 0.1   |         | FAA          | 76DMA 01    |            |
| 1.5      | 0.5   |         | TGGS         | 77PAI 01    |            |
| 1.5      | 0.1   | D*      | FAA          | 77CSA 01    |            |
| 1.5      |       |         | POL          | 74MAI 01    |            |
| 1.5      | 0.15  |         | FAA          | 74RAI 01    |            |
| 1.5      | 0.09  |         | FAA          | 74TAL 01    |            |
| 1.52     | 0.08  |         | 77SPS 01     |             |            |
| 1.52     | 0.07  |         | FAA          | 74CIA 01    |            |
| 1.53     |       |         | AA           | 76WNE 01    |            |
| 1.53     | 1.55  |         | FAA          | 78SEL 01    |            |
| 1.6      | 0.15  | 7       | AE+AF        | 73TAL 01    |            |
| 1.6      | 0.2   | 6       | TGGS         | 76CIA 01    |            |
| 1.6      | 0.5   |         | ICPES        | 80EPS 01    |            |
| 1.6      | 0.15  |         | FAE          | 74TAL 01    |            |
| 1.63     | 0.07  | 8       | SRMS         | 80KOP 01    |            |
| 1.7      |       |         |              | 78SEL 01    |            |
| 1.77     | 0.2   |         | AA           | 76ORD 01    |            |
| 1.85     |       | *       | IDMS         | 75KIL 01    |            |
| 15.      |       | *       | UU           | 80RHN 01    |            |
| Ce (ppm) |       |         |              |             |            |
| 125.     |       |         | *            | UU          | 80RHN 01   |
| 129.     |       |         | *            | ITNA        | 73SEI 01   |
| 136.     | 5.    |         | *            | 14NNA       | 81CYL 01   |
| 136.     | 8.    |         |              | 14NNA       | 81CYL 02   |
| 140.     |       |         |              | 80SFO 01    |            |
| 140.     | 10.   | D*      | ITNA         | 78RYA 01    |            |
| 140.     | 10.   |         | ITNA         | 77GHA 01    |            |
| 140.     | 7.    |         | ITNA         | 81WAK 01    |            |
| 145.     | 5.    |         | ITNA         | 76LAE 01    |            |
| 145.     | 6.    |         | ITNA         | 76WNE 01    |            |
| 146.     |       |         | ITNA         | 82CIA 02    |            |
| 146.     | 15.   |         | ITNA         | 75OND 01    |            |
| 146.     | 17.   |         | ITNA         | 76OND 01    |            |
| 148.     | 7.    | 35      |              | 81CIA 02    |            |
| 148.     | 16.   |         | ITNA         | 75RAC 01    |            |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 149.     | 7.    | 35      | NAA          | 81GLA       | 04         |
| 149.     | 4.    |         | XRF          | 79SMI       | 01         |
| 149.6    | 2.    | D*      | ITNA         | 77ROW       | 04         |
| 149.6    | 2.    |         | ITNA         | 77ROW       | 03         |
| 150.6    | 3.3   |         | IENA         | 77ROW       | 04         |
| 152.     | 10.   |         | PAA          | 76CHA       | 01         |
| 152.     | 10.   | D*      | PAA          | 77CHA       | 01         |
| 153.     | 3.    | 35      | ITNA         | 81GLA       | 03         |
| 153.     | 2.    |         | PAA          | 76KAT       | 03         |
| 153.     | 1.    |         | PAA          | 76KAT       | 02         |
| 154.     | 8.    | 35      | IENA         | 80GLA       | 03         |
| 154.     |       |         | XRF          | 78CAM       | 02         |
| 157.     | 3.2   |         | ICPES        | 81CHU       | 01         |
| 160.     | 23.   |         | EXRF         | 77GIA       | 01         |
| 161.     | 35.   |         | ITNA         | 75NAD       | 02         |
| 161.     | 35.   |         | ITNA         | 78NAD       | 02         |
| 169.     |       | *       | ITNA         | 75MIL       | 01         |
| 176.     | 4.    | *       | ITNA         | 78MAC       | 01         |
| 200.     | 100.  | *       | OES          | 76WEW       | 01         |
| 210.     | 34.   | *       | SSMS         | 78SUG       | 02         |
| Cl (ppm) |       |         |              |             |            |
|          | 500.  |         | ITNA         | 73ABE       | 01         |
| 19.6     | 0.1   |         | PAA          | 74CHA       | 01         |
| 20.      | 2.    |         | ITNA         | 78NAD       | 02         |
| 20.      | 2.    |         | ITNA         | 75NAD       | 02         |
| 25.      | 7.    | D*      | PAA          | 77CHA       | 01         |
| 25.      | 7.    |         | PAA          | 76CHA       | 01         |
| 32.      | 10.   | D*      | ITNA         | 78RYA       | 01         |
| 32.      | 10.   |         | ITNA         | 77CHA       | 01         |
| 40.      | 8.    |         | ITNA         | 78MAC       | 01         |
| 42.      |       |         | ITNA         | 78WEA       | 01         |
| 42.      | 10.   |         | ITNA         | 75OND       | 01         |
| 50.      |       |         | UU           | 80HEN       | 01         |
| 52.      | 15.   |         | ITNA         | 81WAN       | 01         |
| 56.      |       | 35      | ITNA         | 81GLA       | 03         |
| 58.      | 9.    |         | ITNA         | 77MAE       | 01         |
| 185.     | 44.   | *       | ITNA         | 73SHE       | 01         |
| Co (ppm) |       |         |              |             |            |
|          | 52.   | L*      | XRF          | 78CAM       | 02         |
|          | 150.  | L*      | XRF          | 81COH       | 02         |
|          | 130.  | L*      | EXRF         | 77GIA       | 01         |
| 26.      |       | *       | ICPES        | 80NAD       | 01         |
| 32.      | 2.    | *       | AA           | 77MIT       | 01         |
| 35.      | 2.    |         | ITNA         | 76KUC       | 01         |
| 35.4     | 2.8   |         | PAA          | 74CHA       | 01         |
| 36.2     | 1.1   |         | ITNA         | 76BLO       | 01         |
| 36.7     | 3.9   |         | ITNA         | 75NAD       | 02         |
| 37.      | 4.    |         | ITNA         | 78NAD       | 02         |
| 38.      |       |         | ITNA         | 78WEA       | 01         |
| 38.      | 2.    | 35      | IENA         | 80GLA       | 03         |
| 38.      | 0.96  |         | OES          | 76WEW       | 01         |
| 38.      | 2.    |         | ITNA         | 78MAC       | 01         |
| 38.6     | 3.7   |         | ITNA         | 73SHE       | 01         |
| 39.      |       |         | AA           | 76WEW       | 01         |
| 39.4     | 1.2   |         | ITNA         | 76RAC       | 01         |
| 39.8     | 0.9   |         | ITNA         | 81WAN       | 01         |
| 40.      | 2.    | 35      | NAA          | 81GLA       | 04         |
| 40.      | 2.    |         | PAA          | 76CHA       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 40.      | 2.    |         | ITNA         | 73ABE       | 01         |
| 40.      | 2.    |         | ITNA         | 76OND       | 01         |
| 40.      | 2.    | D*      | PAA          | 77CHA       | 01         |
| 40.      | 4.    |         | FAA          | 76OWE       | 01         |
| 40.1     | 0.6   |         | ITNA         | 83GLA       | 01         |
| 40.3     | 0.4   |         | ITNA         | 77ROW       | 03         |
| 40.3     | 0.4   | D*      | ITNA         | 77ROW       | 04         |
| 41.      |       |         | ICPES        | 80FLO       | 01         |
| 41.      | 1.    |         | ITNA         | 78LAU       | C2         |
| 41.      | 3.    |         | ITNA         | 76WEW       | 01         |
| 41.      | 2.    | 35      | ITNA         | 81GLA       | 03         |
| 41.      | 0.6   |         | IENA         | 77ROW       | 04         |
| 41.      | 1.2   |         | ICPES        | 81CHU       | 01         |
| 41.      | 1.    | 35      | ITNA         | 81GLA       | 02         |
| 41.5     | 1.2   |         | ITNA         | 75OND       | 01         |
| 42.      | 1.6   | D*      | ITNA         | 78RYA       | 01         |
| 42.      |       |         | FAA          | 79SIL       | 01         |
| 42.      | 6.    |         | AA           | 76OND       | 01         |
| 42.      |       |         | ITNA         | 75MIL       | 01         |
| 42.      | 3     |         | PAA          | 76KAT       | 02         |
| 42.      | 1.6   |         | ITNA         | 77CHA       | 01         |
| 42.      | 5.    |         | PAA          | 76KAT       | 03         |
| 45.      | 16.   |         | 14NAA        | 81WIL       | 01         |
| 45.      | 16.   |         | 14NAA        | 81WIL       | 02         |
| 46.      |       | *       | ITNA         | 75KLE       | 01         |
| 50.      |       |         | UU           | 80HEN       | 01         |
| Cr (ppm) |       |         |              |             |            |
|          | 150.  | L*      | 14NAA        | 81WIL       | 02         |
|          | 150.  | L*      | 14NAA        | 81WIL       | 01         |
|          |       |         | XRF          | 78CAM       | 02         |
| 112.     |       |         | ITNA         | 75NAD       | 02         |
| 113.     | 1.5   |         | ITNA         | 78NAD       | 02         |
| 113.     | 2.    |         | ITNA         | 78NAD       | 02         |
| 113.     |       |         | FAA          | 78GUI       | 01         |
| 114.     |       |         | ICPES        | 80NAD       | 01         |
| 117.     | 7.    |         | ITNA         | 76RAC       | 01         |
| 117.     |       | 6       | SSMS         | 78GUI       | 01         |
| 118.     | 8.    |         | ITNA         | 76WEW       | 01         |
| 118.     | 6.    |         | ITNA         | 76OND       | 01         |
| 120.     | 5.    |         | ITNA         | 78MAC       | 01         |
| 120.     |       |         | OES          | 78SUG       | 01         |
| 120.     | 4.    |         | AA           | 76OND       | 01         |
| 122.     | 12.   |         | ITNA         | 73SHE       | 01         |
| 123.     |       |         | ICPES        | 80FLO       | 01         |
| 124.     | 14.   |         | XRF          | 79SMI       | 01         |
| 126.     | 11.   |         | ITNA         | 76BLO       | 01         |
| 127.     | 6.    | D*      | NAA          | 74OND       | 01         |
| 127.     | 6.    |         | ITNA         | 75OND       | 01         |
| 128.     | 5.    | 35      | ITNA         | 81GLA       | 02         |
| 128.     |       |         | AA           | 79SIL       | 01         |
| 128.     | 5.    | 35      | ITNA         | 81GLA       | 04         |
| 128.     |       |         | ITNA         | 78WEA       | 01         |
| 128.5    | 8.5   |         | AA           | 77MIT       | 01         |
| 129.     | 3.9   |         | ICPES        | 81CHU       | 01         |
| 129.2    | 2.7   |         | ITNA         | 77ROW       | 03         |
| 129.2    | 2.7   | D*      | ITNA         | 77ROW       | 04         |
| 130.     | 4.    |         | ITNA         | 83GLA       | 01         |
| 130.     |       |         | UU           | 80HEN       | 01         |
| 130.     |       |         | AA           | 76WEW       | 01         |
| 130.     | 5.    | 9       | ITNA         | 78LAU       | 02         |
| 131.     | 8.    |         | ITNA         | 73ABE       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 131.     | 6.1   |         | PAA          | 74CHA       | 01         |
| 131.     | 8.    |         | EXRF         | 78PEL       | 01         |
| 131.     | 6.    |         | PAA          | 76CHA       | 01         |
| 131.     |       |         | EXRF         | 78WEG       | 01         |
| 131.     | 6.    | D*      | PAA          | 77CHA       | 01         |
| 131.     | 9.    |         | ITNA         | 76KUC       | 01         |
| 131.7    | 4.6   |         | RTNA         | 81GAL       | 01         |
| 131.7    | 4.6   |         | RTNA         | 81GAL       | 02         |
| 132.     | 3.3   |         | AA           | 74RAI       | 01         |
| 132.     | 10.   |         | FAA          | 76OWE       | 01         |
| 132.3    | 0.35  |         | RTNA         | 74MCC       | 01         |
| 134.     | 9.    | 35      | ITNA         | 81GLA       | 03         |
| 135.     |       |         | AA           | 78WEG       | 01         |
| 135.     | 14.   |         | IENA         | 77ROW       | 04         |
| 135.     | 6.    |         | ITNA         | 77CHA       | 01         |
| 135.     |       |         | AA           | 78GUI       | 01         |
| 135.     | 6.    | D*      | ITNA         | 78RYA       | 01         |
| 137.     | 16.   |         | ITNA         | 81WAN       | 01         |
| 138.     |       |         | ITNA         | 75KLE       | 01         |
| 140.     | 15.   |         | ITNA         | 78LAU       | 02         |
| 142.     | 13.   |         | PAA          | 76KAT       | 03         |
| 142.     | 9.    |         | PAA          | 76KAT       | 02         |
| 150.     | 13.   |         | OES          | 76WEW       | 01         |
| 159.     | 115.  | *       | EXRF         | 77GIA       | 01         |
| 175.     |       | *6      | SSMS         | 78GUI       | 01         |
| 180.     |       | *       | ITNA         | 75MIL       | 01         |
| Cs (ppm) |       |         |              |             |            |
|          | 10.   | L*      | EXRF         | 77GIA       | 01         |
| 5.8      | 1.4   | *       | ITNA         | 78NAD       | 02         |
| 5.81     | 1.4   | *       | ITNA         | 75NAD       | 02         |
| 7.3      | 1.    |         | ITNA         | 78LAU       | 02         |
| 7.7      | 1.3   |         | ITNA         | 76WEW       | 01         |
| 8.       | 1.    |         | PAA          | 76CHA       | 01         |
| 8.       | 1.    | D*      | PAA          | 77CHA       | 01         |
| 8.1      | 0.5   | 9       | ITNA         | 78LAU       | 02         |
| 8.2      | 0.4   |         | ITNA         | 83GLA       | 01         |
| 8.2      | 0.9   |         | IENA         | 76STE       | 05         |
| 8.2      | 0.5   |         | ITNA         | 76OND       | 01         |
| 8.3      | 0.4   | 35      | ITNA         | 81GLA       | 02         |
| 8.3      | 1.    |         | ITNA         | 77CHA       | 01         |
| 8.3      | 0.9   |         | IENA         | 77ROW       | 03         |
| 8.3      | 1.    | D*      | ITNA         | 78RYA       | 01         |
| 8.4      | 0.5   |         | ITNA         | 77ROW       | 04         |
| 8.42     | 0.22  |         | IENA         | 77ROW       | 04         |
| 8.5      | 0.5   |         | ITNA         | 78MAC       | 01         |
| 8.6      |       |         | ITNA         | 78WEA       | 01         |
| 8.6      | 1.1   |         | ITNA         | 75OND       | 01         |
| 8.6      | 0.8   |         | ITNA         | 76RAG       | 01         |
| 8.7      | 0.3   | 35      | IENA         | 80GLA       | 03         |
| 8.7      | 0.7   | 35      | NAA          | 81GLA       | 04         |
| 8.8      | 0.4   | 35      | ITNA         | 81GLA       | 03         |
| 8.9      | 0.8   |         | ITNA         | 81WAN       | 01         |
| 9.4      |       |         | ITNA         | 75MIL       | 01         |
| 9.9      | 0.8   |         | ITNA         | 73ABE       | 01         |
| 10.      |       |         | UU           | 80HEN       | 01         |
| 10.      | 1.    |         | 14NAA        | 81WIL       | 02         |
| 13.8     | 1.4   | *       | ITNA         | 73SHE       | 01         |
| 0.63     | 0.06  | *       | PAA          | 74CHA       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cu (ppm) |       |         |              |             |            |
|          | 300.  | L*      | ITNA         | 73ABE       | 01         |
|          |       | *       | AA           | 77MIT       | 01         |
| 70.2     | 1.8   |         | OES          | 76WEW       | 01         |
| 110.     | 11.   | *       | ITNA         | 77ROW       | 03         |
| 115.     | 8.    |         | ITNA         | 76STE       | 05         |
| 115.     | 8.    |         | AA           | 76OND       | 01         |
| 119.     | 5.    |         | UU           | 80HEN       | 01         |
| 120.     |       |         | ICPES        | 80FLO       | 01         |
| 120.     |       |         | AA           | 79SIL       | 01         |
| 121.     |       |         | EXRF         | 78WEG       | 01         |
| 123.     |       |         | XRF          | 78CAM       | 02         |
| 124.     |       |         | FAA          | 76OWE       | 01         |
| 124.     | 19.   |         | AA           | 78GUI       | 01         |
| 125.     |       |         | ITNA         | 77CHA       | 01         |
| 125.     | 10.   |         | EXRF         | 78PEL       | 01         |
| 125.     | 13.   |         | ITNA         | 78RYA       | 01         |
| 125.     | 10.   | D*      | AA           | 78GEL       | 01         |
| 127.     |       |         | ICPES        | 81CHU       | 01         |
| 128.     | 3.9   |         | AA           | 78WEG       | 01         |
| 129.     |       | 8       | SSMS         | 80KOP       | 01         |
| 129.     | 5.    |         | AA           | 76WEW       | 01         |
| 129.     |       |         | AA           | 80STO       | 02         |
| 130.     | 5.    |         | AA           | 74RAI       | 01         |
| 130.     | 2.2   |         | SSMS         | 78GUI       | 01         |
| 131.     |       | 6       | AE+AF        | 77FEL       | 01         |
| 131.     |       |         | FAA          | 78GUI       | 01         |
| 133.     |       |         | XRF          | 75KLE       | 01         |
| 133.     | 4.    |         | EXRF         | 77GIA       | 01         |
| 134.     | 11.   | 6       | PAA          | 82SEG       | 01         |
| 135.     | 3.    |         | XRF          | 79SMI       | 01         |
| 136.     |       |         | ICPES        | 80NAD       | 01         |
| 136.     | 6.    | 35      | RTNA         | 77GLA       | 01         |
| 137.     | 7.    |         | ITNA         | 76BLO       | 01         |
| 140.     | 10.   |         | XRF          | 81COH       | 02         |
| 140.     | 20.   | 6       | PAA          | 82SEG       | 01         |
| 140.     | 20.   |         | PAA          | 80SEG       | 01         |
| 142.     | 9.    |         | ITNA         | 73SHE       | 01         |
| 145.     |       | *6      | SSMS         | 78GUI       | 01         |
| 198.     | 61.   | *       | ITNA         | 81WAN       | 01         |
| Dy (ppm) |       |         |              |             |            |
|          | 30.   | L*      | OES          | 76WEW       | 01         |
| 7.6      | 2.4   | *       | ITNA         | 73SHE       | 01         |
| 9.       | 2.    |         | ITNA         | 78MAC       | 01         |
| 9.4      | 0.5   |         | ITNA         | 76STE       | 05         |
| 9.4      | 0.5   |         | ITNA         | 77ROW       | 03         |
| 10.2     |       |         | ITNA         | 75MIL       | 01         |
| 10.2     |       | 35      | ITNA         | 81GLA       | 04         |
| 10.3     | 0.4   | 35      | ITNA         | 81GLA       | 02         |
| 10.9     |       |         | ITNA         | 75NAD       | 02         |
| 10.9     |       |         | ITNA         | 78NAD       | 02         |
| 12.1     | 0.6   |         | ITNA         | 76OND       | 01         |
| 19.      | 3.    | *       | SSMS         | 78SUG       | 02         |
| Er (ppm) |       |         |              |             |            |
|          | 100.  | L*      | OES          | 76WEW       | 01         |
|          | 300.  | L*      | OES          | 76WEW       | 01         |
| 11.      | 2.    |         | SSMS         | 78SUG       | 02         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Eu (ppm) |       |         |              |             |            |
| 1.9      | 0.2   | *       | ITNA         | 76OND 01    |            |
| 2.       | 2.    | *35     | IENA         | 80GLA 03    |            |
| 2.       |       | *       | ICPES        | 80FLO 01    |            |
| 2.3      | 0.1   |         | ITNA         | 73ABE 01    |            |
| 2.39     | 0.11  |         | ITNA         | 76RAG 01    |            |
| 2.42     | 0.16  |         | ITNA         | 73SHE 01    |            |
| 2.44     | 0.19  |         | ITNA         | 76STE 05    |            |
| 2.49     | 0.15  | 35      | ITNA         | 81GLA 02    |            |
| 2.5      | 0.4   |         | ITNA         | 75OND 01    |            |
| 2.5      | 0.16  | 35      | ITNA         | 81GLA 04    |            |
| 2.5      |       |         | ITNA         | 78WEA 01    |            |
| 2.56     | 0.07  |         | ITNA         | 83GLA 01    |            |
| 2.57     | 0.19  |         | ITNA         | 77ROW 03    |            |
| 2.6      | 0.2   |         | ITNA         | 81WAN 01    |            |
| 2.6      | 0.2   |         | ITNA         | 76WEW 01    |            |
| 2.62     | 0.05  |         | ITNA         | 78NAD 02    |            |
| 2.62     | 0.05  |         | ITNA         | 75NAD 02    |            |
| 2.69     | 0.09  |         | ITNA         | 77ROW 04    |            |
| 2.7      | 0.1   |         | ITNA         | 78LAU 02    |            |
| 2.79     |       |         | ITNA         | 82GLA 02    |            |
| 2.8      | 0.13  |         | OES          | 76WEW 01    |            |
| 2.86     |       |         | ITNA         | 75KLE 01    |            |
| 2.9      | 0.2   | 35      | ITNA         | 81GLA 03    |            |
| 3.       | 0.15  |         | ICPES        | 81CHU 01    |            |
| 3.1      |       |         | ITNA         | 75MIL 01    |            |
| 5.3      | 1.2   | *       | SSMS         | 78SUG 02    |            |
| F (ppm)  |       |         |              |             |            |
| 10.      |       |         | UU           | 80HEN 01    |            |
| 20.      |       |         | AA           | 76WEW 01    |            |
| Fe (%)   |       |         |              |             |            |
| 4.23     | 0.3   | *       | PAA          | 76KAT 03    |            |
| 4.24     | 0.19  | *       | PAA          | 76KAT 02    |            |
| 4.4      |       | *       | AA           | 78GUI 01    |            |
| 5.278    | 0.56  | *       | ITNA         | 73SHE 01    |            |
| 5.6      | 2.8   |         | OES          | 76WEW 01    |            |
| 5.6      | 0.2   |         | ITNA         | 76WEW 01    |            |
| 5.7      | 0.3   |         | ITNA         | 76KUC 01    |            |
| 5.8      | 0.3   | 5       | IENA         | 80GLA 03    |            |
| 5.8      |       |         | OES          | 78SUG 01    |            |
| 5.8      |       |         | AA           | 78WEG 01    |            |
| 5.9      | 0.2   | 5       | IENA         | 80GLA 03    |            |
| 5.91     | 0.16  |         | IENA         | 77ROW 04    |            |
| 5.94     |       |         | XRF          | 78CAM 02    |            |
| 5.96     | 0.16  |         | XRF          | 79SMI 01    |            |
| 6.       | 0.3   |         | ITNA         | 76OND 01    |            |
| 6.       |       |         | ICPES        | 80FLO 01    |            |
| 6.       |       |         | XRF          | 76WEW 01    |            |
| 6.       | 0.2   |         | ICPES        | 80EPS 03    |            |
| 6.       | 0.4   |         | AA           | 79WEG 01    |            |
| 6.03     | 0.16  |         | ITNA         | 81WAN 01    |            |
| 6.08     | 0.52  |         | PAA          | 74CHA 01    |            |
| 6.09     | 0.03  |         | ITNA         | 83GLA 01    |            |
| 6.1      | 0.3   | 35      | NAA          | 81GLA 04    |            |
| 6.1      | 0.1   | D*      | TCGS         | 80AND 01    |            |
| 6.1      | 0.2   |         | PAA          | 76CHA 01    |            |
| 6.1      | 0.1   |         | TCGS         | 79FAI 01    |            |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 6.1      | 0.2   | D*      | PAA          | 77CHA 01    |            |
| 6.16     | 0.3   |         | EXRF         | 78PEL 01    |            |
| 6.17     | 0.41  |         | ITNA         | 75NAD 02    |            |
| 6.17     | 0.41  |         | ITNA         | 78NAD 02    |            |
| 6.198    | 0.102 |         | AA           | 77MIT 01    |            |
| 6.2      | 0.3   | D*      | NAA          | 74OND 01    |            |
| 6.2      | 0.04  |         | ICPES        | 80NAD 01    |            |
| 6.2      |       |         | EXRF         | 78WEG 01    |            |
| 6.2      |       |         | OES          | 80WAL 01    |            |
| 6.2      | 0.1   |         | AA           | 76OND 01    |            |
| 6.2      | 0.4   | D*      | ITNA         | 78RYA 01    |            |
| 6.2      | 0.3   |         | ITNA         | 75OND 01    |            |
| 6.2      | 0.05  | D*      | ITNA         | 77ROW 04    |            |
| 6.2      | 0.4   |         | ITNA         | 77CHA 01    |            |
| 6.2      | 0.6   |         | XRF          | 81COH 02    |            |
| 6.2      | 0.0   |         | ITNA         | 77ROW 03    |            |
| 6.2      | 0.1   |         | EXRF         | 77NIE 01    |            |
| 6.22     | 0.08  |         | TCGS         | 79AND 01    |            |
| 6.22     | 0.48  |         | EXRF         | 77GIA 01    |            |
| 6.23     | 0.1   |         | ITNA         | 78LAU 02    |            |
| 6.23     | 0.14  | 35      | ITNA         | 81GLA 02    |            |
| 6.3      | 0.1   |         | ITNA         | 78MAC 01    |            |
| 6.3      | 0.4   | 35      | ITNA         | 81GLA 03    |            |
| 6.32     |       |         | ICPES        | 80NAD 01    |            |
| 6.35     |       |         | ITNA         | 78WEA 01    |            |
| 6.37     |       |         | ITNA         | 75KLE 01    |            |
| 6.4      | 0.15  |         | 14NAA        | 81WIL 02    |            |
| 6.4      |       |         | AA           | 79SIL 01    |            |
| 6.46     | 0.14  |         | ICPES        | 81CHU 01    |            |
| 6.5      |       |         | UU           | 80HEN 01    |            |
| 6.51     | 0.31  |         | ITNA         | 73ABE 01    |            |
| 6.69     |       |         | ITNA         | 75MIL 01    |            |
| 6.7      |       | 35      | TCGS         | 78GLA 04    |            |
| 6.8      | 0.03  | *       | ITNA         | 76RAG 01    |            |
| 6.8      | 0.2   | *       | AA           | 80STO 02    |            |
| 6.95     | 0.15  | *       | 14NAA        | 81WIL 01    |            |
| 7.       |       | *       | AA           | 76WEW 01    |            |
| Ga (ppm) |       |         |              |             |            |
| 34.3     | 1.9   |         | ITNA         | 81WAN 01    |            |
| 37.      | 2.    |         | IENA         | 78WAN 01    |            |
| 38.3     | 6.3   |         | ITNA         | 73SHE 01    |            |
| 40.      | 1.    |         | XRF          | 79SMI 01    |            |
| 40.3     | 2.    | 5       | IENA         | 76STE 05    |            |
| 40.7     | 1.2   |         | IENA         | 77ROW 03    |            |
| 40.7     | 1.2   | 5       | IENA         | 76STE 05    |            |
| 41.      | 1.    | 35      | IENA         | 81GLA 04    |            |
| 41.      | 7.    |         | EXRF         | 77GIA 01    |            |
| 43.      | 1.    | 35      | IENA         | 80GLA 03    |            |
| 43.      | 1.    | 35      | IENA         | 81GLA 03    |            |
| 45.      | 7.    |         | ITNA         | 76OND 01    |            |
| 48.      | 6.    |         | COLOR        | 79LIX 01    |            |
| 49.      |       |         | XRF          | 75KLE 01    |            |
| 50.      |       |         | UU           | 80HEN 01    |            |
| 58.      | 10.   | *       | PAA          | 76WEW 01    |            |
| 68.      | 14.   | *       | OES          | 76WEW 01    |            |
| 72.      |       | *       | ICPES        | 80FLO 01    |            |

TABLE X (cont)

| CONC        | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------------|-------|---------|--------------|-------------|------------|
| Gd (ppm)    |       |         |              |             |            |
|             | 100.  | L*      | OES          | 76WEW       | 01         |
| 11.         |       |         | ITNA         | 75MIL       | 01         |
| 11.4        | 0.2   |         | TCGS         | 79FAL       | 01         |
| 11.7        | 0.4   |         | TCGS         | 79AND       | 01         |
| 12.1        | 0.36  |         | ICPES        | 81CHU       | 01         |
| 17.5        | 0.3   | *       | TCGS         | 80AND       | 01         |
| 23.         | 4.    | *       | SSMS         | 78SUG       | 02         |
| Ge (ppm)    |       |         |              |             |            |
| 19.         | 1.    |         | XRF          | 79SMI       | 01         |
| 20.         |       |         | UU           | 80HEN       | 01         |
| 25.         | 1.4   |         | OES          | 76WEW       | 01         |
| 26.         | 5.    |         | EXRF         | 77GIA       | 01         |
| 476.        | 166.  | *       | ITNA         | 73SHE       | 01         |
| H (ppm)     |       |         |              |             |            |
| 1000.       |       |         | UU           | 80HEN       | 01         |
| 1200.       | 400.  |         | TCGS         | 79AND       | 01         |
| H2O- (%)    |       |         |              |             |            |
| 0.03        |       |         | UU           | 80HEN       | 01         |
| H2O-T (%)   |       |         |              |             |            |
| 0.17        |       |         | FD           | 80KHA       | 02         |
| H2SO4 (ppm) |       |         |              |             |            |
|             | 1000. | L*      | UU           | 80HEN       | 01         |
| Hf (ppm)    |       |         |              |             |            |
|             | 17.   | L*      | 14NAA        | 81WIL       | 01         |
| 6.5         | 0.7   |         | ITNA         | 76WEW       | 01         |
| 6.7         | 0.3   |         | IENA         | 77ROW       | 03         |
| 6.7         | 0.3   | D*      | IENA         | 77ROW       | 04         |
| 7.          | 0.4   |         | ITNA         | 77ROW       | 04         |
| 7.2         | 0.6   |         | ITNA         | 76RAG       | 01         |
| 7.4         | 0.5   |         | ITNA         | 78LAU       | 02         |
| 7.5         | 0.5   |         | ITNA         | 77CHA       | 01         |
| 7.5         |       |         | ITNA         | 78NAD       | 02         |
| 7.5         | 0.5   | D*      | ITNA         | 78RYA       | 01         |
| 7.5         | 0.4   |         | ITNA         | 78MAC       | 01         |
| 7.52        | 0.02  |         | ITNA         | 75NAD       | 02         |
| 7.6         | 0.2   |         | ITNA         | 83GLA       | 01         |
| 7.62        | 0.56  |         | ITNA         | 73SHE       | 01         |
| 7.7         | 0.1   |         | ITNA         | 81WAN       | 01         |
| 7.9         |       |         | ITNA         | 78WEA       | 01         |
| 7.9         | 0.4   |         | ITNA         | 75OND       | 01         |
| 8.          | 0.4   | 35      | NAA          | 81GLA       | 04         |
| 8.          | 0.4   | 35      | ITNA         | 81GLA       | 02         |
| 8.1         | 0.1   | 35      | IENA         | 80GLA       | 03         |
| 8.2         | 0.8   |         | ITNA         | 73ABE       | 01         |
| 8.2         | 0.8   |         | ITNA         | 76OND       | 01         |
| 8.2         |       |         | ITNA         | 75MIL       | 01         |
| 10.         | 2.    | *35     | ITNA         | 81GLA       | 03         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 10.      |       | *       | UU           | 80HEN       | 01         |
| 10.8     |       | *       | ITNA         | 75KLE       | 01         |
| Hg (ppb) |       |         |              |             |            |
|          | 8000. | L*      | 14NAA        | 81WIL       | 01         |
| 12000.   |       | L*      | EXRF         | 77GIA       | 01         |
| 400.     |       | L*      | ITNA         | 76BLO       | 01         |
| 500.     |       | L*      | ITNA         | 73ABE       | 01         |
| 200.     |       | L*      | ITNA         | 78NAD       | 02         |
| 200.     |       | L*      | ITNA         | 75NAD       | 02         |
| 100.     |       |         | UU           | 80HEN       | 01         |
| 119.     | 2.    |         | CVAA         | 80NAD       | 01         |
| 127.     | 3.    |         | CVAA         | 75KLE       | 01         |
| 130.     | 30.   |         | NAA          | 77JER       | 01         |
| 130.     | 30.   | D*      | PAA          | 77CHA       | 01         |
| 130.     | 30.   |         | PAA          | 76CHA       | 01         |
| 134.     | 4.    |         | CVAA         | 74RAI       | 01         |
| 135.     | 10.   |         | PAA          | 74CHA       | 01         |
| 137.     | 15.   |         | RTNA         | 81GAL       | 01         |
| 137.     | 15.   |         | RTNA         | 81GAL       | 02         |
| 141.     | 12.   |         | PAA          | 77GIA       | 03         |
| 145.     |       |         | ITNA         | 78WEA       | 01         |
| 145.     | 6.    |         | RTNA         | 74ORV       | 01         |
| 160.     | 40.   | D*      | ITNA         | 78RYA       | 01         |
| 160.     | 40.   |         | ITNA         | 77CHA       | 01         |
| 170.     | 20.   | 6       | PAA          | 82SEG       | 01         |
| 200.     | 20.   | *       | PAA          | 80SEG       | 01         |
| 200.     | 100.  | *6      | PAA          | 82SEG       | 01         |
| 550.     |       | *       | XRF          | 76WEW       | 01         |
| 3700.    | 1100. | *       | ITNA         | 73SHE       | 01         |
| 11000.   |       | *       | XRF          | 78CAM       | 02         |
| Ho (ppm) |       |         |              |             |            |
|          | 10.   | L*      | OES          | 76WEW       | 01         |
| 1.94     | 0.13  |         | IENA         | 77ROW       | 03         |
| 1.94     | 0.13  |         | IENA         | 76STE       | 05         |
| 3.6      | 0.8   |         | SSMS         | 78SUG       | 02         |
| I (ppm)  |       |         |              |             |            |
|          | 0.5   | L*      | UU           | 80HEN       | 01         |
|          | 6.    | L*      | EXRF         | 77GIA       | 01         |
| 2.       | 1.2   |         | ITNA         | 77MAE       | 01         |
| 2.8      | 1.    |         | PAA          | 77CHA       | 01         |
| 2.9      | 1.2   |         | PAA          | 75OND       | 01         |
| 2.9      |       |         | ITNA         | 78WEA       | 01         |
| 3.       | 1.    | D*      | ITNA         | 78RYA       | 01         |
| 3.       | 1.    |         | ITNA         | 77CHA       | 01         |
| In (ppb) |       |         |              |             |            |
|          | 500.  | L*      | UU           | 80HEN       | 01         |
| 118.     | 4.    | 5       | IENA         | 76STE       | 05         |
| 128.     | 8.    |         | IENA         | 77ROW       | 03         |
| 128.     | 8.    | 5       | IENA         | 76STE       | 05         |
| 156.     | 35.   |         | ITNA         | 73SHE       | 01         |
| 160.     | 20.   |         | ITNA         | 81WAN       | 01         |
| 270.     | 140.  |         | ITNA         | 76RAG       | 01         |
| 280.     | 30.   |         | PAA          | 74CHA       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 290.     | 60.   |         | PAA          | 76CHA       | 01         |
| 290.     | 60.   | D*      | PAA          | 77CHA       | 01         |
| 320.     | 80.   | D*      | ITNA         | 78RYA       | 01         |
| 320.     | 100.  |         | ITNA         | 75OND       | 01         |
| 320.     | 80.   |         | ITNA         | 77CHA       | 01         |
| 3000.    | 2000. | *       | EXRF         | 77GIA       | 01         |
| Ir (ppb) |       |         |              |             |            |
|          | 200.  | L*      | UU           | 80HEN       | 01         |
| 15.6     | 2.4   |         | RTNA         | 77NAD       | 02         |
| 250.     | 80.   |         | ITNA         | 77CHA       | 01         |
| 250.     | 80.   | D*      | ITNA         | 78RYA       | 01         |
| 18600.   | 3300. |         | ITNA         | 73SHE       | 01         |
| 18600.   |       |         | ITNA         | 78WEA       | 01         |
| K (%)    |       |         |              |             |            |
| 1.29     | 0.09  | *       | ITNA         | 76KUC       | 01         |
| 1.51     |       |         | ICPES        | 80NAD       | 01         |
| 1.51     | 0.05  |         | ITNA         | 78MAC       | 01         |
| 1.54     | 0.04  |         | ITNA         | 76BLO       | 01         |
| 1.58     | 0.15  |         | ITNA         | 75OND       | 01         |
| 1.59     | 0.05  |         | PAA          | 76KAT       | 03         |
| 1.59     | 0.05  |         | PAA          | 76KAT       | 02         |
| 1.6      | 0.12  |         | AA           | 80STO       | 02         |
| 1.6      | 0.06  | D*      | PAA          | 77CHA       | 01         |
| 1.6      | 0.04  |         | ICPES        | 81CHU       | 01         |
| 1.6      | 0.06  |         | PAA          | 76CHA       | 01         |
| 1.6      |       |         | OES          | 80WAL       | 01         |
| 1.61     |       |         | ITNA         | 78WEA       | 01         |
| 1.63     | 0.06  |         | ITNA         | 77MAE       | 01         |
| 1.63     |       |         | XRF          | 78CAM       | 02         |
| 1.65     | 0.09  |         | ITNA         | 78LAU       | 02         |
| 1.66     | 0.04  |         | XRF          | 79SMI       | 01         |
| 1.67     | 0.06  |         | EXRF         | 78PEL       | 01         |
| 1.68     |       |         | AA           | 79SIL       | 01         |
| 1.69     |       | 35      | TCGS         | 78GLA       | 04         |
| 1.69     | 0.13  |         | ITNA         | 77CHA       | 01         |
| 1.69     | 0.13  | D*      | ITNA         | 78RYA       | 01         |
| 1.7      | 0.2   |         | ITNA         | 76OND       | 01         |
| 1.7      |       |         | ITNA         | 78KEL       | 02         |
| 1.71     | 0.03  |         | GAMMA        | 73ABE       | 01         |
| 1.71     | 0.03  |         | GAMMA        | 75OND       | 01         |
| 1.71     | 0.04  |         | AA           | 76OND       | 01         |
| 1.72     | 0.09  |         | ICPES        | 80NAD       | 01         |
| 1.73     | 0.18  |         | ITNA         | 81WAN       | 01         |
| 1.74     | 0.07  |         | EXRF         | 77NIE       | 01         |
| 1.75     | 0.1   |         | TCGS         | 79AND       | 01         |
| 1.75     |       |         | UU           | 80HEN       | 01         |
| 1.75     | 0.18  |         | ITNA         | 76RAG       | 01         |
| 1.76     | 0.05  | D*      | TCGS         | 80AND       | 01         |
| 1.76     | 0.05  |         | TCGS         | 79FAI       | 01         |
| 1.77     |       |         | ITNA         | 75MIL       | 01         |
| 1.78     | 0.24  |         | ITNA         | 78NAD       | 02         |
| 1.78     | 0.23  |         | ITNA         | 75NAD       | 02         |
| 1.8      | 0.3   |         | 14NAA        | 81WIL       | 02         |
| 1.8      | 0.13  |         | ITNA         | 77ROW       | 03         |
| 1.8      | 0.13  |         | ITNA         | 76STE       | 05         |
| 1.8      |       |         | ITNA         | 75KLE       | 01         |
| 1.81     | 0.15  | 35      | ITNA         | 81CLA       | 03         |
| 1.83     | 0.05  | 35      | IENA         | 80GLA       | 03         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.9      | 0.5   | *       | 14NAA        | 81WIL       | 01         |
| 1.97     |       | *35     | ITNA         | 81GLA       | 04         |
| 2.18     | 0.24  | *       | ITNA         | 73SHE       | 01         |
| 3.3      | 0.66  | *       | OES          | 76WEW       | 01         |
| La (ppm) |       |         |              |             |            |
| 45.      | 4.5   | *       | OES          | 76WEW       | 01         |
| 64.      | 2.    | *       | ITNA         | 78NAD       | 02         |
| 64.1     | 1.6   | *       | ITNA         | 75NAD       | 02         |
| 68.      | 2.    |         | ITNA         | 78MAC       | 01         |
| 70.      |       |         | UU           | 80HEN       | 01         |
| 71.9     |       |         | ITNA         | 83GLA       | 01         |
| 72.      | 6.    |         | XRF          | 79SMI       | 01         |
| 74.      | 4.    |         | ITNA         | 78LAU       | 02         |
| 74.8     |       |         | ITNA         | 82GLA       | 02         |
| 75.      | 4.    | 35      | ITNA         | 81GLA       | 03         |
| 76.      | 14.   |         | ITNA         | 76OND       | 01         |
| 76.4     | 4.5   |         | ITNA         | 81WAN       | 01         |
| 77.      | 8.    |         | ITNA         | 73SHE       | 01         |
| 78.      |       |         | XRF          | 78CAM       | 02         |
| 78.      |       |         | ICPES        | 80FLO       | 01         |
| 79.      | 6.    | 35      | IENA         | 80GLA       | 03         |
| 79.      | 1.6   |         | ICPES        | 81CHU       | 01         |
| 80.      |       |         | ITNA         | 75MIL       | 01         |
| 81.      | 2.    |         | ITNA         | 76RAG       | 01         |
| 81.2     | 3.3   |         | IENA         | 77ROW       | 03         |
| 81.2     | 3.2   |         | IENA         | 76STE       | 05         |
| 82.      | 4.    |         | ITNA         | 73ABE       | 01         |
| 82.      | 20.   |         | EXRF         | 77GIA       | 01         |
| 82.      |       |         | ITNA         | 78WEA       | 01         |
| 82.      |       |         | ITNA         | 75KLE       | 01         |
| 82.      | 2.    |         | ITNA         | 75OND       | 01         |
| 84.      | 3.6   |         | IENA         | 77ROW       | 04         |
| 84.      | 3.6   |         | ITNA         | 77ROW       | 03         |
| 85.      | 4.    |         | ITNA         | 77CHA       | 01         |
| 85.      | 4.    | D*      | ITNA         | 78RYA       | 01         |
| 85.3     | 3.8   |         | ITNA         | 77ROW       | 04         |
| 86.      | 2.    |         | ITNA         | 76WEW       | 01         |
| 91.      | 7.    | *       | ITNA         | 76STE       | 05         |
| 110.     | 20.   | *       | SSMS         | 78SUG       | 02         |
| Li (ppm) |       |         |              |             |            |
| 1.7      | 0.3   | *       | ICPES        | 81CHU       | 01         |
| 80.      |       |         | AA           | 76WEW       | 01         |
| 140.     | 9.    |         | OES          | 76WEW       | 01         |
| 300.     |       |         | UU           | 80HEN       | 01         |
| Lu (ppm) |       |         |              |             |            |
| 0.87     | 50.   | L*      | OES          | 76WEW       | 01         |
| 0.9      | 0.3   |         | ITNA         | 82GLA       | 02         |
| 0.94     | 0.09  | D*      | ITNA         | 81WAN       | 01         |
| 0.94     | 0.09  |         | ITNA         | 77ROW       | 04         |
| 1.       | 0.1   |         | ITNA         | 77ROW       | 03         |
| 1.       | 0.2   |         | ITNA         | 75OND       | 01         |
| 1.01     | 0.02  |         | ITNA         | 76WEW       | 01         |
| 1.01     | 0.02  |         | ITNA         | 78NAD       | 02         |
| 1.1      | 0.02  |         | ITNA         | 75NAD       | 02         |
| 1.1      | 0.15  | 35      | ITNA         | 81GLA       | 03         |
|          |       |         | ITNA         | 77CHA       | 01         |

TABLE X (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 1.1  | 0.15  | D*      | ITNA         | 78RYA       | 01         |
| 1.2  |       |         | ITNA         | 75MIL       | 01         |
| 1.7  | 0.4   |         | SSMS         | 78SUG       | 02         |
| 2.   | 0.05  | *       | ITNA         | 78LAU       | 02         |
| 3.8  | 0.5   | *       | ITNA         | 73SHE       | 01         |
| 4.   | 1.    | *       | ITNA         | 78MAC       | 01         |

Mg (%)

|       |       |     |       |       |    |
|-------|-------|-----|-------|-------|----|
| 1.01  |       | *   | ICPES | 80NAD | 01 |
| 1.2   | 0.1   |     | AA    | 76OND | 01 |
| 1.22  |       |     | AA    | 79SIL | 01 |
| 1.29  | 0.02  |     | ICPES | 80NAD | 01 |
| 1.32  | 0.04  |     | ICPES | 81CHU | 01 |
| 1.4   | 0.4   |     | ITNA  | 77MAE | 01 |
| 1.4   | 0.4   |     | ITNA  | 78LAU | 02 |
| 1.4   |       |     | OES   | 78SUG | 01 |
| 1.44  | 0.02  |     | PAA   | 76KAT | 03 |
| 1.45  | 0.05  |     | AA    | 80STO | 02 |
| 1.48  | 0.01  |     | PAA   | 74CHA | 01 |
| 1.5   | 1.3   |     | 14NAA | 81WIL | 01 |
| 1.5   | 0.2   | D*  | TCGS  | 80AND | 01 |
| 1.5   | 0.2   |     | TCGS  | 79FAI | 01 |
| 1.5   | 0.15  | D*  | PAA   | 77CHA | 01 |
| 1.5   | 0.01  |     | PAA   | 76KAT | 02 |
| 1.5   | 0.3   |     | ITNA  | 76WEW | 01 |
| 1.5   | 0.15  |     | PAA   | 76CHA | 01 |
| 1.52  | 0.06  |     | ITNA  | 78NAD | 02 |
| 1.52  | 0.06  |     | ITNA  | 75NAD | 02 |
| 1.597 | 0.806 |     | ITNA  | 73SHE | 01 |
| 1.6   | 0.32  |     | OES   | 76WEW | 01 |
| 1.68  | 0.21  | D*  | ITNA  | 78RYA | 01 |
| 1.68  | 0.21  |     | ITNA  | 77CHA | 01 |
| 1.78  | 0.2   |     | ITNA  | 77ROW | 03 |
| 1.78  | 0.2   |     | ITNA  | 76STE | 05 |
| 1.8   |       |     | OES   | 80WAL | 01 |
| 1.8   |       |     | ICPES | 80FLO | 01 |
| 1.8   |       |     | ITNA  | 78WEA | 01 |
| 1.8   | 0.4   |     | ITNA  | 75OND | 01 |
| 2.    |       |     | UU    | 80HEN | 01 |
| 2.    | 0.4   |     | ITNA  | 76RAG | 01 |
| 2.08  | 0.43  |     | ITNA  | 73ABE | 01 |
| 2.1   | 0.5   |     | 14NAA | 81WIL | 02 |
| 2.19  | 0.35  | *   | ITNA  | 81WAN | 01 |
| 2.4   |       | *35 | TCGS  | 78GLA | 04 |
| 6.3   | 0.3   | *   | ITNA  | 78MAC | 01 |

Mn (ppm)

|       |     |    |      |       |    |
|-------|-----|----|------|-------|----|
| 351.  |     | *6 | SSMS | 78GUI | 01 |
| 420.  |     | *  | ITNA | 78KEL | 02 |
| 422.4 | 3.9 | *  | AA   | 77MIT | 01 |
| 440.  |     | *  | AA   | 78WEG | 01 |
| 460.  |     |    | ITNA | 75KLE | 01 |
| 460.  | 26. |    | OES  | 76WEW | 01 |
| 464.  | 1.  |    | ITNA | 78NAD | 02 |
| 464.  | 1.4 |    | ITNA | 75NAD | 02 |
| 464.  | 46. |    | ITNA | 76KUC | 01 |
| 466.  | 31. |    | ITNA | 73SHE | 01 |
| 477.  | 5.  |    | AA   | 76OND | 01 |
| 478.  |     |    | FAA  | 78GUI | 01 |
| 480.  | 25. | D* | TCGS | 80AND | 01 |
| 480.  | 25. |    | TCGS | 79FAI | 01 |

TABLE X (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 480. | 10.   |         | ITNA         | 76BLO       | 01         |
| 482. |       |         | ICPES        | 80NAD       | 01         |
| 483. | 21.   |         | XRF          | 79SMI       | 01         |
| 485. |       |         | AA           | 79SIL       | 01         |
| 488. | 50.   |         | ITNA         | 81WAN       | 01         |
| 488. | 14.   |         | ITNA         | 77ROW       | 03         |
| 488. | 14.   |         | ITNA         | 76STE       | 05         |
| 489. | 11.   |         | ITNA         | 73ABE       | 01         |
| 491. | 10.   |         | PAA          | 76KAT       | 02         |
| 491. | 18.   |         | PAA          | 76KAT       | 03         |
| 492. |       |         | AA           | 78GUI       | 01         |
| 493. | 4.1   |         | AA           | 74RAI       | 01         |
| 495. |       |         | ITNA         | 78WEA       | 01         |
| 495. | 15.   | D*      | PAA          | 77CHA       | 01         |
| 495. | 15.   |         | PAA          | 76CHA       | 01         |
| 495. | 25.   |         | PAA          | 74CHA       | 01         |
| 496. |       |         | OES          | 80WAL       | 01         |
| 496. | 19.   |         | ITNA         | 75OND       | 01         |
| 496. | 19.   | D*      | NAA          | 74OND       | 01         |
| 498. | 11.   | 35      | ITNA         | 81GLA       | 03         |
| 499. | 22.   | 6       | FAA          | 79GEL       | 01         |
| 499. | 25.   |         | ITNA         | 76OND       | 01         |
| 500. |       |         | UU           | 80HEN       | 01         |
| 500. |       |         | EXRF         | 78WEG       | 01         |
| 500. | 15.   | D*      | ITNA         | 78RYA       | 01         |
| 500. | 15.   |         | ITNA         | 77CHA       | 01         |
| 500. | 17.   |         | EXRF         | 78PEL       | 01         |
| 500. |       |         | OES          | 78SUG       | 01         |
| 503. | 15.   |         | ITNA         | 77MAE       | 01         |
| 504. | 25.   |         | ITNA         | 76WEW       | 01         |
| 505. | 9.    | 35      | ITNA         | 81GLA       | 02         |
| 505. | 14.   |         | ITNA         | 76RAG       | 01         |
| 506. |       |         | AA           | 76WEW       | 01         |
| 508. |       |         | XRF          | 78CAM       | 02         |
| 510. |       |         | ICPES        | 80FLO       | 01         |
| 510. | 70.   |         | XRF          | 81COH       | 02         |
| 510. | 10.   |         | ITNA         | 78LAU       | 02         |
| 513. | 15.   | 35      | IENA         | 80GLA       | 03         |
| 516. | 16.   |         | ICPES        | 81CHU       | 01         |
| 520. | 6.    |         | FAA          | 76WEW       | 01         |
| 520. | 20.   |         | ITNA         | 78MAC       | 01         |
| 528. | 104.  |         | EXRF         | 77GIA       | 01         |
| 528. |       | 6       | SSMS         | 78GUI       | 01         |
| 530. | 30.   |         | AA           | 80STO       | 02         |
| 531. | 14.   |         | EXRF         | 77NIE       | 01         |
| 540. |       | *       | ITNA         | 75MIL       | 01         |
| 570. | 24.   | *6      | FAA          | 79GEL       | 01         |

Mo (ppm)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
| 0.5  | 0.08 | D* | PAA   | 77CHA | 01 |
| 0.5  | 0.08 | *  | PAA   | 76CHA | 01 |
| 1.52 | 0.15 | *  | PAA   | 74CHA | 01 |
| 20.  |      |    | UU    | 80HEN | 01 |
| 20.  |      |    | ITNA  | 78WEA | 01 |
| 22.3 | 1.6  |    | 14NAA | 81WIL | 02 |
| 25.  | 5.   |    | EXRF  | 77GIA | 01 |
| 25.3 | 1.6  | D* | IENA  | 77ROW | 04 |
| 25.3 | 1.6  |    | IENA  | 77ROW | 03 |
| 28.  | 1.   |    | XRF   | 79SMI | 01 |
| 28.  | 1.3  |    | 14NAA | 81WIL | 01 |
| 28.  | 1.   | 35 | IENA  | 81GLA | 03 |
| 28.  | 1.   | 35 | IENA  | 80GLA | 03 |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 32.      |       |         | ICPES        | 80NAD       | 01         |
| 36.      | 5.    |         | FAA          | 76OWE       | 01         |
| 36.      | 3.    | 35      | RTNA         | 78GLA       | 02         |
| 37.      | 1.3   |         | OES          | 76WEW       | 01         |
| N (ppm)  |       |         |              |             |            |
|          | 1000. | L*      | UU           | 80HEN       | 01         |
| Na (ppm) |       |         |              |             |            |
| 2603.    | 156.  | *       | ITNA         | 76KUC       | 01         |
| 2658.    | 129.  |         | ITNA         | 73SHE       | 01         |
| 2800.    | 300.  |         | ITNA         | 76BLO       | 01         |
| 2820.    | 50.   |         | ITNA         | 78MAC       | 01         |
| 2830.    | 136.  |         | ITNA         | 76STE       | 05         |
| 2830.    | 140.  |         | ITNA         | 77ROW       | 03         |
| 2900.    |       |         | ICPES        | 80NAD       | 01         |
| 2900.    |       |         | OES          | 78SUG       | 01         |
| 3000.    | 200.  | D*      | TCGS         | 80AND       | 01         |
| 3000.    | 70.   |         | ICPES        | 81CHU       | 01         |
| 3000.    | 200.  |         | TCGS         | 79FAI       | 01         |
| 3000.    |       |         | UU           | 80HEN       | 01         |
| 3000.    |       |         | AA           | 79SIL       | 01         |
| 3000.    | 100.  |         | ITNA         | 78LAU       | 02         |
| 3000.    |       |         | OES          | 80WAL       | 01         |
| 3052.    | 264.  |         | ITNA         | 81WAN       | 01         |
| 3070.    | 80.   |         | ITNA         | 77MAF       | 01         |
| 3100.    | 300.  |         | ITNA         | 76OND       | 01         |
| 3100.    | 200.  |         | ICPES        | 80NAD       | 01         |
| 3130.    |       |         | ITNA         | 83GLA       | 01         |
| 3150.    | 110.  |         | 14NAA        | 81WIL       | 01         |
| 3200.    | 300.  | D*      | ITNA         | 78RYA       | 01         |
| 3200.    | 400.  |         | ITNA         | 75OND       | 01         |
| 3200.    |       |         | ITNA         | 78WEA       | 01         |
| 3200.    | 300.  |         | ITNA         | 77CHA       | 01         |
| 3200.    | 200.  |         | AA           | 76OND       | 01         |
| 3220.    | 50.   | 35      | ITNA         | 81GLA       | 03         |
| 3240.    | 100.  |         | ITNA         | 76RAG       | 01         |
| 3290.    | 110.  |         | AA           | 80STO       | 02         |
| 3300.    | 200.  |         | ITNA         | 75NAD       | 02         |
| 3300.    | 200.  |         | ITNA         | 78NAD       | 02         |
| 3300.    | 150.  | D*      | PAA          | 77CHA       | 01         |
| 3300.    | 100.  | 35      | ITNA         | 81GLA       | 02         |
| 3300.    | 150.  |         | PAA          | 76CHA       | 01         |
| 3330.    | 170.  |         | 14NAA        | 81WIL       | 02         |
| 3400.    | 300.  |         | PAA          | 74CHA       | 01         |
| 3400.    | 300.  |         | ITNA         | 76WEW       | 01         |
| 3400.    |       |         | ITNA         | 75MIL       | 01         |
| 3600.    |       | 35      | TCGS         | 78GLA       | 04         |
| 3700.    | 200.  |         | ITNA         | 73ABE       | 01         |
| 3850.    | 210.  | *       | PAA          | 76KAT       | 03         |
| 3860.    | 130.  | *       | PAA          | 76KAT       | 02         |
| 9700.    | 1900. | *       | OES          | 76WEW       | 01         |
| Nb (ppm) |       |         |              |             |            |
|          | 100.  | L*      | OES          | 76WEW       | 01         |
| 7.       |       |         | UU           | 80HEN       | 01         |
| 26.      | 1.    |         | XRF          | 79SMI       | 01         |
| 28.      | 2.    |         | EXRF         | 77GLA       | 01         |

TABLE X (cont)

| CONC      | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------|-------|---------|--------------|-------------|------------|
| Nd (ppm)  |       |         |              |             |            |
|           | 100.  | L*      | OES          | 76WEW       | 01         |
| 57.8      | 1.6   | D*      | ITNA         | 77ROW       | 04         |
| 57.8      | 1.6   |         | ITNA         | 77ROW       | 03         |
| 58.       | 10.   |         | ITNA         | 81WAN       | 01         |
| 60.       |       | 35      | IENA         | 81GLA       | 04         |
| 60.       | 2.    | 35      | IENA         | 80GLA       | 03         |
| 60.5      | 1.5   |         | ITNA         | 75NAD       | 02         |
| 61.       | 2.    |         | ITNA         | 78NAD       | 02         |
| 62.       | 2.    |         | TCGS         | 80AND       | 01         |
| 62.1      | 2.4   |         | TCGS         | 79FAI       | 01         |
| 66.       | 7.    |         | ITNA         | 76OND       | 01         |
| 69.       | 7.    | D*      | ITNA         | 78RYA       | 01         |
| 69.       | 7.    |         | ITNA         | 77CHA       | 01         |
| 81.       |       |         | ITNA         | 75MIL       | 01         |
| 90.       | 13.   | *       | SSMS         | 78SUG       | 02         |
| 94.       | 19.   | *       | ICPES        | 81CHU       | 01         |
| NH4 (ppm) |       |         |              |             |            |
|           | 100.  | L*      | UU           | 80HEN       | 01         |
| Ni (ppm)  |       |         |              |             |            |
| 69.       | 7.    | *       | IENA         | 77ROW       | 03         |
| 78.       |       | *       | AA           | 76WEW       | 01         |
| 84.       | 2.    | 35      | IENA         | 81GLA       | 04         |
| 84.       | 6.    | 35      | IENA         | 80GLA       | 03         |
| 85.       |       |         | AA           | 78GUI       | 01         |
| 92.       | 9.    | 6       | PAA          | 82SEG       | 01         |
| 92.       | 6.    |         | PAA          | 75OND       | 01         |
| 93.       | 5.    | 8       | SSMS         | 80KOP       | 01         |
| 93.       |       |         | EXRF         | 78WEG       | 01         |
| 94.       |       |         | XRF          | 78CAM       | 02         |
| 94.       |       |         | ICPES        | 80FLO       | 01         |
| 95.       | 20.   |         | EXRF         | 78PEL       | 01         |
| 95.       | 9.    |         | ITNA         | 77CHA       | 01         |
| 95.       | 9.    | D*      | ITNA         | 78RYA       | 01         |
| 96.       | 5.    |         | XRF          | 79SMI       | 01         |
| 96.       | 3.    |         | PAA          | 76KAT       | 02         |
| 96.       | 5.    |         | PAA          | 76KAT       | 03         |
| 96.4      | 1.2   | 6       | IDMS         | 74MOO       | 01         |
| 96.4      | 1.2   | 6       | IDMS         | 74MOO       | 01         |
| 96.6      | 1.    | 6       | IDMS         | 74MOO       | 01         |
| 96.8      | 3.2   |         | PAA          | 74CHA       | 01         |
| 97.       | 5.    | D*      | PAA          | 77CHA       | 01         |
| 97.       | 5.    |         | PAA          | 76CHA       | 01         |
| 98.       |       |         | FAA          | 80WAL       | 01         |
| 98.       |       |         | POL          | 74MAI       | 01         |
| 98.       | 9.    | D*      | NAA          | 74OND       | 01         |
| 98.5      | 9.5   |         | IENA         | 77ROW       | 04         |
| 99.       |       |         | AA           | 79SIL       | 01         |
| 99.       | 4.    |         | AF           | 80EPS       | 02         |
| 99.7      | 3.3   |         | AA           | 77MIT       | 01         |
| 100.      | 7.    | 6       | PAA          | 82SEG       | 01         |
| 100.      |       |         | UU           | 80HEN       | 01         |
| 100.      | 7.    |         | AA           | 76OND       | 01         |
| 100.      | 5.    |         | ITNA         | 78NAD       | 02         |
| 100.      | 5.    |         | ITNA         | 75NAD       | 02         |
| 100.      | 3.    |         | ICPES        | 81CHU       | 01         |

TABLE X (cont)

| CONC      | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------|-------|---------|--------------|-------------|------------|
| 100.      | 20.   |         | ITNA         | 76OND       | 01         |
| 101.      | 7.    |         | EXRF         | 77GIA       | 01         |
| 101.      | 3.3   |         | AA           | 74RAI       | 01         |
| 105.      | 3.    |         | 14NAA        | 81WIL       | 01         |
| 105.      | 13.   |         | ITNA         | 75OND       | 01         |
| 106.      |       |         | FAA          | 78GUI       | 01         |
| 106.      | 12.   |         | 14NAA        | 81WIL       | 02         |
| 109.      |       |         | XRF          | 75KLE       | 01         |
| 110.      | 7.    |         | PAA          | 80SEG       | 01         |
| 110.      | 10.   | 9       | ITNA         | 78LAU       | 02         |
| 120.      | 7.5   | *       | OES          | 76WEW       | 01         |
| 120.      |       | *       | OES          | 78SUG       | 01         |
| 128.      |       | *       | ICPES        | 80NAD       | 01         |
| NO2 (ppm) |       |         |              |             |            |
|           | 100.  | L*      | UU           | 80HEN       | 01         |
| NO3 (ppm) |       |         |              |             |            |
|           | 100.  | L*      | UU           | 80HEN       | 01         |
| O (%)     |       |         |              |             |            |
| 47.02     | 0.08  | 34      | 14NAA        | 80KHA       | 02         |
| Os (ppb)  |       |         |              |             |            |
|           | 4000. | L*      | RTNA         | 77NAD       | 02         |
|           | 400.  | L*      | UU           | 80HEN       | 01         |
| P (ppm)   |       |         |              |             |            |
|           | 8000. | L*      | XRF          | 79SMI       | 01         |
| 880.      |       |         | AA           | 76WEW       | 01         |
| 898.      |       |         | ICPES        | 80NAD       | 01         |
| 1090.     | 26.   |         | ICPES        | 81CHU       | 01         |
| 1200.     |       |         | UU           | 80HEN       | 01         |
| 1900.     | 100.  | *       | COLOR        | 80NAD       | 01         |
| 3000.     |       | *35     | TCGS         | 78GLA       | 04         |
| Pb (ppm)  |       |         |              |             |            |
| 40.       |       | *6      | SSMS         | 78GUI       | 01         |
| 62.       |       |         | AA           | 78GUI       | 01         |
| 62.8      |       |         | FAA          | 78GUI       | 01         |
| 64.       | 13.   |         | ICPES        | 81CHU       | 01         |
| 65.       |       |         | EXRF         | 78WEC       | 01         |
| 66.       | 12.   |         | EXRF         | 78PEL       | 01         |
| 66.       | 6.    |         | XRF          | 79SMI       | 01         |
| 67.       |       |         | POL          | 74MAI       | 01         |
| 68.       | 6.    | 8       | SSMS         | 80KOP       | 02         |
| 68.       | 4.    | 6       | PAA          | 82SEG       | 01         |
| 68.       | 4.    |         | PAA          | 80SEG       | 01         |
| 68.8      |       |         | POT          | 82CHR       | 01         |
| 69.       | 4.    | 6       | PAA          | 82SEG       | 01         |
| 70.       |       |         | AA           | 78GEL       | 01         |
| 70.       |       |         | AA           | 79SIL       | 01         |
| 70.       |       | 6       | SSMS         | 78GUI       | 01         |
| 70.5      |       |         | FAA          | 78SIE       | 01         |
| 70.7      | 2.6   |         | PAA          | 74CHA       | 01         |
| 71.       | 3.    |         | NAA          | 77JER       | 01         |

TABLE X (cont)

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| 71.          | 3.    |         | PAA          | 76CHA       | 01         |
| 71.          | 3.    | D*      | PAA          | 77CHA       | 01         |
| 72.          | 5.    |         | EXRF         | 77GIA       | 01         |
| 74.          | 4.    |         | FAA          | 75BLO       | 02         |
| 74.          | 4.    |         | FAA          | 76BLO       | 01         |
| 74.          | 9.    |         | OES          | 76WEW       | 01         |
| 75.          |       |         | OES          | 80WAL       | 01         |
| 75.          | 5.    | D*      | NAA          | 74OND       | 01         |
| 75.          | 5.    |         | PAA          | 75OND       | 01         |
| 76.          |       |         | AE+AF        | 77FEL       | 01         |
| 77.          |       |         | ICPES        | 80NAD       | 01         |
| 77.          | 6.    |         | AA           | 80STO       | 02         |
| 78.          | 4.    |         | IDMS         | 75KLE       | 01         |
| 78.          | 2.    |         | IDMS         | 78CAR       | 02         |
| 78.          | 2.    |         | AA           | 76OND       | 01         |
| 79.6         | 9.7   |         | HAA          | 82NAD       | 01         |
| 80.          |       |         | UU           | 80HEN       | 01         |
| 81.          |       |         | ICPES        | 80FLO       | 01         |
| 81.          |       |         | AA           | 78WEC       | 01         |
| 82.          | 6.    |         | FAA          | 76OWE       | 01         |
| 82.          |       |         | AA           | 76WEW       | 01         |
| 100.         | 25.   | *       | 14NAA        | 81WIL       | 02         |
| Pb-210 (PC1) |       |         |              |             |            |
| 3.37         | 0.13  | D*      | NM           | 81CAS       | 01         |
| 3.37         | 0.13  |         | NM           | 80CAS       | 01         |
| Pd (ppb)     |       |         |              |             |            |
|              | 2.    | L*      | RTNA         | 77NAD       | 02         |
|              | 1000. | L*      | UU           | 80HEN       | 01         |
|              | 4000. | L*      | EXRF         | 77GIA       | 01         |
| Pr (ppm)     |       |         |              |             |            |
|              | 100.  | L*      | OES          | 76WEW       | 01         |
| 24.          |       |         | ICPES        | 80FLO       | 01         |
| 28.          | 6.    |         | SSMS         | 78SUG       | 02         |
| Pt (ppm)     |       |         |              |             |            |
|              | 90.   | L*      | OES          | 76WEW       | 01         |
| 0.4          |       |         | UU           | 80HEN       | 01         |
| 0.451        | 0.011 |         | RTNA         | 77NAD       | 01         |
| 1.38         | 0.28  |         | RTNA         | 77NAD       | 02         |
| Rb (ppm)     |       |         |              |             |            |
| 70.          | 30.   | *       | ITNA         | 81WAN       | 01         |
| 95.          | 1.    | *       | PAA          | 76KAT       | 02         |
| 96.          | 2.    | *       | PAA          | 76KAT       | 03         |
| 100.         | 10.   | 9       | ITNA         | 78LAU       | 02         |
| 102.         | 5.    |         | 14NAA        | 81WIL       | 02         |
| 105.         | 10.   |         | ITNA         | 76RAC       | 01         |
| 108.         | 4.    |         | EXRF         | 77GIA       | 01         |
| 108.4        | 3.7   |         | IENA         | 77ROW       | 03         |
| 108.4        | 3.7   | D*      | IENA         | 77ROW       | 04         |
| 110.         | 2.    |         | XRF          | 79SMI       | 01         |
| 110.         | 9.    |         | ITNA         | 77ROW       | 04         |
| 110.         | 22.   |         | OES          | 76WEW       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 111.     | 14.   |         | ITNA         | 78NAD       | 02         |
| 111.     | 7.    |         | ITNA         | 83GLA       | 01         |
| 111.     | 13.5  |         | ITNA         | 75NAD       | 02         |
| 112.     | 20.   |         | ITNA         | 76WEW       | 01         |
| 114.     |       |         | XRF          | 78CAM       | 02         |
| 115.     | 15.   |         | ITNA         | 73SHE       | 01         |
| 115.     | 10.   |         | ITNA         | 78LAU       | 02         |
| 116.     | 10.   |         | ITNA         | 77CHA       | 01         |
| 116.     | 10.   | D*      | ITNA         | 78RYA       | 01         |
| 117.     | 6.    | 35      | IENA         | 80GLA       | 03         |
| 118.     | 7.    | 35      | NAA          | 81GLA       | 04         |
| 119.     | 7.    | 35      | ITNA         | 81GLA       | 02         |
| 120.     | 10.   |         | PAA          | 76CHA       | 01         |
| 120.     | 10.   | D*      | PAA          | 77CHA       | 01         |
| 120.     |       |         | XRF          | 75KLE       | 01         |
| 123.     | 9.    | 35      | ITNA         | 81GLA       | 03         |
| 124.     | 10.   |         | ITNA         | 73ABE       | 01         |
| 125.     |       |         | ITNA         | 78WEA       | 01         |
| 125.     | 4.    |         | EXRF         | 77NIE       | 01         |
| 125.     | 10.   |         | ITNA         | 75OND       | 01         |
| 126.     | 10.   |         | PAA          | 75OND       | 01         |
| 130.     | 30.   |         | ITNA         | 76OND       | 01         |
| 137.     | 4.    | *       | 14NAA        | 81WIL       | 01         |
| 150.     |       | *       | UU           | 80HEN       | 01         |
| Re (ppb) |       |         |              |             |            |
|          | 200.  | L*      | UU           | 80HEN       | 01         |
| Rh (ppm) |       |         |              |             |            |
|          | 30.   | L*      | OES          | 76WEW       | 01         |
|          | 4.    | L*      | EXRF         | 77GLA       | 01         |
|          | 500.  | L*      | UU           | 80HEN       | 01         |
| Ru (ppm) |       |         |              |             |            |
|          | 30.   | L*      | OES          | 76WEW       | 01         |
|          | 0.5   | L*      | UU           | 80HEN       | 01         |
| 0.258    | 0.02  |         | RTNA         | 77NAD       | 02         |
| 3.       | 2.    |         | EXRF         | 77GLA       | 01         |
| S (ppm)  |       |         |              |             |            |
| 2000.    |       |         | XRF          | 81COH       | 02         |
| 3900.    | 400.  | D*      | TCGS         | 80AND       | 01         |
| 3900.    | 400.  |         | TCGS         | 79FAI       | 01         |
| 4000.    | 400.  |         | TCGS         | 79AND       | 01         |
| 4400.    | 100.  |         | TCGS         | 77JUR       | 01         |
| 7800.    |       |         | XRF          | 78CAM       | 02         |
| 9000.    | 500.  |         | XRF          | 79SMI       | 01         |
| Sb (ppm) |       |         |              |             |            |
|          | 15.   | L*      | 14NAA        | 81WIL       | 01         |
|          | 100.  | L*      | OES          | 76WEW       | 01         |
| 4.       | 3.    | *       | EXRF         | 77GLA       | 01         |
| 5.       |       | *       | ICPES        | 82NYG       | 01         |
| 5.9      | 0.3   |         | ITNA         | 81WAN       | 01         |
| 5.9      | 0.5   | 5       | IENA         | 77ROW       | 04         |
| 5.9      | 0.5   | 5       | ITNA         | 77ROW       | 04         |
| 5.96     | 0.61  |         | HAA          | 82NAD       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 6.       | 0.2   |         | IENA         | 77ROW       | 03         |
| 6.03     | 0.23  | 5       | IENA         | 77ROW       | 04         |
| 6.1      | 0.4   | 5       | ITNA         | 77ROW       | 04         |
| 6.2      |       | 35      | ITNA         | 81GLA       | 03         |
| 6.4      | 0.2   |         | ITNA         | 78LAU       | 02         |
| 6.5      | 0.2   | 35      | RTNA         | 78GLA       | 02         |
| 6.72     | 0.35  |         | ITNA         | 75NAD       | 02         |
| 6.72     | 0.35  |         | ITNA         | 78NAD       | 02         |
| 6.9      |       |         | ITNA         | 78WEA       | 01         |
| 6.9      | 0.5   | D*      | ITNA         | 78RYA       | 01         |
| 6.9      | 0.5   |         | ITNA         | 77CHA       | 01         |
| 6.9      | 0.6   |         | ITNA         | 75OND       | 01         |
| 6.9      | 0.6   |         | ITNA         | 76RAG       | 01         |
| 6.9      | 0.3   |         | ITNA         | 76OND       | 01         |
| 7.       |       |         | UU           | 80HEN       | 01         |
| 7.       | 1.2   |         | PAA          | 76KAT       | 03         |
| 7.       | 1.1   |         | PAA          | 75OND       | 01         |
| 7.1      | 0.5   |         | NAA          | 77JER       | 01         |
| 7.1      | 0.5   | D*      | PAA          | 77CHA       | 01         |
| 7.1      | 0.5   |         | PAA          | 76CHA       | 01         |
| 7.1      | 0.7   |         | PAA          | 76KAT       | 02         |
| 7.14     | 0.56  |         | PAA          | 74CHA       | 01         |
| 7.2      | 0.8   |         | ITNA         | 73ABE       | 01         |
| 7.2      | 0.3   | 35      | NAA          | 81GLA       | 04         |
| 7.2      | 0.3   | 35      | ITNA         | 81GLA       | 02         |
| 7.3      | 0.3   |         | FAA          | 78HAY       | 01         |
| 7.4      | 0.3   |         | ITNA         | 78MAC       | 01         |
| 7.7      | 0.5   | 35      | IENA         | 80GLA       | 03         |
| 7.8      |       |         | ITNA         | 75KLE       | 01         |
| 8.3      | 1.8   | *       | 14NAA        | 81WIL       | 02         |
| 9.8      | 2.1   | *       | ITNA         | 76WEW       | 01         |
| 12.08    | 0.86  | *       | ITNA         | 73SHE       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 20.      |       | *       | UU           | 80HEN       | 01         |
| 20.      |       | *       | ICPES        | 80FLO       | 01         |
| 20.7     | 2.1   | *       | PAA          | 74CHA       | 01         |
| 23.      | 0.4   |         | ITNA         | 76BLO       | 01         |
| 23.      | 2.3   |         | OES          | 76WEW       | 01         |
| 24.      | 1.    |         | ITNA         | 76WEW       | 01         |
| 25.1     | 0.5   |         | ITNA         | 78NAD       | 02         |
| 25.1     | 0.5   |         | ITNA         | 75NAD       | 02         |
| 25.5     | 2.    | D*      | ITNA         | 78RYA       | 01         |
| 25.5     | 2.    |         | ITNA         | 77CHA       | 01         |
| 25.6     | 0.5   |         | IENA         | 77ROW       | 04         |
| 26.      | 2.    | 35      | IENA         | 80GLA       | 03         |
| 26.5     | 0.2   |         | ITNA         | 83GLA       | 01         |
| 26.7     | 0.2   | D*      | ITNA         | 77ROW       | 04         |
| 26.7     | 0.2   |         | ITNA         | 77ROW       | 03         |
| 26.8     | 0.2   |         | ITNA         | 78MAC       | 01         |
| 26.9     | 0.3   |         | ITNA         | 81WAN       | 01         |
| 26.9     | 1.4   |         | ITNA         | 76OND       | 01         |
| 27.      | 0.5   |         | ITNA         | 78LAU       | 02         |
| 27.      | 1.    |         | ITNA         | 73ABE       | 01         |
| 27.      |       |         | ITNA         | 78WEA       | 01         |
| 27.      | 2.    |         | PAA          | 76CHA       | 01         |
| 27.      | 2.    | D*      | PAA          | 77CHA       | 01         |
| 27.      | 1.    |         | ITNA         | 75OND       | 01         |
| 27.      | 0.6   |         | ITNA         | 76RAG       | 01         |
| 27.5     | 2.4   |         | ITNA         | 73SHE       | 01         |
| 28.      | 1.    | 35      | ITNA         | 81GLA       | 02         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 28.3     | 0.7   | 35      | ITNA         | 81GLA       | 04         |
| 29.      | 3.    |         | 14NAA        | 81WIL       | 02         |
| 29.1     |       |         | ITNA         | 75MIL       | 01         |
| 30.      | 1.    | 35      | ITNA         | 81GLA       | 03         |
| 32.      |       | *       | ITNA         | 75KLE       | 01         |
| 41.      | 5.    | *       | 14NAA        | 81WIL       | 01         |
| Se (ppm) |       |         |              |             |            |
|          | 10.   | L*      | ICPES        | 81CHU       | 01         |
| 3.2      |       | *       | HAA          | 74BYR       | 02         |
| 4.5      | 0.7   | *       | ASV          | 76AND       | 01         |
| 5.5      | 3.4   | *       | ITNA         | 81WAN       | 01         |
| 8.7      | 1.8   |         | ITNA         | 78MAC       | 01         |
| 8.76     | 0.48  |         | HAA          | 82NAD       | 01         |
| 8.8      | 1.2   |         | ITNA         | 73ABE       | 01         |
| 8.8      | 0.7   | 9       | ITNA         | 80WAN       | 01         |
| 8.8      |       |         | XRF          | 78CAM       | 02         |
| 8.9      | 1.2   |         | XRF          | 79SMI       | 01         |
| 8.9      | 0.6   |         | ITNA         | 80WAN       | 01         |
| 9.       | 1.4   |         | ITNA         | 76RAG       | 01         |
| 9.       | 2.    | 35      | IENA         | 80GLA       | 03         |
| 9.       |       |         | ICPES        | 82NYG       | 01         |
| 9.1      | 0.2   |         | ITNA         | 78NAD       | 02         |
| 9.1      | 1.    |         | RTNA         | 74ORV       | 01         |
| 9.1      | 0.3   | 35      | NAA          | 81GLA       | 04         |
| 9.1      | 0.2   |         | ITNA         | 75NAD       | 02         |
| 9.1      | 0.2   |         | ITNA         | 81CAR       | 02         |
| 9.35     | 0.03  |         | GCMS         | 74TAL       | 02         |
| 9.35     | 0.03  |         | DCP          | 81CAR       | 02         |
| 9.35     | 0.03  |         | GCMS         | 75KLE       | 01         |
| 9.48     | 0.8   |         | PAA          | 74CHA       | 01         |
| 9.5      | 0.8   | D*      | PAA          | 77CHA       | 01         |
| 9.5      | 0.8   |         | PAA          | 76CHA       | 01         |
| 9.6      | 3.1   |         | ITNA         | 76BLO       | 01         |
| 9.7      |       |         | COLOR        | 74BYR       | 02         |
| 9.8      | 1.    | D*      | ITNA         | 78RYA       | 01         |
| 9.8      | 0.5   | 6       | PAA          | 82SEG       | 01         |
| 9.8      |       |         | ITNA         | 78WEA       | 01         |
| 9.8      | 1.    |         | ITNA         | 77CHA       | 01         |
| 10.      | 0.5   | 8       | SSMS         | 80KOP       | 01         |
| 10.      | 0.9   | 6       | PAA          | 82SEG       | 01         |
| 10.      | 0.5   | 9       | ITNA         | 78LAU       | 02         |
| 10.      | 2.    |         | ITNA         | 76OND       | 01         |
| 10.      |       |         | UU           | 80HEN       | 01         |
| 10.      | 0.9   |         | PAA          | 80SEG       | 01         |
| 10.      | 0.6   |         | KINA         | 80KNA       | 01         |
| 10.1     | 2.2   |         | ITNA         | 76WEW       | 01         |
| 10.2     |       |         | HAA          | 80WAL       | 01         |
| 10.2     | 1.4   |         | ITNA         | 75OND       | 01         |
| 10.2     | 1.4   | D*      | NAA          | 74OND       | 01         |
| 10.3     | 0.7   |         | RTNA         | 81GAL       | 01         |
| 10.3     | 0.7   |         | RTNA         | 81GAL       | 02         |
| 10.6     | 1.3   |         | ITNA         | 77ROW       | 04         |
| 10.6     | 1.    |         | ITNA         | 78LAU       | 02         |
| 10.8     | 0.8   | D*      | IENA         | 77ROW       | 04         |
| 10.8     | 0.8   |         | IENA         | 77ROW       | 03         |
| 11.      | 3.    |         | ITNA         | 76KUC       | 01         |
| 11.      | 1.    |         | EXRF         | 77GIA       | 01         |
| 12.7     | 1.8   | *       | ITNA         | 73SHE       | 01         |
| 35.      | 13.   | *       | 14NAA        | 81WIL       | 01         |
| 35.      | 13.   | *       | 14NAA        | 81WIL       | 02         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Si (%)   |       |         |              |             |            |
| 16.      |       | *       | OES          | 78SUG       | 01         |
| 17.      | 3.4   | *       | OES          | 76WEW       | 01         |
| 17.7     |       | *35     | TCGS         | 78GLA       | 04         |
| 20.      | 1.6   |         | PAA          | 76CHA       | 01         |
| 20.      | 1.6   | D*      | PAA          | 77CHA       | 01         |
| 20.4     |       |         | ICPES        | 80NAD       | 01         |
| 20.9     |       |         | UU           | 80HEN       | 01         |
| 21.      | 2.    |         | PAA          | 75OND       | 01         |
| 21.5     | 1.4   |         | XRF          | 79SMI       | 01         |
| 21.8     | 0.3   |         | TCGS         | 79FAI       | 01         |
| 21.8     | 0.3   |         | TCGS         | 80AND       | 01         |
| 21.9     |       |         | XRF          | 78CAM       | 02         |
| 22.      | 1.    | 35      | AA           | 81GLA       | 03         |
| 22.4     | 1.6   |         | 14NAA        | 81WIL       | 02         |
| 22.4     | 0.3   |         | ICPES        | 80NAD       | 01         |
| 22.6     |       |         | AA           | 79SIL       | 01         |
| 22.8     | 0.8   |         | 14NAA        | 81WIL       | 01         |
| 23.      | 1.    |         | EXRF         | 77NIE       | 01         |
| 23.      | 6.    |         | 14NAA        | 76BLO       | 01         |
| 23.5     | 0.5   | 35      | IENA         | 80GLA       | 03         |
| 24.5     | 1.1   |         | TCGS         | 79AND       | 01         |
| Sm (ppm) |       |         |              |             |            |
|          | 100.  | L*      | OES          | 76WEW       | 01         |
| 10.05    | 0.58  | *       | ITNA         | 73SHE       | 01         |
| 10.4     | 0.9   |         | IENA         | 77ROW       | 04         |
| 11.      | 1.    |         | ITNA         | 78MAC       | 01         |
| 11.4     | 1.6   |         | IENA         | 76STE       | 05         |
| 11.8     | 1.6   |         | IENA         | 77ROW       | 03         |
| 12.1     | 0.4   | D*      | TCGS         | 80AND       | 01         |
| 12.1     | 1.    | D*      | ITNA         | 78RYA       | 01         |
| 12.1     | 0.4   |         | TCGS         | 79FAI       | 01         |
| 12.1     | 1.4   |         | ITNA         | 77ROW       | 04         |
| 12.1     | 1.    |         | ITNA         | 77CHA       | 01         |
| 12.4     | 0.5   |         | ITNA         | 73ABE       | 01         |
| 12.4     | 0.9   |         | ITNA         | 75OND       | 01         |
| 12.4     |       |         | ITNA         | 78WEA       | 01         |
| 12.8     | 0.6   |         | ITNA         | 76WEW       | 01         |
| 13.      |       |         | ITNA         | 83GLA       | 01         |
| 13.      | 0.3   |         | TCGS         | 79AND       | 01         |
| 13.      | 0.7   |         | ITNA         | 76RAG       | 01         |
| 13.2     |       |         | ITNA         | 82GLA       | 02         |
| 13.4     | 0.7   |         | ITNA         | 76OND       | 01         |
| 13.5     | 0.5   |         | ITNA         | 78LAU       | 02         |
| 13.6     | 0.88  |         | ITNA         | 75NAD       | 02         |
| 13.6     | 0.9   |         | ITNA         | 78NAD       | 02         |
| 14.9     | 1.    | 35      | ITNA         | 81GLA       | 03         |
| 15.      |       |         | ITNA         | 75KLE       | 01         |
| 15.8     | 0.3   | *       | ICPES        | 81CHU       | 01         |
| 20.      | 3.    | *       | SSMS         | 78SUG       | 02         |
| Sn (ppm) |       |         |              |             |            |
| 3.       |       |         | UU           | 80HEN       | 01         |
| 5.       | 2.    |         | EXRF         | 77GIA       | 01         |
| 5.7      | 0.6   |         | NM           | 81IMU       | 01         |
| 6.7      | 1.4   |         | XRF          | 79SMI       | 01         |
| 10.      | 5.    |         | OES          | 76WEW       | 01         |

TABLE X (cont)

| CONC      | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------|-------|---------|--------------|-------------|------------|
| 10.2      | 1.4   | D*      | ITNA         | 78RYA       | 01         |
| 10.2      | 1.4   |         | ITNA         | 77CHA       | 01         |
| 12.       | 1.    |         | PAA          | 76CHA       | 01         |
| 12.       | 1.    | D*      | PAA          | 77CHA       | 01         |
| 12.5      | 1.2   |         | PAA          | 74CHA       | 01         |
| 12.7      | 0.82  |         | HAA          | 82NAD       | 01         |
| 740.      | 210.  | *       | ITNA         | 73SHE       | 01         |
| S03 (ppm) |       |         |              |             |            |
|           | 100.  | L*      | UU           | 80HEN       | 01         |
| S04 (%)   |       |         |              |             |            |
| 0.98      |       |         | UU           | 80HEN       | 01         |
| Sr (ppm)  |       |         |              |             |            |
| 126.      |       | *       | EXRF         | 78WEG       | 01         |
| 869.      | 33.   | *       | ITNA         | 73SHE       | 01         |
| 1200.     | 300.  |         | ITNA         | 76STE       | 05         |
| 1244.     | 6.    |         | PAA          | 76KAT       | 02         |
| 1244.     | 9.    |         | PAA          | 76KAT       | 03         |
| 1250.     | 230.  |         | ITNA         | 76RAG       | 01         |
| 1256.     | 37.   |         | EXRF         | 78PEL       | 01         |
| 1260.     |       | 35      | IENA         | 81GLA       | 03         |
| 1260.     | 30.   | 5       | IENA         | 80GLA       | 03         |
| 1300.     | 200.  |         | ITNA         | 76OND       | 01         |
| 1300.     |       | 35      | IENA         | 81GLA       | 04         |
| 1301.     |       |         | XRF          | 75KLE       | 01         |
| 1310.     | 60.   |         | 14NAA        | 81WIL       | 02         |
| 1310.     | 50.   |         | 14NAA        | 81WIL       | 01         |
| 1340.     | 100.  |         | ITNA         | 78MAC       | 01         |
| 1340.     |       |         | AA           | 79SIL       | 01         |
| 1342.     | 20.   |         | EXRF         | 77GIA       | 01         |
| 1360.     | 110.  | 5       | IENA         | 76STE       | 05         |
| 1370.     | 120.  |         | PAA          | 76CHA       | 01         |
| 1370.     | 120.  | D*      | PAA          | 77CHA       | 01         |
| 1373.     | 95.   |         | PAA          | 74CHA       | 01         |
| 1375.     | 28.   |         | ICPES        | 81CHU       | 01         |
| 1390.     |       |         | ITNA         | 75MIL       | 01         |
| 1390.     |       |         | XRF          | 78CAM       | 02         |
| 1406.     | 80.   |         | ITNA         | 75NAD       | 02         |
| 1406.     | 80.   |         | ITNA         | 78NAD       | 02         |
| 1410.     | 400.  |         | 14NAA        | 77VAN       | 01         |
| 1430.     | 30.   |         | XRF          | 79SMI       | 01         |
| 1430.     | 60.   | 5       | IENA         | 76STE       | 05         |
| 1480.     | 60.   |         | ITNA         | 77ROW       | 04         |
| 1480.     | 60.   |         | IENA         | 77ROW       | 03         |
| 1480.     | 50.   |         | ITNA         | 77MAE       | 01         |
| 1500.     | 180.  |         | ITNA         | 77CHA       | 01         |
| 1500.     |       |         | UU           | 80HEN       | 01         |
| 1500.     | 200.  |         | ITNA         | 78LAU       | 02         |
| 1500.     | 180.  | D*      | ITNA         | 78RYA       | 01         |
| 1510.     | 60.   | 5       | IENA         | 80GLA       | 03         |
| 1520.     | 35.   |         | IENA         | 77ROW       | 04         |
| 1541.     | 188.  |         | ITNA         | 81WAN       | 01         |
| 1600.     | 100.  | 9       | ITNA         | 78LAU       | 02         |
| 1620.     |       | *       | ICPES        | 80FLO       | 01         |
| 1700.     | 300.  | *       | ITNA         | 75OND       | 01         |
| 1900.     | 200.  | *       | ITNA         | 73ABE       | 01         |
| 2300.     | 1100. | *       | OES          | 76WEW       | 01         |
| 8000.     |       | *       | XRF          | 76WEW       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ta (ppm) |       |         |              |             |            |
|          | 22.   | L*      | EXRF         | 77GIA       | 01         |
| 1.6      |       | *       | ITNA         | 75KLE       | 01         |
| 1.74     | 0.12  | 35      | NAA          | 81GLA       | 04         |
| 1.74     | 0.1   | 35      | ITNA         | 81GLA       | 02         |
| 1.8      |       |         | ITNA         | 78WEA       | 01         |
| 1.8      | 0.2   | 35      | IENA         | 80GLA       | 03         |
| 1.8      | 0.3   |         | ITNA         | 76OND       | 01         |
| 1.8      | 0.3   |         | ITNA         | 75OND       | 01         |
| 1.81     | 0.08  |         | ITNA         | 83GLA       | 01         |
| 1.9      | 0.25  | D*      | ITNA         | 78RYA       | 01         |
| 1.9      | 0.25  |         | ITNA         | 77CHA       | 01         |
| 1.9      | 0.2   | 35      | ITNA         | 81GLA       | 03         |
| 1.9      | 0.1   |         | ITNA         | 78LAU       | 02         |
| 2.       | 0.2   |         | ITNA         | 76RAG       | 01         |
| 2.       | 0.06  |         | IENA         | 77ROW       | 03         |
| 2.       |       |         | UU           | 80HEN       | 01         |
| 2.       | 0.1   |         | ITNA         | 78MAC       | 01         |
| 2.       | 0.06  | D*      | IENA         | 77ROW       | 04         |
| 2.01     | 0.14  |         | ITNA         | 77ROW       | 04         |
| 2.04     | 0.03  |         | ITNA         | 75NAD       | 02         |
| 2.04     | 0.03  |         | ITNA         | 78NAD       | 02         |
| 2.1      | 0.2   |         | ITNA         | 81WAN       | 01         |
| 2.2      |       | *       | ITNA         | 75MIL       | 01         |
| 2.74     | 0.25  | *       | ITNA         | 73SHE       | 01         |
| 3.5      | 0.3   | *       | ITNA         | 73ABE       | 01         |
| Tb (ppm) |       |         |              |             |            |
|          | 100.  | L*      | OES          | 76WEW       | 01         |
| 0.22     | 0.04  | *       | ITNA         | 73SHE       | 01         |
| 1.2      | 0.2   |         | ITNA         | 78MAC       | 01         |
| 1.5      | 0.4   |         | ITNA         | 76OND       | 01         |
| 1.5      | 0.3   |         | ITNA         | 81WAN       | 01         |
| 1.53     | 0.11  |         | ITNA         | 83GLA       | 01         |
| 1.8      |       |         | ITNA         | 75MIL       | 01         |
| 1.87     | 0.15  |         | ITNA         | 76RAG       | 01         |
| 1.9      | 0.1   |         | ITNA         | 78LAU       | 02         |
| 1.9      | 0.3   |         | ITNA         | 75OND       | 01         |
| 1.99     | 0.16  |         | ITNA         | 77ROW       | 04         |
| 2.       | 0.3   |         | ITNA         | 73ABE       | 01         |
| 2.       | 0.25  |         | ITNA         | 77CHA       | 01         |
| 2.       | 0.1   | 35      | NAA          | 81GLA       | 04         |
| 2.       | 0.1   | 35      | IENA         | 80GLA       | 03         |
| 2.       | 0.25  | D*      | ITNA         | 78RYA       | 01         |
| 2.01     | 0.06  | D*      | IENA         | 77ROW       | 04         |
| 2.01     | 0.06  |         | IENA         | 77ROW       | 03         |
| 3.12     | 0.02  | *       | ITNA         | 75NAD       | 02         |
| 3.12     | 0.02  | *       | ITNA         | 78NAD       | 02         |
| 3.3      | 0.5   | *       | SSMS         | 78SUG       | 02         |
| Te (ppm) |       |         |              |             |            |
|          | 0.5   | L*      | UU           | 80HEN       | 01         |
|          | 5.    | L*      | EXRF         | 77GIA       | 01         |
| 0.92     | 0.05  |         | HAA          | 82NAD       | 01         |
| 2.3      | 0.3   | D*      | PAA          | 77CHA       | 01         |
| 2.3      | 0.3   |         | PAA          | 76CHA       | 01         |
| 2.32     | 0.2   |         | PAA          | 74CHA       | 01         |
| 9.9      | 1.1   | *35     | RTNA         | 75GLA       | 01         |

TABLE X (cont)

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| Th (ppm)     |       |         |              |             |            |
| 20.          |       | *       | UU           | 80HEN       | 01         |
| 21.          | 3.    |         | EXRF         | 77GLA       | 01         |
| 22.8         | 0.5   |         | ITNA         | 76BLO       | 01         |
| 23.6         | 0.8   |         | ITNA         | 76RAG       | 01         |
| 23.8         | 0.4   |         | ITNA         | 77ROW       | 04         |
| 24.          | 0.8   |         | ITNA         | 81WAN       | 01         |
| 24.          | 2.    |         | ITNA         | 76OND       | 01         |
| 24.          | 1.    | 35      | ITNA         | 81GLA       | 03         |
| 24.          | 1.    |         | ITNA         | 78LAU       | 02         |
| 24.          | 1.    | 35      | IENA         | 80GLA       | 03         |
| 24.          | 0.3   |         | IENA         | 77ROW       | 03         |
| 24.          | 2.    | 35      | RTNA         | 78GLA       | 02         |
| 24.          | 0.5   | D*      | IENA         | 77ROW       | 04         |
| 24.4         | 2.2   |         | ITNA         | 75OND       | 01         |
| 24.5         | 0.4   |         | ITNA         | 83GLA       | 01         |
| 25.          | 2.    |         | ITNA         | 73SHE       | 01         |
| 25.          | 1.    | 35      | ITNA         | 81GLA       | 02         |
| 25.          | 0.9   | 35      | NAA          | 81GLA       | 04         |
| 26.          |       |         | DNA          | 75MIL       | 01         |
| 26.          |       |         | ITNA         | 75MIL       | 01         |
| 26.          |       |         | ITNA         | 75KLE       | 01         |
| 26.2         | 1.3   |         | GAMMA        | 73ABE       | 01         |
| 26.2         | 1.3   |         | GAMMA        | 75OND       | 01         |
| 28.          | 2.    |         | ITNA         | 73ABE       | 01         |
| 32.2         | 0.2   | *       | ITNA         | 78NAD       | 02         |
| 32.2         | 0.2   | *       | ITNA         | 75NAD       | 02         |
| Th-228 (PC1) |       |         |              |             |            |
| 2.23         | 0.05  | D*      | NM           | 81CAS       | 01         |
| 2.23         | 0.05  |         | NM           | 80CAS       | 01         |
| Th-230 (PC1) |       |         |              |             |            |
| 3.74         | 0.17  | D*      | NM           | 81CAS       | 01         |
| 3.74         | 0.17  |         | NM           | 80CAS       | 01         |
| Th-232 (PC1) |       |         |              |             |            |
| 2.45         | 0.08  | D*      | NM           | 81CAS       | 01         |
| 2.45         | 0.08  |         | NM           | 80CAS       | 01         |
| Ti (ppm)     |       |         |              |             |            |
| 3000.        |       | *       | XRF          | 76WEW       | 01         |
| 6000.        |       | *       | UU           | 80HEN       | 01         |
| 6000.        | 400.  | *       | ITNA         | 78MAC       | 01         |
| 6100.        | 200.  | *       | ITNA         | 75NAD       | 02         |
| 6100.        | 200.  | *       | ITNA         | 78NAD       | 02         |
| 6100.        |       | *       | OES          | 78SUG       | 01         |
| 6420.        |       |         | ITNA         | 73KLE       | 01         |
| 6800.        |       |         | AA           | 79SIL       | 01         |
| 6800.        | 1100. |         | ITNA         | 76OND       | 01         |
| 6960.        |       | 35      | TCGS         | 78GLA       | 04         |
| 7000.        | 700.  |         | ITNA         | 76WEW       | 01         |
| 7000.        | 300.  |         | ITNA         | 77ROW       | 03         |
| 7000.        | 300.  |         | ITNA         | 76STE       | 05         |
| 7000.        | 100.  | 35      | IENA         | 80GLA       | 03         |
| 7070.        | 180.  |         | ICPES        | 81CHU       | 01         |
| 7100.        | 100.  |         | ICPES        | 80NAD       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 7150.    | 1200. |         | ITNA         | 76RAG       | 01         |
| 7200.    | 200.  |         | NAA          | 81GLA       | 03         |
| 7200.    | 200.  | D*      | TCGS         | 80AND       | 01         |
| 7200.    | 200.  |         | TCGS         | 79FAL       | 01         |
| 7200.    | 1400. |         | OES          | 76WEW       | 01         |
| 7210.    | 95.   |         | TCGS         | 79AND       | 01         |
| 7230.    | 400.  |         | PAA          | 74CHA       | 01         |
| 7250.    | 360.  |         | PAA          | 76CHA       | 01         |
| 7250.    | 360.  | D*      | PAA          | 77CHA       | 01         |
| 7300.    | 150.  |         | 14NAA        | 81WIL       | 01         |
| 7300.    | 280.  | D*      | ITNA         | 78RYA       | 01         |
| 7300.    | 400.  |         | PAA          | 75OND       | 01         |
| 7300.    |       |         | XRF          | 78CAM       | 02         |
| 7300.    | 280.  |         | ITNA         | 77CHA       | 01         |
| 7330.    |       |         | ICPES        | 80FLO       | 01         |
| 7360.    | 344.  |         | EXRF         | 78PEL       | 01         |
| 7400.    |       |         | ITNA         | 78WEA       | 01         |
| 7400.    | 500.  |         | ITNA         | 78LAU       | 02         |
| 7400.    | 800.  |         | AA           | 76OND       | 01         |
| 7400.    | 300.  |         | ITNA         | 75OND       | 01         |
| 7500.    |       |         | ICPES        | 80NAD       | 01         |
| 7500.    |       |         | EXRF         | 78WEG       | 01         |
| 7500.    | 500.  | 35      | ITNA         | 81GLA       | 02         |
| 7600.    | 800.  |         | ITNA         | 73ABE       | 01         |
| 7600.    | 200.  |         | 14NAA        | 81WIL       | 02         |
| 7660.    | 100.  |         | PAA          | 76KAT       | 03         |
| 7660.    | 70.   |         | PAA          | 76KAT       | 02         |
| 7700.    | 300.  |         | XRF          | 79SIL       | 01         |
| 8200.    | 1100. | *       | ITNA         | 81WAN       | 01         |
| 8600.    | 1100. | *       | EXRF         | 77GLA       | 01         |
| 8700.    |       | *       | AA           | 76WEW       | 01         |
| 8900.    | 752.  | *       | ITNA         | 73SHE       | 01         |
| Tl (ppm) |       |         |              |             |            |
| 2.       | 30.   | L*      | OES          | 76WEW       | 01         |
| 3.5      | 0.5   | 6       | UU           | 80HEN       | 01         |
| 3.5      | 0.5   |         | PAA          | 82SEG       | 01         |
| 3.5      | 0.5   |         | PAA          | 80SEG       | 01         |
| 3.64     | 0.34  |         | PAA          | 74CHA       | 01         |
| 3.7      | 0.4   |         | PAA          | 76CHA       | 01         |
| 3.7      | 0.4   | D*      | PAA          | 77CHA       | 01         |
| 3.8      | 0.27  | 8       | SSMS         | 80KOP       | 01         |
| 3.8      | 0.5   | 6       | PAA          | 82SEG       | 01         |
| 5.       |       | *       | AA           | 76WEW       | 01         |
| 5.3      |       | *       | POT          | 82CHR       | 01         |
| 18.      | 6.    | *       | 14NAA        | 81WIL       | 02         |
| 18.      | 6.    | *       | 14NAA        | 81WIL       | 01         |
| Tm (ppm) |       |         |              |             |            |
| 1.3      | 30.   | L*      | OES          | 76WEW       | 01         |
| 1.3      | 0.3   |         | SSMS         | 78SUG       | 02         |
| 1.3      |       |         | ITNA         | 75MIL       | 01         |
| U (ppm)  |       |         |              |             |            |
| 8.4      | 0.56  | *       | ITNA         | 73SHE       | 01         |
| 8.6      | 1.    | *35     | FLUOR        | 78GLA       | 01         |
| 9.       | 6.    | *       | EXRF         | 77GLA       | 01         |
| 10.5     | 1.    |         | ITNA         | 76RAG       | 01         |
| 10.6     |       |         | ITNA         | 81WAN       | 01         |

TABLE X (cont)

| CONC        | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------------|-------|---------|--------------|-------------|------------|
| 10.6        | 0.6   | 35      | IENA         | 78GLA       | 01         |
| 11.         | 0.4   | 6       | PAA          | 82SEG       | 01         |
| 11.1        | 1.7   |         | ITNA         | 76OND       | 01         |
| 11.3        | 0.3   |         | ITNA         | 78NAD       | 02         |
| 11.3        | 0.3   |         | ITNA         | 75NAD       | 02         |
| 11.3        | 0.3   | 35      | DNA          | 78GLA       | 01         |
| 11.5        | 0.5   | 35      | DNA          | 81GLA       | 03         |
| 11.5        | 0.5   | 35      | IENA         | 80GLA       | 03         |
| 11.7        |       |         | DNA          | 75MIL       | 01         |
| 11.7        | 2.    |         | IDMS         | 78CAR       | 02         |
| 11.8        |       |         | IDMS         | 75KLE       | 01         |
| 11.9        | 0.6   |         | PAA          | 80SEG       | 01         |
| 11.9        | 0.4   | 6       | PAA          | 82SEG       | 01         |
| 12.         | 0.5   |         | GAMMA        | 73ABE       | 01         |
| 12.         |       |         | ITNA         | 78WEA       | 01         |
| 12.         | 0.5   | D*      | NAA          | 74OND       | 01         |
| 12.         | 0.5   |         | GAMMA        | 75OND       | 01         |
| 12.1        | 0.8   | 13      | PAA          | 81SEG       | 01         |
| 12.1        | 2.    | 35      | RTNA         | 75GLA       | 01         |
| 12.2        | 0.6   |         | IENA         | 77ROW       | 04         |
| 12.2        | 1.    | 13      | PAA          | 81SEG       | 01         |
| 12.4        | 0.6   |         | IENA         | 77ROW       | 03         |
| 12.7        | 0.5   |         | IENA         | 76STE       | 05         |
| 12.8        |       |         | ITNA         | 80EDD       | 01         |
| 13.5        | 1.2   |         | ITNA         | 76STE       | 05         |
| 13.8        |       | *       | ITNA         | 75MIL       | 01         |
| 15.         |       | *       | UU           | 80HEN       | 01         |
| U-234 (PC1) |       |         |              |             |            |
| 4.07        | 0.12  |         | NM           | 80CAS       | 01         |
| 4.07        | 0.12  | D*      | NM           | 81CAS       | 01         |
| U-235 (PC1) |       |         |              |             |            |
| 0.179       | 0.012 |         | NM           | 80CAS       | 01         |
| 0.179       | 0.012 | D*      | NM           | 81CAS       | 01         |
| U-238 (PC1) |       |         |              |             |            |
| 4.01        | 0.04  |         | NM           | 80CAS       | 01         |
| 4.01        | 0.04  | D*      | NM           | 81CAS       | 01         |
| V (ppm)     |       |         |              |             |            |
| 151.        | 200.  | L*      | XRF          | 81COH       | 02         |
| 174.        | 55.   | *6      | SSMS         | 78GUT       | 01         |
| 182.        |       |         | XRF          | 79SMT       | 01         |
| 190.        | 50.   |         | XRF          | 78CAM       | 02         |
| 190.        | 50.   | D*      | TCGS         | 79FAI       | 01         |
| 196.        | 10.   |         | TCGS         | 80AND       | 01         |
| 200.        |       |         | ITNA         | 78MAC       | 01         |
| 200.        |       |         | UU           | 80HEN       | 01         |
| 200.        | 34.   |         | EXRF         | 78PEL       | 01         |
| 201.        | 6.    |         | FAA          | 76OWE       | 01         |
| 204.        | 15.   |         | ITNA         | 76BLO       | 01         |
| 208.        | 12.   |         | PAA          | 74CHA       | 01         |
| 210.        |       |         | OES          | 78SUG       | 01         |
| 210.        | 12.   | D*      | PAA          | 77CHA       | 01         |
| 210.        | 12.   |         | PAA          | 76CHA       | 01         |
| 216.        |       |         | AA           | 78GUI       | 01         |
| 216.        |       |         | EXRF         | 78WEG       | 01         |

TABLE X (cont)

| CONC    | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------|-------|---------|--------------|-------------|------------|
| 219.    |       |         | ICPES        | 80NAD       | 01         |
| 220.    | 15.   |         | ITNA         | 73ABE       | 01         |
| 220.    | 15.   |         | ITNA         | 77CHA       | 01         |
| 220.    | 20.   | 35      | ITNA         | 81GLA       | 03         |
| 220.    | 15.   | D*      | ITNA         | 78RYA       | 01         |
| 221.    |       |         | ITNA         | 78WEA       | 01         |
| 223.    | 10.   |         | ITNA         | 78NAD       | 02         |
| 223.    | 9.9   |         | ITNA         | 75NAD       | 02         |
| 224.    | 6.7   |         | ICPES        | 81CHU       | 01         |
| 225.    | 20.   |         | ITNA         | 76WEW       | 01         |
| 226.    |       |         | FAA          | 78GUI       | 01         |
| 230.    | 10.6  |         | ITNA         | 73SHE       | 01         |
| 230.    | 12.   |         | OES          | 76WEW       | 01         |
| 230.    | 30.   | 35      | IENA         | 80GLA       | 03         |
| 230.    | 10.   | 35      | ITNA         | 81GLA       | 02         |
| 230.    | 10.   |         | ITNA         | 78LAU       | 02         |
| 233.    |       |         | ICPES        | 80FLO       | 01         |
| 234.    | 34.   |         | ITNA         | 81WAN       | 01         |
| 235.    | 13.   | D*      | NAA          | 74OND       | 01         |
| 235.    | 15.   |         | ITNA         | 75OND       | 01         |
| 237.    | 20.   |         | ITNA         | 77ROW       | 03         |
| 237.    | 20.   |         | ITNA         | 76STE       | 05         |
| 237.    | 9.    |         | ITNA         | 77MAE       | 01         |
| 240.    |       |         | ITNA         | 75KLE       | 01         |
| 270.    | 60.   |         | ITNA         | 76OND       | 01         |
| 271.    |       | 6       | SSMS         | 78GUI       | 01         |
| 290.    | 80.   | *       | ITNA         | 76RAG       | 01         |
| 295.    | 156.  | *       | EXRF         | 77GIA       | 01         |
| 410.    |       | *       | AA           | 76WEW       | 01         |
| W (ppm) |       |         |              |             |            |
| 3.8     | 19.   | L*      | EXRF         | 77GIA       | 01         |
| 3.9     | 0.7   |         | ITNA         | 81WAN       | 01         |
| 4.      | 0.4   |         | IENA         | 77ROW       | 04         |
| 4.2     | 0.4   |         | IENA         | 77ROW       | 03         |
| 4.5     | 1.    | D*      | IENA         | 76STE       | 05         |
| 4.5     | 1.    |         | ITNA         | 78RYA       | 01         |
| 4.6     |       |         | ITNA         | 77CHA       | 01         |
| 4.6     | 1.6   |         | ITNA         | 78WEA       | 01         |
| 4.8     | 1.5   |         | ITNA         | 75OND       | 01         |
| 4.9     | 0.7   | 35      | RENA         | 81GLA       | 03         |
| 5.      |       |         | UU           | 80HEN       | 01         |
| 5.      | 1.    | 35      | IENA         | 80GLA       | 03         |
| 5.2     | 0.3   | 35      | RTNA         | 78GLA       | 02         |
| 5.5     | 1.5   |         | ITNA         | 76RAG       | 01         |
| 5.8     | 0.3   | 35      | NAA          | 81GLA       | 04         |
| 6.      | 1.    |         | ITNA         | 78MAC       | 01         |
| 12.7    | 1.1   | *       | ITNA         | 73SHE       | 01         |
| Y (ppm) |       |         |              |             |            |
| 30.     |       | *       | UU           | 80HEN       | 01         |
| 44.     | 4.2   |         | OES          | 76WEW       | 01         |
| 60.     | 8.    |         | PAA          | 77CHA       | 01         |
| 60.     | 5.    |         | EXRF         | 77GIA       | 01         |
| 62.     | 10.   |         | PAA          | 75OND       | 01         |
| 65.     |       |         | ICPES        | 80FLO       | 01         |
| 66.     |       |         | XRF          | 78CAM       | 02         |
| 66.     | 2.    |         | PAA          | 76KAT       | 03         |
| 67.     | 1.    |         | PAA          | 76KAT       | 02         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 68.      | 16.   |         | SSMS         | 78SUG       | 02         |
| 68.      | 1.    |         | XRF          | 79SMI       | 01         |
| 150.     | 15.   | *       | 14NAA        | 81WIL       | 02         |
| 150.     | 7.    | *       | 14NAA        | 81WIL       | 01         |
| Yb (ppm) |       |         |              |             |            |
| 4.7      | 0.4   |         | ITNA         | 78MAC       | 01         |
| 4.8      | 0.6   |         | ITNA         | 76WEW       | 01         |
| 5.5      | 0.3   |         | ITNA         | 78LAU       | 02         |
| 5.5      | 1.4   |         | ITNA         | 78NAD       | 02         |
| 5.53     | 0.14  |         | ITNA         | 75NAD       | 02         |
| 5.7      | 0.56  |         | OES          | 76WEW       | 01         |
| 5.7      | 0.6   |         | ITNA         | 76OND       | 01         |
| 5.9      | 0.3   |         | IENA         | 77ROW       | 04         |
| 5.9      | 0.3   |         | ITNA         | 76RAG       | 01         |
| 6.1      | 0.18  |         | ICPES        | 81CHU       | 01         |
| 6.2      | 3.4   |         | ITNA         | 73SHE       | 01         |
| 6.2      | 0.2   | 5       | ITNA         | 77ROW       | 04         |
| 6.6      | 0.4   | D*      | ITNA         | 77ROW       | 04         |
| 6.6      | 0.4   |         | ITNA         | 77ROW       | 03         |
| 6.8      |       |         | ITNA         | 75MIL       | 01         |
| 7.       |       |         | ICPES        | 80FLO       | 01         |
| 7.       | 3.    |         | ITNA         | 75OND       | 01         |
| 7.2      | 2.1   | D*      | ITNA         | 78RYA       | 01         |
| 7.2      | 2.1   |         | ITNA         | 77CHA       | 01         |
| 8.       | 0.5   | 35      | ITNA         | 81GLA       | 03         |
| 8.4      | 0.6   |         | ITNA         | 81WAN       | 01         |
| 8.9      | 0.9   | *       | ITNA         | 73ABE       | 01         |
| 9.       | 1.4   | *       | SSMS         | 78SUG       | 02         |
| Zn (ppm) |       |         |              |             |            |
|          | 420.  | L*      | 14NAA        | 81WIL       | 01         |
|          | 300.  | L*      | 14NAA        | 81WIL       | 02         |
| 180.7    | 4.    | *       | AA           | 74GAL       | 01         |
| 195.     | 23.   |         | RTNA         | 74ORV       | 01         |
| 198.     |       |         | AA           | 78GUI       | 01         |
| 200.     |       |         | EXRF         | 78WEG       | 01         |
| 200.     |       |         | UU           | 80HEN       | 01         |
| 200.     | 20.   |         | ITNA         | 77CHA       | 01         |
| 200.     | 8.    |         | IENA         | 77ROW       | 04         |
| 200.     | 10.   |         | EXRF         | 78PEL       | 01         |
| 200.     | 20.   |         | ITNA         | 78LAU       | 02         |
| 200.     | 20.   | D*      | ITNA         | 78RYA       | 01         |
| 200.     | 10.   | 9       | ITNA         | 78LAU       | 02         |
| 200.5    | 4.    |         | RTNA         | 74GAL       | 01         |
| 201.     | 6.    |         | ITNA         | 77ROW       | 03         |
| 201.     | 8.    |         | AA           | 76OND       | 01         |
| 201.     | 6.    | D*      | ITNA         | 77ROW       | 04         |
| 201.     |       |         | AE+AF        | 77FEL       | 01         |
| 202.     |       |         | XRF          | 78CAM       | 02         |
| 204.     | 12.   | 35      | PAA          | 81GLA       | 03         |
| 204.     | 13.   | 5       | IENA         | 80GLA       | 03         |
| 205.     | 10.   | 6       | PAA          | 82SEG       | 01         |
| 205.     | 20.   |         | PAA          | 80SEG       | 01         |
| 206.     | 7.3   |         | ITNA         | 81WAN       | 01         |
| 207.     |       |         | ITNA         | 78WEA       | 01         |
| 208.     | 9.5   |         | AA           | 80STO       | 02         |
| 208.     |       |         | XRF          | 75KLE       | 01         |
| 208.1    | 24.   |         | ITNA         | 74GAL       | 01         |
| 208.2    | 3.6   |         | AA           | 77NIT       | 01         |
| 210.     | 36.   |         | OES          | 76WEW       | 01         |

TABLE X (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 210.     |       |         | OES          | 78SUG       | 01         |
| 210.     |       |         | ICPES        | 80NAD       | 01         |
| 211.     |       |         | ICPES        | 80EPS       | 03         |
| 212.     | 14.   |         | ITNA         | 78NAD       | 02         |
| 212.     | 14.   |         | ITNA         | 75NAD       | 02         |
| 212.     |       |         | ICPES        | 80FLO       | 01         |
| 212.     | 20.   |         | FAA          | 76OWE       | 01         |
| 212.     | 7.    |         | XRF          | 79SMI       | 01         |
| 213.5    | 1.    |         | XRF          | 74GAL       | 01         |
| 214.     |       |         | AA           | 78GEL       | 01         |
| 214.     | 2.    |         | AF           | 75EPS       | 01         |
| 214.     | 16.   |         | PAA          | 74CHA       | 01         |
| 214.     | 2.    |         | AA           | 75EPS       | 01         |
| 215.     | 20.   |         | NAA          | 77JER       | 01         |
| 215.     | 20.   |         | PAA          | 76CHA       | 01         |
| 215.     | 20.   | D*      | PAA          | 77CHA       | 01         |
| 216.     |       |         | FAA          | 80WAL       | 01         |
| 216.     | 25.   | D*      | NAA          | 74OND       | 01         |
| 216.     | 25.   |         | PAA          | 75OND       | 01         |
| 216.     | 14.   |         | EXRF         | 77GIA       | 01         |
| 216.     | 2.4   |         | AA           | 74RAI       | 01         |
| 219.     | 4.    |         | ICPES        | 79EPS       | 01         |
| 220.     | 10.   | 6       | PAA          | 82SEG       | 01         |
| 220.     | 5.    |         | ITNA         | 76OND       | 01         |
| 220.     | 130.  |         | ITNA         | 76BLO       | 01         |
| 221.     | 16.   | 5       | IENA         | 80GLA       | 03         |
| 221.     |       |         | AA           | 79SIL       | 01         |
| 221.     | 16.   | 35      | NAA          | 81GLA       | 04         |
| 228.     | 6.9   |         | ICPES        | 81CHU       | 01         |
| 230.     | 40.   |         | ITNA         | 76RAG       | 01         |
| 234.     |       |         | AA           | 78WEG       | 01         |
| 250.     |       | *       | AA           | 76WEW       | 01         |
| 270.     |       | *6      | SSMS         | 78GUI       | 01         |
| 270.     | 30.   | *       | ITNA         | 78MAC       | 01         |
| 283.     |       | *6      | SSMS         | 78GUI       | 01         |
| 308.     | 75.   | *       | ITNA         | 76WEW       | 01         |
| 700.     | 220.  | *       | ITNA         | 73SHE       | 01         |
| Zr (ppm) |       |         |              |             |            |
| 160.     | 34.   | *       | OES          | 76WEW       | 01         |
| 182.     | 76.   |         | ITNA         | 76RAG       | 01         |
| 200.     |       |         | UU           | 80HEN       | 01         |
| 223.     | 6.7   |         | ICPES        | 81CHU       | 01         |
| 286.     | 8.    | 35      | IENA         | 81GLA       | 04         |
| 288.     |       |         | ICPES        | 80FLO       | 01         |
| 290.     | 20.   | 5       | IENA         | 80GLA       | 03         |
| 290.     | 7.    |         | EXRF         | 77GIA       | 01         |
| 298.     | 10.   |         | PAA          | 76KAT       | 03         |
| 298.     | 6.    |         | PAA          | 76KAT       | 02         |
| 300.     | 20.   | D*      | PAA          | 77CHA       | 01         |
| 300.     | 20.   |         | PAA          | 76CHA       | 01         |
| 301.     | 22.   |         | PAA          | 74CHA       | 01         |
| 301.     | 20.   |         | PAA          | 75OND       | 01         |
| 305.     |       |         | XRF          | 78CAM       | 02         |
| 310.     | 20.   |         | ITNA         | 77CHA       | 01         |
| 310.     | 20.   | 9       | ITNA         | 78LAU       | 02         |
| 310.     | 70.   | D*      | IENA         | 77ROW       | 04         |
| 310.     | 20.   | D*      | ITNA         | 78RYA       | 01         |
| 310.     | 70.   |         | IENA         | 77ROW       | 03         |
| 311.     | 8.    |         | XRF          | 79SMI       | 01         |
| 340.     | 50.   | 5       | IENA         | 80GLA       | 03         |
| 380.     | 20.   |         | 14NAA        | 81WIL       | 02         |

TABLE X (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 410. |       |         | ITNA         | 77ROW       | 04         |
| 410. | 20.   |         | 14NAA        | 81WIL       | 01         |
| 500. |       | *       | ITNA         | 75MIL       | 01         |
| 640. | 140.  | *       | ITNA         | 73SHE       | 01         |

TABLE Y

## NRS SRM 1633A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppb) |       |         |              |             |            |
|          | 600.  | L*      | IENA         | 80GLA       | 03         |
|          | 1100. | L*      | ITNA         | 82SUZ       | 02         |
| Al (Z)   |       |         |              |             |            |
| 13.8     | 0.32  |         | ITNA         | 82OBR       | 01         |
| 14.      | 0.2   | D*      | TCGS         | 80AND       | 01         |
| 14.      | 0.2   |         | TCGS         | 79FAI       | 01         |
| 14.2     | 0.3   | 35      | ITNA         | 81GLA       | 02         |
| 14.2     | 0.3   |         | ITNA         | 80GAR       | 01         |
| 14.2     | 0.4   | 35      | ITNA         | 81GLA       | 04         |
| 14.5     | 0.12  |         | AA           | 82NAD       | 02         |
| 14.7     | 0.7   |         | ITNA         | 82SUZ       | 02         |
| 14.81    | 0.2   |         | ICPES        | 82NAD       | 02         |
| 15.      | 0.43  |         | CPXRF        | 80KIR       | 01         |
| As (ppm) |       |         |              |             |            |
| 97.      | 18.   | *       | CPXRF        | 80KIR       | 01         |
| 141.     | 8.    |         | AE+AF        | 82MAT       | 01         |
| 142.     |       |         | ITNA         | 81SLO       | 01         |
| 143.     |       |         | RTNA         | 81SLO       | 01         |
| 145.     | 8.    | 35      | VV           | 81GLA       | 04         |
| 145.     | 6.    |         | ITNA         | 82SUZ       | 02         |
| 145.     | 11.   |         | IENA         | 82GLA       | 02         |
| 145.3    | 8.1   |         | ITNA         | 82OBR       | 01         |
| 148.     | 3.    | 35      | IENA         | 80GLA       | 03         |
| B (ppm)  |       |         |              |             |            |
| 39.      | 1.    |         | ICPES        | 82OWE       | 01         |
| 39.      | 3.    | 35      | TCGS         | 81GLA       | 04         |
| 39.2     | 0.7   |         | TCGS         | 79FAI       | 01         |
| 39.2     | 0.7   | D*      | TCGS         | 80AND       | 01         |
| 41.6     | 2.    |         | TCGS         | 83GLA       | 03         |
| Ba (ppm) |       |         |              |             |            |
| 1060.    |       |         | ITNA         | 82GLA       | 02         |
| 1100.    | 100.  | 9       | ITNA         | 82SUZ       | 02         |
| 1210.    | 50.   |         | ITNA         | 82SUZ       | 02         |
| 1240.    | 200.  | 5       | IENA         | 80GLA       | 03         |
| 1400.    | 20.   | 5       | IENA         | 80GLA       | 03         |
| 1440.    | 36.   |         | ITNA         | 82OBR       | 01         |
| 1450.    | 110.  | 35      | NAA          | 81GLA       | 04         |
| 1490.    | 80.   |         | ITNA         | 83GLA       | 01         |
| 1500.    | 100.  |         | CPXRF        | 80KIR       | 01         |
| 1500.    | 90.   |         | ITNA         | 80GAR       | 01         |
| 1500.    | 200.  | 35      | ITNA         | 81GLA       | 02         |
| 1520.    | 20.   | 5       | IENA         | 80GLA       | 03         |
| 1600.    |       |         | ICPES        | 82NAD       | 02         |
| 1760.    | 300.  | 5       | IENA         | 80GLA       | 03         |
| Br (ppm) |       |         |              |             |            |
|          | 10.   | L*      | IENA         | 80GLA       | 03         |
| 2.2      | 0.3   |         | ITNA         | 82SUZ       | 02         |
| 2.4      | 0.1   | 5       | IENA         | 80GLA       | 03         |

TABLE Y (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ca (%)   |       |         |              |             |            |
| 1.05     | 0.16  | 35      | ITNA         | 81GLA       | 02         |
| 1.09     | 0.01  |         | AA           | 82NAD       | 02         |
| 1.1      | 0.3   | 35      | IENA         | 80GLA       | 03         |
| 1.1      | 0.1   | 35      | ITNA         | 81GLA       | 04         |
| 1.11     | 0.076 |         | ITNA         | 820BR       | 01         |
| 1.11     | 0.03  |         | ICPES        | 82NAD       | 02         |
| 1.12     | 0.08  |         | ITNA         | 80GAR       | 01         |
| 1.14     | 0.04  |         | AA           | 82GLA       | 02         |
| 1.16     | 0.21  |         | ITNA         | 82SUZ       | 02         |
| 1.2      | 0.08  |         | CPXRF        | 80KIR       | 01         |
| 1.29     | 0.11  | *       | TCGS         | 79FAI       | 01         |
| 1.29     | 0.11  | D*      | TCGS         | 80AND       | 01         |
| Cd (ppm) |       |         |              |             |            |
|          | 1.4   | L*      | ITNA         | 82SUZ       | 02         |
| 1.07     | 0.05  |         | TCGS         | 79FAI       | 01         |
| 1.07     | 0.05  | D*      | TCGS         | 80AND       | 01         |
| Ce (ppm) |       |         |              |             |            |
| 163.     | 6.    |         | ITNA         | 82GLA       | 02         |
| 167.     | 8.    |         | ITNA         | 82SUZ       | 02         |
| 170.     | 6.    | 35      | ITNA         | 81GLA       | 02         |
| 174.     | 5.    | 12      | ITNA         | 82SUZ       | 02         |
| 180.     | 5.    | 35      | NAA          | 81GLA       | 04         |
| 183.     | 19.   |         | ITNA         | 80GAR       | 01         |
| 186.     | 4.    | 35      | IENA         | 80GLA       | 03         |
| 230.     | 45.   | *       | CPXRF        | 80KIR       | 01         |
| Cl (ppm) |       |         |              |             |            |
|          | 69.   | L*      | ITNA         | 82SUZ       | 02         |
| Co (ppm) |       |         |              |             |            |
| 37.      | 3.    | 35      | IENA         | 80GLA       | 03         |
| 38.      | 13.   |         | CPXRF        | 80KIR       | 01         |
| 40.      |       |         | ITNA         | 82GLA       | 02         |
| 44.      | 1.    |         | ITNA         | 82SUZ       | 02         |
| 44.      | 1.    | 35      | ITNA         | 81GLA       | 02         |
| 44.8     | 0.8   |         | ITNA         | 83GLA       | 01         |
| 46.2     | 1.8   |         | ITNA         | 80GAR       | 01         |
| 47.      | 4.    | 35      | NAA          | 81GLA       | 04         |
| Cr (ppm) |       |         |              |             |            |
| 185.     | 7.    |         | ITNA         | 82SUZ       | 02         |
| 186.     | 8.    | 35      | ITNA         | 81GLA       | 02         |
| 191.     | 13.   |         | ITNA         | 82GLA       | 02         |
| 192.     |       |         | ICPES        | 81WAL       | 01         |
| 194.     | 6.    | 12      | ITNA         | 82SUZ       | 02         |
| 195.     | 7.    |         | ITNA         | 83GLA       | 01         |
| 197.     | 18.   | 35      | ITNA         | 81GLA       | 04         |
| 197.     | 13.   |         | ITNA         | 80GAR       | 01         |
| 200.     | 11.   |         | CPXRF        | 80KIR       | 01         |
| Cs (ppm) |       |         |              |             |            |
| 9.3      | 0.5   |         | ITNA         | 82GLA       | 02         |
| 9.7      | 0.6   | 35      | ITNA         | 81GLA       | 02         |

TABLE Y (cont)

| CONC      | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------|-------|---------|--------------|-------------|------------|
| 9.9       | 0.9   |         | ITNA         | 83GLA       | 01         |
| 10.1      | 0.2   | 35      | IENA         | 80GLA       | 03         |
| 10.2      | 0.2   |         | ITNA         | 82SUZ       | 02         |
| 10.5      | 0.3   | 35      | NAA          | 81GLA       | 04         |
| 10.6      | 1.1   |         | ITNA         | 80GAR       | 01         |
| Cu (ppm)  |       |         |              |             |            |
|           | 350.  | L*      | ITNA         | 82SUZ       | 02         |
| 120.      | 5.2   |         | CPXRF        | 80KIR       | 01         |
| Dy (ppm)  |       |         |              |             |            |
| 14.3      | 0.2   | 35      | ITNA         | 81GLA       | 02         |
| 14.5      |       | 35      | ITNA         | 81GLA       | 04         |
| 15.       | 3.3   |         | ITNA         | 820BR       | 01         |
| 16.6      | 1.3   |         | ITNA         | 80GAR       | 01         |
| 16.8      | 0.3   |         | ITNA         | 82SUZ       | 02         |
| Eu (ppm)  |       |         |              |             |            |
| 2.        | 2.    | *35     | IENA         | 80GLA       | 03         |
| 2.98      | 0.33  |         | ITNA         | 80GAR       | 01         |
| 3.19      | 0.08  | 35      | ITNA         | 81GLA       | 02         |
| 3.6       | 0.1   |         | ITNA         | 83GLA       | 01         |
| 3.64      | 0.25  |         | ITNA         | 820BR       | 01         |
| 3.7       | 0.2   |         | ITNA         | 82GLA       | 02         |
| 3.7       | 0.2   | 35      | ITNA         | 81GLA       | 04         |
| 3.7       | 0.3   |         | ITNA         | 82SUZ       | 02         |
| Fe (%)    |       |         |              |             |            |
| 8.84      |       | *       | AA           | 82GLA       | 02         |
| 8.88      | 0.07  | *       | AA           | 82NAD       | 02         |
| 9.21      | 0.1   |         | ICPES        | 82NAD       | 02         |
| 9.23      | 0.09  | 35      | ITNA         | 81GLA       | 02         |
| 9.36      | 0.49  | 35      | NAA          | 81GLA       | 04         |
| 9.4       | 0.3   |         | ITNA         | 82SUZ       | 02         |
| 9.4       | 0.1   | 5       | IENA         | 80GLA       | 03         |
| 9.49      | 0.1   |         | ITNA         | 83GLA       | 01         |
| 9.5       | 0.3   |         | ITNA         | 80GAR       | 01         |
| 9.5       | 0.3   | 12      | ITNA         | 82SUZ       | 02         |
| 9.7       | 0.2   | 5       | IENA         | 80GLA       | 03         |
| 9.7       | 0.2   |         | TCGS         | 79FAI       | 01         |
| 9.7       | 0.2   | D*      | TCGS         | 80AND       | 01         |
| Ga (ppm)  |       |         |              |             |            |
| 51.       | 5.    |         | ITNA         | 82SUZ       | 02         |
| 55.       | 4.6   |         | CPXRF        | 80KIR       | 01         |
| 55.7      | 4.5   |         | ITNA         | 820BR       | 01         |
| 56.       |       | 35      | IENA         | 81GLA       | 04         |
| 59.       | 1.    | 35      | IENA         | 80GLA       | 03         |
| Gd (ppm)  |       |         |              |             |            |
| 15.3      | 0.2   |         | TCGS         | 79FAI       | 01         |
| 23.5      | 0.3   |         | TCGS         | 80AND       | 01         |
| H2O-T (%) |       |         |              |             |            |
| 0.35      |       |         | FD           | 80KHA       | 02         |

TABLE Y (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Hf (ppm) |       |         |              |             |            |
| 6.3      | 0.7   | 9       | ITNA         | 82SUZ       | 02         |
| 6.6      |       |         | ITNA         | 82GLA       | 02         |
| 7.2      | 0.3   | 35      | ITNA         | 81GLA       | 02         |
| 7.2      | 0.8   |         | ITNA         | 82SUZ       | 02         |
| 7.4      | 0.4   |         | ITNA         | 83GLA       | 01         |
| 7.6      | 0.2   | 35      | NAA          | 81GLA       | 04         |
| 7.78     | 0.85  |         | ITNA         | 80GAR       | 01         |
| 7.8      | 0.2   | 35      | IENA         | 80GLA       | 03         |
| Hg (ppm) |       |         |              |             |            |
|          | 0.63  | L*      | ITNA         | 82SUZ       | 02         |
|          | 0.42  | L*      | ITNA         | 82SUZ       | 02         |
| 150.     | 10.   |         | CVAA         | 82GLA       | 02         |
| 151.     | 12.   |         | CVAA         | 82DOO       | 01         |
| I (ppm)  |       |         |              |             |            |
|          | 5.    | L*      | ITNA         | 82SUZ       | 02         |
| In (ppb) |       |         |              |             |            |
| 151.     | 16.   |         | ITNA         | 82SUZ       | 02         |
| 160.     | 30.   |         | ITNA         | 82OBR       | 01         |
| K (%)    |       |         |              |             |            |
| 1.8      | 0.07  |         | CPXRF        | 80KIR       | 01         |
| 1.82     |       |         | ITNA         | 83GLA       | 01         |
| 1.84     | 0.14  |         | ITNA         | 80GAR       | 01         |
| 1.86     | 0.089 |         | ITNA         | 82OBR       | 01         |
| 1.86     | 0.12  |         | ITNA         | 82SUZ       | 02         |
| 1.88     | 0.1   | 35      | ITNA         | 81GLA       | 04         |
| 1.88     | 0.04  |         | ICPES        | 82NAD       | 02         |
| 1.93     | 0.03  |         | AA           | 82NAD       | 02         |
| 1.96     | 0.02  |         | AA           | 82GLA       | 02         |
| 1.97     | 0.04  |         | TCGS         | 79FAI       | 01         |
| 1.97     | 0.04  | D*      | TCGS         | 80AND       | 01         |
| 1.99     | 0.03  | 35      | IENA         | 80GLA       | 03         |
| La (ppm) |       |         |              |             |            |
| 62.      | 2.    | *       | ITNA         | 82SUZ       | 02         |
| 79.      |       |         | ITNA         | 83GLA       | 01         |
| 81.      | 1.    |         | ITNA         | 82GLA       | 02         |
| 83.      | 4.    | 35      | ITNA         | 81GLA       | 04         |
| 84.      | 2.    |         | ITNA         | 82GRA       | 01         |
| 84.      | 6.    | 35      | IENA         | 80GLA       | 03         |
| 87.9     | 7.    |         | ITNA         | 82OBR       | 01         |
| 100.     | 23.   | *       | ITNA         | 80GAR       | 01         |
| Lu (ppm) |       |         |              |             |            |
| 0.93     | 0.09  |         | ITNA         | 80GAR       | 01         |
| 0.97     | 0.25  |         | ITNA         | 82GLA       | 02         |
| 1.44     | 0.12  |         | ITNA         | 82SUZ       | 02         |

TABLE Y (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Mg (ppm) |       |         |              |             |            |
| 3800.    | 700.  |         | CPXRF        | 80KIR       | 01         |
| 4200.    |       |         | AA           | 82GLA       | 02         |
| 4500.    | 500.  |         | ITNA         | 80GAR       | 01         |
| 4590.    | 30.   |         | AA           | 82NAD       | 02         |
| 4600.    | 70.   |         | ICPES        | 82NAD       | 02         |
| 8000     | 1300. | *       | ITNA         | 82SUZ       | 02         |
| Mn (ppm) |       |         |              |             |            |
| 170.     | 24.   |         | ITNA         | 82SUZ       | 02         |
| 182.     | 3.    | 35      | ITNA         | 81GLA       | 02         |
| 185.     | 11.   |         | ITNA         | 82OBR       | 01         |
| 190.     | 15.   |         | TCGS         | 79FAI       | 01         |
| 190.     | 15.   | D*      | TCGS         | 80AND       | 01         |
| 191.     | 4.    |         | ITNA         | 80GAR       | 01         |
| 195.     | 15.   |         | CPXRF        | 80KIR       | 01         |
| 210.     | 50.   | 35      | ITNA         | 81GLA       | 04         |
| 230.     |       |         | ICPES        | 82NAD       | 02         |
| 260.     | 20.   | 35      | IENA         | 80GLA       | 03         |
| 277.     | 7.    |         | ITNA         | 83GLA       | 01         |
| Mo (ppm) |       |         |              |             |            |
| 27.      | 6.    |         | ITNA         | 82SUZ       | 02         |
| 30.      | 4.2   |         | CPXRF        | 80KIR       | 01         |
| 36.      | 1.    | 35      | IENA         | 80GLA       | 03         |
| Na (ppm) |       |         |              |             |            |
| 1560.    | 70.   |         | AA           | 82NAD       | 02         |
| 1680.    | 90.   |         | ITNA         | 82OBR       | 01         |
| 1700.    | 70.   |         | ICPES        | 82NAD       | 02         |
| 1720.    | 50.   |         | ITNA         | 80GAR       | 01         |
| 1730.    | 10.   |         | ITNA         | 83GLA       | 01         |
| 1740.    | 100.  | 35      | ITNA         | 81GLA       | 04         |
| 1750.    | 50.   |         | ITNA         | 82SUZ       | 02         |
| 1760.    |       |         | ITNA         | 82GLA       | 02         |
| 1800.    | 100.  | 35      | ITNA         | 81GLA       | 02         |
| 2020.    | 400.  |         | ITNA         | 82SCH       | 05         |
| 2100.    | 600.  | *       | TCGS         | 79FAI       | 01         |
| 2100.    | 600.  | D*      | TCGS         | 80AND       | 01         |
| 2200.    | 600.  | *       | CPXRF        | 80KIR       | 01         |
| Nd (ppm) |       |         |              |             |            |
| 65.6     | 5.4   |         | TCGS         | 79FAI       | 01         |
| 66.      | 5.    |         | TCGS         | 80AND       | 01         |
| 71.      | 3.    | 35      | IENA         | 80GLA       | 03         |
| 113.     | 7.    |         | ITNA         | 82SUZ       | 02         |
| 122.     | 13.   | *12     | ITNA         | 82SUZ       | 02         |
| Ni (ppm) |       |         |              |             |            |
| 112.     | 4.8   |         | CPXRF        | 80KIR       | 01         |
| 117.     | 6.    | 35      | IENA         | 80GLA       | 03         |
| 128.     | 6.    |         | ITNA         | 82SUZ       | 02         |
| 139.     | 7.    | 12      | ITNA         | 82SUZ       | 02         |

TABLE Y (cont)

| CONC     | UNCER   | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|---------|---------|--------------|-------------|------------|
| O (%)    |         |         |              |             |            |
| 47.66    | 0.36    | 34      | 14NAA        | 80KHA       | 02         |
| P (ppm)  |         |         |              |             |            |
| 1700.    |         |         | XRF          | 81TUR       | 01         |
| 1800.    | 300.    |         | ICPES        | 82NAD       | 02         |
| 2000.    |         |         | AA           | 82NAD       | 02         |
| Pb (ppm) |         |         |              |             |            |
| 65.      | 5.7     |         | CPXRF        | 80KIR       | 01         |
| Pr (ppm) |         |         |              |             |            |
| 17.9     | 1.7     | 12      | ITNA         | 82SUZ       | 02         |
| 18.9     | 1.1     |         | ITNA         | 82SUZ       | 02         |
| Rb (ppm) |         |         |              |             |            |
| 124.     | 4.      |         | ITNA         | 82SUZ       | 02         |
| 130.     | 26.     |         | ITNA         | 80GAR       | 01         |
| 134.     | 16.     | 35      | NAA          | 81GLA       | 04         |
| 134.     | 8.      |         | ITNA         | 83GLA       | 01         |
| 138.     | 8.      | 12      | ITNA         | 82SUZ       | 02         |
| 147.     | 8.      | 35      | ITNA         | 81GLA       | 02         |
| 150.     | 12.     |         | CPXRF        | 80KIR       | 01         |
| 163.     | 2.      | 35      | IENA         | 80GLA       | 03         |
| S (ppm)  |         |         |              |             |            |
|          | 114000. |         |              |             |            |
| 2700.    | 200.    | L*      | ITNA         | 82SUZ       | 02         |
| 2700.    | 200.    | D*      | TCGS         | 79FAI       | 01         |
|          |         |         | TCGS         | 80AND       | 01         |
| Sb (ppm) |         |         |              |             |            |
| 6.3      | 0.2     |         | ITNA         | 82SUZ       | 02         |
| 6.6      |         |         | ITNA         | 82GLA       | 02         |
| 6.95     | 0.22    | 35      | ITNA         | 81GLA       | 02         |
| 7.3      | 0.2     |         | RTNA         | 81SLO       | 01         |
| 7.7      | 0.5     | 35      | IENA         | 80GLA       | 03         |
| 7.8      | 1.5     |         | ITNA         | 80GAR       | 01         |
| Sc (ppm) |         |         |              |             |            |
| 34.      | 4.2     |         | CPXRF        | 80KIR       | 01         |
| 34.      | 1.      |         | ITNA         | 82SUZ       | 02         |
| 36.      |         |         | ITNA         | 82GLA       | 02         |
| 39.      | 2.      |         | ITNA         | 83GLA       | 01         |
| 40.      | 1.      | 35      | ITNA         | 81GLA       | 02         |
| 40.6     | 1.3     |         | ITNA         | 80GAR       | 01         |
| 41.      | 2.      | 35      | ITNA         | 81GLA       | 04         |
| 43.      | 1.      | 35      | IENA         | 80GLA       | 03         |
| Se (ppm) |         |         |              |             |            |
| 7.8      | 2.1     |         | CPXRF        | 80KIR       | 01         |
| 8.8      | 0.4     | 9       | ITNA         | 82SUZ       | 02         |
| 9.4      | 0.5     |         | RTNA         | 81SLO       | 01         |
| 9.4      | 0.3     | 35      | RTNA         | 81GLA       | 01         |

TABLE Y (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 10.      | 2.    | 35      | IENA         | 80GLA       | 03         |
| 10.2     | 0.6   |         | ITNA         | 82SUZ       | 02         |
| 10.7     | 0.8   | 35      | NAA          | 81GLA       | 04         |
| Si (%)   |       |         |              |             |            |
| 18.      | 0.93  | *       | CPXRF        | 80KIR       | 01         |
| 22.2     | 0.4   |         | TCGS         | 79FAI       | 01         |
| 22.2     | 0.4   | D*      | TCGS         | 80AND       | 01         |
| 23.37    | 0.23  |         | ICPES        | 82NAD       | 02         |
| 23.9     | 0.5   |         | AA           | 82GLA       | 02         |
| 23.9     | 0.5   | 35      | IENA         | 80GLA       | 03         |
| 24.2     | 0.8   |         | AA           | 82NAD       | 02         |
| Sm (ppm) |       |         |              |             |            |
| 14.5     | 1.3   | 35      | ITNA         | 81GLA       | 04         |
| 16.      | 0.2   |         | TCGS         | 79FAI       | 01         |
| 16.      | 0.2   | D*      | TCGS         | 80AND       | 01         |
| 16.4     | 0.1   |         | ITNA         | 82GLA       | 02         |
| 16.7     |       |         | ITNA         | 83GLA       | 01         |
| 18.8     | 0.6   |         | ITNA         | 82OBR       | 01         |
| 19.4     | 0.7   |         | ITNA         | 82SUZ       | 02         |
| 20.      | 4.4   |         | ITNA         | 80GAR       | 01         |
| Sr (ppm) |       |         |              |             |            |
| 740.     | 20.   | *5      | IENA         | 80GLA       | 03         |
| 770.     |       | 35      | IENA         | 81GLA       | 04         |
| 813.     | 70.   |         | ITNA         | 82OBR       | 01         |
| 815.     | 7.    |         | IENA         | 83GLA       | 01         |
| 819.     | 54.   |         | ITNA         | 80GAR       | 01         |
| 825.     | 40.   |         | CPXRF        | 80KIR       | 01         |
| 840.     | 40.   | 12      | ITNA         | 82SUZ       | 02         |
| 840.     | 30.   | 5       | IENA         | 80GLA       | 03         |
| 850.     | 70.   |         | ITNA         | 82SUZ       | 02         |
| Ta (ppm) |       |         |              |             |            |
| 1.71     | 0.05  |         | ITNA         | 82SUZ       | 02         |
| 1.8      | 0.2   | 35      | NAA          | 81GLA       | 04         |
| 1.8      | 0.1   |         | ITNA         | 83GLA       | 01         |
| 1.8      | 0.12  | 35      | ITNA         | 81GLA       | 02         |
| 1.94     |       |         | ITNA         | 82GLA       | 02         |
| 2.       | 0.5   |         | ITNA         | 80GAR       | 01         |
| 2.1      | 0.2   | 35      | IENA         | 80GLA       | 03         |
| Tb (ppm) |       |         |              |             |            |
| 2.1      | 0.1   |         | ITNA         | 82SUZ       | 02         |
| 2.1      | 0.2   |         | ITNA         | 83GLA       | 01         |
| 2.3      | 0.7   |         | ITNA         | 80GAR       | 01         |
| 2.8      | 0.5   | 35      | NAA          | 81GLA       | 04         |
| 2.9      | 0.1   | 35      | IENA         | 80GLA       | 03         |
| Te (ppm) |       |         |              |             |            |
|          | 6.6   | L*      | ITNA         | 82SUZ       | 02         |

TABLE Y (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Th (ppm) |       |         |              |             |            |
| 22.4     |       |         | ITNA         | 82GLA       | 02         |
| 24.3     | 3.8   |         | ITNA         | 82SUZ       | 02         |
| 24.6     | 0.9   | 35      | NAA          | 81GLA       | 04         |
| 24.6     | 1.1   | 35      | ITNA         | 81GLA       | 02         |
| 24.8     | 1.6   |         | ITNA         | 80GAR       | 01         |
| 24.8     | 0.5   |         | ITNA         | 83GLA       | 01         |
| 25.      | 1.    | 35      | IENA         | 80GLA       | 03         |
| 26.      | 1.3   | 12      | ITNA         | 82SUZ       | 02         |
| 28.      | 8.3   | *       | CPXRF        | 80KIR       | 01         |
| Tl (ppm) |       |         |              |             |            |
| 7800.    | 300.  |         | ITNA         | 82SUZ       | 02         |
| 7880.    | 540.  |         | ITNA         | 82OBR       | 01         |
| 8000.    | 600.  | 35      | NAA          | 81GLA       | 04         |
| 8000.    | 800.  |         | CPXRF        | 80KIR       | 01         |
| 8060.    | 370.  |         | ITNA         | 80GAR       | 01         |
| 8200.    | 700.  | 35      | ITNA         | 81GLA       | 02         |
| 8300.    |       |         | ITNA         | 83GLA       | 01         |
| 8400.    | 100.  | 35      | IENA         | 80GLA       | 03         |
| 8400.    | 100.  |         | TCGS         | 79FAI       | 01         |
| 8400.    | 60.   |         | ICPES        | 82NAD       | 02         |
| 8400.    | 100.  | D*      | TCGS         | 80AND       | 01         |
| 9000.    |       | *       | AA           | 82NAD       | 02         |
| Tl (ppm) |       |         |              |             |            |
| 4.4      | 1.3   |         | CPXRF        | 80KIR       | 01         |
| U (ppm)  |       |         |              |             |            |
| 9.83     | 0.9   | *       | IENA         | 82OBR       | 01         |
| 10.2     | 0.3   |         | DNA          | 82GLA       | 02         |
| 10.2     | 0.1   | 35      | IENA         | 80GLA       | 03         |
| 10.2     | 0.2   |         | DNA          | 80GAR       | 01         |
| 10.3     | 0.4   |         | ITNA         | 82SUZ       | 02         |
| 10.4     | 0.3   | 17      | DNA          | 82CON       | 01         |
| 10.4     | 0.8   |         | DNA          | 83GLA       | 01         |
| 10.47    | 0.09  | 35      | DNA          | 80GLA       | 01         |
| 10.6     | 0.4   | 35      | NAA          | 81GLA       | 04         |
| 10.7     | 0.3   | 17      | DNA          | 82CON       | 01         |
| 11.      | 2.7   | *       | CPXRF        | 80KIR       | 01         |
| V (ppm)  |       |         |              |             |            |
| 280.     |       |         | ICPES        | 81WAL       | 01         |
| 280.     | 18.   |         | CPXRF        | 80KIR       | 01         |
| 288.     | 20.   |         | ITNA         | 82OBR       | 01         |
| 290.     | 20.   | 35      | IENA         | 80GLA       | 03         |
| 290.     | 20.   |         | ITNA         | 82SUZ       | 02         |
| 292.     | 16.   | 35      | ITNA         | 81GLA       | 02         |
| 294.     | 28.   | 35      | ITNA         | 81GLA       | 04         |
| 301.     | 8.    |         | ITNA         | 80GAR       | 01         |
| 360.     | 40.   | *       | TCGS         | 79FAI       | 01         |
| 360.     | 40.   | D*      | TCGS         | 80AND       | 01         |

TABLE Y (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| W (ppm)  |       |         |              |             |            |
| 5.4      | 0.4   | 35      | IENA         | 80GLA       | 03         |
| 5.4      | 0.8   |         | ITNA         | 82OBR       | 01         |
| 5.4      | 0.4   | D*      | NAA          | 81GLA       | 04         |
| 5.9      | 0.4   |         | ITNA         | 82SUZ       | 02         |
| 6.9      | 1.2   |         | RENA         | 82GLA       | 02         |
| Yb (ppm) |       |         |              |             |            |
| 6.9      | 0.3   |         | ITNA         | 82SUZ       | 02         |
| 7.5      | 0.5   |         | ITNA         | 82GLA       | 02         |
| 8.2      |       | 35      | ITNA         | 81GLA       | 04         |
| 10.      | 1.8   |         | ITNA         | 80GAR       | 01         |
| Zn (ppm) |       |         |              |             |            |
| 218.     | 18.   |         | CPXRF        | 80KIR       | 01         |
| 220.     | 50.   |         | ITNA         | 80GAR       | 01         |
| 222.     | 7.    | 5       | IENA         | 80GLA       | 03         |
| 230.     |       |         | AA           | 82GLA       | 02         |
| 250.     | 20.   | 12      | ITNA         | 82SUZ       | 02         |
| 250.     | 30.   |         | ITNA         | 82SUZ       | 02         |
| 256.     | 12.   | 5       | IENA         | 80GLA       | 03         |
| Zr (ppm) |       |         |              |             |            |
| 300.     | 30.   | 5       | IENA         | 80GLA       | 03         |
| 370.     | 50.   | 5       | IENA         | 80GLA       | 03         |
| 400.     | 50.   | 12      | ITNA         | 82SUZ       | 02         |
| 410.     | 40.   |         | ITNA         | 82SUZ       | 02         |

TABLE Z

NBS SRM 1634—COLLECTED DATA

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>As (ppb)</b> |       |         |              |             |            |
|                 | 400.  | L*      | EXRF         | 79GIA 01    |            |
| 56.             |       |         | ITNA         | 77FIL 01    |            |
| 63.             | 3.    |         | ITNA         | 78BER 02    |            |
| 70.             |       |         | ITNA         | 78WEA 01    |            |
| 95.             |       |         | RTNA         | 74ORV 01    |            |
| 120.            |       |         | ITNA         | 81SHA 01    |            |
| <b>Au (ppb)</b> |       |         |              |             |            |
| 24.             |       |         | ITNA         | 73SHE 01    |            |
| <b>Br (ppb)</b> |       |         |              |             |            |
| 39.             |       |         | ITNA         | 77FIL 01    |            |
| 39.1            | 5.3   |         | UU           | 77PAC 01    |            |
| 40.             |       |         | ITNA         | 78WEA 01    |            |
| 41.             | 4.    |         | ITNA         | 78BER 02    |            |
| 240.            | 70.   | *       | ITNA         | 73SHE 01    |            |
| <b>Ca (ppm)</b> |       |         |              |             |            |
| 15.             | 2.    |         | ITNA         | 73SHE 01    |            |
| <b>Cd (ppb)</b> |       |         |              |             |            |
| 5.              | 10.   | L*      | RTNA         | 74ORV 01    |            |
|                 |       |         | FAA          | 74RAI 01    |            |
| <b>Cl (ppm)</b> |       |         |              |             |            |
| 7.8             | 0.5   |         | UU           | 77PAC 01    |            |
| 8.              |       |         | ITNA         | 78WEA 01    |            |
| 8.4             | 0.5   |         | ITNA         | 78BER 02    |            |
| 18.             | 0.7   | *       | ITNA         | 73SHE 01    |            |
| <b>Co (ppb)</b> |       |         |              |             |            |
| 250.            | 10.   |         | ITNA         | 73SHE 01    |            |
| 301.            |       |         | ITNA         | 77FIL 01    |            |
| 301.            | 14.   |         | UU           | 77PAC 01    |            |
| 310.            | 15.   |         | ITNA         | 78BER 02    |            |
| 400.            |       |         | ITNA         | 78WEA 01    |            |
| <b>Cr (ppb)</b> |       |         |              |             |            |
|                 | 6000. | L*      | EXRF         | 79GIA 01    |            |
| 80.             |       |         | ITNA         | 81SHA 01    |            |
| 93.             |       |         | ITNA         | 77FIL 01    |            |
| 100.            |       |         | ITNA         | 78WEA 01    |            |
| 116.            | 35.   |         | ITNA         | 73SHE 01    |            |
| <b>Cu (ppm)</b> |       |         |              |             |            |
| 220.            | 800.  | L*      | EXRF         | 79GIA 01    |            |
|                 | 20.   |         | ITNA         | 73SHE 01    |            |

TABLE Z (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Fe (ppm)</b> |       |         |              |             |            |
| 10.8            | 3.3   | 32      | EXRF         | 78KUB 01    |            |
| 12.3            |       |         | POL          | 74MAI 01    |            |
| 12.4            | 1.6   |         | ITNA         | 73SHE 01    |            |
| 12.5            | 2.2   |         | UU           | 77PAC 01    |            |
| 13.             |       |         | ICPES        | 79MER 01    |            |
| 13.5            | 1.2   |         | ITNA         | 81SHA 01    |            |
| 14.             | 1.5   |         | EXRF         | 79GIA 01    |            |
| 14.1            | 0.6   |         | AA           | 74RAI 01    |            |
| 14.2            | 1.5   |         | ITNA         | 78BER 02    |            |
| 14.4            | 1.7   | 32      | EXRF         | 78KUB 01    |            |
| 15.1            | 2.4   | 32      | EXRF         | 78KUB 01    |            |
| 16.2            | 2.8   | 32      | EXRF         | 78KUB 01    |            |
| 16.9            | 2.5   | 32      | EXRF         | 78KUB 01    |            |
| 20.             |       |         | ITNA         | 77FIL 01    |            |
| 25.             |       | *       | ITNA         | 78WEA 01    |            |
| <b>Hg (ppb)</b> |       |         |              |             |            |
|                 | 10.   | L*      | ITNA         | 81SHA 01    |            |
|                 | 10.   | L*      | ITNA         | 77FIL 01    |            |
| 2.3             | 0.2   |         | RTNA         | 74ORV 01    |            |
| 22.             | 15.   |         | ITNA         | 73SHE 01    |            |
| <b>K (ppm)</b>  |       |         |              |             |            |
| 315.            |       |         | ITNA         | 77FIL 01    |            |
| <b>Mn (ppb)</b> |       |         |              |             |            |
|                 | 300.  | L*      | ICPES        | 79MER 01    |            |
|                 | 3000. | L*      | EXRF         | 79GIA 01    |            |
| 110.            | 10.   |         | ITNA         | 78BER 02    |            |
| 190.            |       |         | ITNA         | 73SHE 01    |            |
| 200.            |       |         | ITNA         | 81SHA 01    |            |
| 320.            |       |         | ITNA         | 78WEA 01    |            |
| <b>Mo (ppb)</b> |       |         |              |             |            |
| 870.            | 80.   |         | ITNA         | 78BER 02    |            |
| <b>Na (ppm)</b> |       |         |              |             |            |
| 11.2            |       |         | ITNA         | 77FIL 01    |            |
| 11.2            | 0.7   |         | UU           | 77PAC 01    |            |
| 12.             |       |         | ITNA         | 78WEA 01    |            |
| 13.2            | 1.5   |         | ITNA         | 78BER 02    |            |
| <b>Ni (ppm)</b> |       |         |              |             |            |
| 31.1            | 2.1   |         | AA           | 74RAI 01    |            |
| 32.             | 2.    | 32      | EXRF         | 78KUB 01    |            |
| 32.             | 1.6   |         | EXRF         | 79GIA 01    |            |
| 32.             | 1.    | 32      | EXRF         | 78KUB 01    |            |
| 33.             | 1.    | 32      | EXRF         | 78KUB 01    |            |
| 35.             | 2.    | 32      | EXRF         | 78KUB 01    |            |

TABLE Z (cont)

| CONC | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------|-------|---------|--------------|-------------|------------|
| 35.2 |       |         | POL          | 74MAI       | 01         |
| 36.  | 1.    | 32      | EXRF         | 78KUB       | 01         |
| 36.7 |       |         | ICPES        | 79MER       | 01         |
| 37.  | 2.    |         | ITNA         | 78BER       | 02         |
| 37.4 |       |         | ITNA         | 77FIL       | 01         |
| 37.4 | 1.5   |         | UU           | 77PAC       | 01         |
| 38.1 |       | 6       | IDMS         | 74MOO       | 01         |
| 38.1 |       | 6       | IDMS         | 74MOO       | 01         |
| 38.2 |       | 6       | IDMS         | 74MOO       | 01         |
| 39.5 | 2.26  |         | ITNA         | 73SHE       | 01         |

Pb (ppb)

|     |       |    |       |       |    |
|-----|-------|----|-------|-------|----|
|     | 500.  | *  | ICPES | 79MER | 01 |
|     | 1500. | L* | EXRF  | 79GIA | 01 |
| 41. |       |    | POL   | 74MAI | 01 |
| 50. |       |    | FAA   | 74RAI | 01 |

S (%)

|       |       |  |       |       |    |
|-------|-------|--|-------|-------|----|
| 2.    | 0.1   |  | TITR  | 80MCC | 01 |
| 2.    | 0.2   |  | MECA  | 80MCC | 01 |
| 2.04  | 0.39  |  | ITNA  | 73SHE | 01 |
| 2.05  | 0.4   |  | UU    | 77PAC | 01 |
| 2.154 | 0.009 |  | IC    | 80MCC | 01 |
| 2.17  |       |  | XRF   | 80MCC | 01 |
| 2.24  | 0.05  |  | ICPES | 81WAL | 02 |
| 2.24  | 0.05  |  | ITNA  | 81SHA | 01 |
| 2.3   | 0.3   |  | ITNA  | 78BER | 02 |

Sb (ppb)

|     |    |  |      |       |    |
|-----|----|--|------|-------|----|
| 10. |    |  | ITNA | 77FIL | 01 |
| 10. |    |  | ITNA | 78WEA | 01 |
| 14. | 3. |  | ITNA | 73SHE | 01 |

Se (ppb)

|      |     |   |      |       |    |
|------|-----|---|------|-------|----|
| 138. | 60. | * | RTNA | 74ORV | 01 |
| 170. |     |   | ITNA | 77FIL | 01 |
| 190. | 30. |   | ITNA | 73SHE | 01 |
| 200. |     |   | ITNA | 78WEA | 01 |

V (ppm)

|      |      |    |       |       |    |
|------|------|----|-------|-------|----|
| 266. | 18.  |    | ITNA  | 73SHE | 01 |
| 283. | 12.  |    | EXRF  | 79GIA | 01 |
| 300. |      |    | ITNA  | 81SHA | 01 |
| 303. | 18.  | 32 | EXRF  | 78KUB | 01 |
| 310. |      |    | ITNA  | 78WEA | 01 |
| 310. | 5.   | 32 | EXRF  | 78KUB | 01 |
| 311. | 7.   | 32 | EXRF  | 78KUB | 01 |
| 312. | 16.4 |    | UU    | 77PAC | 01 |
| 314. |      |    | ICPES | 79MER | 01 |
| 317. | 6.   |    | GC    | 81DIL | 01 |
| 318. | 15.  |    | ITNA  | 78BER | 02 |
| 323. | 9.   | 32 | EXRF  | 78KUB | 01 |
| 325. | 11.  | 32 | EXRF  | 78KUB | 01 |
| 326. | 6.8  |    | AA    | 74RAI | 01 |

TABLE Z (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Zn (ppb) |       |         |              |             |            |
|          | 1000. | L*      | ITNA         | 81SHA       | 01         |
|          | 600.  | *       | ICPES        | 79MER       | 01         |
|          | 600.  | L*      | EXRF         | 79GIA       | 01         |
| 170.     | 20.   |         | RTNA         | 74ORV       | 01         |
| 300.     |       |         | ITNA         | 78WEA       | 01         |
| 480.     | 120.  |         | ITNA         | 73SHE       | 01         |

TABLE AA

## NBS SRM 1635—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppm) |       |         |              |             |            |
|          | 2.5   | L*      | WXRF         | 82MIL       | 01         |
|          | 0.038 | L*      | ITNA         | 82SUZ       | 02         |
| Al (ppm) |       |         |              |             |            |
| 3000.    | 300.  |         | ITNA         | 80GER       | 01         |
| 3000.    | 300.  |         | ITNA         | 82SUZ       | 02         |
| 3400.    | 400.  | D*      | TCGS         | 80GER       | 01         |
| 3400.    | 400.  |         | TCGS         | 79FAI       | 01         |
| 3400.    | 400.  | D*      | TCGS         | 80AND       | 01         |
| As (ppb) |       |         |              |             |            |
| 280.     | 20.   |         | HAA          | 82NAD       | 01         |
| 320.     |       |         | FAA          | 82WIL       | 01         |
| 330.     |       |         | AF           | 82WIL       | 01         |
| 400.     | 50.   |         | ITNA         | 82SUZ       | 02         |
| 440.     | 50.   |         | RTNA         | 78GAL       | 01         |
| 700.     | 400.  | *       | ITNA         | 80GER       | 01         |
| 700.     |       | *34     | WXRF         | 82MIL       | 01         |
| Ash (%)  |       |         |              |             |            |
| 4.8      |       | 34      | CB           | 82MIL       | 01         |
| B (ppm)  |       |         |              |             |            |
| 104.5    | 2.6   |         | TCGS         | 79FAI       | 01         |
| 105.     | 3.    | D*      | TCGS         | 80GER       | 01         |
| 105.     | 3.    |         | TCGS         | 80AND       | 01         |
| 135.     | 11.   |         | ITNA         | 82SCH       | 05         |
| Ba (ppm) |       |         |              |             |            |
|          | 2800. | L*      | ITNA         | 80TOU       | 01         |
| 67.      | 20.   | 9       | ITNA         | 82SUZ       | 02         |
| 70.      | 9.    |         | ITNA         | 80GER       | 01         |
| 72.      | 17.   | 5       | ITNA         | 80TOU       | 01         |
| 77.      | 24.   |         | ITNA         | 82SUZ       | 02         |
| 81.      |       | 34      | WXRF         | 82MIL       | 01         |
| Bi (ppm) |       |         |              |             |            |
|          | 1.    | L*      | WXRF         | 82MIL       | 01         |
| Br (ppm) |       |         |              |             |            |
|          | 170.  | L*      | ITNA         | 80TOU       | 01         |
| 1.07     | 0.17  |         | ITNA         | 82SUZ       | 02         |
| 1.6      | 0.3   |         | ITNA         | 80GER       | 01         |
| 1.9      | 0.2   | 5       | ITNA         | 80TOU       | 01         |
| 3.       |       | 34      | WXRF         | 82MIL       | 01         |
| C (%)    |       |         |              |             |            |
| 59.      | 3.    | D*      | TCGS         | 80GER       | 01         |
| 59.      | 3.    |         | TCGS         | 79FAI       | 01         |
| 59.      | 3.    | D*      | TCGS         | 80AND       | 01         |
| 66.23    | 0.06  |         | CB           | 80SCH       | 02         |

TABLE AA (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ca (ppm) |       |         |              |             |            |
| 5400.    | 200.  |         | TCGS         | 79FAI       | 01         |
| 5400.    | 200.  | D*      | TCGS         | 80GER       | 01         |
| 5400.    | 200.  | D*      | TCGS         | 80AND       | 01         |
| 5500.    | 900.  |         | ITNA         | 82SUZ       | 02         |
| 5700.    | 700.  |         | ITNA         | 80GER       | 01         |
| Cd (ppb) |       |         |              |             |            |
|          | 3000. | L*      | WXRF         | 82MIL       | 01         |
|          | 380.  | L*      | ITNA         | 82SUZ       | 02         |
| 29.      | 3.    |         | RTNA         | 78GAL       | 01         |
| Ce (ppm) |       |         |              |             |            |
| 3.3      | 0.2   | 12      | ITNA         | 82SUZ       | 02         |
| 3.4      | 0.2   |         | ITNA         | 82SUZ       | 02         |
| 3.5      | 0.5   |         | ITNA         | 80GER       | 01         |
| 8.       |       | *34     | WXRF         | 82MIL       | 01         |
| Cl (ppm) |       |         |              |             |            |
|          | 30.   | L*      | ITNA         | 82SUZ       | 02         |
| 26.      | 2.    | D*      | TCGS         | 80GER       | 01         |
| 26.      | 2.    |         | TCGS         | 79FAI       | 01         |
| 26.      | 4.    |         | ITNA         | 80GER       | 01         |
| 26.      | 2.    | D*      | TCGS         | 80AND       | 01         |
| 36.      |       | 34      | WXRF         | 82MIL       | 01         |
| Co (ppm) |       |         |              |             |            |
| 0.62     | 0.06  |         | ITNA         | 82SUZ       | 02         |
| 0.7      |       | 34      | WXRF         | 82MIL       | 01         |
| 0.59     | 0.06  |         | ITNA         | 80GER       | 01         |
| Cr (ppm) |       |         |              |             |            |
| 2.       |       | 34      | WXRF         | 82MIL       | 01         |
| 2.3      | 0.2   |         | ITNA         | 80GER       | 01         |
| 2.48     | 0.08  |         | RTNA         | 78GAL       | 01         |
| 2.5      | 0.2   | 12      | ITNA         | 82SUZ       | 02         |
| 2.6      | 0.3   |         | ITNA         | 82SUZ       | 02         |
| Cs (ppb) |       |         |              |             |            |
|          | 500.  | L*      | WXRF         | 82MIL       | 01         |
| 46.      | 5.    |         | ITNA         | 80GER       | 01         |
| 53.      | 6.    |         | ITNA         | 82SUZ       | 02         |
| Cu (ppm) |       |         |              |             |            |
|          | 46.   | L*      | ITNA         | 82SUZ       | 02         |
| 3.       |       | 34      | WXRF         | 82MIL       | 01         |
| 3.56     | 0.18  |         | RTNA         | 78GAL       | 01         |
| Dy (ppb) |       |         |              |             |            |
|          | 740.  | L*      | ITNA         | 82SUZ       | 02         |
|          | 2000. | L*      | WXRF         | 82MIL       | 01         |
| 310.     | 40.   |         | ITNA         | 80GER       | 01         |

TABLE AA (cont)

| CONC      | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------|-------|---------|--------------|-------------|------------|
| Er (ppb)  |       |         |              |             |            |
|           | 2000. | L*      | WXRf         | 82MIL       | 01         |
| Eu (ppb)  |       |         |              |             |            |
|           | 1000. | L*      | WXRf         | 82MIL       | 01         |
| 59.       | 2.    |         | ITNA         | 82SUZ       | 02         |
| 61.       | 7.    |         | ITNA         | 80GER       | 01         |
| F (ppm)   |       |         |              |             |            |
| 20.       |       |         | ISE          | 83KNA       | 01         |
| Fe (ppm)  |       |         |              |             |            |
| 2200.     | 100.  | D*      | TCGS         | 80GER       | 01         |
| 2200.     | 100.  |         | TCGS         | 79FAI       | 01         |
| 2200.     | 100.  | D*      | TCGS         | 80AND       | 01         |
| 2300.     | 200.  |         | ITNA         | 80GER       | 01         |
| 2330.     | 240.  | 12      | ITNA         | 82SUZ       | 02         |
| 2340.     | 140.  | 12      | ITNA         | 82SUZ       | 02         |
| Ga (ppm)  |       |         |              |             |            |
|           | 2.    | L*      | ITNA         | 82SUZ       | 02         |
| 1.1       |       | 34      | WXRf         | 82MIL       | 01         |
| Gd (ppb)  |       |         |              |             |            |
|           | 1500. | L*      | WXRf         | 82MIL       | 01         |
| 230.      | 10.   |         | TCGS         | 79FAI       | 01         |
| 350.      | 20.   |         | TCGS         | 80AND       | 01         |
| Ge (ppm)  |       |         |              |             |            |
| 0.5       |       | 34      | WXRf         | 82MIL       | 01         |
| H (%)     |       |         |              |             |            |
| 3.96      | 0.03  |         | TCGS         | 79FAI       | 01         |
| 3.96      | 0.03  | D*      | TCGS         | 80AND       | 01         |
| 3.96      | 0.03  | D*      | TCGS         | 80GER       | 01         |
| 4.18      | 0.14  |         | CB           | 80SCH       | 02         |
| H2O-T (%) |       |         |              |             |            |
| 14.       |       |         | FD           | 80KHA       | 02         |
| Hf (ppb)  |       |         |              |             |            |
|           | 2000. | L*      | WXRf         | 82MIL       | 01         |
| 240.      | 40.   | 9       | ITNA         | 82SUZ       | 02         |
| 270.      | 40.   |         | ITNA         | 80GER       | 01         |
| 290.      | 20.   |         | ITNA         | 82SUZ       | 02         |
| Hg (ppb)  |       |         |              |             |            |
|           | 1500. | L*      | WXRf         | 82MIL       | 01         |
| 56.       |       | L*      | ITNA         | 82SUZ       | 02         |
| 5.        | 15.   | R*      | CVAA         | 82DOO       | 01         |
| 35.       | 11.   | 12      | ITNA         | 82SUZ       | 02         |

TABLE AA (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ho (ppm) |       |         |              |             |            |
|          | 1.5   | L*      | WXRf         | 82MIL       | 01         |
| I (ppb)  |       |         |              |             |            |
|          | 1300. | L*      | WXRf         | 82MIL       | 01         |
| 860.     |       | L*      | ITNA         | 82SUZ       | 02         |
| 600.     | 300.  |         | ITNA         | 80GER       | 01         |
| In (ppb) |       |         |              |             |            |
|          | 1000. | L*      | WXRf         | 82MIL       | 01         |
| 31.      |       | L*      | ITNA         | 82SUZ       | 02         |
| 5.       | 2.    |         | ITNA         | 80GER       | 01         |
| K (ppm)  |       |         |              |             |            |
| 90.      | 90.   |         | ITNA         | 82SUZ       | 02         |
| 97.      | 6.    |         | TCGS         | 79FAI       | 01         |
| 97.      | 6.    | D*      | TCGS         | 80GER       | 01         |
| 97.      | 6.    | D*      | TCGS         | 80AND       | 01         |
| 120.     | 10.   |         | ITNA         | 80GER       | 01         |
| La (ppm) |       |         |              |             |            |
| 1.38     | 0.07  |         | ITNA         | 82SUZ       | 02         |
| 2.       |       | 34      | WXRf         | 82MIL       | 01         |
| 2.1      | 0.3   |         | ITNA         | 80GER       | 01         |
| Lu (ppb) |       |         |              |             |            |
|          | 2000. | L*      | WXRf         | 82MIL       | 01         |
| 27.      | 4.    |         | ITNA         | 80GER       | 01         |
| 36.      | 7.    |         | ITNA         | 82SUZ       | 02         |
| Mg (ppm) |       |         |              |             |            |
| 940.     | 190.  |         | ITNA         | 82SUZ       | 02         |
| 1000.    | 200.  |         | ITNA         | 80GER       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 19.      | 1.2   |         | ITNA         | 82SUZ       | 02         |
| 22.      | 3.    |         | ITNA         | 80GER       | 01         |
| 23.      |       | 34      | WXRf         | 82MIL       | 01         |
| 24.      | 7.    |         | TCGS         | 79FAI       | 01         |
| 24.      | 7.    | D*      | TCGS         | 80AND       | 01         |
| 24.      | 7.    | D*      | TCGS         | 80GER       | 01         |
| Mo (ppb) |       |         |              |             |            |
|          | 1000. | L*      | WXRf         | 82MIL       | 01         |
| 270.     | 100.  |         | ITNA         | 82SUZ       | 02         |
| N (%)    |       |         |              |             |            |
| 1.       | 0.1   |         | TCGS         | 79FAI       | 01         |
| 1.       | 0.1   | D*      | TCGS         | 80AND       | 01         |
| 1.       | 0.1   | D*      | TCGS         | 80GER       | 01         |
| 1.52     | 0.02  |         | CB           | 80SCH       | 02         |

TABLE AA (cont)

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| Na (ppm)     |       |         |              |             |            |
| 2200.        | 160.  |         | ITNA         | 82SCH 05    |            |
| 2400.        | 200.  |         | ITNA         | 80GER 01    |            |
| 2400.        | 200.  |         | ITNA         | 82SUZ 02    |            |
| 2420.        |       | 34      | WXRF         | 82MIL 01    |            |
| 2700.        | 50.   |         | TCGS         | 79FAI 01    |            |
| 2700.        | 50.   | D*      | TCGS         | 80GER 01    |            |
| 2700.        | 50.   | D*      | TCGS         | 80AND 01    |            |
| Nb (ppm)     |       |         |              |             |            |
|              | 1.    | L*      | WXRF         | 82MIL 01    |            |
| Nd (ppm)     |       |         |              |             |            |
|              | 1.8   | L*      | ITNA         | 82SUZ 02    |            |
|              | 1.6   | L*      | ITNA         | 82SUZ 02    |            |
|              | 1.    | L*      | WXRF         | 82MIL 01    |            |
| 1.4          | 0.2   |         | ITNA         | 80GER 01    |            |
| Ni (ppm)     |       |         |              |             |            |
| 1.72         | 0.32  |         | ITNA         | 82SUZ 02    |            |
| 1.83         | 0.23  | 12      | ITNA         | 82SUZ 02    |            |
| 3.           |       | 34      | WXRF         | 82MIL 01    |            |
| O (%)        |       |         |              |             |            |
| 20.79        | 0.19  | 34      | 14NAA        | 80KHA 02    |            |
| 33.          | 1.6   |         | 14NAA        | 80NAD 01    |            |
| 34.99        | 0.32  | 35      | 14NAA        | 80KHA 02    |            |
| P (ppm)      |       |         |              |             |            |
| 63.          |       | 34      | WXRF         | 82MIL 01    |            |
| Pb (ppm)     |       |         |              |             |            |
| 1.48         | 0.21  |         | HAA          | 82NAD 01    |            |
| 2.6          |       | 34      | WXRF         | 82MIL 01    |            |
| Pb-210 (PC1) |       |         |              |             |            |
| 0.069        | 0.001 |         | NM           | 80CAS 01    |            |
| 0.07         | 0.001 | D*      | NM           | 81CAS 01    |            |
| Pr (ppm)     |       |         |              |             |            |
|              | 4.3   | L*      | ITNA         | 82SUZ 02    |            |
|              | 1.    | L*      | WXRF         | 82MIL 01    |            |
|              | 4.4   | L*      | ITNA         | 82SUZ 02    |            |
| Rb (ppm)     |       |         |              |             |            |
|              | 0.3   | L*      | WXRF         | 82MIL 01    |            |
| 0.76         | 0.09  |         | ITNA         | 82SUZ 02    |            |
| 0.83         | 0.08  | 12      | ITNA         | 82SUZ 02    |            |

TABLE AA (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| S (ppm)  |        |         |              |             |            |
| 19000.   |        | L*      | ITNA         | 82SUZ 02    |            |
| 3200.    | 100.   |         | TCGS         | 79FAI 01    |            |
| 3200.    | 100.   | D*      | TCGS         | 80GER 01    |            |
| 3200.    | 100.   | D*      | TCGS         | 80AND 01    |            |
| Sb (ppb) |        |         |              |             |            |
|          | 1000.  | L*      | WXRF         | 82MIL 01    |            |
| 120.     | 10.    |         | RTNA         | 78GAL 01    |            |
| 130.     | 10.    |         | HAA          | 82NAD 01    |            |
| 140.     | 10.    |         | ITNA         | 80GER 01    |            |
| 160.     | 30.    |         | ITNA         | 82SUZ 02    |            |
| 170.     | 40.    | 5       | ITNA         | 80TOU 01    |            |
| Sc (ppb) |        |         |              |             |            |
|          | 1200.  | L*      | ITNA         | 80TOU 01    |            |
| 560.     | 50.    |         | ITNA         | 82SUZ 02    |            |
| 690.     | 70.    |         | ITNA         | 80GER 01    |            |
| 700.     | 30.    | 5       | ITNA         | 80TOU 01    |            |
| 900.     |        | 34      | WXRF         | 82MIL 01    |            |
| Se (ppm) |        |         |              |             |            |
| 0.79     | 0.07   |         | HAA          | 82NAD 01    |            |
| 0.8      | 0.2    |         | RTNA         | 80KNA 01    |            |
| 0.82     | 0.04   |         | RTNA         | 78GAL 01    |            |
| 0.9      |        |         | AF           | 82WIL 01    |            |
| 0.9      |        |         | FAA          | 82WIL 01    |            |
| 0.94     | 0.11   |         | ITNA         | 82SUZ 02    |            |
| 0.98     | 0.09   |         | ITNA         | 80GER 01    |            |
| 0.99     | 0.11   | 9       | ITNA         | 82SUZ 02    |            |
| 1.2      |        | *34     | WXRF         | 82MIL 01    |            |
| Si (ppm) |        |         |              |             |            |
| 5200.    | 200.   |         | TCGS         | 79FAI 01    |            |
| 5200.    | 200.   | D*      | TCGS         | 80GER 01    |            |
| 5200.    | 200.   | D*      | TCGS         | 80AND 01    |            |
| 5600.    | 700.   |         | 14NAA        | 80GER 01    |            |
| Sm (ppb) |        |         |              |             |            |
|          | 39000. | L*      | ITNA         | 80TOU 01    |            |
|          | 1000.  | L*      | WXRF         | 82MIL 01    |            |
| 250.     | 10.    |         | TCGS         | 79FAI 01    |            |
| 250.     | 10.    | D*      | TCGS         | 80GER 01    |            |
| 250.     | 10.    | D*      | TCGS         | 80AND 01    |            |
| 270.     | 10.    | 5       | ITNA         | 80TOU 01    |            |
| 300.     | 40.    |         | ITNA         | 80GER 01    |            |
| 340.     | 30.    |         | ITNA         | 82SUZ 02    |            |
| Sn (ppm) |        |         |              |             |            |
|          | 0.6    | L*      | WXRF         | 82MIL 01    |            |

TABLE AA (cont)

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| Sr (ppm)     |       |         |              |             |            |
| 118.         | 8.    |         | ITNA         | 82SUZ 02    |            |
| 127.         | 24.   | 12      | ITNA         | 82SUZ 02    |            |
| 129.         | 14.   |         | ITNA         | 80GER 01    |            |
| 140.         |       | 34      | WXRF         | 82MIL 01    |            |
| Ta (ppb)     |       |         |              |             |            |
|              | 1000. | L*      | WXRF         | 82MIL 01    |            |
| 44.          | 6.    |         | ITNA         | 82SUZ 02    |            |
| 46.          | 9.    |         | ITNA         | 80GER 01    |            |
| Tb (ppb)     |       |         |              |             |            |
|              | 2000. | L*      | WXRF         | 82MIL 01    |            |
| 35.          | 3.    |         | ITNA         | 82SUZ 02    |            |
| Te (ppb)     |       |         |              |             |            |
|              | 290.  | L*      | ITNA         | 82SUZ 02    |            |
| 600.         |       | 34      | WXRF         | 82MIL 01    |            |
| Th (ppb)     |       |         |              |             |            |
|              | 1000. | L*      | WXRF         | 82MIL 01    |            |
| 580.         | 40.   |         | ITNA         | 82SUZ 02    |            |
| 610.         | 70.   | 12      | ITNA         | 82SUZ 02    |            |
| 640.         | 50.   | 5       | ITNA         | 80TOU 01    |            |
| 640.         | 60.   |         | ITNA         | 80GER 01    |            |
| Th-228 (FCI) |       |         |              |             |            |
| 64.8         | 4.1   | D*      | NM           | 81CAS 01    |            |
| 64.8         | 4.1   |         | NM           | 80CAS 01    |            |
| Th-230 (FCI) |       |         |              |             |            |
|              | 76.5  | 7.9     | D*           | NM          | 81CAS 01   |
|              | 76.5  | 7.9     |              | NM          | 80CAS 01   |
| Th-232 (FCI) |       |         |              |             |            |
|              | 61.9  | 7.7     | D*           | NM          | 81CAS 01   |
|              | 61.9  | 7.7     |              | NM          | 80CAS 01   |
| Ti (ppm)     |       |         |              |             |            |
| 190.         | 20.   |         | TCGS         | 79FAI 01    |            |
| 190.         | 20.   | D*      | TCGS         | 80AND 01    |            |
| 190.         | 20.   | D*      | TCGS         | 80GER 01    |            |
| 200.         |       | 34      | WXRF         | 82MIL 01    |            |
| 210.         | 20.   |         | ITNA         | 80GER 01    |            |
| 210.         | 50.   |         | ITNA         | 82SUZ 02    |            |
| Tl (ppm)     |       |         |              |             |            |
|              | 1.    | L*      | WXRF         | 82MIL 01    |            |
| Tm (ppm)     |       |         |              |             |            |
|              | 1.    | L*      | WXRF         | 82MIL 01    |            |

TABLE AA (cont)

| CONC        | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-------------|--------|---------|--------------|-------------|------------|
| U (ppb)     |        |         |              |             |            |
|             | 23000. | L*      | ITNA         | 80TOU 01    |            |
|             | 1000.  | L*      | WXRF         | 82MIL 01    |            |
| 200.        | 50.    |         | ITNA         | 80GER 01    |            |
| 240.        | 30.    |         | ITNA         | 82SUZ 02    |            |
| 320.        | 40.    | 5       | ITNA         | 80TOU 01    |            |
| U-234 (FCI) |        |         |              |             |            |
|             | 71.9   |         |              |             |            |
|             | 71.9   | 4.4     | D*           | NM          | 80CAS 01   |
|             |        | 4.4     |              | NM          | 81CAS 01   |
| U-235 (FCI) |        |         |              |             |            |
|             | 4.9    |         |              |             |            |
|             | 4.9    | 0.3     | D*           | NM          | 80CAS 01   |
| U-238 (FCI) |        |         |              |             |            |
|             | 0.073  |         |              |             |            |
|             | 0.073  | 0.004   | D*           | NM          | 80CAS 01   |
|             |        | 0.004   |              | NM          | 81CAS 01   |
| V (ppm)     |        |         |              |             |            |
|             | 4.     |         | 34           | WXRF        | 82MIL 01   |
|             | 4.3    | 0.3     |              | ITNA        | 82SUZ 02   |
|             | 4.5    | 0.05    |              | ITNA        | 80GER 01   |
| W (ppm)     |        |         |              |             |            |
|             | 0.173  | 1.      | L*           | WXRF        | 82MIL 01   |
|             |        | 0.051   |              | ITNA        | 82SUZ 02   |
| Y (ppm)     |        |         |              |             |            |
|             | 1.9    |         | 34           | WXRF        | 82MIL 01   |
| Yb (ppb)    |        |         |              |             |            |
|             | 140.   | 2000.   | L*           | WXRF        | 82MIL 01   |
|             | 170.   | 20.     |              | ITNA        | 80GER 01   |
|             | 175.   | 60.     | 5            | ITNA        | 80TOU 01   |
|             |        | 12.     |              | ITNA        | 82SUZ 02   |
| Zn (ppm)    |        |         |              |             |            |
|             | 5.6    |         | 34           | WXRF        | 82MIL 01   |
|             | 6.6    | 1.4     | 12           | ITNA        | 82SUZ 02   |
|             | 7.5    | 2.2     |              | ITNA        | 80GER 01   |
|             | 7.8    | 1.2     |              | ITNA        | 82SUZ 02   |
| Zr (ppm)    |        |         |              |             |            |
|             | 15.    |         | 34           | WXRF        | 82MIL 01   |
|             | 15.7   | 4.3     | 12           | ITNA        | 82SUZ 02   |
|             | 16.    | 3.      |              | ITNA        | 80GER 01   |
|             | 19.4   | 3.3     | *            | ITNA        | 82SUZ 02   |

TABLE BB

## NBS SRM 1641—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Hg (ppm) |       |         |              |             |            |
| 1.47     | 0.17  |         | CVAA         | 82GLA       | 02         |

TABLE CC

## NBS SRM 1642A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Hg (ppb) |       |         |              |             |            |
| 1.3      |       |         | CVAA         | 82GLA       | 02         |

TABLE DD

## NBS SRM 1643—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Al (ppb) |       |         |              |             |            |
| 50.      |       | *       | ITNA         | 81HAB       | 01         |
| 77.1     | 5.7   |         | AE+AF        | 78EPS       | 01         |
| 82.1     | 1.4   |         | FAA          | 78EPS       | 01         |
| 83.      | 2.    |         | DCP          | 79REE       | 01         |
| 83.      | 2.    | D*      | DCP          | 81REE       | 01         |
| As (ppb) |       |         |              |             |            |
| 71.      |       |         | ICPES        | 82NYG       | 01         |
| 75.7     | 1.3   |         | HAA          | 80YAN       | 01         |
| 78.      |       | 13      | ASV          | 82LEU       | 01         |
| 79.      |       | 13      | ASV          | 82LEU       | 01         |
| Ba (ppb) |       |         |              |             |            |
| 17.3     | 1.8   |         | AE+AF        | 79EPS       | 03         |
| 18.      |       |         | FAA          | 78BEA       | 01         |
| 18.      |       | 14      | FAA          | 79EPS       | 03         |
| 18.7     | 0.7   |         | FAA          | 78EPS       | 01         |
| 19.7     | 1.    |         | AE+AF        | 78EPS       | 01         |
| 21.5     | 1.2   | *14     | FAA          | 79EPS       | 03         |
| Be (ppb) |       |         |              |             |            |
| 18.8     | 0.4   |         | FAA          | 78EPS       | 01         |
| 21.3     | 5.5   |         | AE+AF        | 78EPS       | 01         |
| Ca (ppm) |       |         |              |             |            |
| 23.9     |       |         | ITNA         | 81HAB       | 01         |
| Cd (ppb) |       |         |              |             |            |
|          | 15.   | L*      | XRF          | 80BER       | 02         |
| Co (ppb) |       |         |              |             |            |
| 20.      | 2.    |         | XRF          | 80BER       | 02         |
| Cu (ppb) |       |         |              |             |            |
| 14.      | 0.3   |         | FAA          | 78EPS       | 01         |
| 16.2     | 1.8   |         | AE+AF        | 78EPS       | 01         |
| 17.      | 1.    |         | XRF          | 80BER       | 02         |
| Fe (ppb) |       |         |              |             |            |
| 76.      | 2.    | D*      | DCP          | 81REE       | 01         |
| 76.      | 2.    |         | DCP          | 79REE       | 01         |
| 82.      | 3.    |         | XRF          | 80BER       | 02         |
| Hg (ppb) |       |         |              |             |            |
|          | 8.    | L*      | XRF          | 80BER       | 02         |
| Mg (ppm) |       |         |              |             |            |
| 5.7      |       |         | ITNA         | 81HAB       | 01         |

TABLE DD (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Mn (ppb) |       |         |              |             |            |
| 20.      |       | *       | ITNA         | 81HAB       | 01         |
| 26.      | 3.    |         | XRF          | 80BER       | 02         |
| 27.5     | 0.7   |         | FAA          | 78EPS       | 01         |
| 28.      | 2.5   |         | AE+AF        | 78EPS       | 01         |
| 29.      | 3.    | D*      | DCP          | 81REE       | 01         |
| 29.      | 3.    |         | DCP          | 79REE       | 01         |
| Mo (ppb) |       |         |              |             |            |
| 104.     | 3.    |         | FAA          | 78EPS       | 01         |
| 110.     | 5.    |         | AE+AF        | 78EPS       | 01         |
| Na (ppm) |       |         |              |             |            |
| 8.8      |       |         | ITNA         | 81HAB       | 01         |
| Ni (ppb) |       |         |              |             |            |
| 48.      | 4.    | D*      | DCP          | 81REE       | 01         |
| 48.      | 4.    |         | DCP          | 79REE       | 01         |
| 49.8     | 0.8   |         | FAA          | 78EPS       | 01         |
| 50.      | 3.    |         | XRF          | 80BER       | 02         |
| 51.3     | 4.2   |         | AE+AF        | 78EPS       | 01         |
| Pb (ppb) |       |         |              |             |            |
| 23.      | 2.    |         | XRF          | 80BER       | 02         |
| Se (ppb) |       |         |              |             |            |
| 10.      |       |         | ICPES        | 82NYG       | 01         |
| 12.      | 1.    |         | HAA          | 81COX       | 01         |
| Sn (ppb) |       |         |              |             |            |
|          | 20.   | L*      | XRF          | 80BER       | 02         |
| V (ppb)  |       |         |              |             |            |
| 40.      |       |         | ITNA         | 81HAB       | 01         |
| 50.      | 2.    | D*      | DCP          | 81REE       | 01         |
| 50.      | 2.    |         | DCP          | 79REE       | 01         |
| Zn (ppb) |       |         |              |             |            |
| 61.      | 1.    | D*      | DCP          | 81REE       | 01         |
| 61.      | 1.    |         | DCP          | 79REE       | 01         |
| 63.      | 3.    |         | XRF          | 80BER       | 02         |

TABLE EE

NBS SRM 1643A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppb) |       |         |              |             |            |
| 2.7      |       |         | FAA          | 82GLA       | 02         |
| 2.8      | 0.1   |         | FAA          | 83GLA       | 01         |
| Al (ppb) |       |         |              |             |            |
| 57.      | 6.    |         | FAA          | 82JEN       | 02         |
| As (ppb) |       |         |              |             |            |
| 70.      | 4.    |         | FAA          | 83GLA       | 01         |
| 76.      | 7.    |         | FAA          | 82GLA       | 02         |
| Ba (ppb) |       |         |              |             |            |
| 45.      | 6.    |         | FAA          | 83GLA       | 01         |
| 48.      | 3.    |         | FAA          | 82GLA       | 02         |
| Ca (ppm) |       |         |              |             |            |
| 26.9     | 0.8   |         | AA           | 83GLA       | 01         |
| 30.      | 4.    |         | FAA          | 82GLA       | 02         |
| Cd (ppb) |       |         |              |             |            |
| 5.       | 1.    |         | FAA          | 82JEN       | 02         |
| 11.      | 2.    |         | FAA          | 83GLA       | 01         |
| 12.      |       |         | FAA          | 82GLA       | 02         |
| Cr (ppb) |       |         |              |             |            |
| 17.5     | 0.3   |         | FAA          | 83GLA       | 01         |
| 20.      |       |         | FAA          | 82GLA       | 02         |
| Cu (ppb) |       |         |              |             |            |
| 10.      | 1.    |         | FAA          | 82JEN       | 02         |
| 16.      |       |         | FAA          | 82GLA       | 02         |
| 19.      | 1.    |         | FAA          | 83GLA       | 01         |
| Fe (ppb) |       |         |              |             |            |
| 23.      | 5.    |         | FAA          | 82JEN       | 02         |
| 88.      | 7.    |         | FAA          | 83GLA       | 01         |
| 100.     |       |         | FAA          | 82GLA       | 02         |
| K (ppm)  |       |         |              |             |            |
| 1.5      |       |         | FAA          | 82GLA       | 02         |
| 1.62     | 0.04  |         | AA           | 83GLA       | 01         |
| Mg (ppm) |       |         |              |             |            |
| 7.8      | 0.4   |         | AA           | 83GLA       | 01         |
| 7.9      | 0.3   |         | FAA          | 82GLA       | 02         |
| Mn (ppb) |       |         |              |             |            |
| 10.      | 1.    |         | FAA          | 82JEN       | 02         |
| 32.      | 3.    |         | FAA          | 83GLA       | 01         |

TABLE FF

NBS SRM 1645—COLLECTED DATA

TABLE EE (cont)

| CONC      | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| Na (ppm)  |       |         |              |             |            | Al (X)   |       |         |              |             |            |
| 9.        | 0.2   |         | FAA          | 82GLA 02    |            | 2.37     | 0.04  | 35      | ITNA         | 81GLA 02    |            |
| 9.        | 0.2   |         | AA           | 83GLA 01    |            | 2.42     | 0.12  |         | AA           | 81FAR 01    |            |
|           |       |         |              |             |            | 3.9      |       | *       | ICPES        | 80FLO 01    |            |
| Ni (ppb)  |       |         |              |             |            | As (ppm) |       |         |              |             |            |
| 57.       |       |         | FAA          | 82GLA 02    |            | 62.6     | 2.1   |         | RTNA         | 82ELS 02    |            |
| NO3 (ppm) |       |         |              |             |            | 65.      | 1.    |         | FAE          | 80DSI 01    |            |
| 1.        |       |         | ISE          | 83GLA 01    |            | 66.      | 5.    |         | ITNA         | 82GLA 02    |            |
| Pb (ppb)  |       |         |              |             |            | 66.      |       |         | HAA          | 80AGE 03    |            |
| 26.       | 2.    |         | FAA          | 82GLA 02    |            | 66.4     |       |         | ICPES        | 81COU 01    |            |
| 28.       | 2.    |         | FAA          | 83GLA 01    |            | 67.      |       |         | ICPES        | 82NYG 01    |            |
| 41.       | 5.    |         | FAA          | 82JEN 02    |            | 68.      |       |         | ITNA         | 83GLA 01    |            |
| Se (ppb)  |       |         |              |             |            | 70.      |       |         | RTNA         | 81SL 01     |            |
| 10.       | 1.    |         | FAA          | 83GLA 01    |            | 71.      |       |         | ICPES        | 80FLO 01    |            |
| Sr (ppb)  |       |         |              |             |            | 72.      |       |         | ITNA         | 81SLO 01    |            |
| 236.      |       |         | FAA          | 83GLA 01    |            | 87.      |       | *       | PAA          | 80BER 01    |            |
| Zn (ppb)  |       |         |              |             |            | B (ppm)  |       |         |              |             |            |
| 57.       | 6.    |         | FAA          | 82JEN 02    |            | 29.9     | 1.    |         | TCGS         | 83GLA 03    |            |
| 66.       | 2.    |         | FAA          | 83GLA 01    |            | Ba (ppm) |       |         |              |             |            |
| 76.       |       |         | FAA          | 82GLA 02    |            | 178.     | 15.   | *       | PAA          | 80KAT 01    |            |
|           |       |         |              |             |            | 340.     | 50.   | 35      | ITNA         | 81GLA 02    |            |
|           |       |         |              |             |            | 400.     |       |         | ICPES        | 80FLO 01    |            |
|           |       |         |              |             |            | Be (ppm) |       |         |              |             |            |
|           |       |         |              |             |            | 1.       |       |         | ICPES        | 80FLO 01    |            |
|           |       |         |              |             |            | Bi (ppm) |       |         |              |             |            |
|           |       |         |              |             |            |          | 0.1   | L*      | FAA          | 82MAT 02    |            |
|           |       |         |              |             |            | Ca (X)   |       |         |              |             |            |
|           |       |         |              |             |            | 2.33     |       | 6       | XRF          | 78TAK 01    |            |
|           |       |         |              |             |            | 2.73     | 0.15  | 35      | ITNA         | 81GLA 02    |            |
|           |       |         |              |             |            | 2.9      | 0.13  |         | AA           | 81FAR 01    |            |
|           |       |         |              |             |            | 2.93     | 0.01  |         | PAA          | 80KAT 01    |            |
|           |       |         |              |             |            | 3.106    |       | 6       | XRF          | 78TAK 01    |            |
|           |       |         |              |             |            | 4.2      |       | *       | ICPES        | 80FLO 01    |            |
|           |       |         |              |             |            | Cd (ppm) |       |         |              |             |            |
|           |       |         |              |             |            | 8.9      | 0.4   |         | RTNA         | 80VAL 01    |            |
|           |       |         |              |             |            | 9.1      | 0.3   |         | IDMS         | 80ROS 01    |            |
|           |       |         |              |             |            | 9.2      | 0.5   |         | FAA          | 81FAR 01    |            |
|           |       |         |              |             |            | 10.      |       |         | ICPES        | 80FLO 01    |            |
|           |       |         |              |             |            | 10.2     | 0.4   |         | RTNA         | 79DER 01    |            |
|           |       |         |              |             |            | 10.8     | 2.    |         | ICPES        | 82SCH 04    |            |
|           |       |         |              |             |            | 11.      |       |         | PAA          | 80BER 01    |            |
|           |       |         |              |             |            | 11.4     | 4.3   |         | AE+AF        | 82GOL 01    |            |
|           |       |         |              |             |            | Ce (ppm) |       |         |              |             |            |
|           |       |         |              |             |            | 20.      | 0.6   |         | PAA          | 80KAT 01    |            |
|           |       |         |              |             |            | 28.      |       |         | PAA          | 80BER 01    |            |

TABLE FF (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Co (ppm) |       |         |              |             |            |
| 8.       | 0.2   | 35      | ITNA         | 81GLA       | 02         |
| 8.4      | 0.7   |         | RTNA         | 77MEL       | 01         |
| 8.5      | 0.3   |         | PAA          | 80KAT       | 01         |
| 9.96     | 0.12  |         | RTNA         | 79DER       | 01         |
| 11.      |       |         | ICPES        | 80FLO       | 01         |
| 24.      |       | *       | PAA          | 80BER       | 01         |
| Cr (%)   |       |         |              |             |            |
| 2.29     | 0.08  | *       | PAA          | 80KAT       | 01         |
| 2.5      | 0.4   | *       | RTNA         | 77MEL       | 01         |
| 2.91     | 0.24  |         | ICPES        | 82SCH       | 04         |
| 2.97     | 0.125 | 11      | RTNA         | 76STE       | 01         |
| 2.98     |       |         | PAA          | 80BER       | 01         |
| 2.99     | 0.13  | 35      | ITNA         | 81GLA       | 02         |
| 3.02     |       |         | ICPES        | 80FLO       | 01         |
| 3.15     | 0.147 | 11      | RTNA         | 76STE       | 01         |
| 3.16     | 0.152 | 11      | RTNA         | 76STE       | 01         |
| 3.18     | 0.08  |         | AA           | 81FAR       | 01         |
| 3.19     | 0.038 | 6       | XRF          | 80IWA       | 02         |
| 3.25     | 0.152 | 11      | RTNA         | 76STE       | 01         |
| 3.25     | 0.049 | 6       | XRF          | 80IWA       | 02         |
| 3.27     | 0.155 |         | ITNA         | 76STE       | 01         |
| 3.4      | 0.148 | *11     | RTNA         | 76STE       | 01         |
| 3.52     |       | *6      | XRF          | 78TAK       | 01         |
| Cs (ppm) |       |         |              |             |            |
| 2.32     | 0.13  | 35      | ITNA         | 81GLA       | 02         |
| 3.3      | 0.2   |         | RTNA         | 77MEL       | 01         |
| Cu (ppm) |       |         |              |             |            |
| 78.      |       | *6      | XRF          | 78TAK       | 01         |
| 96.      | 14.   |         | ASV          | 81DOG       | 01         |
| 100.     | 20.   |         | AA           | 77YAN       | 01         |
| 105.     | 14.   |         | ICPES        | 82SCH       | 04         |
| 106.     |       |         | PAA          | 80BER       | 01         |
| 108.     |       | 6       | XRF          | 78TAK       | 01         |
| 111.     | 7.    |         | PAA          | 81FAR       | 01         |
| 113.     |       | 6       | XRF          | 78TAK       | 01         |
| 119.     |       |         | ICPES        | 80FLO       | 01         |
| 123.     | 6.    |         | RTNA         | 79DER       | 01         |
| 125.2    | 8.2   |         | RTNA         | 80VAL       | 01         |
| Eu (ppm) |       |         |              |             |            |
| 0.7      |       |         | ICPES        | 80FLO       | 01         |
| 0.31     | 0.03  | 35      | ITNA         | 81GLA       | 02         |
| F (ppm)  |       |         |              |             |            |
| 1740.    | 60.   |         | ISE          | 83KNA       | 01         |
| Fe (%)   |       |         |              |             |            |
| 8.372    |       | *6      | XRF          | 78TAK       | 01         |
| 8.5      | 0.5   | *       | RTNA         | 77MEL       | 01         |
| 9.89     |       | 6       | XRF          | 78TAK       | 01         |
| 10.4     |       | 6       | XRF          | 78TAK       | 01         |

TABLE FF (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 10.5     | 0.3   | 35      | ITNA         | 81GLA       | 02         |
| 10.51    | 0.18  |         | PAA          | 80KAT       | 01         |
| 10.6     | 0.3   |         | AA           | 81FAR       | 01         |
| 11.4     | 1.3   |         | ICPES        | 82SCH       | 04         |
| 11.5     |       |         | ICPES        | 80FLO       | 01         |
| Ga (ppm) |       |         |              |             |            |
| 38.      |       |         | ICPES        | 80FLO       | 01         |
| Hf (ppm) |       |         |              |             |            |
| 1.39     | 0.07  | 35      | ITNA         | 81GLA       | 02         |
| Hg (ppm) |       |         |              |             |            |
| 0.85     | 0.036 |         | CVAA         | 80NAD       | 01         |
| 1.1      | 0.1   |         | RTNA         | 77MEL       | 01         |
| 1.11     | 0.26  |         | CVAA         | 80WHI       | 01         |
| 1.3      |       |         | PAA          | 80BER       | 01         |
| 1.3      | 0.2   |         | RTNA         | 80VAL       | 01         |
| K (%)    |       |         |              |             |            |
| 0.893    |       | 6       | XRF          | 78TAK       | 01         |
| 1.24     |       | 6       | XRF          | 78TAK       | 01         |
| La (ppm) |       |         |              |             |            |
| 15.      |       |         | ICPES        | 80FLO       | 01         |
| Mg (%)   |       |         |              |             |            |
| 0.684    | 0.01  |         | PAA          | 80KAT       | 01         |
| 0.75     | 0.02  |         | AA           | 81FAR       | 01         |
| 4.1      |       |         | ICPES        | 80FLO       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 746.     | 130.  |         | AE+AF        | 82GOL       | 01         |
| 750.     | 18.   |         | PAA          | 80KAT       | 01         |
| 750.     |       |         | ICPES        | 80FLO       | 01         |
| 762.     | 9.    | 35      | ITNA         | 81GLA       | 02         |
| 768.     | 85.   |         | ICPES        | 82SCH       | 04         |
| 780.     | 90.   |         | AA           | 81FAR       | 01         |
| 1460.    |       | *6      | XRF          | 78TAK       | 01         |
| 3321.    |       | *6      | XRF          | 78TAK       | 01         |
| Mo (ppm) |       |         |              |             |            |
| 25.      |       |         | PAA          | 80BER       | 01         |
| Na (ppm) |       |         |              |             |            |
| 5450.    | 110.  |         | PAA          | 80KAT       | 01         |
| 5600.    | 200.  | 35      | ITNA         | 81GLA       | 02         |
| Nb (ppm) |       |         |              |             |            |
| 1.4      | 0.07  |         | PAA          | 80KAT       | 01         |

TABLE FF (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ni (ppm) |       |         |              |             |            |
| 28.      |       | 6       | XRF          | 78TAK       | 01         |
| 30.      |       | 6       | XRF          | 78TAK       | 01         |
| 33.      |       | 6       | XRF          | 78TAK       | 01         |
| 37.6     | 6.4   |         | AE+AF        | 82GOL       | 01         |
| 45.      |       |         | ICPES        | 80FLO       | 01         |
| 46.1     | 2.5   |         | ICPES        | 82SCH       | 04         |
| 46.6     | 4.6   |         | PAA          | 78MAS       | 01         |
| 47.      | 3.    |         | PAA          | 80KAT       | 01         |
| 48.      |       |         | PAA          | 80BER       | 01         |
| 48.      |       |         | PAA          | 78KAT       | 01         |
| 55.      | 3.    |         | RTNA         | 77MEL       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 680.     | 20.   |         | AA           | 77YAN       | 01         |
| 683.     | 29.   |         | FAA          | 81FAR       | 01         |
| 695.     | 45.   |         | ASV          | 81DOG       | 01         |
| 717.     |       | 6       | XRF          | 78TAK       | 01         |
| 719.     |       | 6       | XRF          | 78TAK       | 01         |
| 721.     | 20.   |         | ICPES        | 82SCH       | 04         |
| 724.     |       |         | PAA          | 80BER       | 01         |
| 725.     |       |         | ICPES        | 80FLO       | 01         |
| 771.     | 231.  | *       | AE+AF        | 82GOL       | 01         |
| 1019.    |       | *6      | XRF          | 78TAK       | 01         |
| Pr (ppm) |       |         |              |             |            |
| 14.      |       |         | ICPES        | 80FLO       | 01         |
| Rb (ppm) |       |         |              |             |            |
| 38.      |       | 6       | XRF          | 78TAK       | 01         |
| 39.      |       | 6       | XRF          | 78TAK       | 01         |
| 40.      | 2.    |         | PAA          | 80KAT       | 01         |
| 41.4     | 0.5   |         | RTNA         | 77MEL       | 01         |
| 50.      | 7.    | *35     | ITNA         | 81GLA       | 02         |
| Sb (ppm) |       |         |              |             |            |
| 21.7     |       |         | RTNA         | 81NIS       | 01         |
| 22.6     |       |         | RTNA         | 81KIB       | 01         |
| 25.      |       |         | HAA          | 81YAM       | 01         |
| 28.3     | 1.2   |         | FAA          | 82MAT       | 02         |
| 31.      | 4.    |         | ITNA         | 81HAM       | 01         |
| 33.2     |       |         | RTNA         | 81SLO       | 01         |
| 33.6     | 2.2   |         | RTNA         | 82ELS       | 02         |
| 36.      |       |         | ITNA         | 81SLO       | 01         |
| 38.      |       |         | ICPES        | 82NYG       | 01         |
| 40.      | 5.    | 35      | ITNA         | 81GLA       | 02         |
| 52.      |       | *       | PAA          | 80BER       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 2.13     | 0.07  | 35      | ITNA         | 81GLA       | 02         |
| 3.1      | 0.5   |         | RTNA         | 77MEL       | 01         |
| Se (ppm) |       |         |              |             |            |
| 0.85     |       |         | RTNA         | 81SLO       | 01         |
| 1.       |       |         | ICPES        | 81GOU       | 01         |

TABLE FF (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.3      | 0.2   |         | RTNA         | 77MEL       | 01         |
| 1.5      | 0.1   |         | RTNA         | 81GLA       | 01         |
| 5.       |       | *       | ICPES        | 80FLO       | 01         |
| 8.       |       | *       | ICPES        | 82NYG       | 01         |
| Si (%)   |       |         |              |             |            |
| 30.6     | 1.2   |         | AA           | 81FAR       | 01         |
| Sn (ppm) |       |         |              |             |            |
| 313.     | 9.    |         | FAA          | 82MAT       | 02         |
| Sr (ppm) |       |         |              |             |            |
| 851.     | 13.   |         | PAA          | 80KAT       | 01         |
| 862.     |       |         | PAA          | 80BER       | 01         |
| 870.     |       | 6       | XRF          | 78TAK       | 01         |
| 1033.    |       | 6       | XRF          | 78TAK       | 01         |
| 1200.    |       | *       | ICPES        | 80FLO       | 01         |
| Ta (ppb) |       |         |              |             |            |
| 220.     | 20.   | 35      | ITNA         | 81GLA       | 02         |
| Th (ppm) |       |         |              |             |            |
| 1.8      |       |         | PAA          | 80BER       | 01         |
| Ti (ppm) |       |         |              |             |            |
| 258.     | 1000. | L*      | ITNA         | 81GLA       | 02         |
| 490.     |       | 6       | XRF          | 78TAK       | 01         |
| 642.     | 13.   | 6       | XRF          | 78TAK       | 01         |
| 700.     |       |         | PAA          | 80KAT       | 01         |
| 825.     |       |         | AA           | 82MAT       | 04         |
|          |       |         | PAA          | 80BER       | 01         |
| Tl (ppm) |       |         |              |             |            |
| 1.9      |       |         | FAA          | 80BER       | 01         |
| U (ppm)  |       |         |              |             |            |
| 0.8      | 0.02  |         | RTNA         | 78DER       | 01         |
| 1.16     |       |         | DNA          | 83GLA       | 01         |
| 1.4      |       |         | PAA          | 80BER       | 01         |
| V (ppm)  |       |         |              |             |            |
| 24.1     | 6.5   |         | ICPES        | 82SCH       | 04         |
| 25.      |       |         | ICPES        | 80FLO       | 01         |
| 29.      | 6.    | 35      | ITNA         | 81GLA       | 02         |
| Y (ppm)  |       |         |              |             |            |
| 7.       |       |         | ICPES        | 80FLO       | 01         |
| 7.4      | 0.3   |         | PAA          | 80KAT       | 01         |
| Yb (ppb) |       |         |              |             |            |
| 600.     |       |         | ICPES        | 80FLO       | 01         |

TABLE FF (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Zn (ppm) |       |         |              |             |            |
| 1414.    | 84.   |         | RTNA         | 77MEL       | 01         |
| 1480.    |       | 6       | XRF          | 78TAK       | 01         |
| 1540.    | 67.   |         | PAA          | 80KAT       | 01         |
| 1587.    |       |         | ICPES        | 80FLO       | 01         |
| 1610.    | 40.   |         | AA           | 77YAN       | 01         |
| 1640.    | 40.   |         | AA           | 81FAR       | 01         |
| 1640.    |       | 6       | XRF          | 78TAK       | 01         |
| 1713.    | 145.  |         | ICPES        | 82SCH       | 04         |
| 1720.    | 361.  |         | AE+AF        | 82GOL       | 01         |
| 1730.    |       |         | PAA          | 80BER       | 01         |
| 1794.    |       | 6       | XRF          | 78TAK       | 01         |
| 1806.    | 37.   |         | RTNA         | 79DER       | 01         |
| Zr (ppm) |       |         |              |             |            |
| 55.      | 3.    |         | PAA          | 80KAT       | 01         |
| 71.      |       |         | PAA          | 80BER       | 01         |

TABLE GG

NBS SRM 1646—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| B (ppm)  |       |         |              |             |            |
| 83.      | 2.    |         | TCGS         | 83GLA       | 03         |
| Cs (ppm) |       |         |              |             |            |
| 3.6      | 0.4   |         | ITNA         | 83GLA       | 01         |
| Sb (ppm) |       |         |              |             |            |
| 0.85     |       |         | ITNA         | 83GLA       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 10.4     | 0.2   |         | ITNA         | 83GLA       | 01         |
| U (ppm)  |       |         |              |             |            |
| 3.       |       |         | DNA          | 83GLA       | 01         |

TABLE HH

NBS SRM 1648—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppm) |       |         |              |             |            |
| 5.8      | 0.9   |         | IENA         | 83GLA       | 02         |
| 6.       | 1.    |         | XRF          | 77GLA       | 02         |
| 6.       | 1.    | D*      | XRF          | 79GLA       | 03         |
| 6.4      | 0.5   |         | ITNA         | 79GRE       | 01         |
| Al (%)   |       |         |              |             |            |
| 3.05     | 0.03  |         | AA           | 81FRA       | 01         |
| 3.1      | 0.1   |         | ITNA         | 83GLA       | 02         |
| 3.12     | 0.2   | 35      | ITNA         | 81GLA       | 03         |
| 3.3      |       |         | ICPES        | 80FLO       | 01         |
| 3.3      | 0.45  |         | AA           | 81FAR       | 01         |
| 3.5      | 0.1   |         | ITNA         | 79GRE       | 01         |
| As (ppm) |       |         |              |             |            |
| 112.     |       |         | ICPES        | 80FLO       | 01         |
| 117.     |       |         | ICPES        | 82NYG       | 01         |
| 117.     | 5.    |         | ITNA         | 83GLA       | 02         |
| 117.     | 5.    |         | ITNA         | 79GRE       | 01         |
| 119.     |       | 35      | NAA          | 81GLA       | 03         |
| 119.     | 2.    |         | IENA         | 83GLA       | 02         |
| B (ppm)  |       |         |              |             |            |
| 158.     | 8.    |         | TCGS         | 83GLA       | 03         |
| 6000.    | 170.  | *       | UU           | 81FRA       | 01         |
| Ba (ppm) |       |         |              |             |            |
| 740.     | 60.   |         | ITNA         | 79GRE       | 01         |
| 757.     | 35.   |         | XRF          | 77GLA       | 02         |
| 757.     | 35.   | D*      | XRF          | 79GLA       | 03         |
| 774.     |       |         | ICPES        | 80FLO       | 01         |
| 800.     | 10.   | 5       | ITNA         | 83GLA       | 02         |
| 840.     | 40.   |         | IENA         | 83GLA       | 02         |
| 980.     | 100.  | 5*      | ITNA         | 83GLA       | 02         |
| Be (ppm) |       |         |              |             |            |
| 3.       |       |         | ICPES        | 80FLO       | 01         |
| Br (ppm) |       |         |              |             |            |
| 460.     | 15.   | 5       | IENA         | 83GLA       | 02         |
| 500.     | 30.   |         | ITNA         | 79GRE       | 01         |
| 504.     | 14.   | 5       | IENA         | 83GLA       | 02         |
| 517.     | 14.   |         | XRF          | 77GLA       | 02         |
| 517.     | 14.   | D*      | XRF          | 79GLA       | 03         |
| 526.     | 24.   | 35      | ITNA         | 81GLA       | 03         |
| 526.     | 25.   |         | ITNA         | 83GLA       | 02         |
| C (%)    |       |         |              |             |            |
| 14.7     | 0.3   |         | CB           | 83GLA       | 02         |
| 15.27    | 0.15  |         | UU           | 81FRA       | 01         |
| Ca (%)   |       |         |              |             |            |
| 5.4      | 0.3   |         | IENA         | 83GLA       | 02         |
| 5.5      | 0.4   |         | AA           | 82GLA       | 02         |

TABLE HH (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cd (ppm) |       |         |              |             |            |
| 5.6      | 0.4   |         | AA           | 83GLA       | 02         |
| 5.8      | 0.5   |         | ITNA         | 79GRE       | 01         |
| 6.1      | 0.04  |         | EXRF         | 78PEL       | 01         |
| 6.18     | 0.23  |         | AA           | 81FAR       | 01         |
| 6.3      | 0.3   |         | ITNA         | 83GLA       | 02         |
| Ce (ppm) |       |         |              |             |            |
| 64.      | 7.    |         | AA           | 82GLA       | 02         |
| 69.      | 4.    |         | FAA          | 81FAR       | 01         |
| 70.      | 2.    |         | XRF          | 77GLA       | 02         |
| 70.      | 2.    | D*      | XRF          | 79GLA       | 03         |
| 70.      | 6.    |         | ITNA         | 79GRE       | 01         |
| 73.      |       |         | ICPES        | 80FLO       | 01         |
| 75.      | 7.    |         | AA           | 83GLA       | 02         |
| 105.     | 9.    | *       | AA           | 81FRA       | 01         |
| Cl (ppm) |       |         |              |             |            |
| 500.     | 60.   | *35     | ITNA         | 81GLA       | 03         |
| 4500.    | 200.  |         | ITNA         | 79GRE       | 01         |
| 4890.    | 80.   |         | ITNA         | 83GLA       | 02         |
| Co (ppm) |       |         |              |             |            |
| 15.2     | 0.9   |         | AA           | 81FRA       | 01         |
| 17.2     | 0.6   |         | ITNA         | 83GLA       | 02         |
| 17.6     | 0.5   |         | ITNA         | 79GRE       | 01         |
| 18.      | 1.    |         | IENA         | 83GLA       | 02         |
| 28.      |       |         | ICPES        | 80FLO       | 01         |
| 42.      | 7.    | *35     | ITNA         | 81GLA       | 03         |
| Cr (ppm) |       |         |              |             |            |
| 173.     | 27.   | *       | FAA          | 81FAR       | 01         |
| 380.     | 40.   |         | AA           | 83GLA       | 02         |
| 383.     |       |         | AA           | 82GLA       | 02         |
| 398.     |       |         | ICPES        | 80FLO       | 01         |
| 402.     | 10.   |         | ITNA         | 79GRE       | 01         |
| 410.     | 50.   | 35      | ITNA         | 81GLA       | 03         |
| 410.     | 8.    |         | ITNA         | 83GLA       | 02         |
| 417.     | 16.   |         | AA           | 81FRA       | 01         |
| 440.     | 10.   |         | EXRF         | 78PEL       | 01         |
| 560.     | 11.   | *       | UU           | 81FRA       | 01         |
| 580.     | 50.   | *       | UU           | 81FRA       | 01         |
| Cs (ppm) |       |         |              |             |            |
| 3.3      | 0.2   |         | IENA         | 83GLA       | 02         |
| 3.4      | 0.2   |         | ITNA         | 79GRE       | 01         |
| 3.73     | 0.29  |         | ITNA         | 83GLA       | 02         |
| Cu (ppm) |       |         |              |             |            |
| 570.     | 44.   |         | UU           | 81FRA       | 01         |
| 581.     | 16.   |         | XRF          | 77GLA       | 02         |

TABLE HH (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 586.     | 22.   |         | FAA          | 81FAR       | 01         |
| 589.     | 12.   |         | AA           | 81FRA       | 01         |
| 596.     | 24.   |         | AA           | 82GLA       | 02         |
| 598.     |       |         | ICPES        | 80FLO       | 01         |
| 600.     | 30.   |         | AA           | 83GLA       | 02         |
| 610.     | 18.   |         | UU           | 81FRA       | 01         |
| 640.     | 60.   | *       | EXRF         | 81KIN       | 01         |
| 700.     | 100.  | *       | EXRF         | 78PEL       | 01         |
| Eu (ppm) |       |         |              |             |            |
| 0.77     | 0.03  |         | ITNA         | 83GLA       | 02         |
| 0.79     | 0.08  |         | ITNA         | 79GRE       | 01         |
| 1.       |       |         | ICPES        | 80FLO       | 01         |
| Fe (%)   |       |         |              |             |            |
| 3.43     | 0.05  |         | AA           | 81FRA       | 01         |
| 3.7      |       |         | AA           | 82GLA       | 02         |
| 3.8      | 0.5   | 35      | ITNA         | 81GLA       | 03         |
| 3.84     | 0.08  |         | ITNA         | 79GRE       | 01         |
| 3.86     | 0.06  |         | ITNA         | 83GLA       | 02         |
| 3.9      | 0.1   |         | IENA         | 83GLA       | 02         |
| 3.96     | 0.037 |         | EXRF         | 78PEL       | 01         |
| 4.       | 0.1   |         | EXRF         | 81KIN       | 01         |
| 4.05     | 0.1   |         | XRF          | 77GIA       | 02         |
| 4.05     | 0.1   | D*      | XRF          | 79GIA       | 03         |
| 4.1      |       |         | ICPES        | 80FLO       | 01         |
| 4.2      | 0.4   |         | AA           | 83GLA       | 02         |
| 4.5      | 0.23  | *       | AA           | 81FAR       | 01         |
| 5.45     | 0.32  | *       | UU           | 81FRA       | 01         |
| 5.65     | 0.14  | *       | UU           | 81FRA       | 01         |
| Ga (ppm) |       |         |              |             |            |
| 8.3      | 0.4   |         | IENA         | 83GLA       | 02         |
| 72.      |       |         | ICPES        | 80FLO       | 01         |
| H (%)    |       |         |              |             |            |
| 2.23     | 0.04  |         | CB           | 83GLA       | 02         |
| Hf (ppm) |       |         |              |             |            |
| 4.2      | 0.3   |         | ITNA         | 79GRE       | 01         |
| 4.47     | 0.07  |         | ITNA         | 83GLA       | 02         |
| 5.2      | 0.4   |         | IENA         | 83GLA       | 02         |
| I (ppm)  |       |         |              |             |            |
| 16.      | 2.    |         | XRF          | 77GIA       | 02         |
| 16.      | 2.    | D*      | XRF          | 79GIA       | 03         |
| 20.      | 5.    |         | ITNA         | 79GRE       | 01         |
| In (ppb) |       |         |              |             |            |
| 980.     | 70.   |         | ITNA         | 79GRE       | 01         |
| K (%)    |       |         |              |             |            |
| 0.96     | 0.12  |         | ITNA         | 83GLA       | 02         |
| 0.99     | 0.11  |         | ITNA         | 79GRE       | 01         |

TABLE HH (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| 1.04     | 0.02  |         | EXRF         | 78PEL       | 01         |
| 1.07     | 0.02  |         | IENA         | 83GLA       | 02         |
| 1.11     | 0.08  | 35      | ITNA         | 81GLA       | 03         |
| La (ppm) |       |         |              |             |            |
| 35.      |       |         | ICPES        | 80FLO       | 01         |
| 38.      | 3.    | 35      | ITNA         | 81GLA       | 03         |
| 40.      | 2.    |         | ITNA         | 83GLA       | 02         |
| 42.      | 2.    |         | ITNA         | 79GRE       | 01         |
| 42.      | 5.    |         | IENA         | 83GLA       | 02         |
| Lu (ppb) |       |         |              |             |            |
| 34.      | 3.    |         | ITNA         | 83GLA       | 02         |
| Mg (ppm) |       |         |              |             |            |
| 7200.    | 600.  |         | AA           | 82GLA       | 02         |
| 7500.    | 400.  |         | AA           | 83GLA       | 02         |
| 7600.    | 400.  |         | AA           | 81FAR       | 01         |
| 8000.    | 130.  |         | AA           | 81FRA       | 01         |
| 8300.    | 800.  |         | ITNA         | 79GRE       | 01         |
| 9000.    |       | *       | ICPES        | 80FLO       | 01         |
| Mu (ppm) |       |         |              |             |            |
| 740.     | 30.   |         | IENA         | 83GLA       | 02         |
| 747.     | 10.   |         | ITNA         | 83GLA       | 02         |
| 790.     | 20.   |         | ITNA         | 79GRE       | 01         |
| 790.     | 80.   |         | AA           | 83GLA       | 02         |
| 805.     | 4.    |         | AA           | 81FRA       | 01         |
| 810.     | 40.   | 35      | ITNA         | 81GLA       | 03         |
| 810.     | 60.   |         | AA           | 81FAR       | 01         |
| 840.     | 85.   |         | UU           | 81FRA       | 01         |
| 851.     |       |         | ICPES        | 80FLO       | 01         |
| 860.     | 20.   |         | EXRF         | 81KIN       | 01         |
| 870.     | 30.   |         | EXRF         | 78PEL       | 01         |
| 880.     | 80.   |         | AA           | 82GLA       | 02         |
| 880.     | 19.   |         | UU           | 81FRA       | 01         |
| 961.     | 34.   | *       | XRF          | 77GIA       | 02         |
| 961.     | 34.   | D*      | XRF          | 79GIA       | 03         |
| Mo (ppm) |       |         |              |             |            |
| 17.      | 2.    |         | XRF          | 77GIA       | 02         |
| 21.      | 2.    |         | IENA         | 83GLA       | 02         |
| N (%)    |       |         |              |             |            |
| 3.25     | 0.04  |         | CB           | 83GLA       | 02         |
| Na (ppm) |       |         |              |             |            |
| 4000.    | 200.  |         | ITNA         | 79GRE       | 01         |
| 4220.    | 120.  | 5       | ITNA         | 83GLA       | 02         |
| 4600.    | 200.  | 5       | ITNA         | 83GLA       | 02         |
| 5500.    | 1500. | 35      | ITNA         | 81GLA       | 03         |
| Nb (ppm) |       |         |              |             |            |
| 22.      | 3.    |         | XRF          | 77GIA       | 02         |

TABLE HH (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ni (ppm) |       |         |              |             |            |
| 72.      | 15.   |         | AA           | 82GLA       | 02         |
| 75.      | 4.    |         | IENA         | 83GLA       | 02         |
| 83.      | 4.    |         | EXRF         | 78PEL       | 01         |
| 85.      |       |         | ICPES        | 80FLO       | 01         |
| 99.      | 13.   |         | XRF          | 77GIA       | 02         |
| 100.     | 7.    |         | UU           | 81FRA       | 01         |
| 105.     | 21.   |         | AA           | 81FRA       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 6100.    | 200.  |         | AA           | 82GLA       | 02         |
| 6200.    | 810.  |         | UU           | 81FRA       | 01         |
| 6210.    | 85.   |         | FAA          | 81FAR       | 01         |
| 6300.    | 300.  |         | AA           | 83GLA       | 02         |
| 6300.    | 100.  |         | XRF          | 77GIA       | 02         |
| 6400.    | 45.   |         | AA           | 81FRA       | 01         |
| 6780.    | 60.   |         | EXRF         | 78PEL       | 01         |
| 6900.    | 200.  |         | EXRF         | 81KIN       | 01         |
| 7000.    |       |         | ICPES        | 80FLO       | 01         |
| Pr (ppm) |       |         |              |             |            |
| 8.       |       |         | ICPES        | 80FLO       | 01         |
| Rb (ppm) |       |         |              |             |            |
| 52.      | 9.    |         | ITNA         | 79GRE       | 01         |
| 53.      | 5.    |         | ITNA         | 83GLA       | 02         |
| 55.      | 6.    | 35      | ITNA         | 81GLA       | 03         |
| 58.      | 2.    |         | IENA         | 83GLA       | 02         |
| S (%)    |       |         |              |             |            |
| 5.21     | 0.06  |         | UU           | 81FRA       | 01         |
| Sb (ppm) |       |         |              |             |            |
| 41.      |       |         | ICPES        | 82NYG       | 01         |
| 44.      | 3.    |         | XRF          | 77GIA       | 02         |
| 44.      | 6.    |         | ITNA         | 83GLA       | 01         |
| 44.      | 3.    | D*      | XRF          | 79GIA       | 03         |
| 45.      | 3.    |         | ITNA         | 79GRE       | 01         |
| 47.      | 2.    |         | ITNA         | 83GLA       | 02         |
| Sc (ppm) |       |         |              |             |            |
| 6.6      | 0.2   |         | ITNA         | 79GRE       | 01         |
| 6.6      | 0.6   |         | ITNA         | 83GLA       | 01         |
| 6.8      |       | 35      | ITNA         | 81CLA       | 03         |
| 6.8      | 0.3   |         | ITNA         | 83GLA       | 02         |
| Se (ppm) |       |         |              |             |            |
| 4.       |       | *       | ICPES        | 80FLO       | 01         |
| 23.1     | 0.2   | 35      | RTNA         | 81GLA       | 01         |
| 25.      | 4.    |         | XRF          | 77GIA       | 02         |
| 25.      | 4.    | D*      | XRF          | 79GIA       | 03         |
| 26.      |       |         | ICPES        | 82NYG       | 01         |
| 27.      | 2.    |         | ITNA         | 79GRE       | 01         |

TABLE HH (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Si (%)   |       |         |              |             |            |
| 11.5     | 2.    |         | AA           | 82GLA       | 02         |
| 12.63    | 0.47  |         | AA           | 81FRA       | 01         |
| 13.      | 1.1   |         | IENA         | 83GLA       | 02         |
| 13.      | 2.    |         | AA           | 83GLA       | 02         |
| 14.7     | 0.3   |         | EXRF         | 78PEL       | 01         |
| 16.2     | 1.    |         | AA           | 81FAR       | 01         |
| Sm (ppm) |       |         |              |             |            |
| 4.       | 0.4   |         | ITNA         | 79GRE       | 01         |
| 4.2      | 0.4   | 35      | ITNA         | 81GLA       | 03         |
| 4.4      | 0.3   |         | ITNA         | 83GLA       | 02         |
| Sn (ppm) |       |         |              |             |            |
| 147.     | 4.    |         | XRF          | 77GIA       | 02         |
| Sr (ppm) |       |         |              |             |            |
| 190.     | 10.   |         | EXRF         | 78PEL       | 01         |
| 211.     | 6.    |         | XRF          | 77GIA       | 02         |
| 220.     | 10.   |         | IENA         | 83GLA       | 02         |
| 450.     |       | *       | ICPES        | 80FLO       | 01         |
| Ta (ppm) |       |         |              |             |            |
| 6.76     | 0.17  |         | ITNA         | 83GLA       | 02         |
| 7.2      | 0.4   |         | IENA         | 83GLA       | 02         |
| Th (ppm) |       |         |              |             |            |
| 7.4      | 0.3   |         | ITNA         | 79GRE       | 01         |
| 7.5      | 0.5   |         | ITNA         | 83GLA       | 02         |
| 7.8      | 0.4   |         | IENA         | 83GLA       | 02         |
| Ti (ppm) |       |         |              |             |            |
| 3800.    | 200.  |         | EXRF         | 81KIN       | 01         |
| 3900.    | 800.  |         | AA           | 81FRA       | 01         |
| 4000.    |       |         | ICPES        | 80FLO       | 01         |
| 4000.    | 200.  |         | ITNA         | 79GRE       | 01         |
| 4000.    | 200.  |         | ITNA         | 83GLA       | 02         |
| 4100.    | 400.  |         | AA           | 82GLA       | 02         |
| 4100.    | 300.  |         | AA           | 83GLA       | 02         |
| 4260.    | 30.   |         | EXRF         | 78PEL       | 01         |
| 4500.    | 400.  | *       | IENA         | 83GLA       | 02         |
| 9700.    |       | *35     | NAA          | 81GLA       | 03         |
| U (ppm)  |       |         |              |             |            |
| 5.42     | 0.2   |         | DNA          | 83GLA       | 02         |
| 5.6      | 0.05  |         | IENA         | 83GLA       | 02         |
| 5.9      |       |         | DNA          | 83GLA       | 01         |
| V (ppm)  |       |         |              |             |            |
| 106.     |       |         | ICPES        | 80FLO       | 01         |
| 116.     | 19.   | 35      | ITNA         | 81GLA       | 03         |
| 116.     | 4.    |         | ITNA         | 83GLA       | 02         |

TABLE II

TABLE HH (cont)

NBS SRM 1A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| 123.     | 12.   |         | IENA         | 83GLA       | 02         | A1 (%)   |       |         |              |             |            |
| 130.     | 7.    |         | ITNA         | 79GRE       | 01         |          |       |         |              |             |            |
| W (ppm)  |       |         |              |             |            | 2.1      |       |         | OES          | 62JOE       | 01         |
|          |       |         |              |             |            | 2.23     |       |         | OES          | 78KNO       | 01         |
|          |       |         |              |             |            | 2.27     |       |         | DCP          | 73KAR       | 01         |
| 3.5      |       | 35      | RENA         | 81GLA       | 03         | 2.29     |       |         | TITR         | 58WAT       | 01         |
| 4.4      | 2.8   |         | IENA         | 83GLA       | 02         | 2.36     |       |         | RR           | 73KAR       | 01         |
| 4.8      | 0.6   |         | ITNA         | 79GRE       | 01         |          |       |         |              |             |            |
| Y (ppm)  |       |         |              |             |            | B (ppm)  |       |         |              |             |            |
|          |       |         |              |             |            | 80.      |       | 3       | OES          | 63CLA       | 01         |
| 5.       |       |         | ICPES        | 80FLO       | 01         | 100.     |       | 3       | OES          | 63CLA       | 01         |
| Yb (ppm) |       |         |              |             |            | Ba (ppm) |       |         |              |             |            |
|          |       |         |              |             |            |          | 800.  | L*      | OES          | 63CLA       | 01         |
| 2.       |       |         | ICPES        | 80FLO       | 01         |          |       |         |              |             |            |
| Zn (ppm) |       |         |              |             |            | C (%)    |       |         |              |             |            |
| 4300.    | 550.  | *       | UU           | 81FRA       | 01         | 9.73     |       |         | CB           | 78TER       | 01         |
| 4400.    | 60.   |         | UU           | 81FRA       | 01         |          |       |         |              |             |            |
| 4580.    | 160.  |         | AA           | 81FAR       | 01         | Ca (%)   |       |         |              |             |            |
| 4650.    | 150.  |         | EXRF         | 78PEL       | 01         |          |       |         |              |             |            |
| 4700.    | 200.  |         | ITNA         | 79GRE       | 01         | 28.6     |       |         | OES          | 62JOE       | 01         |
| 4700.    |       |         | ICPES        | 80FLO       | 01         | 29.5     |       |         | RR           | 73KAR       | 01         |
| 4740.    | 130.  |         | IENA         | 83GLA       | 02         | 29.6     |       |         | XRF          | 78KNO       | 01         |
| 4740.    | 30.   |         | AA           | 80EPS       | 01         | 29.7     |       |         | DCP          | 73KAR       | 01         |
| 4750.    | 50.   |         | ITNA         | 83GLA       | 02         |          |       |         |              |             |            |
| 4800.    |       |         | AA           | 82GLA       | 02         | Co (ppm) |       |         |              |             |            |
| 4800.    | 100.  |         | EXRF         | 81KIN       | 01         |          | 10.   | L*      | OES          | 63CLA       | 01         |
| 4800.    | 300.  |         | AA           | 83GLA       | 02         | 3.9      | 1.4   |         | RTNA         | 61TUR       | 01         |
| 4800.    | 60.   |         | AA           | 81FRA       | 01         |          |       |         |              |             |            |
| 4850.    | 240.  | 35      | ITNA         | 81GLA       | 03         | Cr (ppm) |       |         |              |             |            |
| 4890.    | 130.  |         | XRF          | 77GIA       | 02         | 23.      |       |         | RTNA         | 61TUR       | 01         |
| 4890.    | 130.  | D*      | XRF          | 79GIA       | 03         | 30.      |       |         | OES          | 63CLA       | 01         |
| Zr (ppm) |       |         |              |             |            |          |       |         |              |             |            |
| 169.     | 8.    |         | XRF          | 77GIA       | 02         | Cu (ppm) |       |         |              |             |            |
|          |       |         |              |             |            | 3.       |       |         | OES          | 63CLA       | 01         |
|          |       |         |              |             |            | Fe (%)   |       |         |              |             |            |
|          |       |         |              |             |            | 0.855    |       |         | OES          | 62JOE       | 01         |
|          |       |         |              |             |            | 1.08     |       |         | OES          | 78KNO       | 01         |
|          |       |         |              |             |            | 1.08     |       |         | DCP          | 73KAR       | 01         |
|          |       |         |              |             |            | 1.1      |       |         | COLOR        | 59COL       | 01         |
|          |       |         |              |             |            | 1.13     |       |         | RR           | 73KAR       | 01         |
|          |       |         |              |             |            | 1.15     |       |         | TITR         | 69WIC       | 01         |
|          |       |         |              |             |            | Ga (ppm) |       |         |              |             |            |
|          |       |         |              |             |            | 4.       |       |         | OES          | 63CLA       | 01         |
|          |       |         |              |             |            | Hg (ppb) |       |         |              |             |            |
|          |       |         |              |             |            | 44.      |       |         | FAA          | 75HEI       | 01         |
|          |       |         |              |             |            | 71.4     | 2.16  |         | FAA          | 82FLA       | 01         |

TABLE II (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| K (ppm)  |       |         |              |             |            |
| 6900.    |       |         | RR           | 73KAR       | 01         |
| La (ppm) |       |         |              |             |            |
| 100.     |       |         | OES          | 63CLA       | 01         |
| Mg (%)   |       |         |              |             |            |
| 1.29     |       |         | OES          | 78KNO       | 01         |
| 1.3      |       |         | OES          | 62JOE       | 01         |
| 1.37     |       |         | RR           | 73KAR       | 01         |
| 1.39     |       |         | DCP          | 73KAR       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 320.     |       |         | OES          | 78KNO       | 01         |
| 500.     |       | 3       | OES          | 63CLA       | 01         |
| 500.     |       | 3       | OES          | 63CLA       | 01         |
| Mo (ppm) |       |         |              |             |            |
|          | 1.    | L*      | OES          | 63CLA       | 01         |
| Na (ppm) |       |         |              |             |            |
| 2300.    |       |         | RR           | 73KAR       | 01         |
| 2700.    |       |         | DCP          | 73KAR       | 01         |
| Ni (ppm) |       |         |              |             |            |
| 10.      |       |         | OES          | 63CLA       | 01         |
| P (ppm)  |       |         |              |             |            |
| 650.     |       |         | WXRF         | 71FAB       | 01         |
| 1500.    |       |         | OES          | 78KNO       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 17.2     |       |         | FAA          | 75CAM       | 02         |
| 20.      |       |         | OES          | 63CLA       | 01         |
| 21.      |       |         | FAA          | 79HEI       | 03         |
| S (ppm)  |       |         |              |             |            |
| 2700.    |       |         | CB           | 55COL       | 01         |
| 2800.    |       |         | OES          | 78KNO       | 01         |
| 2800.    |       |         | CB           | 74RUN       | 01         |
| 2800.    |       |         | UU           | 72BOU       | 01         |
| 3000.    |       |         | TURB         | 73SHA       | 01         |
| 3020.    | 90.   |         | CB           | 77LAN       | 01         |
| 3073.    |       |         | CB           | 78TER       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 15.      |       |         | OES          | 63CLA       | 01         |

TABLE II (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Si (%)   |       |         |              |             |            |
| 6.53     |       |         | XRF          | 78KNO       | 01         |
| 6.54     |       |         | OES          | 62JOE       | 01         |
| 6.58     |       |         | RR           | 73KAR       | 01         |
| 6.63     |       |         | COLOR        | 74SHA       | 01         |
| 6.72     |       |         | DCP          | 73KAR       | 01         |
| Sn (ppm) |       |         |              |             |            |
| 1.68     |       |         | AA           | 82TER       | 01         |
| Sr (ppm) |       |         |              |             |            |
| 1700.    |       |         | OES          | 75THO       | 01         |
| 1940.    |       |         | OES          | 58CRA       | 01         |
| 2000.    |       | 3       | OES          | 63CLA       | 01         |
| 2000.    |       |         | RTNA         | 61TUR       | 01         |
| 3000.    |       | *3      | OES          | 63CLA       | 01         |
| Ti (ppm) |       |         |              |             |            |
| 900.     |       |         | RR           | 73KAR       | 01         |
| 900.     |       |         | DCP          | 73KAR       | 01         |
| 960.     | 61.   |         | RTNA         | 65WAH       | 01         |
| 1000.    |       |         | OES          | 78KNO       | 01         |
| 1500.    |       | 3       | OES          | 63CLA       | 01         |
| 2500.    |       | *3      | OES          | 63CLA       | 01         |
| V (ppm)  |       |         |              |             |            |
| 30.      |       |         | OES          | 63CLA       | 01         |
| W (ppm)  |       |         |              |             |            |
| 10.      |       |         | OES          | 63CLA       | 01         |
| Zn (ppm) |       |         |              |             |            |
| 17.      |       |         | XRF          | 65BAL       | 01         |
| 23.3     |       |         | RTNA         | 65BAL       | 01         |
| Zr (ppm) |       |         |              |             |            |
| 60.      |       |         | OES          | 63CLA       | 01         |

TABLE JJ

## NBS SRM 1B—COLLECTED DATA

| CONC           | UNCER | COMMENT | ANAL<br>METH  | REF<br>CODE          | REF<br>NUM |
|----------------|-------|---------|---------------|----------------------|------------|
| Ag (ppm)       |       |         |               |                      |            |
|                | 5.    | L*      | ICPES         | 81CHU 01             |            |
| Al (ppm)       |       |         |               |                      |            |
| 5660.<br>5800. | 200.  |         | ICPES<br>OES  | 81CHU 01<br>73BES 01 |            |
| As (ppm)       |       |         |               |                      |            |
|                | 5.    | L*      | ICPES         | 81CHU 01             |            |
| Au (ppm)       |       |         |               |                      |            |
|                | 3.    | L*      | ICPES         | 81CHU 01             |            |
| Ba (ppm)       |       |         |               |                      |            |
| 86.            | 1.7   |         | ICPES         | 81CHU 01             |            |
| Be (ppb)       |       |         |               |                      |            |
| 420.           | 50.   |         | ICPES         | 81CHU 01             |            |
| Bi (ppm)       |       |         |               |                      |            |
|                | 25.   | L*      | ICPES         | 81CHU 01             |            |
| Ca (%)         |       |         |               |                      |            |
| 35.93<br>36.8  | 1.19  |         | ICPES<br>OES  | 81CHU 01<br>73BES 01 |            |
| Cd (ppb)       |       |         |               |                      |            |
| 52.            | 2000. | L*      | ICPES<br>IDMS | 81CHU 01<br>74ROS 02 |            |
| Ce (ppm)       |       |         |               |                      |            |
|                | 15.   | L*      | ICPES         | 81CHU 01             |            |
| Co (ppm)       |       |         |               |                      |            |
| 4.1            | 1.    |         | ICPES         | 81CHU 01             |            |
| Cr (ppm)       |       |         |               |                      |            |
| 15.7           | 1.    |         | ICPES         | 81CHU 01             |            |
| Cu (ppm)       |       |         |               |                      |            |
| 5.5            | 1.    |         | ICPES         | 81CHU 01             |            |
| Eu (ppm)       |       |         |               |                      |            |
| 1.7            | 1.2   |         | ICPES         | 81CHU 01             |            |
| Fe (ppm)       |       |         |               |                      |            |
| 5000.<br>5460. | 140.  |         | OES<br>ICPES  | 73BES 01<br>81CHU 01 |            |

TABLE JJ (cont)

| CONC           | UNCER     | COMMENT | ANAL<br>METH | REF<br>CODE          | REF<br>NUM |
|----------------|-----------|---------|--------------|----------------------|------------|
| Gd (ppm)       |           |         |              |                      |            |
|                | 5.        | L*      | ICPES        | 81CHU 01             |            |
| Hg (ppb)       |           |         |              |                      |            |
| 15.7           | 0.9       |         | FAA          | 82FLA 01             |            |
| K (ppm)        |           |         |              |                      |            |
| 2000.          | 50.       |         | ICPES        | 81CHU 01             |            |
| La (ppm)       |           |         |              |                      |            |
|                | 5.        | L*      | ICPES        | 81CHU 01             |            |
| Li (ppm)       |           |         |              |                      |            |
|                | 2.        | L*      | ICPES        | 81CHU 01             |            |
| Mg (ppm)       |           |         |              |                      |            |
| 2040.<br>2400. | 60.       |         | ICPES<br>OES | 81CHU 01<br>73BES 01 |            |
| Mn (ppm)       |           |         |              |                      |            |
| 1430.<br>1510. | 45.       |         | OES<br>ICPES | 73BES 01<br>81CHU 01 |            |
| Mo (ppm)       |           |         |              |                      |            |
|                | 3.        | L*      | ICPES        | 81CHU 01             |            |
| Na (ppm)       |           |         |              |                      |            |
| 260.           | 15.       |         | ICPES        | 81CHU 01             |            |
| Nd (ppm)       |           |         |              |                      |            |
|                | 20.       | L*      | ICPES        | 81CHU 01             |            |
| Ni (ppm)       |           |         |              |                      |            |
| 11.            | 1.        |         | ICPES        | 81CHU 01             |            |
| P (ppm)        |           |         |              |                      |            |
| 370.           | 9.        |         | ICPES        | 81CHU 01             |            |
| Pb (ppm)       |           |         |              |                      |            |
| 2.<br>17.      | 0.4<br>2. |         | FAA<br>ICPES | 75CAM 02<br>81CHU 01 |            |
| S (ppm)        |           |         |              |                      |            |
| 100.           |           |         | CB           | 77LAN 01             |            |
| Sb (ppm)       |           |         |              |                      |            |
|                | 10.       | L*      | ICPES        | 81CHU 01             |            |

TABLE JJ (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Se (ppm) |       |         |              |             |            |
|          | 30.   | L*      | ICPES        | 81CHU       | 01         |
| Si (%)   |       |         |              |             |            |
| 2.28     | 0.05  |         | COLOR        | 81FON       | 01         |
| 2.32     |       |         | OES          | 73BES       | 01         |
| Sm (ppm) |       |         |              |             |            |
|          | 5.    | L*      | ICPES        | 81CHU       | 01         |
| Sn (ppm) |       |         |              |             |            |
|          | 3.    | L*      | ICPES        | 81CHU       | 01         |
| Sr (ppm) |       |         |              |             |            |
| 1200.    |       |         | OES          | 75THO       | 01         |
| 1208.    | 24.   |         | ICPES        | 81CHU       | 01         |
| Th (ppm) |       |         |              |             |            |
|          | 25.   | L*      | ICPES        | 81CHU       | 01         |
| Ti (ppm) |       |         |              |             |            |
| 292.     | 6.    |         | ICPES        | 81CHU       | 01         |
| 300.     |       |         | OES          | 73BES       | 01         |
| U (ppm)  |       |         |              |             |            |
|          | 30.   | L*      | ICPES        | 81CHU       | 01         |
| V (ppm)  |       |         |              |             |            |
| 30.1     | 1.4   |         | ICPES        | 81CHU       | 01         |
| Yb (ppm) |       |         |              |             |            |
| 2.1      | 0.1   |         | ICPES        | 81CHU       | 01         |
| Zn (ppm) |       |         |              |             |            |
| 40.7     | 2.    |         | ICPES        | 81CHU       | 01         |
| Zr (ppm) |       |         |              |             |            |
| 16.      | 1.    |         | ICPES        | 81CHU       | 01         |

TABLE KK

NBS SRM 278—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Al (%)   |       |         |              |             |            |
| 7.43     | 0.57  |         | ITNA         | 82GRA       | 01         |
| 7.8      | 0.2   |         | TCGS         | 82GRA       | 01         |
| As (ppm) |       |         |              |             |            |
| 4.68     | 0.13  |         | ITNA         | 81AHM       | 01         |
| 5.06     | 1.29  |         | ITNA         | 82GRA       | 01         |
| 5.1      | 0.88  |         | ITNA         | 82VOG       | 01         |
| Au (ppb) |       |         |              |             |            |
| 1.6      | 0.8   |         | ITNA         | 82GRA       | 01         |
| 2.64     | 0.52  |         | ITNA         | 82VOG       | 01         |
| B (ppm)  |       |         |              |             |            |
| 24.9     | 0.5   |         | TCGS         | 82VOG       | 01         |
| 25.2     | 0.4   |         | TCGS         | 82GRA       | 01         |
| 25.3     | 1.    |         | TCGS         | 83GLA       | 03         |
| Ba (ppm) |       |         |              |             |            |
| 885.     | 54.   |         | ITNA         | 81AHM       | 01         |
| 1060.    | 40.   |         | ITNA         | 82VOG       | 01         |
| 1080.    | 58.   |         | ITNA         | 82GRA       | 01         |
| Br (ppm) |       |         |              |             |            |
| 2.61     | 0.62  |         | ITNA         | 82GRA       | 01         |
| 2.65     | 0.2   |         | ITNA         | 81AHM       | 01         |
| 2.99     | 1.01  |         | ITNA         | 82VOG       | 01         |
| Ca (ppm) |       |         |              |             |            |
| 6000.    | 1000. |         | TCGS         | 82GRA       | 01         |
| 7300.    | 300.  |         | TCGS         | 82VOG       | 01         |
| 7500.    | 1200. |         | ITNA         | 82GRA       | 01         |
| Ce (ppm) |       |         |              |             |            |
| 56.5     | 1.9   |         | ITNA         | 81AHM       | 01         |
| 56.5     | 2.9   |         | ITNA         | 80AHM       | 01         |
| 59.4     | 6.8   |         | ITNA         | 82GRA       | 01         |
| 66.5     | 9.3   |         | ITNA         | 82VOG       | 01         |
| Cl (ppm) |       |         |              |             |            |
| 640.     | 90.   |         | TCGS         | 82GRA       | 01         |
| Co (ppm) |       |         |              |             |            |
| 1.85     | 0.18  |         | ITNA         | 82GRA       | 01         |
| 1.89     | 0.31  |         | ITNA         | 82VOG       | 01         |
| 2.04     | 0.22  |         | ITNA         | 81AHM       | 01         |
| Cr (ppm) |       |         |              |             |            |
| 6.34     | 0.93  |         | ITNA         | 82GRA       | 01         |
| 6.42     | 0.28  |         | ITNA         | 82VOG       | 01         |
| 6.79     | 0.44  |         | ITNA         | 81AHM       | 01         |

TABLE KK (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Cs (ppm)</b> |       |         |              |             |            |
| 4.92            | 0.34  |         | ITNA         | 82GRA 01    |            |
| 5.12            | 0.44  |         | ITNA         | 81AHM 01    |            |
| 5.3             | 0.25  |         | ITNA         | 82VOG 01    |            |
| 5.3             | 0.7   |         | ITNA         | 83GLA 01    |            |
| <b>Eu (ppb)</b> |       |         |              |             |            |
| 764.            | 56.   |         | ITNA         | 82GRA 01    |            |
| 796.            | 9.    |         | ITNA         | 82VOG 01    |            |
| 820.            | 30.   |         | ITNA         | 81AHM 01    |            |
| 820.            | 30.   |         | ITNA         | 80AHM 01    |            |
| <b>Fe (%)</b>   |       |         |              |             |            |
| 1.14            | 0.23  | *       | ITNA         | 81AHM 01    |            |
| 1.32            | 0.17  |         | TCGS         | 82GRA 01    |            |
| 1.52            | 0.05  |         | ITNA         | 82GRA 01    |            |
| 1.54            | 0.01  |         | ITNA         | 82VOG 01    |            |
| 1.55            | 0.06  |         | TCGS         | 82VOG 01    |            |
| <b>Ga (ppm)</b> |       |         |              |             |            |
| 10.             | 3.    |         | ITNA         | 82GRA 01    |            |
| 12.47           | 2.53  |         | ITNA         | 82VOG 01    |            |
| <b>Gd (ppm)</b> |       |         |              |             |            |
| 4.5             |       |         | ITNA         | 82GRA 01    |            |
| 5.28            | 0.06  |         | TCGS         | 82VOG 01    |            |
| 5.34            | 0.08  |         | TCGS         | 82GRA 01    |            |
| 37.74           | 1.5   | *       | ITNA         | 81AHM 01    |            |
| 37.74           | 1.5   | *       | ITNA         | 80AHM 01    |            |
| <b>H (%)</b>    |       |         |              |             |            |
| 0.089           | 0.012 |         | TCGS         | 82VOG 01    |            |
| <b>Hf (ppm)</b> |       |         |              |             |            |
| 6.41            | 0.24  |         | ITNA         | 81AHM 01    |            |
| 8.82            | 0.73  |         | ITNA         | 82GRA 01    |            |
| 8.86            | 0.73  |         | ITNA         | 82VOG 01    |            |
| <b>In (ppb)</b> |       |         |              |             |            |
| 43.6            | 2.7   |         | ITNA         | 81AHM 01    |            |
| <b>K (%)</b>    |       |         |              |             |            |
| 3.42            | 0.34  |         | ITNA         | 82GRA 01    |            |
| 3.44            | 0.08  |         | TCGS         | 82GRA 01    |            |
| 3.58            | 0.7   |         | TCGS         | 82VOG 01    |            |
| 4.23            | 0.13  | *       | ITNA         | 81AHM 01    |            |
| <b>La (ppm)</b> |       |         |              |             |            |
| 27.59           | 0.38  |         | ITNA         | 81AHM 01    |            |
| 27.6            | 0.4   |         | ITNA         | 80AHM 01    |            |
| 35.4            | 2.5   |         | ITNA         | 82GRA 01    |            |
| 35.8            | 1.5   |         | ITNA         | 82VOG 01    |            |

TABLE KK (cont)

| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|-----------------|-------|---------|--------------|-------------|------------|
| <b>Lu (ppb)</b> |       |         |              |             |            |
| 740.            | 50.   |         | ITNA         | 80AHM 01    |            |
| 745.            | 310.  |         | ITNA         | 81AHM 01    |            |
| 820.            | 39.   |         | ITNA         | 82VOG 01    |            |
| 836.            | 50.   |         | ITNA         | 82GRA 01    |            |
| <b>Mn (ppm)</b> |       |         |              |             |            |
| 367.            | 15.   |         | ITNA         | 82VOG 01    |            |
| 400.            | 50.   |         | ITNA         | 82GRA 01    |            |
| 409.            | 15.   |         | ITNA         | 81AHM 01    |            |
| 430.            | 70.   |         | TCGS         | 82GRA 01    |            |
| <b>Mo (ppm)</b> |       |         |              |             |            |
| 3.73            | 0.52  |         | ITNA         | 82VOG 01    |            |
| 3.73            | 0.52  |         | ITNA         | 82GRA 01    |            |
| <b>Na (%)</b>   |       |         |              |             |            |
| 2.6             | 0.2   |         | TCGS         | 82GRA 01    |            |
| 3.3             | 0.4   |         | ITNA         | 82VOG 01    |            |
| 3.46            | 0.26  |         | ITNA         | 82GRA 01    |            |
| 3.9             | 0.23  |         | ITNA         | 81AHM 01    |            |
| <b>Nd (ppm)</b> |       |         |              |             |            |
| 28.2            | 1.    |         | ITNA         | 82GRA 01    |            |
| <b>Rb (ppm)</b> |       |         |              |             |            |
| 130.            | 12.   |         | ITNA         | 82GRA 01    |            |
| 138.            | 10.   |         | ITNA         | 82VOG 01    |            |
| 143.17          | 2.63  |         | ITNA         | 81AHM 01    |            |
| <b>Sb (ppm)</b> |       |         |              |             |            |
| 1.59            | 0.05  |         | ITNA         | 82VOG 01    |            |
| 1.61            | 0.13  |         | ITNA         | 82GRA 01    |            |
| 1.7             | 0.4   |         | ITNA         | 81AHM 01    |            |
| 1.9             |       |         | ITNA         | 83GLA 01    |            |
| <b>Sc (ppm)</b> |       |         |              |             |            |
| 4.16            | 0.21  |         | ITNA         | 81AHM 01    |            |
| 5.              | 0.1   |         | ITNA         | 83GLA 01    |            |
| 5.24            | 0.14  |         | ITNA         | 82GRA 01    |            |
| 5.31            | 0.05  |         | ITNA         | 82VOG 01    |            |
| <b>Si (%)</b>   |       |         |              |             |            |
| 33.2            | 0.7   |         | TCGS         | 82VOG 01    |            |
| 36.6            | 1.3   |         | TCGS         | 82GRA 01    |            |
| <b>Sm (ppm)</b> |       |         |              |             |            |
| 5.61            | 0.05  |         | TCGS         | 82VOG 01    |            |
| 5.66            | 0.1   |         | TCGS         | 82GRA 01    |            |
| 5.69            | 0.62  |         | ITNA         | 82GRA 01    |            |
| 5.7             | 0.7   |         | ITNA         | 82VOG 01    |            |

TABLE LL

TABLE KK (cont)

NBS SRM 4350—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ta (ppm) |       |         |              |             |            |
| 1.23     | 0.19  |         | ITNA         | 82GRA 01    |            |
| 1.23     | 0.16  |         | ITNA         | 82VOG 01    |            |
| 1.32     | 0.18  |         | ITNA         | 81AHM 01    |            |
| Tb (ppm) |       |         |              |             |            |
| 1.12     | 0.22  |         | ITNA         | 82VOG 01    |            |
| 1.14     | 0.1   |         | ITNA         | 82GRA 01    |            |
| 1.23     | 0.03  |         | ITNA         | 81AHM 01    |            |
| 1.23     | 0.08  |         | ITNA         | 80AHM 01    |            |
| Th (ppm) |       |         |              |             |            |
| 12.27    | 0.77  |         | ITNA         | 81AHM 01    |            |
| 12.27    | 0.77  |         | ITNA         | 80CHA 02    |            |
| 12.8     | 0.3   |         | ITNA         | 82GRA 01    |            |
| 13.1     | 0.2   |         | ITNA         | 82VOG 01    |            |
| Ti (ppm) |       |         |              |             |            |
| 1450.    | 90.   |         | TCGS         | 82GRA 01    |            |
| 1500.    | 40.   |         | TCGS         | 82VOG 01    |            |
| Tm (ppm) |       |         |              |             |            |
| 0.301    | 0.02  |         | ITNA         | 81AHM 01    |            |
| U (ppm)  |       |         |              |             |            |
| 4.204    | 0.284 |         | ITNA         | 81AHM 01    |            |
| 4.58     |       |         | DNA          | 83GLA 01    |            |
| 4.82     | 0.35  |         | ITNA         | 82GRA 01    |            |
| 4.96     | 0.33  |         | ITNA         | 82VOG 01    |            |
| Yb (ppm) |       |         |              |             |            |
| 3.58     | 0.25  |         | ITNA         | 81AHM 01    |            |
| 3.58     | 0.25  |         | ITNA         | 80AHM 01    |            |
| 4.54     | 0.86  |         | ITNA         | 82GRA 01    |            |
| 5.09     | 0.95  |         | ITNA         | 82VOG 01    |            |
| Zn (ppm) |       |         |              |             |            |
| 54.      | 2.5   |         | ITNA         | 82GRA 01    |            |
| 57.4     | 3.6   |         | ITNA         | 82VOG 01    |            |
| Zr (ppm) |       |         |              |             |            |
| 285.     | 16.   |         | ITNA         | 82GRA 01    |            |
| 311.     | 50.   |         | ITNA         | 82VOG 01    |            |

Cs-137 (PC1)

2.5 0.35 GAMMA 83GLA 01

I (ppb)

5400. 5000. RTNA 79BRA 01

1-129 (FC1)

Pu-239 (PC1)

0.033 0.001 AS 81CAR 01

TABLE MM

NBS SRM 4350B—COLLECTED DATA

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| Am-241 (PC1) |       |         |              |             |            |
| 0.005        |       |         | AS           | 83GLA 01    |            |
| Co-6 (PC1)   |       |         |              |             |            |
| 0.13         | 0.01  |         | GAMMA        | 82JEN 03    |            |
| Cs-137 (PC1) |       |         |              |             |            |
| 0.85         | 0.08  |         | GAMMA        | 83GLA 01    |            |
| Pu-238 (FC1) |       |         |              |             |            |
| 0.2          | 0.8   |         | AS           | 83GLA 01    |            |
| Pu-239 (FC1) |       |         |              |             |            |
| 11.6         | 2.5   |         | AS           | 83GLA 01    |            |
| Th-230 (PC1) |       |         |              |             |            |
| 0.8          |       |         | AS           | 83GLA 01    |            |

TABLE NN

## NBS SRM 4353—COLLECTED DATA

| CONC         | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|--------------|-------|---------|--------------|-------------|------------|
| Am-241 (PC1) |       |         |              |             |            |
| 0.042        | 0.008 |         | AS           | 83GLA 01    |            |
| Ce-137 (PC1) |       |         |              |             |            |
| 0.52         | 0.06  |         | GAMMA        | 83GLA 01    |            |
| Pu-238 (FC1) |       |         |              |             |            |
| 3.5          | 1.9   |         | AS           | 83GLA 01    |            |
| Pu-239 (PC1) |       |         |              |             |            |
| 0.202        | 0.039 |         | AS           | 83GLA 01    |            |
| Th-230 (PC1) |       |         |              |             |            |
| 1.2          |       |         | AS           | 83GLA 01    |            |

TABLE OO

## NBS SRM 610—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppm) |       |         |              |             |            |
| 180.     | 80.   |         | ITNA         | 73SHE 01    |            |
| As (ppm) |       |         |              |             |            |
| 305.     | 20.   |         | SSMS         | 74BER 01    |            |
| Au (ppm) |       |         |              |             |            |
| 20.      | 2.    |         | ITNA         | 73SHE 01    |            |
| B (ppm)  |       |         |              |             |            |
| 368.     | 12.   |         | ICPES        | 82OWE 01    |            |
| Ba (ppm) |       |         |              |             |            |
| 638.     | 24.   |         | SSMS         | 74BER 01    |            |
| Be (ppm) |       |         |              |             |            |
| 450.     | 50.   |         | CPAA         | 82LAS 01    |            |
| Bi (ppm) |       |         |              |             |            |
| 405.     | 18.   |         | SSMS         | 74BER 01    |            |
| Ca (X)   |       |         |              |             |            |
| 7.64     | 0.002 |         | SSMS         | 74BER 01    |            |
| Cd (ppm) |       |         |              |             |            |
| 187.     | 21.   |         | SSMS         | 74BER 01    |            |
| Ce (ppm) |       |         |              |             |            |
| 318.     | 14.   |         | SSMS         | 74BER 01    |            |
| Co (ppm) |       |         |              |             |            |
| 135.     | 14.   |         | ITNA         | 73SHE 01    |            |
| 375.     | 12.   |         | SSMS         | 74BER 01    |            |
| Cr (ppm) |       |         |              |             |            |
| 371.     | 15.   |         | SSMS         | 74BER 01    |            |
| Ga (ppm) |       |         |              |             |            |
| 481.     | 10.   |         | SSMS         | 74BER 01    |            |
| Ge (ppm) |       |         |              |             |            |
| 496.     | 10.   |         | SSMS         | 74BER 01    |            |
| Hf (ppm) |       |         |              |             |            |
| 220.     | 14.   |         | SSMS         | 74BER 01    |            |

TABLE OO (cont)

| CONC       | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------------|-------|---------|--------------|-------------|------------|
| In (ppm)   |       |         |              |             |            |
| 319.       | 11.   |         | SSMS         | 74BER       | 01         |
| Li (ppm)   |       |         |              |             |            |
| 354.       | 27.   |         | CPAA         | 82LAS       | 01         |
| Mg (ppm)   |       |         |              |             |            |
| 472.       | 22.   |         | SSMS         | 74BER       | 01         |
| Mn (ppm)   |       |         |              |             |            |
| 391.       | 7.    |         | SSMS         | 74BER       | 01         |
| Mo (ppm)   |       |         |              |             |            |
| 307.       | 19.   |         | SSMS         | 74BER       | 01         |
| Ni (ppm)   |       |         |              |             |            |
| 431.       | 10.   |         | SSMS         | 74BER       | 01         |
| Pb (ppm)   |       |         |              |             |            |
| 392.       | 11.   |         | SSMS         | 74BER       | 01         |
| Sb (ppm)   |       |         |              |             |            |
| 387.       | 18.   |         | SSMS         | 74BER       | 01         |
| Ta (ppm)   |       |         |              |             |            |
| 206.       | 9.    |         | SSMS         | 74BER       | 01         |
| Te (ppm)   |       |         |              |             |            |
| 259.       | 21.   |         | SSMS         | 74BER       | 01         |
| Th (ppm)   |       |         |              |             |            |
| 469.       | 7.    |         | SSMS         | 74BER       | 01         |
| Ti (ppm)   |       |         |              |             |            |
| 361.       | 18.   |         | SSMS         | 74BER       | 01         |
| Tl (ppm)   |       |         |              |             |            |
| 52.        | 35.   |         | SSMS         | 74BER       | 01         |
| U (ppm)    |       |         |              |             |            |
| 413.       | 18.   |         | SSMS         | 74BER       | 01         |
| 430.       |       |         | DNA          | 83GLA       | 01         |
| 470.       | 90.   | 17      | DNA          | 82CON       | 01         |
| 471.       | 28.   | 17      | DNA          | 82CON       | 01         |
| U-235 (a%) |       |         |              |             |            |
| 0.251      | 0.009 |         | RTNA         | 83GLA       | 01         |

TABLE OO (cont)

| CONC    | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|---------|-------|---------|--------------|-------------|------------|
| V (ppm) |       |         |              |             |            |
| 206.    | 10.   |         | SSMS         | 74BER       | 01         |

TABLE PP

NBS SRM 612—COLLECTED DATA

| CONC       | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|------------|-------|---------|--------------|-------------|------------|
| Ag (ppm)   |       |         |              |             |            |
| 31.        | 7.    |         | ITNA         | 73SHE       | 01         |
| Au (ppm)   |       |         |              |             |            |
| 5.         | 1.    |         | ITNA         | 73SHE       | 01         |
| B (ppm)    |       |         |              |             |            |
| 40.        | 4.    |         | ICPES        | 82OWE       | 01         |
| Be (ppm)   |       |         |              |             |            |
| 31.        | 7.    |         | CPAA         | 82LAS       | 01         |
| Ce (ppm)   |       |         |              |             |            |
| 37.        | 2.    |         | ITNA         | 73SHE       | 01         |
| Co (ppm)   |       |         |              |             |            |
| 31.        | 1.    |         | ITNA         | 73SHE       | 01         |
| Eu (ppm)   |       |         |              |             |            |
| 26.        | 1.    |         | ITNA         | 73SHE       | 01         |
| La (ppm)   |       |         |              |             |            |
| 35.        | 15.   |         | ITNA         | 73SHE       | 01         |
| Li (ppm)   |       |         |              |             |            |
| 44.        | 8.    |         | CPAA         | 82LAS       | 01         |
| Pb (ppm)   |       |         |              |             |            |
| 38.56      | 0.11  |         | IDMS         | 77GUL       | 01         |
| Th (ppm)   |       |         |              |             |            |
| 31.        | 1.    |         | ITNA         | 73SHE       | 01         |
| U (ppm)    |       |         |              |             |            |
| 35.74      |       |         | NT           | 80VIR       | 01         |
| 36.3       | 7.2   | 17      | DNA          | 82CON       | 01         |
| 37.66      | 0.08  |         | IDMS         | 77GUL       | 01         |
| 39.        | 4.9   | 17      | DNA          | 82CON       | 01         |
| 40.        |       |         | DNA          | 83GLA       | 01         |
| U-235 (a%) |       |         |              |             |            |
| 0.229      | 0.011 |         | RTNA         | 83GLA       | 01         |

TABLE QQ

NBS SRM 614—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppm) |       |         |              |             |            |
| 0.471    | 0.06  |         | FAA          | 82JEN       | 02         |
| 0.57     | 0.07  |         | ITNA         | 73SHE       | 01         |
| Au (ppm) |       |         |              |             |            |
| 0.28     | 0.14  |         | FAA          | 82JEN       | 02         |
| 1.       | 0.8   |         | ITNA         | 73SHE       | 01         |
| Co (ppm) |       |         |              |             |            |
| 0.59     | 0.1   |         | ITNA         | 73SHE       | 01         |
| Cu (ppm) |       |         |              |             |            |
| 1.61     | 0.32  |         | FAA          | 82JEN       | 02         |
| Eu (ppm) |       |         |              |             |            |
| 1.1      | 0.6   |         | ITNA         | 73SHE       | 01         |
| La (ppm) |       |         |              |             |            |
|          | 2.    |         | ITNA         | 73SHE       | 01         |
| Sb (ppm) |       |         |              |             |            |
| 1.1      | 0.1   |         | ITNA         | 73SHE       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 0.68     | 0.23  |         | ITNA         | 73SHE       | 01         |
| Th (ppm) |       |         |              |             |            |
| 0.58     | 0.15  |         | ITNA         | 73SHE       | 01         |
| Tl (ppm) |       |         |              |             |            |
| 0.29     | 0.05  |         | RTNA         | 82COH       | 01         |
| U (ppm)  |       |         |              |             |            |
| 0.74     |       |         | NT           | 80VIR       | 01         |

TABLE RR

NBS SRM 616—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Sb (ppb) |       |         |              |             |            |
| 12.      | 20.   |         | ITNA         | 73SHE       | 01         |
| Sc (ppb) |       |         |              |             |            |
| 20.      | 4.    |         | ITNA         | 73SHE       | 01         |
| Th (ppb) |       |         |              |             |            |
| 18.      | 2.    |         | ITNA         | 73SHE       | 01         |

TABLE SS

NBS SRM 688—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Al (%)   |       |         |              |             |            |
| 8.54     | 0.39  |         | ITNA         | 82GRA       | 01         |
| 9.3      | 0.2   |         | TCGS         | 82GRA       | 01         |
| As (ppm) |       |         |              |             |            |
| 2.68     | 0.54  |         | ITNA         | 82GRA       | 01         |
| Au (ppb) |       |         |              |             |            |
| 0.9      | 0.4   |         | ITNA         | 82GRA       | 01         |
| B (ppm)  |       |         |              |             |            |
| 0.88     | 0.14  |         | TCGS         | 82GRA       | 01         |
| 1.3      | 0.2   |         | TCGS         | 83GLA       | 03         |
| Ba (ppm) |       |         |              |             |            |
| 197.     | 33.   |         | ITNA         | 82GRA       | 01         |
| 210.     | 30.   |         | ITNA         | 83GLA       | 01         |
| Ca (%)   |       |         |              |             |            |
| 7.9      | 0.2   |         | TCGS         | 82GRA       | 01         |
| 8.2      | 0.6   |         | ITNA         | 82GRA       | 01         |
| Ce (ppm) |       |         |              |             |            |
| 10.1     | 3.9   |         | ITNA         | 82GRA       | 01         |
| Co (ppm) |       |         |              |             |            |
| 47.5     | 1.5   |         | ITNA         | 82GRA       | 01         |
| 55.6     | 1.2   |         | ITNA         | 83GLA       | 01         |
| Cr (ppm) |       |         |              |             |            |
| 328.     | 15.   |         | ITNA         | 82GRA       | 01         |
| 330.     | 10.   |         | ITNA         | 83GLA       | 01         |
| Cs (ppb) |       |         |              |             |            |
| 210.     | 110.  |         | ITNA         | 83GLA       | 01         |
| Eu (ppm) |       |         |              |             |            |
| 0.919    | 0.048 |         | ITNA         | 82GRA       | 01         |
| 1.01     | 0.05  |         | ITNA         | 83GLA       | 01         |
| Fe (%)   |       |         |              |             |            |
| 7.1      | 0.06  |         | ITNA         | 83GLA       | 01         |
| 7.23     | 0.19  |         | ITNA         | 82GRA       | 01         |
| 7.23     | 0.17  |         | TCGS         | 82GRA       | 01         |
| Ga (ppm) |       |         |              |             |            |
| 57.      | 10.   |         | ITNA         | 82GRA       | 01         |

TABLE SS (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Gd (ppm) |       |         |              |             |            |
| 2.5      |       |         | ITNA         | 82GRA 01    |            |
| 2.82     | 0.08  |         | TCGS         | 82GRA 01    |            |
| Hf (ppm) |       |         |              |             |            |
| 1.46     | 0.13  |         | ITNA         | 83GLA 01    |            |
| 1.58     | 0.14  |         | ITNA         | 82GRA 01    |            |
| K (ppm)  |       |         |              |             |            |
| 1700.    | 100.  |         | TCGS         | 82GRA 01    |            |
| La (ppm) |       |         |              |             |            |
| 5.9      | 0.2   |         | ITNA         | 83GLA 01    |            |
| 7.54     | 0.93  |         | ITNA         | 82GRA 01    |            |
| Lu (ppb) |       |         |              |             |            |
| 342.     | 57.   |         | ITNA         | 82GRA 01    |            |
| Mg (%)   |       |         |              |             |            |
| 3.9      | 0.8   |         | ITNA         | 82GRA 01    |            |
| 5.7      | 0.4   |         | TCGS         | 82GRA 01    |            |
| Mn (ppm) |       |         |              |             |            |
| 1120.    | 60.   |         | TCGS         | 82GRA 01    |            |
| 1180.    | 70.   |         | ITNA         | 82GRA 01    |            |
| 1290.    | 60.   |         | ITNA         | 83GLA 01    |            |
| Na (%)   |       |         |              |             |            |
| 1.05     | 0.07  |         | TCGS         | 82GRA 01    |            |
| 1.39     | 0.12  |         | ITNA         | 82GRA 01    |            |
| 1.61     | 0.01  |         | ITNA         | 83GLA 01    |            |
| Nd (ppm) |       |         |              |             |            |
| 9.95     | 1.08  |         | ITNA         | 82GRA 01    |            |
| Ni (ppm) |       |         |              |             |            |
| 123.     | 29.   |         | ITNA         | 82GRA 01    |            |
| Sb (ppb) |       |         |              |             |            |
| 420.     |       |         | ITNA         | 83GLA 01    |            |
| 466.     | 207.  |         | ITNA         | 82GRA 01    |            |
| Sc (ppm) |       |         |              |             |            |
| 36.1     | 0.9   |         | ITNA         | 82GRA 01    |            |
| 36.3     | 0.5   |         | ITNA         | 83GLA 01    |            |
| Si (%)   |       |         |              |             |            |
| 24.6     | 0.6   |         | TCGS         | 82GRA 01    |            |

TABLE SS (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Sm (ppm) |       |         |              |             |            |
| 2.09     | 0.22  |         | ITNA         | 82GRA 01    |            |
| 2.31     | 0.08  |         | TCGS         | 82GRA 01    |            |
| 2.54     | 0.07  |         | ITNA         | 83GLA 01    |            |
| Sr (ppm) |       |         |              |             |            |
| 179.     | 14.   |         | ITNA         | 83GLA 01    |            |
| Ta (ppb) |       |         |              |             |            |
| 246.     | 58.   |         | ITNA         | 82GRA 01    |            |
| 380.     | 70.   |         | ITNA         | 83GLA 01    |            |
| Tb (ppb) |       |         |              |             |            |
| 462.     | 25.   |         | ITNA         | 82GRA 01    |            |
| 520.     | 60.   |         | ITNA         | 83GLA 01    |            |
| Th (ppb) |       |         |              |             |            |
| 460.     | 130.  |         | ITNA         | 83GLA 01    |            |
| Ti (ppm) |       |         |              |             |            |
| 7000.    | 700.  |         | ITNA         | 82GRA 01    |            |
| 7200.    | 200.  |         | TCGS         | 82GRA 01    |            |
| U (ppb)  |       |         |              |             |            |
| 280.     |       |         | DNA          | 83GLA 01    |            |
| 340.     | 80.   |         | ITNA         | 82GRA 01    |            |
| V (ppm)  |       |         |              |             |            |
| 235.     | 25.   |         | ITNA         | 82GRA 01    |            |
| Yb (ppm) |       |         |              |             |            |
| 1.86     | 0.27  |         | ITNA         | 82GRA 01    |            |
| Zr (ppm) |       |         |              |             |            |
| 58.6     | 8.7   |         | ITNA         | 82GRA 01    |            |

TABLE TT  
NBS SRM 70—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ba (ppm) |       |         |              |             |            |
| 380.     | 17.   |         | ITNA         | 77FLA 01    |            |
| Ce (ppm) |       |         |              |             |            |
|          | 4.    | L*      | ITNA         | 77FLA 01    |            |
| Co (ppb) |       |         |              |             |            |
| 100.     |       |         | ITNA         | 77FLA 01    |            |
| Cr (ppm) |       |         |              |             |            |
|          | 2.    | L*      | ITNA         | 77FLA 01    |            |
| Cs (ppm) |       |         |              |             |            |
| 6.6      | 0.19  |         | ITNA         | 77FLA 01    |            |
| Eu (ppb) |       |         |              |             |            |
| 400.     | 10.   |         | ITNA         | 77FLA 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 300.     |       |         | ITNA         | 77FLA 01    |            |
| Hf (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 77FLA 01    |            |
| Hg (ppb) |       |         |              |             |            |
| 98.      | 5.95  |         | FAA          | 82FLA 01    |            |
| La (ppm) |       |         |              |             |            |
|          | 3.    | L*      | ITNA         | 77FLA 01    |            |
| Lu (ppb) |       |         |              |             |            |
|          | 40.   | L*      | ITNA         | 77FLA 01    |            |
| Nd (ppm) |       |         |              |             |            |
|          | 3.    | L*      | ITNA         | 77FLA 01    |            |
| Rb (ppm) |       |         |              |             |            |
| 470.     | 26.   |         | ITNA         | 77FLA 01    |            |
| Sb (ppb) |       |         |              |             |            |
|          | 500.  | L*      | ITNA         | 77FLA 01    |            |
| Sc (ppb) |       |         |              |             |            |
| 40.      | 3.    |         | ITNA         | 77FLA 01    |            |

TABLE TT (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Sm (ppb) |       |         |              |             |            |
|          | 500.  | L*      | ITNA         | 77FLA 01    |            |
| Ta (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 77FLA 01    |            |
| Tb (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 77FLA 01    |            |
| Th (ppb) |       |         |              |             |            |
|          | 400.  | L*      | ITNA         | 77FLA 01    |            |
| Yb (ppb) |       |         |              |             |            |
|          | 300.  | L*      | ITNA         | 77FLA 01    |            |
| Zn (ppm) |       |         |              |             |            |
| 6.       | 0.71  |         | ITNA         | 77FLA 01    |            |
| 7.3      |       |         | RTNA         | 65BAL 01    |            |
| 7.5      |       |         | XRF          | 65BAL 01    |            |
| Zr (ppm) |       |         |              |             |            |
|          | 75.   | L*      | ITNA         | 77FLA 01    |            |

TABLE UU

## NBS SRM 70A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ba (ppm) |       |         |              |             |            |
| 120.     | 5.    |         | ITNA         | 77FLA 01    |            |
| 121.9    |       |         | IDMS         | 69LAE 01    |            |
| C (ppm)  |       |         |              |             |            |
| 50.      |       |         | CB           | 78TER 01    |            |
| Ca (ppm) |       |         |              |             |            |
| 640.     |       |         | AA           | 73RAM 01    |            |
| Cd (ppb) |       |         |              |             |            |
| 8.7      |       |         | IDMS         | 74ROS 02    |            |
| Ce (ppm) |       |         |              |             |            |
|          | 4.    | L*      | ITNA         | 77FLA 01    |            |
| Co (ppb) |       |         |              |             |            |
| 200.     |       |         | ITNA         | 77FLA 01    |            |
| Cr (ppm) |       |         |              |             |            |
|          | 4.    | L*      | ITNA         | 77FLA 01    |            |
| Cs (ppm) |       |         |              |             |            |
| 9.28     | 0.15  |         | ITNA         | 77FLA 01    |            |
| 10.      |       |         | AA           | 72ALL 01    |            |
| Eu (ppb) |       |         |              |             |            |
| 570.     | 10.   |         | ITNA         | 77FLA 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 490.     |       |         | AA           | 73RAM 01    |            |
| 600.     |       |         | ITNA         | 77FLA 01    |            |
| Hf (ppb) |       |         |              |             |            |
|          | 300.  | L*      | ITNA         | 77FLA 01    |            |
| Hg (ppb) |       |         |              |             |            |
| 15.      | 1.03  |         | FAA          | 82FLA 01    |            |
| K (%)    |       |         |              |             |            |
| 9.71     |       |         | ISE          | 75PUF 01    |            |
| 9.71     |       |         | FE           | 75PUF 01    |            |
| 9.79     |       |         | AA           | 73RAM 01    |            |
| La (ppm) |       |         |              |             |            |
|          | 2.    | L*      | ITNA         | 77FLA 01    |            |

TABLE UU (cont)

| CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|--------|---------|--------------|-------------|------------|
| Lu (ppb) |        |         |              |             |            |
| 8.       | 100.   | L*      | ITNA         | 77FLA 01    |            |
|          |        |         | IDMS         | 76MCC 03    |            |
| Na (%)   |        |         |              |             |            |
| 1.8      |        |         | ISE          | 75PUF 01    |            |
| 1.87     |        |         | AA           | 73RAM 01    |            |
| 1.9      |        |         | FE           | 75PUF 01    |            |
| Nd (ppm) |        |         |              |             |            |
|          | 3.     | L*      | ITNA         | 77FLA 01    |            |
| Rb (ppm) |        |         |              |             |            |
| 519.1    |        |         | IDMS         | 82KRA 01    |            |
| 523.4    |        |         | IDMS         | 70LAE 01    |            |
| 524.2    | 1.5    |         | IDMS         | 74COR 01    |            |
| 529.8    | 1.6    |         | IDMS         | 69COM 01    |            |
| 529.9    | 1.     |         | XRF          | 69COM 01    |            |
| 530.     | 15.    |         | ITNA         | 77FLA 01    |            |
| 540.     |        |         | AA           | 72ALL 01    |            |
| S (ppm)  |        |         |              |             |            |
| 3.       |        |         | CB           | 78TER 01    |            |
| Sb (ppb) |        |         |              |             |            |
|          | 400.   | L*      | ITNA         | 77FLA 01    |            |
| Sc (ppb) |        |         |              |             |            |
| 110.     | 3.     |         | ITNA         | 77FLA 01    |            |
| Se (ppm) |        |         |              |             |            |
| 66.1     | 0.2    |         | XRF          | 69COM 01    |            |
| Sm (ppb) |        |         |              |             |            |
|          | 200.   | L*      | ITNA         | 77FLA 01    |            |
| Sn (ppm) |        |         |              |             |            |
| 0.75     |        |         | AA           | 82TER 01    |            |
| Sr (ppm) |        |         |              |             |            |
| 64.      | 0.4    |         | IDMS         | 74COR 01    |            |
| 65.1     | 0.1    |         | IDMS         | 69COM 01    |            |
| 65.5     |        |         | IDMS         | 82KRA 01    |            |
| 66.4     |        |         | IDMS         | 70LAE 01    |            |
| Sr 87/86 |        |         |              |             |            |
| 1.202    | 0.001  |         | IDMS         | 69COM 01    |            |
| 1.1978   | 0.0033 |         | IDMS         | 74COR 01    |            |

TABLE VV

NBS SRM 76—COLLECTED DATA

| TABLE UU (cont) |       |         |              |             |            |          |       |         |              |             |            |
|-----------------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| CONC            | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
| Ta (ppb)        |       |         |              |             |            | Al (%)   |       |         |              |             |            |
| 150.            | 8.    |         | ITNA         | 77FLA       | 01         | 20.05    |       |         | WXRF         | 67KOD       | 01         |
| Tb (ppb)        |       |         |              |             |            | Ca (ppm) |       |         |              |             |            |
|                 | 200.  | L*      | ITNA         | 77FLA       | 01         | 1600.    |       |         | WXRF         | 67KOD       | 01         |
| Th (ppb)        |       |         |              |             |            | Fe (%)   |       |         |              |             |            |
| 300.            |       |         | ITNA         | 77FLA       | 01         | 1.47     | 0.01  |         | COLOR        | 59COL       | 01         |
| Tl (ppm)        |       |         |              |             |            | 1.59     |       |         | WXRF         | 67KOD       | 01         |
| 2.715           | 0.217 | 7       | ASV          | 82CAL       | 01         | K (%)    |       |         |              |             |            |
| 2.906           | 0.25  | 7       | ASV          | 82CAL       | 01         | 1.29     |       |         | WXRF         | 67KOD       | 01         |
| Tb (ppb)        |       |         |              |             |            | Mg (ppm) |       |         |              |             |            |
|                 | 500.  | L*      | ITNA         | 77FLA       | 01         | 2800.    |       |         | WXRF         | 67KOD       | 01         |
| Zn (ppm)        |       |         |              |             |            | Mn (ppm) |       |         |              |             |            |
|                 | 5.    | L*      | ITNA         | 77FLA       | 01         | 230.     |       |         | WXRF         | 67KOD       | 01         |
| Zr (ppm)        |       |         |              |             |            | Si (%)   |       |         |              |             |            |
|                 | 90.   | L*      | ITNA         | 77FLA       | 01         | 25.76    |       |         | WXRF         | 67KOD       | 01         |
|                 |       |         |              |             |            | Sr (ppm) |       |         |              |             |            |
|                 |       |         |              |             |            | 85.      |       |         | WXRF         | 67KOD       | 01         |
|                 |       |         |              |             |            | Ti (%)   |       |         |              |             |            |
|                 |       |         |              |             |            | 1.34     |       |         | WXRF         | 67KOD       | 01         |

TABLE WW

## NBS SRM 77—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Al (%)   |       |         |              |             |            |
| 30.63    |       |         | WXRF         | 67KOD 01    |            |
| 31.4     |       |         | XRF          | 72ASH 01    |            |
| Ca (ppm) |       |         |              |             |            |
| 1400.    |       |         | WXRF         | 67KOD 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 5200.    |       |         | WXRF         | 67KOD 01    |            |
| 5700.    | 100.  |         | COLOR        | 59COL 01    |            |
| K (%)    |       |         |              |             |            |
| 1.79     |       |         | WXRF         | 67KOD 01    |            |
| Mg (ppm) |       |         |              |             |            |
| 2200.    |       |         | WXRF         | 67KOD 01    |            |
| Mn (ppm) |       |         |              |             |            |
| 80.      |       |         | WXRF         | 67KOD 01    |            |
| Si (%)   |       |         |              |             |            |
| 15.3     |       |         | XRF          | 72ASH 01    |            |
| 15.34    |       |         | WXRF         | 67KOD 01    |            |
| Sr (ppm) |       |         |              |             |            |
| 1200.    |       |         | WXRF         | 67KOD 01    |            |
| Ti (%)   |       |         |              |             |            |
| 1.82     |       |         | WXRF         | 67KOD 01    |            |

TABLE XX

## NBS SRM 88—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ca (%)   |       |         |              |             |            |
| 21.81    | 0.03  |         | TITR         | 80HIT 02    |            |
| Co (ppm) |       |         |              |             |            |
| 0.7      | 0.6   |         | RTNA         | 61TUR 01    |            |
| Cr (ppm) |       |         |              |             |            |
| 3.9      |       |         | RTNA         | 61TUR 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 580.     | 10.   |         | COLOR        | 59COL 01    |            |
| S (ppm)  |       |         |              |             |            |
| 270.     |       |         | CB           | 55COL 01    |            |
| 290.     |       |         | CB           | 77LAN 01    |            |
| 300.     |       |         | TURB         | 73SHA 01    |            |
| Sr (ppm) |       |         |              |             |            |
| 55.      |       |         | OES          | 58GRA 01    |            |
| 60.      |       |         | RTNA         | 61TUR 01    |            |
| Ti (ppm) |       |         |              |             |            |
| 24.      | 4.    |         | RTNA         | 65WAH 01    |            |
| 340.     |       |         | COLOR        | 63KOR 01    |            |

TABLE YY  
NBS SRM 88A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ag (ppm) | 3.    | L*      | ICPES        | 81CHU       | 01         |
| Al (ppm) |       |         |              |             |            |
| 300.     |       |         | EXRF         | 80DAL       | 01         |
| 900.     | 30.   |         | ICPES        | 81CHU       | 01         |
| As (ppm) | 5.    | L*      | ICPES        | 81CHU       | 01         |
| Au (ppm) | 3.    | L*      | ICPES        | 81CHU       | 01         |
| Ba (ppm) | 13.   | 0.26    | ICPES        | 81CHU       | 01         |
| Be (ppb) | 180.  | 20.     | ICPES        | 81CHU       | 01         |
| Bi (ppm) | 25.   | L*      | ICPES        | 81CHU       | 01         |
| C (%)    | 12.83 |         | CB           | 78TER       | 01         |
| Ca (%)   | 20.96 | 0.69    | ICPES        | 81CHU       | 01         |
| 22.5     |       |         | EXRF         | 80DAL       | 01         |
| Cd (ppm) | 2.    | L*      | ICPES        | 81CHU       | 01         |
| Ce (ppm) | 15.   | L*      | ICPES        | 81CHU       | 01         |
| Co (ppm) | 3.    | 1.      | ICPES        | 81CHU       | 01         |
| Cr (ppm) | 11.7  | 1.      | ICPES        | 81CHU       | 01         |
| Cu (ppm) | 2.5   | 1.      | ICPES        | 81CHU       | 01         |
| Eu (ppm) | 1.2   | 0.6     | ICPES        | 81CHU       | 01         |

TABLE YY (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Fe (ppm) | 2050. | 40.     | ICPES        | 81CHU       | 01         |
| 2200.    |       |         | EXRF         | 80DAL       | 01         |
| Gd (ppm) | 3.4   | 0.35    | ICPES        | 81CHU       | 01         |
| Hg (ppb) | 28.2  | 0.68    | FAA          | 82FLA       | 01         |
| K (ppm)  | 700.  |         | EXRF         | 80DAL       | 01         |
| 1000.    | 25.   |         | ICPES        | 81CHU       | 01         |
| La (ppm) | 5.    | L*      | ICPES        | 81CHU       | 01         |
| Li (ppm) | 2.    | L*      | ICPES        | 81CHU       | 01         |
| Mg (%)   | 13.   |         | EXRF         | 80DAL       | 01         |
| 13.06    | 0.4   |         | ICPES        | 81CHU       | 01         |
| Mn (ppm) | 150.  |         | EXRF         | 80DAL       | 01         |
| 210.     | 6.3   |         | ICPES        | 81CHU       | 01         |
| Mo (ppm) | 3.    | L*      | ICPES        | 81CHU       | 01         |
| Na (ppm) | 104.  | 7.      | ICPES        | 81CHU       | 01         |
| Nd (ppm) | 20.   | L*      | ICPES        | 81CHU       | 01         |
| Ni (ppm) | 3.    | L*      | ICPES        | 81CHU       | 01         |
| P (ppm)  | 70.   | 4.      | ICPES        | 81CHU       | 01         |
| 220.     |       |         | EXRF         | 80DAL       | 01         |
| Pb (ppm) | 27.   | 3.      | ICPES        | 81CHU       | 01         |

TABLE ZZ

NBS SRM 91—COLLECTED DATA

TABLE YY (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| S (ppm)  |       |         |              |             |            | Al (%)   |       |         |              |             |            |
| 4.       |       |         | CB           | 78TER 01    |            | 3.21     |       | 35      | TCGS         | 78GLA 04    |            |
| 21.      |       |         | CB           | 77LAN 01    |            |          |       |         |              |             |            |
| Sb (ppm) |       |         |              |             |            | B (ppm)  |       |         |              |             |            |
|          | 10.   | L*      | ICPES        | 81CHU 01    |            | 302.     |       |         | OES          | 64FIL 01    |            |
| Se (ppm) |       |         |              |             |            | Ba (ppm) |       |         |              |             |            |
|          | 30.   | L*      | ICPES        | 81CHU 01    |            | 79.      |       |         | OES          | 72AVN 01    |            |
| Si (ppm) |       |         |              |             |            | Ca (%)   |       |         |              |             |            |
| 4100.    |       |         | EXRF         | 80DAL 01    |            | 7.54     |       | 35      | TCGS         | 78GLA 04    |            |
| Sm (ppm) |       |         |              |             |            | Co (ppm) |       |         |              |             |            |
|          | 5.    | L*      | ICPES        | 81CHU 01    |            | 4.5      |       |         | OES          | 72AVN 01    |            |
| Sn (ppm) |       |         |              |             |            | Cr (ppm) |       |         |              |             |            |
|          | 3.    | L*      | ICPES        | 81CHU 01    |            | 26.      |       |         | OES          | 64FIL 01    |            |
|          |       |         |              |             |            | 26.      |       |         | OES          | 72AVN 01    |            |
| Sr (ppm) |       |         |              |             |            | Cu (ppm) |       |         |              |             |            |
| 41.      | 0.8   |         | ICPES        | 81CHU 01    |            | 16.      |       |         | OES          | 72AVN 01    |            |
| 96.      |       |         | OES          | 75THO 01    |            |          |       |         |              |             |            |
| Th (ppm) |       |         |              |             |            | F (%)    |       |         |              |             |            |
|          | 25.   | L*      | ICPES        | 81CHU 01    |            | 5.1      |       | *       | IC           | 82WIL 02    |            |
|          |       |         |              |             |            | 5.16     |       | *35     | IENA         | 79GLA 03    |            |
| Ti (ppm) |       |         |              |             |            | 5.6      | 0.16  | 11      | ISE          | 77HOP 01    |            |
|          |       |         |              |             |            | 5.62     | 0.08  |         | NAA          | 80NOR 01    |            |
| 66.      | 2.    |         | ICPES        | 81CHU 01    |            | 5.68     | 0.15  |         | ISE          | 77TRO 01    |            |
| 180.     |       |         | EXRF         | 80DAL 01    |            | 5.7      |       | 11      | ISE          | 77HOP 01    |            |
|          |       |         |              |             |            | 5.72     |       |         | ISE          | 70ING 01    |            |
| U (ppm)  |       |         |              |             |            | 5.75     | 0.003 |         | ISE          | 71PET 01    |            |
|          | 25.   | L*      | ICPES        | 81CHU 01    |            | Fe (ppm) |       |         |              |             |            |
| V (ppm)  |       |         |              |             |            | 430.     |       |         | OES          | 64FIL 01    |            |
|          |       |         |              |             |            | 600.     |       | 35      | IENA         | 79GLA 03    |            |
| 9.       | 1.    |         | ICPES        | 81CHU 01    |            | 4000.    |       | 35      | TCGS         | 78GLA 04    |            |
|          |       |         |              |             |            | 5200.    | 100.  |         | COLOR        | 59COL 01    |            |
| Yb (ppm) |       |         |              |             |            | Ga (ppm) |       |         |              |             |            |
| 1.2      | 0.04  |         | ICPES        | 81CHU 01    |            | 12.      |       |         | OES          | 72AVN 01    |            |
| Zn (ppm) |       |         |              |             |            | K (%)    |       |         |              |             |            |
| 4.1      | 1.    |         | ICPES        | 81CHU 01    |            | 2.68     |       | 35      | TCGS         | 78GLA 04    |            |
| Zr (ppm) |       |         |              |             |            | Mg (ppm) |       |         |              |             |            |
|          | 1.    | L*      | ICPES        | 81CHU 01    |            | 60.      |       | 35      | TCGS         | 78GLA 04    |            |

TABLE AAA

NBS SRM 950A—COLLECTED DATA

TABLE ZZ (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC       | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|------------|-------|---------|--------------|-------------|------------|
| Mn (ppm) |       |         |              |             |            | U238/235   |       |         |              |             |            |
| 39.      |       |         | OES          | 64FIL       | 01         | 137.55     | 0.29  |         | IDMS         | 79UNR       | 01         |
| 63.      |       |         | OES          | 72AVN       | 01         | 138.889    | 4761. |         | MS           | 82SMI       | 01         |
| Na (%)   |       |         |              |             |            | 137.9      | 0.2   |         | IDMS         | 81CHE       | 02         |
| 6.23     |       | 35      | IENA         | 79GLA       | 03         | 138.       | 0.4   |         | IDMS         | 81CHE       | 01         |
| 6.32     |       | 35      | TCGS         | 78GLA       | 04         | U234/238   |       |         |              |             |            |
| Ni (ppm) |       |         |              |             |            | 0.00005672 |       |         | IDMS         | 80RIL       | 01         |
| 0.79     |       | 35      | IENA         | 79GLA       | 03         | U235/238   |       |         |              |             |            |
| 6.       |       |         | OES          | 72AVN       | 01         | 727.65     |       |         | IDMS         | 80RIL       | 01         |
| O (%)    |       |         |              |             |            |            |       |         |              |             |            |
| 49.      | 0.6   |         | 14NAA        | 80NOR       | 01         |            |       |         |              |             |            |
| Pb (ppm) |       |         |              |             |            |            |       |         |              |             |            |
| 17.      |       |         | OES          | 64FIL       | 01         |            |       |         |              |             |            |
| 1150.    |       |         | OES          | 72AVN       | 01         |            |       |         |              |             |            |
| Si (%)   |       |         |              |             |            |            |       |         |              |             |            |
| 31.5     | 1.21  |         | AA           | 82KIS       | 01         |            |       |         |              |             |            |
| 32.1     |       | 35      | TCGS         | 78GLA       | 04         |            |       |         |              |             |            |
| 32.2     |       | 35      | IENA         | 79GLA       | 03         |            |       |         |              |             |            |
| Sr (ppm) |       |         |              |             |            |            |       |         |              |             |            |
| 39.      |       |         | OES          | 72AVN       | 01         |            |       |         |              |             |            |
| Ti (ppm) |       |         |              |             |            |            |       |         |              |             |            |
| 350.     |       | L*      | IENA         | 79GLA       | 03         |            |       |         |              |             |            |
| 110.     |       | 35      | TCGS         | 78GLA       | 04         |            |       |         |              |             |            |
| 140.     |       |         | OES          | 72AVN       | 01         |            |       |         |              |             |            |
| 156.     |       |         | OES          | 64FIL       | 01         |            |       |         |              |             |            |
| U (ppb)  |       |         |              |             |            |            |       |         |              |             |            |
| 540.     |       |         | DNA          | 66HAM       | 01         |            |       |         |              |             |            |
| V (ppm)  |       |         |              |             |            |            |       |         |              |             |            |
| 43.      |       |         | OES          | 72AVN       | 01         |            |       |         |              |             |            |
| Zr (ppm) |       |         |              |             |            |            |       |         |              |             |            |
| 47.      |       |         | OES          | 64FIL       | 01         |            |       |         |              |             |            |

TABLE BBB

NBS SRM 97—COLLECTED DATA

TABLE BBB (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| Al (%)   |       |         |              |             |            | Eu (ppm) |       |         |              |             |            |
| 20.47    |       |         | COLOR        | 57SHI       | 01         | 1.24     | 0.03  |         | ITNA         | 77FLA       | 01         |
| 20.51    |       |         | CHEM         | 57SHI       | 01         | 1.56     |       |         | OES          | 77FLA       | 01         |
| B (ppm)  |       |         |              |             |            | Fe (ppm) |       |         |              |             |            |
| 57.      |       |         | OES          | 64FIL       | 01         | 6500.    | 100.  |         | COLOR        | 59COL       | 01         |
| 71.3     |       |         | OES          | 77FLA       | 01         | 6600.    | 100.  |         | ITNA         | 77FLA       | 01         |
|          |       |         |              |             |            | 6600.    |       |         | COLOR        | 57SHI       | 01         |
|          |       |         |              |             |            | 6800.    |       |         | CHEM         | 57SHI       | 01         |
| Ba (ppm) |       |         |              |             |            | Ga (ppm) |       |         |              |             |            |
| 110.     |       |         | OES          | 77FLA       | 01         | 45.1     |       |         | OES          | 77FLA       | 01         |
| 141.     |       |         | OES          | 58GRA       | 01         |          |       |         |              |             |            |
| 270.     | 21.   |         | ITNA         | 77FLA       | 01         |          |       |         |              |             |            |
| Be (ppm) |       |         |              |             |            | Hf (ppm) |       |         |              |             |            |
| 1.3      |       |         | OES          | 77FLA       | 01         | 39.5     | 1.19  |         | ITNA         | 77FLA       | 01         |
| C (ppm)  |       |         |              |             |            | Hg (ppb) |       |         |              |             |            |
| 3200.    |       |         | CB           | 78TER       | 01         | 68.      |       |         | FAA          | 75HEI       | 01         |
|          |       |         |              |             |            | 159.2    | 6.22  |         | FAA          | 82FLA       | 01         |
| Ce (ppm) |       |         |              |             |            | La (ppm) |       |         |              |             |            |
| 57.      | 29.   |         | ITNA         | 77FLA       | 01         |          |       |         |              |             |            |
| 60.7     |       |         | OES          | 77FLA       | 01         | 34.      | 14.7  | L*      | OES          | 77FLA       | 01         |
|          |       |         |              |             |            |          | 0.71  |         | ITNA         | 77FLA       | 01         |
| Co (ppm) |       |         |              |             |            | Li (ppm) |       |         |              |             |            |
| 3.3      | 0.06  |         | ITNA         | 77FLA       | 01         | 1074.    |       |         | OES          | 77FLA       | 01         |
| 3.46     |       |         | OES          | 77FLA       | 01         |          |       |         |              |             |            |
| 4.4      |       |         | RTNA         | 61TUR       | 01         | Lu (ppm) |       |         |              |             |            |
|          |       |         |              |             |            | 0.96     | 0.02  |         | ITNA         | 77FLA       | 01         |
| Cr (ppm) |       |         |              |             |            | Mg (%)   |       |         |              |             |            |
| 486.     |       |         | OES          | 77FLA       | 01         |          |       |         |              |             |            |
| 500.     |       |         | COLOR        | 57SHI       | 01         | 0.13     |       |         | COLOR        | 57SHI       | 01         |
| 540.     |       |         | CHEM         | 57SHI       | 01         | 0.16     |       |         | CHEM         | 57SHI       | 01         |
| 576.     | 14.4  |         | ITNA         | 77FLA       | 01         |          |       |         |              |             |            |
| 581.     |       |         | RTNA         | 61TUR       | 01         |          |       |         |              |             |            |
| 639.     |       |         | AA           | 80DON       | 01         |          |       |         |              |             |            |
| Cs (ppm) |       |         |              |             |            | Mn (ppm) |       |         |              |             |            |
| 2.4      | 0.08  |         | ITNA         | 77FLA       | 01         | 16.      |       |         | CHEM         | 57SHI       | 01         |
|          |       |         |              |             |            | 35.      |       |         | OES          | 64FIL       | 01         |
|          |       |         |              |             |            | 99.7     |       |         | OES          | 77FLA       | 01         |
| Cu (ppm) |       |         |              |             |            | Mo (ppm) |       |         |              |             |            |
| 11.      |       |         | OES          | 64FIL       | 01         | 2.       |       |         | CHEM         | 57SHI       | 01         |
| 18.5     |       |         | OES          | 77FLA       | 01         |          |       |         |              |             |            |
| 20.      |       |         | CHEM         | 57SHI       | 01         |          |       |         |              |             |            |
| 22.      |       |         | COLOR        | 57SHI       | 01         |          |       |         |              |             |            |
| Dy (ppm) |       |         |              |             |            | Nb (ppm) |       |         |              |             |            |
| 4.28     |       |         | OES          | 77FLA       | 01         | 35.6     |       |         | OES          | 77FLA       | 01         |
|          |       |         |              |             |            | Nd (ppm) |       |         |              |             |            |
|          |       |         |              |             |            | 19.      |       |         | ITNA         | 77FLA       | 01         |

TABLE BBB (cont)

| CONC     | UNCER        | COMMENT | ANAL<br>METH | REF<br>CODE    | REF<br>NUM |
|----------|--------------|---------|--------------|----------------|------------|
| Ni (ppm) |              |         |              |                |            |
| 32.      |              |         | OES          | 64FIL          | 01         |
| 36.8     |              |         | OES          | 77FLA          | 01         |
| Pb (ppm) |              |         |              |                |            |
| 34.3     |              |         | OES          | 77FLA          | 01         |
| 35.      |              |         | FAA          | 79HEI          | 03         |
| Rb (ppm) |              |         |              |                |            |
| 24.      | 1.6          |         | ITNA         | 77FLA          | 01         |
| S (ppm)  |              |         |              |                |            |
| 158.     |              |         | CB           | 78TER          | 01         |
| 170.     |              |         | CB           | 55COL          | 01         |
| 200.     |              |         | TURB         | 73SHA          | 01         |
| Sb (ppm) |              |         |              |                |            |
| 1.4      | 0.11         |         | ITNA         | 77FLA          | 01         |
| Sc (ppm) |              |         |              |                |            |
| 12.1     |              |         | OES          | 77FLA          | 01         |
| 20.7     | 0.17         |         | ITNA         | 77FLA          | 01         |
| Si (%)   |              |         |              |                |            |
| 20.      |              |         | TITR         | 77OHL          | 01         |
| Sm (ppm) |              |         |              |                |            |
| 5.8      | 4.64<br>0.08 | L*      | OES<br>ITNA  | 77FLA<br>77FLA | 01<br>01   |
| Sn (ppm) |              |         |              |                |            |
| 7.       |              |         | OES          | 64FIL          | 01         |
| 10.1     |              |         | OES          | 77FLA          | 01         |
| Sr (ppm) |              |         |              |                |            |
| 30.      |              |         | RTNA         | 61TUR          | 01         |
| 88.      |              |         | OES          | 58GRA          | 01         |
| 101.     |              |         | OES          | 77FLA          | 01         |
| Ta (ppm) |              |         |              |                |            |
| 4.2      | 0.09         |         | ITNA         | 77FLA          | 01         |
| Tb (ppm) |              |         |              |                |            |
| 1.27     | 0.02         |         | ITNA         | 77FLA          | 01         |
| Th (ppm) |              |         |              |                |            |
| 37.      | 0.48         |         | ITNA         | 77FLA          | 01         |

TABLE BBB (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ti (%)   |       |         |              |             |            |
| 1.3      |       |         | COLOR        | 57SHI       | 01         |
| 1.43     |       |         | CHEM         | 57SHI       | 01         |
| V (ppm)  |       |         |              |             |            |
| 148.     |       |         | OES          | 64FIL       | 01         |
| 205.     |       |         | COLOR        | 57SHI       | 01         |
| 234.     |       |         | CHEM         | 57SHI       | 01         |
| 362.     |       |         | OES          | 77FLA       | 01         |
| Y (ppm)  |       |         |              |             |            |
| 33.      |       |         | OES          | 64FIL       | 01         |
| 37.6     |       |         | OES          | 77FLA       | 01         |
| Yb (ppm) |       |         |              |             |            |
| 6.8      | 0.17  |         | ITNA         | 77FLA       | 01         |
| 7.47     |       |         | OES          | 77FLA       | 01         |
| Zn (ppm) |       |         |              |             |            |
| 81.      |       |         | XRF          | 65BAL       | 01         |
| 103.     | 3.15  |         | ITNA         | 77FLA       | 01         |
| Zr (ppm) |       |         |              |             |            |
| 1390.    | 34.8  |         | ITNA         | 77FLA       | 01         |

TABLE CCC

## NBS SRM 97A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| B (ppm)  |       |         |              |             |            |
| 69.4     |       |         | OES          | 77FLA 01    |            |
| Ba (ppm) |       |         |              |             |            |
| 660.     | 20.6  |         | ITNA         | 77FLA 01    |            |
| Be (ppm) |       |         |              |             |            |
| 3.55     |       |         | OES          | 77FLA 01    |            |
| C (ppm)  |       |         |              |             |            |
| 600.     |       |         | CB           | 78TER 01    |            |
| Ce (ppm) |       |         |              |             |            |
| 124.     |       |         | OES          | 77FLA 01    |            |
| 203.     | 3.51  |         | ITNA         | 77FLA 01    |            |
| Co (ppm) |       |         |              |             |            |
| 4.1      | 0.08  |         | ITNA         | 77FLA 01    |            |
| 4.64     |       |         | OES          | 77FLA 01    |            |
| Cr (ppm) |       |         |              |             |            |
| 180.     | 4.1   |         | ITNA         | 77FLA 01    |            |
| 203.     |       |         | OES          | 77FLA 01    |            |
| Cs (ppm) |       |         |              |             |            |
| 1.6      | 0.6   |         | ITNA         | 77FLA 01    |            |
| Cu (ppm) |       |         |              |             |            |
| 24.9     |       |         | OES          | 77FLA 01    |            |
| Dy (ppm) |       |         |              |             |            |
| 8.89     |       |         | OES          | 77FLA 01    |            |
| Eu (ppm) |       |         |              |             |            |
| 3.66     |       |         | OES          | 77FLA 01    |            |
| 3.81     | 0.02  |         | ITNA         | 77FLA 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 3000.    | 30.   |         | ITNA         | 77FLA 01    |            |
| Ga (ppm) |       |         |              |             |            |
| 31.6     |       |         | OES          | 77FLA 01    |            |
| Hf (ppm) |       |         |              |             |            |
| 11.3     | 0.39  |         | ITNA         | 77FLA 01    |            |
| 15.4     |       |         | RTNA         | 76GAN 01    |            |

TABLE CCC (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Hg (ppb) |       |         |              |             |            |
| 387.5    | 22.5  |         | FAA          | 82FLA 01    |            |
| La (ppm) |       |         |              |             |            |
| 43.7     |       |         | OES          | 77FLA 01    |            |
| 103.     | 1.83  |         | ITNA         | 77FLA 01    |            |
| Li (ppm) |       |         |              |             |            |
| 439.     |       |         | OES          | 77FLA 01    |            |
| Lu (ppm) |       |         |              |             |            |
| 0.98     | 0.04  |         | ITNA         | 77FLA 01    |            |
| Mn (ppm) |       |         |              |             |            |
| 5.24     |       |         | OES          | 77FLA 01    |            |
| Nb (ppm) |       |         |              |             |            |
| 39.      |       |         | OES          | 77FLA 01    |            |
| Nd (ppm) |       |         |              |             |            |
| 88.      | 3.7   |         | ITNA         | 77FLA 01    |            |
| Ni (ppm) |       |         |              |             |            |
| 81.      |       |         | OES          | 77FLA 01    |            |
| Pb (ppm) |       |         |              |             |            |
| 41.7     |       |         | OES          | 77FLA 01    |            |
| Rb (ppm) |       |         |              |             |            |
|          | 20.   | L*      | ITNA         | 77FLA 01    |            |
| S (ppm)  |       |         |              |             |            |
| 308.     |       |         | CB           | 78TER 01    |            |
| Sb (ppb) |       |         |              |             |            |
| 800.     | 100.  |         | ITNA         | 77FLA 01    |            |
| Sc (ppm) |       |         |              |             |            |
| 21.3     |       |         | OES          | 77FLA 01    |            |
| 31.3     | 0.75  |         | ITNA         | 77FLA 01    |            |
| Sm (ppm) |       |         |              |             |            |
| 6.88     |       |         | OES          | 77FLA 01    |            |
| 21.3     | 0.69  |         | ITNA         | 77FLA 01    |            |

TABLE DDD

TABLE CCC (cont)

NBS SRM 98—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| Sn (ppm) |       |         |              |             |            | Al (%)   |       |         |              |             |            |
| 6.16     |       |         | AA           | 82TER       | 01         | 13.48    |       |         | TITR         | 58WAT       | 01         |
| 6.33     |       |         | OES          | 77FLA       | 01         | 13.5     |       |         | CHEM         | 62JOE       | 01         |
|          |       |         |              |             |            | 13.5     |       |         | OES          | 62JOE       | 01         |
| Sr (ppm) |       |         |              |             |            | 13.51    |       |         | CHEM         | 57SHI       | 01         |
| 860.     |       |         | OES          | 77FLA       | 01         | 13.65    |       |         | COLOR        | 57SHI       | 01         |
| Ta (ppm) |       |         |              |             |            | B (ppm)  |       |         |              |             |            |
| 3.21     | 0.06  |         | ITNA         | 77FLA       | 01         | 68.      |       |         | OES          | 64FIL       | 01         |
|          |       |         |              |             |            | 78.5     |       |         | OES          | 77FLA       | 01         |
| Tb (ppm) |       |         |              |             |            | 150.     |       | 3       | OES          | 63CLA       | 01         |
| 2.77     | 0.08  |         | ITNA         | 77FLA       | 01         | 250.     |       | 3       | OES          | 63CLA       | 01         |
| Th (ppm) |       |         |              |             |            | Ba (ppm) |       |         |              |             |            |
| 31.1     | 0.37  |         | ITNA         | 77FLA       | 01         | 570.     |       |         | OES          | 58GRA       | 01         |
|          |       |         |              |             |            | 670.     | 10.8  |         | ITNA         | 77FLA       | 01         |
| U (ppm)  |       |         |              |             |            | 800.     |       |         | OES          | 63CLA       | 01         |
| 6.58     |       |         | RTNA         | 76GAN       | 01         | Be (ppm) |       |         |              |             |            |
| V (ppm)  |       |         |              |             |            | 4.1      |       |         | OES          | 77FLA       | 01         |
| 362.     |       |         | OES          | 77FLA       | 01         | C (ppm)  |       |         |              |             |            |
| Y (ppm)  |       |         |              |             |            | 4000.    |       |         | CB           | 78TER       | 01         |
| 121.     |       |         | OES          | 77FLA       | 01         | Ca (ppm) |       |         |              |             |            |
| Yb (ppm) |       |         |              |             |            | 1500.    |       |         | CHEM         | 62JOE       | 01         |
| 7.7      | 0.23  |         | ITNA         | 77FLA       | 01         | 1500.    |       |         | OES          | 62JOE       | 01         |
| 10.1     |       |         | OES          | 77FLA       | 01         | 1600.    |       |         | TITR         | 80HIT       | 02         |
| Zn (ppm) |       |         |              |             |            | Ce (ppm) |       |         |              |             |            |
|          |       |         |              |             |            | 119.     |       |         | OES          | 77FLA       | 01         |
|          |       |         |              |             |            | 135.     | 1.32  |         | ITNA         | 77FLA       | 01         |
|          | 20.   | L*      | ITNA         | 77FLA       | 01         | Co (ppm) |       |         |              |             |            |
| Zr (ppm) |       |         |              |             |            | 13.8     | 0.1   |         | ITNA         | 77FLA       | 01         |
| 465.     | 19.   |         | RTNA         | 76GAN       | 01         | 15.      |       |         | OES          | 63CLA       | 01         |
| 580.     | 21.   |         | ITNA         | 77FLA       | 01         | 16.5     |       |         | RTNA         | 61TUR       | 01         |
|          |       |         |              |             |            | 16.9     |       |         | OES          | 77FLA       | 01         |
|          |       |         |              |             |            | 17.      |       |         | OES          | 64FIL       | 01         |
|          |       |         |              |             |            | Cr (ppm) |       |         |              |             |            |
|          |       |         |              |             |            | 113.     | 2.33  |         | ITNA         | 77FLA       | 01         |
|          |       |         |              |             |            | 119.     |       |         | OES          | 64FIL       | 01         |
|          |       |         |              |             |            | 130.     |       |         | RTNA         | 61TUR       | 01         |
|          |       |         |              |             |            | 136.     |       |         | OES          | 77FLA       | 01         |
|          |       |         |              |             |            | 143.     |       |         | AA           | 80DON       | 01         |
|          |       |         |              |             |            | 144.     |       |         | CHEM         | 57SHI       | 01         |
|          |       |         |              |             |            | 150.     |       | 3       | OES          | 63CLA       | 01         |
|          |       |         |              |             |            | 170.     |       |         | COLOR        | 57SHI       | 01         |
|          |       |         |              |             |            | 250.     |       | 3       | OES          | 63CLA       | 01         |
|          |       |         |              |             |            | 1400.    |       | *       | CHEM         | 62JOE       | 01         |
|          |       |         |              |             |            | 1600.    |       | *       | OES          | 62JOE       | 01         |

TABLE DDD (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Cs (ppm) |       |         |              |             |            |
| 10.7     | 0.17  |         | ITNA         | 77FLA       | 01         |
| Cu (ppm) |       |         |              |             |            |
| 33.7     |       |         | OES          | 77FLA       | 01         |
| 39.      |       |         | OES          | 64FIL       | 01         |
| 70.      |       |         | COLOR        | 57SHI       | 01         |
| 70.      |       | 3       | OES          | 63CLA       | 01         |
| 72.      |       |         | CHEM         | 57SHI       | 01         |
| 100.     |       | 3       | OES          | 63CLA       | 01         |
| Dy (ppm) |       |         |              |             |            |
| 7.07     |       |         | OES          | 77FLA       | 01         |
| Eu (ppm) |       |         |              |             |            |
| 1.74     | 0.02  |         | ITNA         | 77FLA       | 01         |
| 2.07     |       |         | OES          | 77FLA       | 01         |
| Fe (%)   |       |         |              |             |            |
| 1.12     |       |         | CHEM         | 62JOE       | 01         |
| 1.17     |       |         | OES          | 62JOE       | 01         |
| 1.38     | 0.01  |         | COLOR        | 59COL       | 01         |
| 1.4      | 0.05  |         | ITNA         | 77FLA       | 01         |
| 1.4      |       |         | COLOR        | 57SHI       | 01         |
| 1.43     |       |         | CHEM         | 57SHI       | 01         |
| Ga (ppm) |       |         |              |             |            |
| 24.1     | 100.  | L*      | OES          | 63CLA       | 01         |
| 80.      |       | 3       | OES          | 77FLA       | 01         |
|          |       |         | OES          | 63CLA       | 01         |
| Hf (ppm) |       |         |              |             |            |
| 7.       | 0.42  |         | ITNA         | 77FLA       | 01         |
| Hg (ppb) |       |         |              |             |            |
| 462.6    | 12.1  |         | FAA          | 82FLA       | 01         |
| La (ppm) |       |         |              |             |            |
| 55.2     |       |         | OES          | 77FLA       | 01         |
| 79.      | 1.7   |         | ITNA         | 77FLA       | 01         |
| 150.     |       |         | OES          | 63CLA       | 01         |
| Li (ppm) |       |         |              |             |            |
| 144.     |       |         | OES          | 77FLA       | 01         |
| Lu (ppb) |       |         |              |             |            |
| 650.     |       |         | ITNA         | 77FLA       | 01         |

TABLE DDD (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Mg (ppm) |       |         |              |             |            |
| 4100.    |       |         | TITR         | 80HIT       | 02         |
| 4200.    |       |         | OES          | 62JOE       | 01         |
| 4300.    |       |         | CHEM         | 62JOE       | 01         |
| 4300.    |       |         | CHEM         | 57SHI       | 01         |
| 4600.    |       |         | COLOR        | 57SHI       | 01         |
| Mn (ppm) |       |         |              |             |            |
| 39.      | 80.   | L*      | OES          | 62JOE       | 01         |
| 39.      |       |         | OES          | 64FIL       | 01         |
| 40.      |       |         | CHEM         | 57SHI       | 01         |
| 96.5     |       |         | CHEM         | 62JOE       | 01         |
| 100.     |       | 3       | OES          | 77FLA       | 01         |
| 100.     |       | 3       | OES          | 63CLA       | 01         |
| 100.     |       |         | OES          | 63CLA       | 01         |
| Mo (ppm) |       |         |              |             |            |
| 1.       | 1.    | L*      | OES          | 63CLA       | 01         |
|          |       |         | CHEM         | 57SHI       | 01         |
| Nd (ppm) |       |         |              |             |            |
| 49.      | 0.58  |         | ITNA         | 77FLA       | 01         |
| Ni (ppm) |       |         |              |             |            |
| 39.      |       |         | OES          | 64FIL       | 01         |
| 40.      |       |         | OES          | 63CLA       | 01         |
| 52.8     |       |         | OES          | 77FLA       | 01         |
| P (ppm)  |       |         |              |             |            |
| 350.     |       | 11      | COLOR        | 76WHI       | 01         |
| 390.     |       | 11      | COLOR        | 76WHI       | 01         |
| Pb (ppm) |       |         |              |             |            |
| 40.      |       |         | OES          | 63CLA       | 01         |
| 47.5     |       |         | OES          | 77FLA       | 01         |
| Rb (ppm) |       |         |              |             |            |
| 154.     | 1.12  |         | ITNA         | 77FLA       | 01         |
| S (ppm)  |       |         |              |             |            |
| 250.     |       |         | CB           | 78TER       | 01         |
| 270.     |       |         | CB           | 55COL       | 01         |
| 300.     |       |         | TURB         | 73SHA       | 01         |
| Sb (ppm) |       |         |              |             |            |
| 1.3      | 0.12  |         | ITNA         | 77FLA       | 01         |
| Sc (ppm) |       |         |              |             |            |
| 22.1     |       |         | OES          | 77FLA       | 01         |
| 22.9     | 0.06  |         | ITNA         | 77FLA       | 01         |
| 30.      |       |         | OES          | 63CLA       | 01         |

TABLE DDD (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Se (ppm) |       |         |              |             |            |
| 1.04     | 0.08  |         | FLUOR        | 74CRE       | 01         |
| 1.2      |       | UU      | 74WAH        | 01          |            |
| 1.37     |       | UU      | 65WEL        | 01          |            |
| Si (%)   |       |         |              |             |            |
| 27.59    |       |         | TITR         | 77OHL       | 01         |
| 27.6     |       |         | CHEM         | 62JOE       | 01         |
| 27.6     |       |         | OES          | 62JOE       | 01         |
| Sm (ppm) |       |         |              |             |            |
| 6.3      | 0.42  |         | OES          | 77FLA       | 01         |
| 10.3     |       | ITNA    | 77FLA        | 01          |            |
| Sn (ppm) |       |         |              |             |            |
| 6.47     |       |         | OES          | 77FLA       | 01         |
| Sr (ppm) |       |         |              |             |            |
| 205.     |       |         | RTNA         | 61TUR       | 01         |
| 230.     |       |         | OES          | 58GRA       | 01         |
| 300.     |       |         | OES          | 63CLA       | 01         |
| 326.     |       |         | OES          | 77FLA       | 01         |
| 390.     |       |         | OES          | 75THO       | 01         |
| Ta (ppm) |       |         |              |             |            |
| 2.22     | 0.03  |         | ITNA         | 77FLA       | 01         |
| Tb (ppm) |       |         |              |             |            |
| 1.35     | 0.02  |         | ITNA         | 77FLA       | 01         |
| Th (ppm) |       |         |              |             |            |
| 19.5     | 0.21  |         | ITNA         | 77FLA       | 01         |
| Ti (ppm) |       |         |              |             |            |
| 8400.    |       |         | CHEM         | 62JOE       | 01         |
| 8600.    |       |         | CHEM         | 57SHI       | 01         |
| 8690.    |       |         | OES          | 62JOE       | 01         |
| 9000.    |       | 3       | OES          | 63CLA       | 01         |
| 9300.    |       |         | COLOR        | 57SHI       | 01         |
| 10000.   |       | 3       | OES          | 63CLA       | 01         |
| V (ppm)  |       |         |              |             |            |
| 106.     |       |         | OES          | 64FIL       | 01         |
| 120.     |       |         | OES          | 62JOE       | 01         |
| 140.     |       |         | CHEM         | 62JOE       | 01         |
| 140.     |       |         | CHEM         | 57SHI       | 01         |
| 161.     |       |         | COLOR        | 57SHI       | 01         |
| 200.     |       | 3       | OES          | 63CLA       | 01         |
| 300.     |       | 3       | OES          | 63CLA       | 01         |
| 310.     |       |         | OES          | 77FLA       | 01         |

TABLE DDD (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Y (ppm)  |       |         |              |             |            |
| 28.      |       |         | OES          | 64FIL       | 01         |
| 40.      |       |         | OES          | 63CLA       | 01         |
| 46.7     |       |         | OES          | 77FLA       | 01         |
| Yb (ppm) |       |         |              |             |            |
| 4.9      | 0.1   |         | ITNA         | 77FLA       | 01         |
| 6.8      |       |         | OES          | 77FLA       | 01         |
| 21.2     |       |         | OES          | 77FLA       | 01         |
| Zn (ppm) |       |         |              |             |            |
| 125.     | 2.1   |         | ITNA         | 77FLA       | 01         |
| Zr (ppm) |       |         |              |             |            |
| 190.     |       | *       | OES          | 64FIL       | 01         |
| 270.     |       |         | OES          | 62JOE       | 01         |
| 300.     |       |         | CHEM         | 62JOE       | 01         |
| 300.     |       |         | OES          | 63CLA       | 01         |
| 340.     | 19.6  |         | ITNA         | 77FLA       | 01         |
| 377.     |       |         | OES          | 77FLA       | 01         |

TABLE EEE

## NBS SRM 98A—COLLECTED DATA

TABLE EEE (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|----------|-------|---------|--------------|-------------|------------|
| B (ppm)  |       |         |              |             |            | Hg (ppb) |       |         |              |             |            |
| 120.     |       |         | OES          | 77FLA 01    |            | 39.3     | 4.8   |         | FAA          | 82FLA 01    |            |
| Ba (ppm) |       |         |              |             |            | La (ppm) |       |         |              |             |            |
| 168.     |       |         | OES          | 77FLA 01    |            | 91.7     |       |         | OES          | 77FLA 01    |            |
| 480.     | 20.   |         | ITNA         | 77FLA 01    |            | 162.     | 2.99  |         | ITNA         | 77FLA 01    |            |
| Be (ppm) |       |         |              |             |            | Li (ppm) |       |         |              |             |            |
| 5.93     |       |         | OES          | 77FLA 01    |            | 291.     |       |         | OES          | 77FLA 01    |            |
| C (ppm)  |       |         |              |             |            | Lu (ppm) |       |         |              |             |            |
| 8100.    |       |         | CB           | 78TER 01    |            | 1.15     | 0.06  |         | ITNA         | 77FLA 01    |            |
| Ce (ppm) |       |         |              |             |            | Mn (ppm) |       |         |              |             |            |
| 180.     |       |         | OES          | 77FLA 01    |            | 41.4     |       |         | OES          | 77FLA 01    |            |
| 219.     | 0.29  |         | ITNA         | 77FLA 01    |            | Nb (ppm) |       |         |              |             |            |
| Co (ppm) |       |         |              |             |            | 39.9     |       |         | OES          | 77FLA 01    |            |
| 11.5     | 0.06  |         | ITNA         | 77FLA 01    |            | Nd (ppm) |       |         |              |             |            |
| 14.4     |       |         | OES          | 77FLA 01    |            | 98.      | 2.6   |         | ITNA         | 77FLA 01    |            |
| Cr (ppm) |       |         |              |             |            | Ni (ppm) |       |         |              |             |            |
| 212.     | 4.8   |         | ITNA         | 77FLA 01    |            | 162.     |       |         | OES          | 77FLA 01    |            |
| 234.     |       |         | OES          | 77FLA 01    |            | Pb (ppm) |       |         |              |             |            |
| Cs (ppm) |       |         |              |             |            | 69.2     |       |         | OES          | 77FLA 01    |            |
| 6.2      | 0.06  |         | ITNA         | 77FLA 01    |            | Rb (ppm) |       |         |              |             |            |
| Cu (ppm) |       |         |              |             |            | 35.      | 2.3   |         | ITNA         | 77FLA 01    |            |
| 121.     |       |         | OES          | 77FLA 01    |            | S (ppm)  |       |         |              |             |            |
| Dy (ppm) |       |         |              |             |            | 1300.    |       |         | CB           | 78TER 01    |            |
| 17.5     |       |         | OES          | 77FLA 01    |            | Sb (ppm) |       |         |              |             |            |
| Eu (ppm) |       |         |              |             |            | 2.3      | 0.1   |         | ITNA         | 77FLA 01    |            |
| 3.18     | 0.02  |         | ITNA         | 77FLA 01    |            | Sc (ppm) |       |         |              |             |            |
| 3.52     |       |         | OES          | 77FLA 01    |            | 28.8     |       |         | OES          | 77FLA 01    |            |
| Fe (ppm) |       |         |              |             |            | 34.8     | 0.21  |         | ITNA         | 77FLA 01    |            |
| 8800.    | 30.   |         | ITNA         | 77FLA 01    |            | Sm (ppm) |       |         |              |             |            |
| Ga (ppm) |       |         |              |             |            | 9.18     |       |         | OES          | 77FLA 01    |            |
| 23.3     |       |         | OES          | 77FLA 01    |            | 15.      | 2.4   |         | ITNA         | 77FLA 01    |            |
| Hf (ppm) |       |         |              |             |            |          |       |         |              |             |            |
| 7.3      | 0.14  |         | ITNA         | 77FLA 01    |            |          |       |         |              |             |            |

TABLE FFF

## NBS SRM 99—COLLECTED DATA

TABLE EEE (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM | CONC     | UNCER  | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|----------|--------|---------|--------------|-------------|------------|
| Sn (ppm) |       |         |              |             |            | Al (%)   |        |         |              |             |            |
| 4.88     |       |         | OES          | 77FLA 01    |            | 10.07    |        |         | TITR         | 58WAT 01    |            |
| 5.25     |       |         | AA           | 82TER 01    |            |          |        |         |              |             |            |
| Sr (ppm) |       |         |              |             |            | B (ppm)  |        |         |              |             |            |
| 438.     |       |         | OES          | 77FLA 01    |            | 10.      |        |         | OES          | 63CLA 01    |            |
| Ta (ppm) |       |         |              |             |            | Ba (ppm) |        |         |              |             |            |
| 2.46     | 0.03  |         | ITNA         | 77FLA 01    |            |          | 130.   | L*      | ITNA         | 77FLA 01    |            |
|          |       |         |              |             |            |          | 800.   | L*      | OES          | 63CLA 01    |            |
| Tb (ppm) |       |         |              |             |            | Ce (ppm) |        |         |              |             |            |
| 2.92     | 0.06  |         | ITNA         | 77FLA 01    |            | 8.       | 0.6    |         | ITNA         | 77FLA 01    |            |
| Th (ppm) |       |         |              |             |            | Co (ppb) |        |         |              |             |            |
| 23.9     | 0.11  |         | ITNA         | 77FLA 01    |            |          | 10000. | L*      | OES          | 63CLA 01    |            |
| Tl (ppb) |       |         |              |             |            | 700.     | 30.    |         | ITNA         | 77FLA 01    |            |
|          |       |         |              |             |            | 780.     | 120.   |         | RTNA         | 61TUR 01    |            |
| 351.     | 40.   | 7       | ASV          | 82CAL 01    |            | Cr (ppm) |        |         |              |             |            |
| V (ppm)  |       |         |              |             |            |          | 20.    | L*      | OES          | 63CLA 01    |            |
| 554.     |       |         | OES          | 77FLA 01    |            | 3.3      | 0.16   |         | ITNA         | 77FLA 01    |            |
|          |       |         |              |             |            | 5.3      |        |         | RTNA         | 61TUR 01    |            |
| Y (ppm)  |       |         |              |             |            | 13.      |        |         | OES          | 64FIL 01    |            |
| 176.     |       |         | OES          | 77FLA 01    |            | Cs (ppb) |        |         |              |             |            |
| Yb (ppm) |       |         |              |             |            | 700.     | 100.   |         | ITNA         | 77FLA 01    |            |
| 9.3      | 0.29  |         | ITNA         | 77FLA 01    |            | Cu (ppm) |        |         |              |             |            |
| 10.3     |       |         | OES          | 77FLA 01    |            | 20.      |        |         | OES          | 63CLA 01    |            |
| Zn (ppm) |       |         |              |             |            | 22.      |        |         | OES          | 64FIL 01    |            |
|          | 23.   | L*      | ITNA         | 77FLA 01    |            | Eu (ppb) |        |         |              |             |            |
| Zr (ppm) |       |         |              |             |            | 350.     |        |         | ITNA         | 77FLA 01    |            |
| 740.     | 32.   |         | ITNA         | 77FLA 01    |            | Fe (ppm) |        |         |              |             |            |
|          |       |         |              |             |            | 500.     |        |         | ITNA         | 77FLA 01    |            |
|          |       |         |              |             |            | Ga (ppm) |        |         |              |             |            |
|          |       |         |              |             |            | 30.      |        |         | OES          | 63CLA 01    |            |
|          |       |         |              |             |            | Hf (ppb) |        |         |              |             |            |
|          |       |         |              |             |            | 900.     | 60.    |         | ITNA         | 77FLA 01    |            |
|          |       |         |              |             |            | La (ppm) |        |         |              |             |            |
|          |       |         |              |             |            |          | 100.   | L*      | OES          | 63CLA 01    |            |
|          |       |         |              |             |            |          | 8.     | L*      | ITNA         | 77FLA 01    |            |

TABLE FFF (cont)

| CONC     | UNCER                | COMMENT       | ANAL<br>METH       | REF<br>CODE                      | REF<br>NUM |
|----------|----------------------|---------------|--------------------|----------------------------------|------------|
| Lu (ppb) | 200.                 | L*            | ITNA               | 77FLA 01                         |            |
| Mn (ppm) |                      |               |                    |                                  |            |
| 12.      |                      |               | OES                | 64FIL 01                         |            |
| 50.      |                      |               | OES                | 63CLA 01                         |            |
| Nd (ppm) | 4.                   | L*            | ITNA               | 77FLA 01                         |            |
| Ni (ppm) | 15.                  |               | OES                | 63CLA 01                         |            |
| P (ppm)  | 567.                 |               | OES                | 64FIL 01                         |            |
| Pb (ppm) | 62.                  |               | OES                | 64FIL 01                         |            |
|          | 150.                 |               | OES                | 63CLA 01                         |            |
| Rb (ppm) | 23.                  | 1.6           | ITNA               | 77FLA 01                         |            |
| Sb (ppb) | 500.                 | 60.           | ITNA               | 77FLA 01                         |            |
| Sc (ppb) | 830.                 | 10000.<br>10. | L*<br>OES<br>ITNA  | 63CLA 01<br>77FLA 01             |            |
| Si (%)   | 32.05<br>32.05       | 0.01          | TITR<br>COLOR      | 77OHL 01<br>82SAR 01             |            |
| Sm (ppm) | 2.                   | L*            | ITNA               | 77FLA 01                         |            |
| Sr (ppm) | 120.<br>130.<br>400. |               | RTNA<br>OES<br>OES | 61TUR 01<br>75THO 01<br>63CLA 01 |            |
| Ta (ppm) | 1.9                  | 0.02          | ITNA               | 77FLA 01                         |            |
| Tb (ppb) | 280.                 | 6.            | ITNA               | 77FLA 01                         |            |

TABLE FFF (cont)

| CONC     | UNCER              | COMMENT | ANAL<br>METH             | REF<br>CODE                      | REF<br>NUM |
|----------|--------------------|---------|--------------------------|----------------------------------|------------|
| Th (ppm) | 1.6                | 0.03    | ITNA                     | 77FLA 01                         |            |
| Ti (ppm) | 61.                |         | OES                      | 64FIL 01                         |            |
|          | 150.               |         | OES                      | 63CLA 01                         |            |
|          | 200.               | 3       | OES                      | 63CLA 01                         |            |
|          | 560.               | 3       | COLOR                    | 63KOR 01                         |            |
| U (ppm)  | 1.09               |         | DNA                      | 66HAM 01                         |            |
| V (ppm)  | 10.                | L*      | OES                      | 63CLA 01                         |            |
| Y (ppm)  | 10.                |         | OES                      | 63CLA 01                         |            |
| Yb (ppm) | 1.                 | 0.06    | ITNA                     | 77FLA 01                         |            |
| Zn (ppm) | 14.6<br>15.<br>18. | 0.82    | RTNA<br>XRF<br>ITNA      | 65BAL 01<br>65BAL 01<br>77FLA 01 |            |
| Zr (ppm) | 11.<br>40.         | 100.    | L*<br>ITNA<br>OES<br>OES | 77FLA 01<br>64FIL 01<br>63CLA 01 |            |

TABLE GGG

## NBS SRM 99A—COLLECTED DATA

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Ba (ppm) |       |         |              |             |            |
| 2570.    | 38.6  |         | ITNA         | 77FLA 01    |            |
| C (ppm)  |       |         |              |             |            |
| 300.     |       |         | CB           | 78TER 01    |            |
| Ca (%)   |       |         |              |             |            |
| 1.51     |       |         | AA           | 73RAM 01    |            |
| Ce (ppm) |       |         |              |             |            |
| 5.       | 0.29  |         | ITNA         | 77FLA 01    |            |
| Co (ppb) |       |         |              |             |            |
| 100.     |       |         | ITNA         | 77FLA 01    |            |
| Cr (ppm) |       |         |              |             |            |
|          | 3.    | L*      | ITNA         | 77FLA 01    |            |
| Cs (ppm) |       |         |              |             |            |
| 0.5      | 0.03  |         | ITNA         | 77FLA 01    |            |
| 9.       |       |         | AA           | 72ALL 01    |            |
| Eu (ppb) |       |         |              |             |            |
| 820.     | 4.    |         | ITNA         | 77FLA 01    |            |
| Fe (ppm) |       |         |              |             |            |
| 450.     |       |         | AA           | 73RAM 01    |            |
| 500.     |       |         | ITNA         | 77FLA 01    |            |
| Hf (ppb) |       |         |              |             |            |
| 300.     | 30.   |         | ITNA         | 77FLA 01    |            |
| Hg (ppb) |       |         |              |             |            |
| 164.6    | 7.35  |         | FAA          | 82FLA 01    |            |
| K (%)    |       |         |              |             |            |
| 4.2      | 0.13  |         | ISE          | 75PUF 01    |            |
| 4.2      |       |         | FE           | 75PUF 01    |            |
| 4.4      |       |         | AA           | 73RAM 01    |            |
| La (ppm) |       |         |              |             |            |
| 22.      | 1.9   |         | ITNA         | 77FLA 01    |            |
| Lu (ppb) |       |         |              |             |            |
|          | 100.  | L*      | ITNA         | 77FLA 01    |            |
| Mg (ppm) |       |         |              |             |            |
| 130.     |       |         | AA           | 73RAM 01    |            |

TABLE GGG (cont)

| CONC     | UNCER | COMMENT | ANAL<br>METH | REF<br>CODE | REF<br>NUM |
|----------|-------|---------|--------------|-------------|------------|
| Na (%)   |       |         |              |             |            |
| 4.45     |       |         | AA           | 73RAM 01    |            |
| 4.6      |       |         | FE           | 75PUF 01    |            |
| 4.6      | 0.1   |         | ISE          | 75PUF 01    |            |
| Nd (ppm) |       |         |              |             |            |
|          | 4.    | L*      | ITNA         | 77FLA 01    |            |
| Rb (ppm) |       |         |              |             |            |
| 100.     |       |         | AA           | 72ALL 01    |            |
| 109.     | 1.2   |         | ITNA         | 77FLA 01    |            |
| S (ppm)  |       |         |              |             |            |
| 19.      |       |         | CB           | 78TER 01    |            |
| Sb (ppb) |       |         |              |             |            |
|          | 300.  | L*      | ITNA         | 77FLA 01    |            |
| Sc (ppb) |       |         |              |             |            |
| 230.     |       |         | ITNA         | 77FLA 01    |            |
| Si (%)   |       |         |              |             |            |
| 30.42    | 0.4   |         | AA           | 82KIS 01    |            |
| Sm (ppb) |       |         |              |             |            |
| 500.     | 70.   |         | ITNA         | 77FLA 01    |            |
| Sn (ppm) |       |         |              |             |            |
| 0.45     |       |         | AA           | 82TER 01    |            |
| Ta (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 77FLA 01    |            |
| Tb (ppb) |       |         |              |             |            |
|          | 200.  | L*      | ITNA         | 77FLA 01    |            |
| Th (ppb) |       |         |              |             |            |
| 500.     |       |         | ITNA         | 77FLA 01    |            |
| Yb (ppb) |       |         |              |             |            |
|          | 300.  | L*      | ITNA         | 77FLA 01    |            |
| Zn (ppm) |       |         |              |             |            |
|          | 7.    | L*      | ITNA         | 77FLA 01    |            |
| Zr (ppm) |       |         |              |             |            |
| 70.      |       |         | ITNA         | 77FLA 01    |            |

TABLE HHH: REFERENCES FOR NBS SRM COLLECTED DATA

| CODE N   | DESCRIPTION                                                                                                                                                                                                                              | CODE N   | DESCRIPTION                                                                                                                                                                                                                                           |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| 58GKA 01 | R. J. GRABOWSKI AND R. C. UNICE (1958)<br>QUANTITATIVE SPECTROCHEMICAL DETERMINATION OF BARIUM AND STRONTIUM, ANALYTICAL CHEMISTRY, 30: 1374-1379.                                                                                       | 69WIC 01 | R. WICKOLD (1969)<br>EXTRAKTION DES EISENS MIT METHYLISOBUTYLKETON UND SEINE TITRATION IM EXTRAKT MIT ADTA, FRESERIUS ZEITSCHRIFT FÜR ANALYTISCHE CHEMIE, 244: 372-375.                                                                               |
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| 59COL 01 | P. F. COLLINS, H. DIEHL, AND G. F. SMITH (1959)<br>DETERMINATION OF IRON IN LIMESTONE, SILICATES, AND REFRACTORIES, ANALYTICAL CHEMISTRY, 31: 1862-1867.                                                                                 | 70LAE 01 | J. R. DE LAETER AND I. D. ABERCROMBIE (1970)<br>MASS SPECTROMETRIC ISOTOPE DILUTION ANALYSES OF RUBIDIUM AND STRONTIUM IN STANDARD ROCKS, EARTH AND PLANETARY SCIENCE LETTERS, 9: 327-330.                                                            |
| 61TUR 01 | K. K. TUREKIAN AND M. H. CARR (1961)<br>CHROMIUM, COBALT AND STRONTIUM IN SOME BUREAU OF STANDARDS ROCK REFERENCE SAMPLES, GEOCHIMICA ET COSMOCHIMICA ACTA, 24: 1-9.                                                                     | 71FAB 01 | B. P. FABEL (1971)<br>RAPID X-RAY FLUORESCENCE DETERMINATION OF PHOSPHORUS IN GEOLOGICAL SAMPLES, APPLIED SPECTROSCOPY, 25: 41-43.                                                                                                                    |
| 62JOE 01 | O. I. JOENSUU AND N. H. SUHR (1962)<br>SPECTROCHEMICAL ANALYSIS OF ROCKS, MINERALS, AND RELATED MATERIALS, APPLIED SPECTROSCOPY, 16: 101-104.                                                                                            | 71PET 01 | M. A. PETERS AND D. M. LADD (1971)<br>DETERMINATION OF FLUORIDE IN OXIDES WITH THE FLUORIDE-ION ACTIVITY ELECTRODE, TALANTA, 18: 655-664.                                                                                                             |
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| 64FIL 01 | R. H. FILBY (1964)<br>THE CONTENTS OF SEVERAL TRACE ELEMENTS IN SOME STANDARD ROCK SAMPLES, GEOCHIMICA ET COSMOCHIMICA ACTA, 28: 265-269.                                                                                                | 72AVN 01 | R. AVNI, A. HAREL, AND I. B. BRENNER (1972)<br>A NEW APPROACH TO THE SPECTROCHEMICAL ANALYSIS OF SILICATE ROCKS AND MINERALS, APPLIED SPECTROSCOPY, 26: 641-645.                                                                                      |
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| 65MTA 01 | PROCEEDINGS OF THE 1965 INTERNATIONAL CONFERENCE ON MODERN TRENDS IN ACTIVATION ANALYSIS, COLLEGE STATION, TEXAS, APRIL 19-22.                                                                                                           | 72BOU 01 | J. L. BOUVIER, J. G. SEM GUPTA, AND S. ABBEY (1972)<br>TITLE UNKNOWN, GEOLOGICAL SURVEY OF CANADA PAPER 72-31, P. 22; TAKEN FROM 77LAE 01.                                                                                                            |
| 65WAH 01 | W. H. WAHL, V. J. MOLINSKY, AND H. ARINO (1965)<br>RAPID RADIOCHEMICAL SEPARATION PROCEDURES FOR ACTIVATION ANALYSIS INDICATORS, IN 65MTA 01, PP. 44-47.                                                                                 | 72BOW 01 | H. J. M. BOWEN (1972)<br>THE DETERMINATION OF TIN IN BIOLOGICAL MATERIAL BY USING NEUTRON-ACTIVATION ANALYSIS, ANALYST, 97: 1003-1005.                                                                                                                |
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| 66HAM 01 | E. I. HAMILTON (1966)<br>THE URANIUM CONTENT OF SOME INTERNATIONAL STANDARDS, EARTH AND PLANETARY SCIENCE LETTERS, 1: 317-318.                                                                                                           | 72DAM 01 | E. DAMSGAARD, K. HEYDORN, AND B. RIETZ (1972)<br>DETERMINATION OF VANADIUM IN BIOLOGICAL MATERIALS BY NEUTRON ACTIVATION ANALYSIS, NUCLEAR ACTIVATION TECHNIQUES IN THE LIFE SCIENCES: 1972, IAEA, VIENNA, PP. 119-130, IN 72LAE 01.                  |
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| CODE N   | DESCRIPTION                                                                                                                                                                                                                                          | CODE N   | DESCRIPTION                                                                                                                                                                                                                                                                                 |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| 72RAI 01 | T. C. RAINS AND O. MENIS (1972)<br>DETERMINATION OF SUBMICROGRAM AMOUNTS OF MERCURY IN STANDARD<br>REFERENCE MATERIALS BY FLAMELESS ATOMIC ABSORPTION<br>SPECTROMETRY, JOURNAL OF THE ASSOCIATION OF OFFICIAL<br>ANALYTICAL CHEMISTS, 55: 1339-1344. | 73KAR 01 | S. S. KARACKI AND F. L. CORCORAN (1973)<br>COAL ASH ANALYSIS WITH AN ARGON PLASMA EMISSION EXCITATION<br>SOURCE, APPLIED SPECTROSCOPY, 27: 41-42.                                                                                                                                           |
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