UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

# Results of inductively coupled plasma-atomic emission spectroscopy analyses of minus 30-mesh stream-sediment samples from within and adjacent to the National Petroleum Reserve Alaska

By

K.D. Kelley,* K.E. Slaughter,* and J.M. Motooka*

Open-File Report 90-501



*U.S. Geological Survey, Denver Federal Center, Box 25046, MS 973, Denver, CO 80225

1990

## Contents



### Illustrations



### Tables

## INTRODUCTION

A geochemical study was undertaken in 1977 by the U.S. Geological Survey in and immediately adjacent to the southern part of the National Petroleum Reserve Alaska (NPRA) (fig. 1). Results of emission spectrographic analysis of minus 30-mesh stream sediment and nonmagnetic heavy-mineral-concentrate samples are included in Theobald and Barton (1978). The minus 30-mesh stream sediments were subsequently analyzed by Inductively Coupled Plasma-Atomic Emission Spectrography (ICP-AES) for 10 additional elements (Ag, As, Au, Bi, Cd, Cu, Mo, Pb, Sb, and Zn). The results of the ICP analyses and basic statistics are included in this report.

The southern NPRA is underlain primarily by Paleozoic and Mesozoic sedimentary rocks. Several sediment-hosted Pb-Zn-Ag occurrences and deposits occur within this area. The largest deposit is the shale-hosted stratiform Zn-Pb-Ag deposit at Red Dog. Other mineral occurrences and deposits are hosted by sandstone, siltstone, and shale and consist of disseminated, vein- and breccia-hosted galena and sphalerite. These include Drenchwater Creek, Story Creek, and Whoopee Creek (Einaudi and Hitzman, 1986) (fig. 1).

## METHOD OF SAMPLE COLLECTION AND PREPARATION

Five hundred and eighty-five streams were sampled during the course of the geochemical survey of the NPRA. The samples were collected primarily from second- or third-order streams. Unconsolidated stream-sediment and heavy-mineral concentrates derived from the sediment were collected at all but 11 sites at a sample density ranging from one sample/8 $mi^2$ in the mountains to one sample/12 $mi^2$ in the foothills. The stream sediments were sieved to pass 30 mesh and a half split was ground for analysis by emission spectrography. Detailed descriptions of the sample collection, preparation, and analysis of stream sediment and nonmagnetic heavy-mineral concentrates are included in Theobald and Barton (1978).

## METHOD OF ANALYSIS

The minus 30-mesh sediment samples collected within and immediately adjacent to the NPRA were resubmitted for analysis by ICP-AES for Ag, As, Au, Bi, Cd, Cu, Mo, Pb, Sb, and Zn (Motooka, 1988). Lower detection limits for these elements and basic statistics are shown in table 1.

## DESCRIPTION OF DATA TABLES

Results of the analyses (in parts per million) are listed in table 2. The data for Au and Bi are not included because all samples have concentrations below the detection limit (qualified values). The lower limits of determination for Au and Bi by ICP-

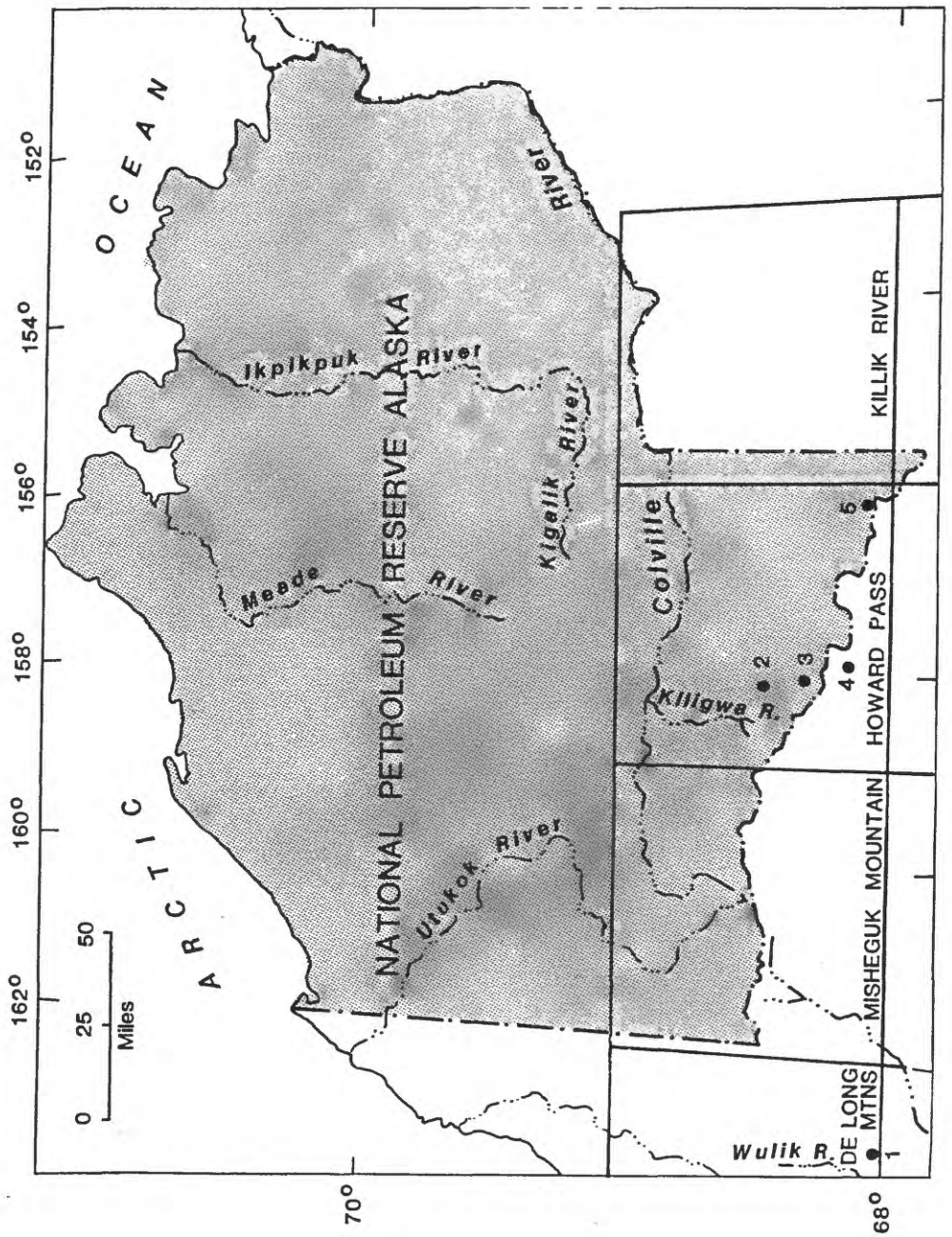


Figure 1. Location of the National Petroleum Reserve (NPRA) in Alaska. Significant mineral deposits and occurrences in the area include: 1) Red Dog; 2) Drenchwater Creek; 3) Story Creek; 4) Whoopee Creek; 5) Koiyaktot Mountain.

AES are 0.15 ppm and 0.6 ppm, respectively. Sample numbers having a "D" prefix refer to samples collected in the De Long Mountains quadrangle. Similarly, a "H" and "M" signifies samples collected in the Howard Pass and Misheguk Mountain quadrangle, respectively. The "SG" following the field number refers to a 30-mesh stream sediment which was ground prior to analysis.

## ROCK ANALYSIS STORAGE SYSTEM

Upon completion of all analytical work, the analytical results were entered into a computer-based file called Rock Analysis Storage System (RASS). This data base contains both descriptive geological information and analytical data. Any or all of this information may be retrieved and converted to a binary form (STATPAC) for computerized statistical analysis or publication (VanTrump and Miesch, 1976).

## REFERENCES


Einaudi, M.T., and Hitzman, M.W., 1986, Mineral deposits in northern Alaska--Introduction: Economic Geology, v. 81, p. 1583-1591.

Motooka, J.M., 1988, An exploration geochemical technique for the determination of preconcentrated organometallic halides by ICP-AES: Applied Spectroscopy, v. 42, no. 7, p. 1293-1296.

Theobald, P.K., and Barton, H.N., 1978, Basic data for the geochemical evaluation of National Petroleum Reserve, Alaska: U.S. Geological Survey Open-File Report 78-70-D, 15 p.

VanTrump, George, Jr., and Miesch, A.T., 1977, The U.S. Geological Survey RASS-STATPAC system for management and statistical reduction of geochemical data: Computers and Geosciences, v. 3, p. 475-488.

Table 1. Univariate statistics of 583 sediment samples from the southern part of the NPRA and adjacent areas [Values in parts per million (ppm); N, not detected at lower limit of determination; Ptile, percentile]

| Element | Lower Limit[+] | Valid[*] | Min Value | Max Value | Mean[°] | 25th Ptile | 50th Ptile | 90th Ptile |
|---|---|---|---|---|---|---|---|---|
| Ag | .045 | 233 | .045 | 6.1 | .088 | N | N | .2 |
| As | .6 | 576 | .75 | 97 | 13.4 | 9.7 | 12 | 20 |
| Au | .15 | 0 | --- | --- | ---- | --- | --- | --- |
| Bi | .6 | 0 | --- | --- | ---- | --- | --- | --- |
| Cd | .03 | 575 | .032 | 25 | .52 | .19 | .31 | .95 |
| Cu | .03 | 583 | 2.6 | 180 | 43 | 28 | 40 | 71 |
| Mo | .09 | 540 | .099 | 8.6 | 1.8 | .76 | 1.4 | 3.5 |
| Pb | .03 | 575 | .84 | 3400 | 19 | 10 | 12 | 19 |
| Sb | .6 | 205 | .60 | 35 | .5 | N | N | 1 |
| Zn | .03 | 583 | 14 | 6000 | 129 | 84 | 110 | 170 |

[+] Lower limit of determination (based on a 1 gram sample)

[*] Number of samples with concentrations greater than the lower limit of determination

[°] Arithmatic mean, calculated on all samples; qualified values were replaced with a value of 0.25 x lower limit of determination

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas. [Values in parts per million; No samples contained detectable Au (0.15 ppm detection limit) or Bi (0.6 ppm detection limit)].

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| D575SG | 68 04 48 | 162 39 00 | .055 | 15 | .48 | 24 | .96 | 25 | 1.2 | 130 |
| D576SG | 68 05 06 | 162 39 36 | .550 | 19 | 1.1 | 54 | 5.4 | 22 | 1.3 | 200 |
| D577SG | 68 03 54 | 162 39 06 | N | 9.6 | .044 | 13 | .40 | 5.3 | N | 35 |
| D578SG | 68 03 48 | 162 40 06 | .120 | 16 | .31 | 28 | 2.1 | 9.7 | .61 | 100 |
| D579SG | 68 00 24 | 162 41 12 | .340 | 21 | 1.4 | 37 | 3.1 | 16 | 1.0 | 180 |
| D580SG | 68 00 24 | 162 47 18 | .200 | 21 | .88 | 48 | 2.6 | 16 | .84 | 150 |
| D581SG | 68 00 24 | 162 58 06 | .360 | 20 | 1.3 | 39 | 2.9 | 43 | .98 | 180 |
| D582SG | 68 04 24 | 162 52 00 | 6.10 | 46 | 25.0 | 85 | 8.0 | 3400 | 35 | 6000 |
| D583SG | 68 05 18 | 162 52 24 | .420 | 17 | 1.4 | 44 | 4.1 | 21 | 1.3 | 280 |
| H302SG | 68 31 18 | 158 58 48 | .160 | 9.2 | .26 | 71 | 1.8 | 9.8 | N | 130 |
| H303SG | 68 31 06 | 158 58 18 | .180 | 7.5 | .17 | 43 | 1.1 | 8.9 | N | 96 |
| H304SG | 68 30 24 | 158 59 18 | N | 6.9 | .062 | 51 | .38 | 8.9 | N | 97 |
| H305SG | 68 28 36 | 158 59 24 | .130 | 8.9 | .34 | 53 | 2.0 | 11 | N | 110 |
| H306SG | 68 27 06 | 158 56 24 | .170 | 12 | .28 | 41 | 1.8 | 12 | N | 110 |
| H307SG | 68 29 24 | 158 49 48 | .180 | 8.9 | .28 | 31 | .71 | 9.3 | N | 110 |
| H308SG | 68 29 36 | 158 49 12 | .220 | 9.9 | .22 | 29 | 1.0 | 12 | N | 96 |
| H309SG | 68 28 24 | 158 48 36 | .100 | 6.0 | .12 | 57 | .77 | 70 | N | 69 |
| H310SG | 68 21 36 | 158 41 00 | .110 | 6.2 | .13 | 56 | .81 | 7.4 | N | 71 |
| H311SG | 68 23 00 | 158 49 30 | .140 | 12 | 1.9 | 77 | 4.2 | 10 | .93 | 270 |
| H312SG | 68 23 24 | 158 47 06 | N | 8.6 | .22 | 39 | 1.1 | 12 | N | 110 |
| H313SG | 68 24 24 | 158 43 54 | N | 7.0 | .22 | 57 | 1.1 | 9.1 | N | 110 |
| H317SG | 68 43 30 | 158 54 36 | N | 13 | .27 | 35 | 1.7 | 10 | N | 96 |
| H318SG | 68 42 24 | 158 52 42 | N | 11 | .65 | 48 | 2.3 | 11 | N | 110 |
| H319SG | 68 40 42 | 158 58 48 | .078 | 8.0 | .71 | 53 | 2.3 | 11 | N | 130 |
| H320SG | 68 37 48 | 158 54 36 | .079 | 8.7 | 1.0 | 45 | 2.5 | 11 | N | 140 |
| H321SG | 68 36 42 | 158 50 30 | .058 | 12 | 1.7 | 78 | 5.4 | 12 | 1.0 | 160 |
| H322SG | 68 36 30 | 158 51 00 | .078 | 13 | .89 | 79 | 4.2 | 14 | .73 | 150 |
| H323SG | 68 33 30 | 158 54 12 | .240 | 12 | .82 | 82 | 4.0 | 11 | 1.1 | 140 |
| H324SG | 68 33 36 | 158 54 48 | .270 | 11 | .45 | 63 | 3.2 | 10 | N | 120 |
| H325SG | 68 35 12 | 158 42 18 | 1.40 | 13 | 3.6 | 47 | 6.1 | 32 | 2.0 | 460 |
| H326SG | 68 34 48 | 158 40 54 | .890 | 15 | 3.2 | 78 | 5.0 | 90 | 2.7 | 640 |
| H327SG | 68 36 54 | 158 14 18 | .058 | 12 | .33 | 36 | 1.7 | 9.4 | N | 96 |
| H328SG | 68 35 36 | 158 24 00 | .390 | 12 | 1.7 | 64 | 3.8 | 18 | .94 | 350 |
| H329SG | 68 36 06 | 158 23 20 | .280 | 17 | .79 | 55 | 3.3 | 10 | .96 | 180 |
| H330SG | 68 32 42 | 158 31 18 | .460 | 11 | 2.3 | 64 | 3.6 | 26.0 | 1.1 | 490 |
| H331SG | 68 32 36 | 158 30 36 | .310 | 12 | 1.2 | 75 | 4.3 | 12 | .99 | 220 |
| H332SG | 68 35 36 | 158 34 30 | .180 | 14 | 1.4 | 86 | 5.2 | 13 | .62 | 190 |
| H333SG | 68 33 00 | 158 37 06 | N | 9.7 | 1.2 | 93 | 5.4 | 10 | .61 | 170 |
| H334SG | 68 33 12 | 158 37 36 | N | 13 | 1.2 | 100 | 5.3 | 15 | N | 160 |
| H335SG | 68 31 48 | 158 38 48 | N | 11 | 1.2 | 78 | 5.9 | 11 | N | 130 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| H336SG | 68 29 12 | 158 39 18 | N | 8.2 | .92 | 89 | 5.1 | 10 | N | 120 |
| H337SG | 68 29 06 | 158 38 18 | .051 | 9.7 | 1.3 | 120 | 7.1 | 12 | .79 | 210 |
| H338SG | 68 49 10 | 158 29 36 | N | 4.3 | .25 | 36 | .31 | 40 | N | 69 |
| H339SG | 68 50 36 | 158 40 18 | N | 13 | .66 | 39 | 1.6 | 12 | N | 110 |
| H340SG | 68 30 06 | 158 09 45 | N | 15 | .83 | 58 | 4.2 | 13 | .68 | 120 |
| H341SG | 68 29 24 | 158 11 06 | N | 8.9 | .32 | 57 | 1.8 | 11 | N | 100 |
| H342SG | 68 30 00 | 158 11 42 | N | 12 | .24 | 43 | 1.5 | 12 | N | 93 |
| H343SG | 68 29 36 | 158 13 18 | N | 12 | .18 | 44 | 1.0 | 11 | N | 95 |
| H344SG | 68 28 36 | 158 17 00 | N | 12 | .48 | 50 | 2.2 | 13 | N | 110 |
| H345SG | 68 28 48 | 158 17 00 | N | 8.2 | .26 | 54 | 1.8 | 10 | N | 100 |
| H346SG | 68 24 00 | 158 46 48 | N | 6.1 | .43 | 57 | 1.3 | 9.5 | N | 120 |
| H347SG | 68 24 06 | 158 47 24 | .110 | 7.9 | .38 | 72 | 2.8 | 12 | .83 | 120 |
| H348SG | 68 26 12 | 158 44 36 | .110 | 9.5 | 1.3 | 64 | 1.8 | 14 | .78 | 160 |
| H349SG | 68 26 18 | 158 43 54 | .150 | 7.3 | .27 | 67 | 2.1 | 12 | .97 | 130 |
| H350SG | 68 25 30 | 158 40 00 | N | 6.8 | .37 | 63 | 1.5 | 9.9 | N | 130 |
| H351SG | 68 25 18 | 158 39 18 | .084 | 8.5 | .60 | 55 | 2.5 | 11 | .68 | 120 |
| H352SG | 68 24 24 | 158 31 30 | N | 10 | .56 | 42 | 2.0 | 13 | N | 120 |
| H353SG | 68 23 18 | 158 33 48 | N | 1.7 | .12 | 70 | .10 | 2.1 | N | 53 |
| H354SG | 68 22 48 | 158 37 00 | N | .86 | .061 | 75 | .099 | 10 | N | 43 |
| H355SG | 68 19 36 | 158 37 36 | N | N | .030 | 92 | N | N | N | 35 |
| H356SG | 68 19 00 | 158 33 36 | N | .75 | .045 | 53 | N | N | N | 14 |
| H357SG | 68 18 06 | 158 21 24 | N | 1.2 | .030 | 17 | N | N | N | 29 |
| H358SG | 68 21 24 | 158 23 12 | N | N | .033 | 82 | N | N | N | 18 |
| H359SG | 68 21 24 | 158 29 12 | N | N | .064 | 64 | N | .84 | N | 23 |
| H360SG | 68 37 42 | 158 03 30 | N | 7.6 | .22 | 21 | .85 | 12 | N | 89 |
| H361SG | 68 36 54 | 158 06 54 | N | 11 | .23 | 27 | 1.1 | 10 | N | 91 |
| H362SG | 68 35 12 | 158 08 48 | N | 9.0 | .068 | 31 | .99 | 9.3 | N | 71 |
| H363SG | 68 35 12 | 158 09 48 | N | 9.4 | .073 | 28 | .75 | 9.3 | N | 68 |
| H364SG | 68 31 00 | 158 23 00 | .240 | 8.8 | .56 | 62 | 2.8 | 11 | .65 | 150 |
| H365SG | 68 23 48 | 158 29 30 | N | 8.4 | .14 | 33 | 1.0 | 9.0 | N | 72 |
| H366SG | 68 23 30 | 158 26 12 | N | 1.7 | .041 | 75 | N | 1.8 | N | 41 |
| H367SG | 68 23 06 | 158 26 00 | N | 1.7 | .030 | 67 | N | 1.1 | N | 31 |
| H368SG | 68 23 42 | 158 13 36 | N | 3.0 | .032 | 98 | .42 | 30 | N | 64 |
| H369SG | 68 22 00 | 158 11 00 | N | 6.1 | .12 | 73 | .50 | 80 | N | 88 |
| H370SG | 68 21 00 | 158 10 00 | N | 11 | .49 | 30 | .48 | 27 | .86 | 110 |
| H371SG | 68 21 12 | 158 13 12 | N | 4.3 | .29 | 100 | .60 | 9.2 | N | 120 |
| H372SG | 68 20 54 | 158 15 54 | N | 2.2 | .086 | 51 | .26 | 3.8 | N | 53 |
| H373SG | 68 19 54 | 158 11 42 | .076 | 12 | .26 | 26 | .44 | 14 | .67 | 92 |
| H374SG | 68 16 42 | 158 15 18 | N | 13 | .11 | 40 | .44 | 11 | .66 | 71 |
| H375SG | 68 16 06 | 158 11 48 | N | 12 | .27 | 31 | .57 | 13 | .71 | 93 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| H376SG | 68 58 06 | 159 31 36 | N | 21 | .44 | 32 | 1.8 | 25 | N | 99 |
| H377SG | 68 51 18 | 159 21 06 | .054 | 17 | 1.8 | 39 | 1.5 | 20 | .75 | 230 |
| H378SG | 68 59 18 | 159 19 18 | N | 17 | .27 | 31 | 1.2 | 21 | N | 110 |
| H379SG | 68 44 24 | 158 48 24 | N | 8.1 | .27 | 32 | 1.2 | 11 | N | 78 |
| H380SG | 68 45 54 | 158 44 36 | .052 | 18 | .46 | 47 | 2.6 | 11 | N | 120 |
| H381SG | 68 44 48 | 158 33 00 | N | 14 | .32 | 35 | 1.4 | 14 | N | 100 |
| H382SG | 68 43 30 | 158 26 36 | N | 9.2 | .19 | 30 | .77 | 10 | N | 74 |
| H383SG | 68 44 24 | 158 10 54 | N | 14 | .52 | 52 | 1.9 | 12 | N | 110 |
| H384SG | 68 44 36 | 158 11 18 | .057 | 12 | .63 | 54 | 2.1 | 11 | N | 100 |
| H385SG | 68 45 36 | 158 09 24 | .078 | 14 | .73 | 68 | 2.1 | 13 | .74 | 120 |
| H386SG | 68 45 24 | 158 04 00 | N | 2.6 | .13 | 47 | .36 | 3.7 | N | 69 |
| H387SG | 68 42 06 | 158 04 00 | N | 10 | .45 | 72 | 2.1 | 14 | N | 110 |
| H388SG | 68 40 48 | 158 23 42 | .160 | 10 | .29 | 24 | 2.5 | 90 | N | 85 |
| H389SG | 68 40 30 | 158 23 18 | N | 10 | .089 | 29 | .75 | 12 | N | 110 |
| H390SG | 68 39 36 | 158 32 48 | N | 9.7 | .43 | 61 | 2.0 | 13 | N | 120 |
| H391SG | 68 39 36 | 158 36 48 | .082 | 30 | .35 | 42 | 1.8 | 15 | N | 120 |
| H392SG | 68 39 18 | 158 37 12 | .170 | 14 | 1.5 | 83 | 5.2 | 15 | 1.2 | 200 |
| H393SG | 68 35 18 | 158 37 54 | .720 | 12 | 3.0 | 73 | 7.2 | 23 | 1.9 | 610 |
| H394SG | 68 39 24 | 157 52 54 | N | 24 | .62 | 45 | 1.6 | 23 | N | 140 |
| H395SG | 68 34 36 | 157 53 48 | N | 15 | .84 | 59 | 3.8 | 17 | .75 | 140 |
| H396SG | 68 26 36 | 158 20 06 | N | 15 | .86 | 59 | 3.8 | 17 | N | 140 |
| H397SG | 68 26 48 | 158 21 00 | N | 10 | .73 | 46 | 2.1 | 15 | N | 120 |
| H398SG | 68 28 18 | 158 01 54 | .073 | 11 | .45 | 52 | 2.3 | 12 | N | 120 |
| H399SG | 68 25 15 | 157 56 00 | .440 | 13 | 2.3 | 55 | 3.3 | 53 | 1.3 | 410 |
| H400SG | 68 24 00 | 158 01 00 | N | 14 | .77 | 35 | .76 | 43 | .79 | 260 |
| H401SG | 68 23 36 | 158 02 54 | .470 | 13 | .98 | 54 | 5.1 | 11 | 1.0 | 170 |
| H402SG | 68 23 18 | 158 06 00 | .160 | 11 | .69 | 50 | 2.5 | 12 | .75 | 140 |
| H403SG | 68 21 00 | 158 09 00 | N | 10 | .41 | 30 | .42 | 28 | N | 110 |
| H404SG | 68 20 30 | 158 00 48 | .071 | 15 | .71 | 61 | 3.4 | 12 | .83 | 150 |
| H405SG | 68 17 45 | 158 02 54 | N | 19 | .27 | 38 | 1.7 | 15 | N | 120 |
| H406SG | 68 19 00 | 157 54 54 | N | 12 | .15 | 30 | 1.2 | 12 | N | 100 |
| H407SG | 68 14 42 | 157 57 42 | N | 14 | .20 | 64 | .56 | 20 | .69 | 150 |
| H408SG | 68 15 00 | 157 58 06 | N | 12 | .15 | 39 | .60 | 13 | N | 110 |
| H409SG | 68 12 42 | 157 59 00 | N | 6.5 | .21 | 40 | .43 | 23 | N | 140 |
| H410SG | 68 35 18 | 157 41 00 | .073 | 7.9 | .44 | 44 | 1.0 | 8.9 | N | 110 |
| H411SG | 68 31 48 | 157 44 06 | N | 14 | .47 | 43 | 2.0 | 15 | N | 210 |
| H412SG | 68 31 18 | 157 41 00 | N | 8.2 | .030 | 31 | .48 | 12 | N | 95 |
| H413SG | 68 31 00 | 157 41 00 | .170 | 10 | .71 | 52 | 2.8 | 12 | N | 140 |
| H414SG | 68 25 12 | 157 49 48 | N | 13 | .66 | 39 | 1.5 | 14 | N | 150 |
| H415SG | 68 25 00 | 157 49 12 | .099 | 13 | .43 | 40 | 1.6 | 22 | N | 150 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| H416SG | 68 23 42 | 157 44 01 | N | 17 | .12 | 33 | .40 | 30 | N | 110 |
| H417SG | 68 21 24 | 157 45 00 | N | 13 | .99 | 33 | 1.7 | 85 | .75 | 240 |
| H418SG | 68 20 54 | 157 46 30 | .140 | 14 | .85 | 49 | 3.3 | 13 | N | 170 |
| H419SG | 68 21 12 | 157 47 12 | N | 11 | .20 | 26 | .97 | 9.7 | N | 81 |
| H420SG | 68 17 36 | 157 44 24 | N | 11 | .14 | 26 | .55 | 10 | N | 67 |
| H421SG | 68 17 36 | 157 45 00 | N | 13 | .32 | 30 | 1.2 | 11 | N | 93 |
| H422SG | 68 17 00 | 157 45 42 | N | 10 | .13 | 31 | .52 | 14 | N | 78 |
| H423SG | 68 16 36 | 157 44 36 | N | 9.9 | .23 | 33 | .63 | 15 | N | 110 |
| H424SG | 68 18 24 | 157 37 06 | N | 9.3 | .28 | 27 | .42 | 15 | N | 93 |
| H425SG | 68 18 36 | 157 37 36 | N | 11 | .17 | 26 | .47 | 11 | N | 71 |
| H426SG | 68 18 48 | 157 29 24 | N | 9.2 | .25 | 24 | .32 | 10 | N | 59 |
| H427SG | 68 18 48 | 157 30 12 | N | 11 | .21 | 31 | .43 | 12 | N | 88 |
| H428SG | 68 18 18 | 157 25 36 | N | 7.9 | .12 | 26 | .33 | 9.5 | N | 66 |
| H429SG | 68 18 42 | 157 23 12 | N | 13 | .13 | 27 | .46 | 10 | N | 60 |
| H430SG | 68 17 42 | 157 23 28 | N | 12 | .29 | 40 | .50 | 16 | N | 150 |
| H431SG | 68 16 24 | 157 10 42 | N | 8.9 | .19 | 31 | .47 | 11 | N | 98 |
| H432SG | 68 16 48 | 157 09 48 | N | 8.8 | .21 | 30 | .49 | 10 | N | 93 |
| H433SG | 68 16 54 | 157 08 54 | N | 7.5 | .15 | 23 | .39 | 10 | N | 82 |
| H434SG | 68 17 24 | 156 59 00 | N | 9.6 | .19 | 25 | .44 | 7.5 | N | 68 |
| H435SG | 68 17 24 | 156 59 48 | N | 9.7 | .31 | 25 | .43 | 9.4 | N | 73 |
| H436SG | 68 16 42 | 156 59 54 | N | 7.4 | .19 | 20 | .36 | 9.8 | N | 89 |
| H437SG | 68 13 36 | 157 04 48 | N | 12 | .27 | 29 | .74 | 13 | N | 120 |
| H438SG | 68 14 18 | 157 06 18 | N | 11 | .22 | 29 | .45 | 12 | N | 120 |
| H439SG | 68 14 24 | 157 10 42 | N | 11 | .48 | 37 | 1.3 | 12 | N | 130 |
| H440SG | 68 12 42 | 157 15 48 | .063 | 9.4 | .25 | 40 | .89 | 90 | N | 97 |
| H441SG | 68 12 54 | 157 26 00 | N | 11 | .081 | 20 | .36 | 12 | N | 69 |
| H442SG | 68 13 30 | 157 29 36 | N | 13 | .14 | 23 | .42 | 13 | N | 69 |
| H443SG | 68 13 24 | 157 30 24 | N | 11 | .18 | 24 | .41 | 15 | N | 74 |
| H444SG | 68 13 06 | 157 34 30 | N | 12 | .15 | 31 | .39 | 14 | .65 | 92 |
| H445SG | 68 12 24 | 157 37 42 | N | 7.9 | .12 | 14 | .40 | 9.4 | N | 60 |
| H446SG | 68 11 30 | 157 47 30 | N | 8.6 | .13 | 28 | .31 | 13 | N | 81 |
| H447SG | 68 14 36 | 157 43 24 | N | 12 | .16 | 42 | .51 | 15 | N | 120 |
| H448SG | 68 14 30 | 157 46 18 | N | 13 | .27 | 41 | .46 | 29 | .72 | 160 |
| H449SG | 68 54 24 | 158 59 00 | N | 22 | .23 | 34 | 1.4 | 19 | N | 100 |
| H450SG | 68 59 00 | 158 47 00 | N | 15 | .19 | 28 | 1.1 | 14 | N | 86 |
| H451SG | 68 57 18 | 158 07 00 | N | 22 | .19 | 29 | 1.2 | 14 | N | 89 |
| H452SG | 68 57 00 | 157 47 42 | N | 19 | .17 | 27 | .98 | 16 | N | 83 |
| H453SG | 68 53 48 | 157 31 12 | N | 20 | .26 | 30 | 1.3 | 17 | N | 110 |
| H454SG | 68 52 18 | 157 16 00 | N | 17 | .15 | 32 | .96 | 16 | N | 95 |
| H455SG | 68 51 54 | 157 07 42 | N | 19 | .16 | 28 | 1.1 | 19 | N | 97 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| H456SG | 68 51 42 | 157 03 00 | N | 25 | .20 | 23 | 1.5 | 16 | N | 99 |
| H457SG | 68 52 36 | 156 48 06 | .057 | 12 | .20 | 26 | 1.1 | 8.1 | N | 69 |
| H458SG | 68 49 18 | 156 50 54 | N | 27 | .22 | 32 | 1.3 | 22 | N | 110 |
| H459SG | 68 49 00 | 157 02 18 | N | 20 | .22 | 33 | 1.2 | 19 | N | 100 |
| H460SG | 68 48 45 | 157 01 54 | N | 24 | .24 | 33 | 1.6 | 18 | N | 110 |
| H461SG | 68 46 48 | 157 24 00 | N | 14 | .28 | 36 | 1.3 | 16 | N | 100 |
| H462SG | 68 44 18 | 157 23 48 | N | 10 | .47 | 46 | .85 | 11 | N | 110 |
| H463SG | 68 44 12 | 157 25 06 | .064 | 19 | .88 | 48 | 3.4 | 12 | N | 130 |
| H464SG | 68 48 12 | 157 24 24 | N | 15 | .17 | 26 | 1.6 | 13 | N | 99 |
| H465SG | 68 57 00 | 158 19 48 | N | 20 | .17 | 31 | 1.6 | 17 | N | 100 |
| H466SG | 68 53 12 | 158 35 12 | N | 13 | .19 | 28 | 1.2 | 16 | N | 88 |
| H467SG | 68 53 10 | 158 35 00 | N | 11 | .18 | 27 | .86 | 9.2 | N | 81 |
| H468SG | 68 53 30 | 158 15 54 | N | 12 | .22 | 19 | .96 | 7.4 | N | 75 |
| H469SG | 68 51 12 | 157 57 24 | N | 7.4 | .37 | 34 | .79 | 7.2 | N | 75 |
| H470SG | 68 51 30 | 157 57 42 | N | 14 | .17 | 25 | .95 | 10 | N | 90 |
| H471SG | 68 53 18 | 157 51 12 | N | 21 | .28 | 37 | 1.2 | 18 | N | 110 |
| H472SG | 68 51 30 | 157 39 30 | N | 17 | .13 | 19 | 1.2 | 12 | N | 96 |
| H473SG | 68 50 36 | 157 24 18 | N | 19 | .15 | 28 | 1.4 | 16 | N | 87 |
| H474SG | 68 49 36 | 157 24 30 | N | 19 | .19 | 31 | 1.6 | 15 | N | 92 |
| H475SG | 68 51 00 | 156 42 00 | N | 15 | .11 | 29 | .80 | 15 | N | 92 |
| H476SG | 68 51 42 | 156 35 24 | N | 10 | .097 | 19 | .62 | 9.9 | N | 76 |
| H477SG | 68 51 36 | 156 31 48 | N | 13 | .20 | 27 | .86 | 12 | N | 83 |
| H478SG | 68 46 54 | 156 11 42 | N | 9.4 | .13 | 11 | .84 | 7.3 | N | 65 |
| H479SG | 68 51 24 | 156 13 18 | N | 18 | .039 | 12 | .67 | 8.6 | N | 76 |
| H480SG | 68 53 06 | 156 15 12 | N | 9.0 | .083 | 7.5 | .58 | 6.8 | N | 69 |
| H481SG | 68 44 06 | 156 09 48 | N | 4.3 | .068 | 7.1 | .55 | 6.4 | N | 46 |
| H482SG | 68 41 36 | 156 14 30 | N | 7.4 | .17 | 18 | .62 | 7.8 | N | 59 |
| H483SG | 68 40 18 | 156 14 12 | N | 8.3 | .24 | 23 | .76 | 9.6 | N | 78 |
| H484SG | 68 38 00 | 156 19 52 | N | 9.1 | .26 | 16 | 1.6 | 10 | N | 73 |
| H485SG | 68 43 45 | 156 30 00 | N | 12 | .12 | 18 | .83 | 7.5 | N | 63 |
| H486SG | 68 42 48 | 156 38 12 | N | 15 | .15 | 21 | 1.1 | 8.7 | N | 70 |
| H487SG | 68 40 18 | 156 41 30 | N | 22 | .71 | 31 | 2.5 | 14 | N | 120 |
| H488SG | 68 40 18 | 156 42 30 | N | 15 | .32 | 24 | 1.4 | 13 | N | 130 |
| H489SG | 68 41 06 | 156 37 42 | N | 9.8 | .24 | 30 | 1.2 | 11 | N | 96 |
| H490SG | 68 40 42 | 156 50 30 | N | 12 | .75 | 29 | 2.1 | 8.6 | N | 110 |
| H491SG | 68 40 36 | 157 00 30 | N | 26 | .68 | 38 | 3.2 | 12 | .61 | 130 |
| H492SG | 68 37 18 | 157 05 06 | N | 9.8 | .19 | 28 | .85 | 70 | N | 71 |
| H493SG | 68 35 30 | 157 07 00 | N | 18 | .13 | 35 | .94 | 12 | N | 79 |
| H494SG | 68 35 18 | 157 12 36 | N | 5.3 | .47 | 41 | 1.5 | 7.1 | N | 110 |
| H495SG | 68 35 36 | 157 13 00 | N | 8.0 | .25 | 28 | 1.1 | 8.4 | N | 72 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| H496SG | 68 41 00 | 157 18 00 | .048 | 6.9 | .43 | 52 | 2.0 | 80 | N | 120 |
| H497SG | 68 40 48 | 157 19 00 | .093 | 14 | .76 | 72 | 3.8 | 9.6 | .65 | 130 |
| H498SG | 68 36 00 | 157 29 36 | .130 | 7.0 | 1.0 | 61 | 2.9 | 8.1 | N | 140 |
| H499SG | 68 31 36 | 157 29 24 | .220 | 5.8 | 2.7 | 39 | 3.2 | 9.3 | N | 140 |
| H500SG | 68 31 48 | 157 29 24 | .180 | 11 | 1.1 | 49 | 3.0 | 14 | N | 100 |
| H501SG | 68 30 06 | 157 27 48 | .500 | 12 | .97 | 18 | 3.2 | 9.6 | .88 | 83 |
| H502SG | 68 29 24 | 157 33 36 | .120 | 15 | 2.2 | 73 | 6.0 | 14 | 1.2 | 200 |
| H503SG | 68 29 36 | 157 32 42 | .400 | 10 | 1.1 | 22 | 5.3 | 6.1 | .90 | 100 |
| H504SG | 68 31 24 | 157 23 42 | .110 | 7.7 | .41 | 53 | 1.7 | 7.9 | N | 94 |
| H505SG | 68 28 36 | 157 21 24 | N | 21 | 1.1 | 58 | 2.7 | 10 | 1.0 | 150 |
| H506SG | 68 27 54 | 157 04 24 | N | 5.1 | .08 | 6.0 | .67 | 6.7 | N | 39 |
| H507SG | 68 27 36 | 156 59 18 | .051 | 9.9 | .42 | 42 | 3.1 | 12 | .76 | 120 |
| H508SG | 68 29 42 | 156 46 18 | N | 16 | .17 | 20 | .90 | 10 | N | 66 |
| H509SG | 68 30 30 | 156 41 18 | N | 9.6 | .25 | 20 | .85 | 10 | N | 86 |
| H510SG | 68 32 42 | 156 36 54 | N | 23 | .19 | 26 | 1.1 | 12 | N | 82 |
| H511SG | 68 33 06 | 156 36 18 | .150 | 6.1 | .37 | 10 | 1.5 | 6.1 | N | 64 |
| H512SG | 68 31 00 | 156 20 18 | N | 5.0 | .16 | 11 | .82 | 5.9 | N | 56 |
| H513SG | 68 35 18 | 156 12 00 | N | 5.4 | .16 | 9.2 | .97 | 6.1 | N | 50 |
| H514SG | 68 30 12 | 156 02 36 | N | 12 | .27 | 21 | .79 | 12 | N | 91 |
| H515SG | 68 22 24 | 156 03 18 | N | 10 | .63 | 34 | 1.1 | 11 | N | 120 |
| H516SG | 68 19 06 | 156 03 00 | N | 8.1 | .44 | 30 | .26 | 12 | N | 110 |
| H517SG | 68 19 24 | 156 07 54 | N | 10 | .63 | 18 | .30 | 18 | N | 110 |
| H518SG | 68 19 18 | 156 18 06 | N | 12 | .40 | 26 | .37 | 20 | N | 110 |
| H519SG | 68 17 30 | 156 21 12 | N | 7.9 | .22 | 16 | .27 | 7.7 | N | 66 |
| H520SG | 68 17 30 | 156 25 00 | .093 | 9.3 | .37 | 27 | .42 | 14 | 1.1 | 84 |
| H521SG | 68 15 48 | 156 24 24 | N | 10 | .86 | 26 | .36 | 73 | 1.3 | 170 |
| H522SG | 68 18 24 | 156 29 12 | N | 14 | .48 | 34 | .56 | 20 | 1.0 | 110 |
| H523SG | 68 22 48 | 156 12 06 | N | 12 | .76 | 19 | .73 | 20 | N | 180 |
| H524SG | 68 27 00 | 156 21 06 | N | 7.0 | .15 | 15 | .44 | 9.1 | N | 77 |
| H525SG | 68 27 24 | 156 32 36 | N | 4.3 | .039 | 9.1 | .20 | 4.5 | N | 55 |
| H526SG | 68 22 12 | 156 40 06 | N | 3.2 | .11 | 16 | .18 | 8.2 | N | 93 |
| H527SG | 68 19 30 | 156 41 36 | N | N | 1.6 | 23 | N | 24 | N | 280 |
| H528SG | 68 17 42 | 156 43 36 | N | 11 | .50 | 29 | .56 | 19 | .71 | 120 |
| H529SG | 68 15 24 | 156 36 36 | N | 12 | .34 | 25 | .55 | 9.9 | .61 | 83 |
| H530SG | 68 15 00 | 156 36 48 | N | 12 | .23 | 29 | .42 | 12 | N | 89 |
| H531SG | 68 15 06 | 156 34 24 | N | 10 | .38 | 26 | .47 | 8.1 | N | 89 |
| H532SG | 68 14 42 | 156 33 18 | N | 12 | .20 | 27 | .50 | 8.8 | .63 | 75 |
| H533SG | 68 14 18 | 156 33 12 | N | 12 | .33 | 27 | .44 | 16 | .72 | 140 |
| H534SG | 68 09 54 | 156 34 54 | .056 | 8.9 | .57 | 14 | .34 | 42 | 1.2 | 210 |
| H535SG | 68 09 54 | 156 46 00 | N | 7.2 | .30 | 23 | .56 | 8.8 | N | 77 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| H536SG | 68 12 24 | 156 45 06 | .130 | 13 | .50 | 28 | 1.2 | 17 | 1.0 | 150 |
| H537SG | 68 26 00 | 156 42 54 | N | 8.3 | .13 | 12 | .71 | 8.2 | N | 77 |
| H538SG | 68 20 36 | 156 49 06 | N | 10 | .18 | 18 | .49 | 13 | N | 89 |
| H539SG | 68 17 30 | 156 48 18 | N | 13 | .29 | 27 | .44 | 19 | .93 | 110 |
| H540SG | 68 20 24 | 156 57 12 | N | 11 | .16 | 29 | .51 | 17 | N | 87 |
| H541SG | 68 20 36 | 156 57 24 | N | 11 | .19 | 27 | .60 | 10 | N | 84 |
| H542SG | 68 20 30 | 157 06 12 | N | 9.0 | .34 | 23 | .58 | 14 | .62 | 76 |
| H543SG | 68 20 18 | 157 06 42 | N | 13 | 1.4 | 29 | .62 | 24 | .79 | 230 |
| H544SG | 68 20 30 | 157 07 12 | N | 11 | .43 | 23 | .84 | 17 | .87 | 120 |
| H545SG | 68 22 06 | 157 07 18 | N | 12 | 1.4 | 25 | .82 | 32 | 1.0 | 300 |
| H546SG | 68 23 18 | 157 13 48 | N | 16 | .30 | 31 | .48 | 21 | N | 140 |
| H547SG | 68 20 30 | 157 18 54 | N | 16 | .80 | 23 | .63 | 26 | .92 | 160 |
| H548SG | 68 20 00 | 157 18 54 | N | 11 | .28 | 26 | .51 | 11 | .65 | 89 |
| H549SG | 68 21 24 | 157 29 36 | N | 12 | .33 | 31 | .65 | 22 | .92 | 100 |
| H550SG | 68 21 24 | 157 30 06 | N | 16 | 1.1 | 26 | .64 | 75 | 2.3 | 190 |
| H551SG | 68 23 54 | 157 32 54 | N | 14 | .21 | 34 | .60 | 14 | .86 | 100 |
| H552SG | 68 27 00 | 157 43 06 | .170 | 14 | .27 | 43 | 1.1 | 13 | .79 | 160 |
| H553SG | 68 14 36 | 156 15 18 | N | 12 | 1.1 | 27 | .51 | 46 | 1.7 | 250 |
| H554SG | 68 15 12 | 156 12 48 | N | 13 | .48 | 25 | .56 | 14 | .70 | 100 |
| H555SG | 68 13 48 | 156 06 18 | N | 9.5 | .65 | 22 | .46 | 9.8 | N | 100 |
| H556SG | 68 14 18 | 156 08 12 | N | 9.9 | .28 | 19 | .34 | 8.2 | N | 61 |
| H557SG | 68 12 48 | 156 10 12 | .050 | 10 | .74 | 24 | .43 | 28 | 1.6 | 210 |
| H558SG | 68 12 06 | 156 06 48 | .058 | 11 | 1.7 | 22 | .43 | 79 | 1.8 | 280 |
| H559SG | 68 14 06 | 156 00 12 | N | 13 | .47 | 23 | .47 | 13 | .74 | 79 |
| H560SG | 68 12 12 | 156 03 18 | N | 7.9 | .34 | 19 | .31 | 10 | N | 74 |
| H561SG | 68 10 36 | 156 15 00 | N | 13.0 | .28 | 31 | .56 | 14 | 1.2 | 130 |
| H562SG | 68 12 00 | 156 18 30 | N | 9.8 | .25 | 25 | .65 | 8.7 | .69 | 74 |
| H563SG | 68 13 24 | 156 22 30 | .052 | 11 | 2.2 | 23 | .50 | 69 | 1.9 | 430 |
| H564SG | 68 06 42 | 156 21 12 | N | 9.8 | .19 | 8.4 | .33 | 9.9 | N | 58 |
| H565SG | 68 01 42 | 156 16 30 | N | 15 | .19 | 33 | .32 | 20 | 1.0 | 110 |
| H566SG | 68 02 30 | 156 25 42 | N | 13 | .15 | 20 | .35 | 10 | N | 60 |
| H567SG | 68 01 54 | 156 28 00 | N | 12 | .045 | 31 | .30 | 15 | N | 74 |
| H568SG | 68 01 42 | 156 34 30 | N | 8.5 | .063 | 19 | .28 | 8.4 | N | 71 |
| H569SG | 68 04 48 | 156 42 00 | N | 11 | .056 | 27 | .31 | 10 | N | 61 |
| H570SG | 68 07 06 | 156 39 00 | N | 13 | .13 | 24 | .33 | 12 | N | 60 |
| H571SG | 68 06 40 | 156 46 54 | N | 6.8 | .16 | 10 | .36 | 9.2 | N | 40 |
| H572SG | 68 06 12 | 156 51 12 | N | 9.5 | .20 | 16 | .36 | 10 | N | 58 |
| H573SG | 68 10 12 | 157 17 48 | N | 8.2 | .30 | 16 | .65 | 7.9 | N | 56 |
| H574SG | 68 09 30 | 157 28 12 | N | 11 | .030 | 4.5 | .28 | 60 | N | 22 |
| M001SG | 68 39 42 | 161 46 00 | N | 19 | .64 | 31 | 1.9 | 17 | .68 | 130 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| M002SG | 68 39 12 | 161 57 36 | .083 | 26 | .95 | 42 | 3.4 | 17 | .85 | 150 |
| M003SG | 68 37 30 | 161 47 54 | N | 21 | .73 | 38 | 2.3 | 17 | N | 140 |
| M004SG | 68 35 40 | 161 49 20 | N | 27 | .17 | 34 | 1.2 | 18 | N | 120 |
| M005SG | 68 36 42 | 161 42 36 | .830 | 15 | 1.4 | 57 | 6.3 | 11 | 1.5 | 230 |
| M006SG | 68 34 00 | 161 45 18 | .880 | 16 | 1.6 | 56 | 5.1 | 11 | 1.3 | 320 |
| M007SG | 68 33 18 | 161 43 00 | N | 10 | .28 | 43 | 1.7 | 12 | N | 120 |
| M008SG | 68 33 18 | 161 42 18 | .046 | 12 | .58 | 63 | 2.7 | 15 | N | 160 |
| M009SG | 68 33 24 | 161 50 12 | .190 | 11 | 1.7 | 81 | 3.9 | 14 | .84 | 230 |
| M010SG | 68 33 18 | 161 51 00 | .560 | 15 | 1.2 | 61 | 4.9 | 12 | .92 | 220 |
| M011SG | 68 30 18 | 161 51 00 | N | 10 | .11 | 39 | .69 | 12 | N | 110 |
| M012SG | 68 30 24 | 161 48 00 | .066 | 13 | .76 | 55 | 2.7 | 13 | N | 160 |
| M013SG | 68 28 18 | 161 46 36 | .330 | 15 | 1.4 | 81 | 6.9 | 11 | 1.2 | 260 |
| M014SG | 68 28 24 | 161 46 12 | .130 | 11 | .80 | 69 | 4.2 | 11 | .80 | 170 |
| M015SG | 68 25 15 | 161 46 12 | N | 5.3 | .11 | 3.0 | .53 | 3.1 | N | 59 |
| M016SG | 68 25 15 | 161 44 54 | N | 4.2 | .22 | 3.0 | .66 | 3.3 | N | 62 |
| M017SG | 68 21 54 | 161 56 06 | .200 | 11 | .44 | 44 | 2.3 | 10 | N | 180 |
| M018SG | 68 24 00 | 161 57 24 | .120 | 9.9 | .94 | 69 | 4.5 | 11 | .71 | 150 |
| M019SG | 68 30 42 | 161 59 12 | N | 11 | .07 | 35 | .58 | 13 | N | 110 |
| M020SG | 68 30 42 | 161 58 48 | N | 11 | .18 | 40 | 1.2 | 12 | N | 120 |
| M021SG | 68 43 42 | 161 15 00 | .054 | 17 | .90 | 38 | 1.8 | 17 | .80 | 140 |
| M022SG | 68 41 10 | 161 22 12 | N | 23 | .45 | 44 | 2.3 | 16 | .66 | 140 |
| M023SG | 68 41 28 | 161 22 18 | .054 | 23 | .95 | 35 | 2.8 | 20 | .87 | 140 |
| M024SG | 68 39 42 | 161 32 12 | .110 | 30 | .71 | 48 | 3.3 | 19 | 1.1 | 150 |
| M025SG | 68 37 36 | 161 36 54 | .200 | 21 | .44 | 46 | 3.0 | 14 | .67 | 140 |
| M026SG | 68 39 06 | 161 35 54 | N | 34 | .25 | 39 | 1.8 | 18 | N | 120 |
| M027SG | 68 36 36 | 161 37 36 | N | 38 | .13 | 40 | 1.3 | 22 | N | 99 |
| M028SG | 68 35 36 | 161 36 24 | .140 | 12 | .39 | 52 | 2.3 | 19 | N | 110 |
| M029SG | 68 35 30 | 161 36 54 | .130 | 14 | .57 | 54 | 2.6 | 16 | N | 160 |
| M030SG | 68 32 30 | 161 33 42 | N | 8.8 | .17 | 30 | 1.1 | 8.9 | N | 77 |
| M031SG | 68 32 36 | 161 33 54 | N | 10 | .16 | 41 | .92 | 11 | N | 89 |
| M032SG | 68 33 06 | 161 31 00 | N | 8.5 | .21 | 31 | 1.1 | 8.9 | N | 84 |
| M033SG | 68 32 30 | 161 28 00 | N | 1.2 | .15 | 17 | .21 | 6.1 | N | 70 |
| M034SG | 68 31 36 | 161 27 24 | N | 5.8 | .24 | 15 | 1.1 | 4.6 | N | 68 |
| M035SG | 68 29 00 | 161 26 00 | N | 7.8 | .25 | 34 | 1.2 | 8.2 | N | 100 |
| M036SG | 68 28 30 | 161 29 06 | N | 3.9 | .13 | 3.8 | .30 | 3.8 | N | 34 |
| M037SG | 68 27 54 | 161 30 36 | N | 3.3 | .16 | 2.8 | .42 | 2.9 | N | 32 |
| M038SG | 68 27 42 | 161 30 54 | .190 | 11 | 1.7 | 35 | 3.8 | 8.9 | .88 | 150 |
| M039SG | 68 27 42 | 161 35 30 | N | 4.9 | .07 | 4.3 | .25 | 5.1 | N | 34 |
| M040SG | 68 27 36 | 161 35 12 | N | 2.9 | .21 | 2.6 | .41 | 2.6 | N | 30 |
| M041SG | 68 27 30 | 161 38 12 | .070 | 4.2 | .32 | 7.4 | .93 | 3.8 | N | 41 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| M042SG | 68 27 12 | 161 37 30 | .540 | 6.0 | 1.9 | 23 | 4.7 | 4.1 | 1.1 | 150 |
| M043SG | 68 27 36 | 161 40 48 | .066 | 4.1 | .09 | 2.8 | .39 | 3.8 | N | 31 |
| M044SG | 68 27 36 | 161 41 48 | .150 | 6.1 | .34 | 27 | 1.6 | 8.6 | N | 68 |
| M045SG | 68 23 24 | 161 38 06 | .420 | 13 | .73 | 48 | 3.5 | 10 | .96 | 270 |
| M046SG | 68 24 00 | 161 40 48 | .400 | 14 | 1.7 | 71 | 6.1 | 12 | 1.4 | 240 |
| M047SG | 68 23 24 | 161 37 18 | .130 | 8.8 | .33 | 25 | 1.8 | 8.6 | N | 97 |
| M048SG | 68 23 18 | 161 31 54 | .220 | 14 | .73 | 48 | 3.5 | 14 | 1.2 | 180 |
| M049SG | 68 20 54 | 161 21 36 | .220 | 19 | .97 | 59 | 4.6 | 15 | 1.4 | 310 |
| M050SG | 68 41 48 | 161 15 42 | .110 | 26 | .79 | 52 | 3.8 | 19 | .95 | 120 |
| M051SG | 68 41 48 | 161 15 12 | .059 | 24 | .55 | 46 | 2.1 | 17 | N | 120 |
| M052SG | 68 38 42 | 161 29 12 | .076 | 21 | .35 | 41 | 1.9 | 16 | N | 110 |
| M053SG | 68 38 24 | 161 25 06 | .140 | 24 | .56 | 48 | 3.7 | 16 | .64 | 110 |
| M054SG | 68 37 24 | 161 25 12 | .049 | 15 | .40 | 40 | 2.1 | 12 | .71 | 100 |
| M055SG | 68 36 12 | 161 23 00 | N | 13 | .23 | 41 | 1.6 | 12 | N | 100 |
| M056SG | 68 36 12 | 161 22 42 | N | 13 | .39 | 40 | 2.0 | 11 | N | 100 |
| M057SG | 68 33 36 | 161 15 42 | .200 | 14 | .95 | 77 | 4.7 | 16 | .65 | 160 |
| M058SG | 68 33 54 | 161 15 24 | .050 | 16 | .42 | 41 | 2.6 | 13 | N | 99 |
| M059SG | 68 33 42 | 161 13 24 | N | 13 | .31 | 19 | 1.6 | 13 | N | 81 |
| M060SG | 68 32 24 | 161 14 54 | .087 | 13 | .65 | 64 | 1.4 | 11 | N | 130 |
| M061SG | 68 32 30 | 161 14 36 | .073 | 16 | .31 | 45 | 1.7 | 15 | N | 120 |
| M062SG | 68 32 24 | 161 16 00 | .130 | 19 | .67 | 51 | 3.8 | 13 | .95 | 140 |
| M063SG | 68 32 18 | 161 17 24 | .092 | 18 | .60 | 46 | 3.3 | 14 | .90 | 120 |
| M064SG | 68 31 24 | 161 19 42 | N | 7.2 | .23 | 23 | 1.2 | 6.7 | N | 62 |
| M065SG | 68 31 18 | 161 19 06 | .097 | 13 | .47 | 63 | 2.2 | 14 | .85 | 130 |
| M066SG | 68 26 15 | 161 23 36 | N | 18 | .55 | 43 | 2.3 | 14 | .64 | 110 |
| M067SG | 68 24 36 | 161 24 06 | N | 15 | .73 | 42 | 2.0 | 12 | N | 120 |
| M068SG | 68 24 24 | 161 24 00 | .390 | 16 | 5.5 | 180 | 8.6 | 16 | 1.8 | 800 |
| M069SG | 68 24 36 | 161 11 18 | .079 | 15 | .64 | 36 | 1.9 | 11 | N | 120 |
| M070SG | 68 25 30 | 161 11 42 | .110 | 17 | .53 | 68 | 3.0 | 14 | .86 | 130 |
| M071SG | 68 27 06 | 161 11 54 | .740 | 7.1 | .38 | 140 | 1.4 | 3.7 | N | 130 |
| M072SG | 68 26 18 | 161 16 12 | .130 | 16 | .84 | 52 | 3.1 | 15 | .71 | 140 |
| M073SG | 68 26 30 | 161 16 00 | .089 | 11 | 1.2 | 90 | 2.0 | 8.8 | .98 | 150 |
| M074SG | 68 26 48 | 161 02 00 | .110 | 17 | .46 | 87 | 2.6 | 18 | .73 | 140 |
| M075SG | 68 26 36 | 161 01 54 | .160 | 14 | .58 | 57 | 3.4 | 19 | .93 | 130 |
| M076SG | 68 26 55 | 161 02 36 | .200 | 13 | 2.5 | 71 | 1.9 | 11 | 1.6 | 200 |
| M077SG | 68 31 00 | 161 07 18 | .079 | 13 | .42 | 47 | 2.5 | 17 | .70 | 110 |
| M078SG | 68 31 12 | 161 06 54 | .047 | 12 | .40 | 55 | 1.4 | 12 | N | 120 |
| M079SG | 68 35 00 | 161 04 54 | .080 | 12 | .51 | 41 | 2.5 | 11 | N | 110 |
| M080SG | 68 35 42 | 161 03 54 | .200 | 15 | .58 | 48 | 2.8 | 14 | .61 | 140 |
| M081SG | 68 50 18 | 161 17 00 | .065 | 33 | .14 | 35 | 1.1 | 21 | .68 | 100 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| M082SG | 68 47 06 | 161 17 00 | N | 19 | .21 | 32 | 1.6 | 16 | N | 93 |
| M083SG | 68 46 48 | 161 21 00 | .160 | 70 | .18 | 36 | 1.7 | 26 | 1.4 | 110 |
| M084SG | 68 46 48 | 161 20 00 | .190 | 80 | .34 | 40 | 2.0 | 30 | 1.8 | 120 |
| M085SG | 68 46 18 | 161 29 50 | .220 | 62 | .16 | 36 | 1.7 | 30 | 1.4 | 120 |
| M086SG | 68 45 54 | 161 29 50 | .055 | 26 | .14 | 35 | 1.1 | 20 | N | 110 |
| M087SG | 68 46 48 | 161 34 30 | .052 | 24 | .21 | 36 | 1.0 | 19 | N | 110 |
| M088SG | 68 45 36 | 161 35 12 | .074 | 46 | .47 | 35 | 1.9 | 22 | 1.0 | 110 |
| M089SG | 68 44 48 | 161 40 00 | N | 47 | .47 | 27 | 2.9 | 23 | 1.1 | 96 |
| M090SG | 68 46 42 | 161 40 30 | N | 30 | .18 | 32 | 1.1 | 21 | N | 95 |
| M091SG | 68 47 12 | 161 44 12 | N | 21 | .20 | 27 | 1.1 | 21 | N | 80 |
| M092SG | 68 46 12 | 161 45 54 | N | 20 | .13 | 28 | .92 | 18 | N | 84 |
| M093SG | 68 45 06 | 161 52 48 | N | 14 | .17 | 24 | 1.0 | 16 | N | 62 |
| M094SG | 68 48 36 | 161 58 00 | N | 18 | .13 | 24 | .87 | 17 | N | 73 |
| M095SG | 68 50 36 | 161 58 42 | N | 20 | .15 | 17 | .77 | 14 | N | 50 |
| M096SG | 68 52 42 | 161 56 48 | N | 22 | .19 | 21 | .88 | 14 | N | 59 |
| M097SG | 68 55 42 | 161 55 12 | N | 20 | .16 | 16 | .76 | 14 | N | 47 |
| M098SG | 68 56 18 | 161 53 30 | N | 24 | .13 | 18 | .86 | 15 | N | 61 |
| M099SG | 68 58 30 | 161 46 12 | N | 19 | .26 | 24 | .87 | 14 | N | 59 |
| M100SG | 68 59 18 | 161 43 00 | N | 21 | .29 | 24 | 1.1 | 13 | N | 58 |
| M101SG | 68 57 30 | 161 44 00 | N | 16 | .26 | 30 | .92 | 15 | N | 120 |
| M102SG | 68 57 42 | 161 43 12 | N | 25 | .28 | 25 | 1.1 | 16 | N | 68 |
| M103SG | 68 58 00 | 161 25 18 | N | 18 | .22 | 18 | .86 | 13 | N | 55 |
| M104SG | 68 58 12 | 161 24 30 | N | 16 | .26 | 14 | .73 | 12 | N | 42 |
| M105SG | 68 52 24 | 161 22 12 | N | 27 | .11 | 34 | 1.1 | 19 | N | 100 |
| M106SG | 68 50 36 | 161 30 06 | N | 27 | .19 | 27 | 1.1 | 19 | .71 | 120 |
| M107SG | 68 50 42 | 161 30 42 | N | 28 | .23 | 30 | 1.1 | 19 | .64 | 96 |
| M108SG | 68 46 00 | 160 55 24 | N | 16 | .44 | 34 | 1.8 | 17 | .68 | 110 |
| M109SG | 68 45 42 | 160 55 54 | N | 19 | .56 | 41 | 2.0 | 14 | .65 | 120 |
| M110SG | 68 42 42 | 161 02 36 | N | 19 | .70 | 66 | 2.9 | 18 | .81 | 130 |
| M111SG | 68 37 35 | 161 03 50 | .086 | 14 | .53 | 58 | 3.0 | 15 | N | 120 |
| M112SG | 68 37 48 | 161 10 36 | N | 13 | .43 | 36 | 2.2 | 13 | N | 98 |
| M113SG | 68 37 54 | 161 11 00 | N | 12 | .53 | 46 | 2.6 | 14 | N | 110 |
| M114SG | 68 33 18 | 161 00 24 | .240 | 13 | .85 | 53 | 3.9 | 13 | 1.0 | 160 |
| M115SG | 68 33 24 | 160 56 24 | .320 | 16 | 3.7 | 84 | 3.3 | 15 | 1.0 | 380 |
| M116SG | 68 33 30 | 160 53 42 | .210 | 8.8 | 1.2 | 70 | 3.5 | 15 | .67 | 170 |
| M117SG | 68 33 36 | 160 50 06 | N | 11 | .40 | 44 | 2.4 | 13 | .70 | 110 |
| M118SG | 68 29 36 | 160 50 12 | .150 | 13 | .47 | 70 | 2.9 | 12 | 1.1 | 150 |
| M119SG | 68 29 30 | 160 49 36 | .200 | 13 | .34 | 49 | 2.0 | 11 | .92 | 140 |
| M120SG | 68 30 18 | 160 57 18 | .150 | 16 | .77 | 83 | 2.9 | 15 | 1.3 | 140 |
| M121SG | 68 29 30 | 160 57 06 | .130 | 16 | .81 | 88 | 3.1 | 14 | 1.1 | 140 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M122SG | 68 26 24 | 160 51 24 | .080 | 13 | .43 | 73 | 2.1 | 14 | N | 130 | | |
| M123SG | 68 26 30 | 160 50 36 | .480 | 13 | .60 | 44 | 3.0 | 11 | .73 | 150 | | |
| M124SG | 68 22 06 | 160 57 06 | .160 | 20 | .60 | 40 | 2.4 | 15 | | | N | 140 |
| M125SG | 68 21 18 | 161 06 54 | .066 | 13 | .50 | 31 | 1.7 | 11 | | | N | 98 |
| M126SG | 68 22 54 | 161 05 12 | .080 | 13 | .51 | 30 | 1.7 | 11 | | | N | 97 |
| M127SG | 68 20 42 | 160 48 18 | .057 | 8.6 | .25 | 70 | 1.2 | 5.8 | N | 100 | | |
| M128SG | 68 21 00 | 160 47 54 | .063 | 5.8 | .19 | 67 | 1.0 | 4.3 | N | 82 | | |
| M129SG | 68 24 24 | 160 46 12 | .220 | 12 | .45 | 98 | 2.4 | 12 | .64 | 150 | | |
| M130SG | 68 24 00 | 160 42 00 | .071 | 6.0 | .26 | 88 | .46 | 3.3 | N | 94 | | |
| M131SG | 68 25 12 | 160 42 30 | .250 | 12 | .45 | 100 | 2.2 | 11 | .92 | 160 | | |
| M132SG | 68 50 24 | 160 53 00 | N | 22 | .17 | 29 | 1.1 | 9.9 | N | 96 | | |
| M133SG | 68 48 18 | 160 44 48 | .250 | 97 | .19 | 41 | 2.8 | 37 | 2.3 | 130 | | |
| M134SG | 68 46 00 | 160 41 24 | N | 14 | .33 | 36 | .57 | 9.0 | N | 91 | | |
| M135SG | 68 42 30 | 160 43 54 | N | 22 | .69 | 61 | 3.2 | 18 | .80 | 120 | | |
| M136SG | 68 40 18 | 160 49 06 | .053 | 16 | .75 | 87 | 3.8 | 20 | .94 | 140 | | |
| M137SG | 68 38 30 | 160 45 24 | N | 16 | .17 | 46 | 1.4 | 17 | N | 96 | | |
| M138SG | 68 38 30 | 160 44 54 | N | 15 | .17 | 48 | 1.3 | 15 | N | 98 | | |
| M139SG | 68 38 12 | 160 57 18 | .130 | 13 | .81 | 80 | 5.2 | 13 | .85 | 200 | | |
| M140SG | 68 36 54 | 160 54 54 | .150 | 18 | .16 | 38 | 1.3 | 15 | N | 100 | | |
| M141SG | 68 36 06 | 160 53 18 | N | 17 | .30 | 42 | 1.8 | 14 | N | 100 | | |
| M142SG | 68 36 18 | 160 53 18 | N | 16 | .06 | 30 | .72 | 17 | N | 81 | | |
| M143SG | 68 33 24 | 160 40 12 | .068 | 14 | .21 | 38 | 1.4 | 15 | N | 90 | | |
| M144SG | 68 33 18 | 160 38 54 | N | 13 | .12 | 33 | 1.3 | 13 | N | 82 | | |
| M145SG | 68 33 48 | 160 38 54 | N | 18 | .14 | 40 | 1.3 | 14 | N | 90 | | |
| M146SG | 68 33 54 | 160 39 48 | .110 | 14 | .31 | 38 | 1.3 | 14 | N | 92 | | |
| M147SG | 68 30 30 | 160 36 06 | .098 | 12 | .30 | 50 | 1.8 | 11 | N | 110 | | |
| M148SG | 68 30 12 | 160 33 54 | .140 | 12 | .30 | 47 | 1.7 | 12 | N | 150 | | |
| M149SG | 68 27 45 | 160 32 30 | .140 | 9.5 | .22 | 34 | 1.3 | 9.4 | N | 96 | | |
| M150SG | 68 25 36 | 160 38 24 | .050 | 6.5 | .24 | 120 | .97 | 3.0 | N | 100 | | |
| M151SG | 68 25 36 | 160 41 06 | .200 | 11 | .27 | 130 | 1.9 | 8.0 | .98 | 150 | | |
| M152SG | 68 21 18 | 160 28 06 | N | .6 | .03 | 100 | N | N | N | 28 | | |
| M153SG | 68 23 06 | 160 26 00 | N | .6 | .04 | 100 | N | N | N | 52 | | |
| M154SG | 68 25 24 | 160 27 00 | N | 3.3 | .20 | 120 | .92 | 2.1 | N | 98 | | |
| M155SG | 68 26 18 | 160 27 18 | .160 | 14 | .33 | 57 | 2.5 | 13 | N | 110 | | |
| M156SG | 68 26 12 | 160 27 42 | .080 | 12 | .32 | 84 | 2.3 | 13 | N | 120 | | |
| M157SG | 68 27 18 | 160 23 54 | .110 | 13 | .32 | 68 | 2.5 | 11 | N | 120 | | |
| M158SG | 68 26 30 | 160 20 12 | N | 4.7 | .28 | 120 | 1.9 | 2.8 | N | 110 | | |
| M159SG | 68 42 24 | 160 37 00 | .120 | 19 | .00 | 76 | 7.7 | 14 | .81 | 120 | | |
| M160SG | 68 40 24 | 160 36 48 | N | 20 | .32 | 49 | 2.3 | 18 | N | 97 | | |
| M161SG | 68 38 48 | 160 36 12 | N | 17 | .18 | 29 | 1.6 | 14 | N | 78 | | |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| M162SG | 68 36 48 | 160 37 12 | N | 14 | .18 | 44 | 1.4 | 13 | N | 98 |
| M163SG | 68 36 00 | 160 36 12 | N | 17 | .15 | 45 | 1.6 | 14 | N | 94 |
| M164SG | 68 35 12 | 160 33 54 | N | 17 | .18 | 43 | 1.9 | 14 | N | 96 |
| M165SG | 68 35 12 | 160 32 00 | N | 15 | .16 | 40 | 1.5 | 12 | N | 97 |
| M166SG | 68 31 36 | 160 28 30 | .089 | 14 | .25 | 47 | 2.0 | 12 | N | 100 |
| M167SG | 68 31 48 | 160 28 12 | N | 13 | .10 | 33 | 1.3 | 12 | N | 86 |
| M168SG | 68 31 54 | 160 30 00 | N | 16 | .11 | 42 | 1.2 | 10 | N | 87 |
| M169SG | 68 31 12 | 160 32 24 | N | 12 | .17 | 45 | 1.0 | 13 | N | 87 |
| M170SG | 68 31 18 | 160 34 30 | .062 | 14 | .19 | 29 | 1.6 | 11 | N | 82 |
| M171SG | 68 26 12 | 160 19 06 | .130 | 6.9 | .63 | 120 | 4.5 | 3.7 | .89 | 130 |
| M172SG | 68 25 18 | 160 18 12 | N | 1.4 | .18 | 120 | .59 | N | N | 74 |
| M173SG | 68 25 18 | 160 16 00 | N | 2.1 | .19 | 120 | .91 | 1.2 | N | 80 |
| M174SG | 68 25 24 | 160 14 48 | .110 | 7.4 | .29 | 81 | 1.3 | 7.1 | N | 110 |
| M175SG | 68 26 15 | 159 56 00 | .110 | 12 | .78 | 52 | 3.0 | 11 | .67 | 130 |
| M176SG | 68 28 36 | 159 56 12 | .140 | 15 | .59 | 42 | 4.1 | 14 | 1.1 | 150 |
| M177SG | 68 28 42 | 160 01 12 | .079 | 9.8 | .31 | 45 | 1.8 | 11 | N | 110 |
| M178SG | 68 28 24 | 160 06 12 | .059 | 13 | .30 | 51 | 2.2 | 11 | N | 110 |
| M179SG | 68 28 12 | 160 06 36 | .098 | 16 | .25 | 50 | 1.9 | 12 | N | 120 |
| M180SG | 68 27 48 | 160 14 00 | .140 | 12 | .31 | 49 | 1.6 | 11 | N | 120 |
| M181SG | 68 30 48 | 160 20 00 | .180 | 12 | .44 | 50 | 2.1 | 9.8 | N | 120 |
| M182SG | 68 31 42 | 160 20 54 | .370 | 13 | .29 | 54 | 2.1 | 11 | .92 | 120 |
| M183SG | 68 33 12 | 160 25 30 | .210 | 13 | .16 | 43 | 1.3 | 12 | N | 100 |
| M184SG | 68 33 00 | 160 25 06 | .170 | 14 | .33 | 60 | 3.3 | 12 | N | 120 |
| M185SG | 68 32 48 | 160 26 30 | N | 13 | .12 | 43 | 1.1 | 13 | N | 96 |
| M186SG | 68 35 48 | 160 21 48 | N | 12 | .13 | 46 | 1.0 | 12 | N | 95 |
| M187SG | 68 36 00 | 160 22 24 | N | 14 | .19 | 44 | 1.6 | 13 | N | 100 |
| M188SG | 68 47 30 | 160 37 25 | N | 9.2 | .26 | 32 | .44 | 7.3 | N | 84 |
| M189SG | 68 47 42 | 160 33 30 | N | 13 | .47 | 40 | 1.5 | 11 | N | 99 |
| M190SG | 68 47 54 | 160 33 30 | N | 13 | .62 | 35 | 1.6 | 12 | N | 110 |
| M191SG | 68 46 06 | 160 26 24 | N | 15 | .52 | 52 | 2.4 | 14 | N | 110 |
| M192SG | 68 46 24 | 160 27 00 | N | 9.6 | .34 | 42 | .32 | 8.2 | N | 98 |
| M193SG | 68 40 30 | 160 26 06 | N | 11 | .14 | 48 | .85 | 11 | N | 110 |
| M194SG | 68 38 24 | 160 24 00 | N | 13 | .16 | 37 | 1.4 | 12 | N | 96 |
| M195SG | 68 36 18 | 160 21 48 | N | 14 | .08 | 35 | .76 | 12 | N | 85 |
| M196SG | 68 30 36 | 160 13 00 | .078 | 12 | .29 | 54 | 1.8 | 12 | N | 110 |
| M197SG | 68 30 24 | 160 13 18 | .120 | 13 | .36 | 51 | 2.2 | 11 | N | 120 |
| M198SG | 68 30 54 | 160 08 48 | .046 | 14 | .37 | 65 | 3.1 | 12 | .73 | 120 |
| M199SG | 68 33 24 | 160 05 24 | .110 | 15 | .77 | 49 | 2.9 | 11 | 1.2 | 130 |
| M200SG | 68 33 12 | 160 06 12 | .120 | 15 | .54 | 61 | 2.7 | 11 | N | 130 |
| M201SG | 68 28 48 | 159 47 00 | .160 | 12 | .72 | 62 | 3.6 | 10 | .73 | 150 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| M202SG | 68 31 30 | 159 55 00 | .270 | 11 | 1.3 | 58 | 4.1 | 9.6 | 1.0 | 260 |
| M203SG | 68 32 12 | 159 57 00 | .430 | 17 | .49 | 42 | 5.0 | 9.3 | 1.2 | 200 |
| M204SG | 68 34 42 | 159 59 42 | .210 | 13 | 1.2 | 60 | 4.7 | 11 | 1.8 | 150 |
| M205SG | 68 35 00 | 160 00 18 | .096 | 13 | .66 | 49 | 2.6 | 12 | 1.1 | 120 |
| M206SG | 68 38 54 | 160 07 00 | N | 12 | .44 | 48 | 2.1 | 12 | .63 | 120 |
| M207SG | 68 38 54 | 160 07 50 | .150 | 12 | .96 | 62 | 3.1 | 12 | .80 | 150 |
| M208SG | 68 39 12 | 160 08 00 | .110 | 13 | .36 | 41 | 1.8 | 14 | N | 120 |
| M210SG | 68 53 36 | 161 36 36 | N | 19 | .16 | 28 | .83 | 17 | N | 98 |
| M211SG | 68 51 24 | 161 43 00 | N | 14 | .22 | 22 | .77 | 19 | N | 63 |
| M212SG | 68 51 12 | 161 43 18 | N | 38 | .33 | 26 | 1.2 | 21 | .91 | 74 |
| M213SG | 68 58 18 | 161 20 12 | N | 18 | .20 | 21 | .81 | 15 | N | 59 |
| M214SG | 68 58 12 | 161 14 06 | N | 14 | .16 | 19 | .75 | 14 | N | 56 |
| M215SG | 68 57 36 | 161 14 42 | N | 14 | .16 | 19 | .63 | 13 | N | 56 |
| M216SG | 68 58 42 | 161 01 00 | N | 17 | .40 | 33 | 1.0 | 22 | .71 | 250 |
| M217SG | 68 58 48 | 160 52 00 | N | 20 | .08 | 25 | .86 | 16 | N | 80 |
| M218SG | 68 53 30 | 160 45 24 | N | 22 | .12 | 16 | .78 | 13 | N | 49 |
| M219SG | 68 53 18 | 160 44 54 | N | 37 | .15 | 24 | 1.1 | 17 | N | 74 |
| M220SG | 68 57 48 | 160 37 36 | N | 42 | .18 | 18 | 1.1 | 17 | N | 60 |
| M221SG | 68 54 54 | 160 28 06 | N | 13 | .19 | 18 | .89 | 11 | N | 150 |
| M222SG | 68 54 36 | 160 27 36 | N | 22 | .16 | 26 | 1.2 | 15 | N | 120 |
| M223SG | 68 54 18 | 160 07 12 | N | 13 | .06 | 15 | .82 | 9.1 | N | 70 |
| M224SG | 68 52 24 | 159 57 30 | N | 12 | .16 | 17 | .97 | 8.2 | N | 60 |
| M225SG | 68 52 06 | 159 47 48 | N | 17 | .38 | 38 | 1.3 | 15 | N | 86 |
| M226SG | 68 54 24 | 159 37 42 | N | 16 | .30 | 28 | 1.5 | 21 | .65 | 87 |
| M227SG | 68 46 24 | 159 38 06 | N | 13 | .37 | 47 | 2.7 | 13 | N | 110 |
| M228SG | 68 44 24 | 159 42 24 | N | 15 | .21 | 49 | 2.0 | 14 | N | 100 |
| M229SG | 68 44 48 | 159 44 54 | .072 | 21 | .23 | 44 | 1.8 | 17 | .72 | 110 |
| M230SG | 68 44 18 | 159 43 36 | N | 11 | .13 | 44 | 1.7 | 14 | .80 | 94 |
| M231SG | 68 43 30 | 159 45 18 | N | 18 | .28 | 42 | 2.4 | 16 | N | 110 |
| M232SG | 68 43 00 | 159 50 00 | N | 10 | .03 | 60 | 1.8 | 15 | N | 98 |
| M233SG | 68 40 42 | 160 12 00 | N | 11 | .19 | 52 | 2.1 | 14 | .72 | 100 |
| M234SG | 68 44 42 | 160 07 30 | N | 15 | .25 | 52 | 1.7 | 12 | N | 110 |
| M235SG | 68 44 54 | 160 06 18 | N | 15 | .17 | 42 | 2.0 | 16 | N | 100 |
| M236SG | 68 47 18 | 159 55 42 | N | 21 | .31 | 37 | 1.6 | 11 | .66 | 88 |
| M237SG | 68 48 20 | 160 19 54 | .057 | 12 | .79 | 41 | 1.9 | 18 | .89 | 140 |
| M238SG | 68 48 18 | 160 15 42 | N | 11 | .26 | 31 | .73 | 8.9 | N | 88 |
| M239SG | 68 46 36 | 160 21 54 | N | 11 | .42 | 39 | .91 | 10 | N | 100 |
| M240SG | 68 46 36 | 160 21 12 | .059 | 16 | .82 | 51 | 4.7 | 11 | .66 | 120 |
| M241SG | 68 39 06 | 160 14 06 | N | 14 | .29 | 47 | 2.0 | 17 | .87 | 110 |
| M242SG | 68 37 42 | 160 17 36 | N | 14 | .27 | 47 | 1.9 | 14 | .61 | 110 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| M243SG | 68 37 42 | 160 18 18 | N | 11 | .22 | 44 | 1.6 | 11 | N | 98 |
| M244SG | 68 38 12 | 160 18 18 | N | 15 | .21 | 49 | 1.6 | 15 | N | 110 |
| M245SG | 68 35 48 | 159 53 54 | .120 | 7.0 | .28 | 65 | 1.4 | 9.9 | N | 120 |
| M246SG | 68 35 42 | 159 54 36 | .075 | 10 | .52 | 52 | 2.1 | 13 | .97 | 120 |
| M247SG | 68 38 24 | 159 58 00 | N | 8.0 | .31 | 40 | 1.3 | 11 | N | 99 |
| M248SG | 68 38 30 | 159 58 36 | N | 13 | .49 | 52 | 2.0 | 16 | .84 | 110 |
| M249SG | 68 39 18 | 159 57 24 | N | 12 | .39 | 48 | 1.5 | 13 | .63 | 110 |
| M250SG | 68 41 06 | 159 57 42 | N | 13 | .36 | 42 | 1.5 | 15 | N | 120 |
| M251SG | 68 41 00 | 159 54 18 | N | 9.8 | .37 | 80 | 2.2 | 10 | .74 | 140 |
| M252SG | 68 41 12 | 159 47 18 | .072 | 9.7 | .41 | 53 | 1.6 | 11 | .65 | 140 |
| M253SG | 68 40 42 | 159 45 48 | .120 | 9.3 | .55 | 58 | 2.1 | 13 | N | 150 |
| M254SG | 68 40 36 | 159 46 36 | N | 10 | .54 | 54 | 2.0 | 13 | .62 | 130 |
| M256SG | 68 36 24 | 159 40 54 | N | 7.4 | .31 | 61 | 1.6 | 8.8 | .73 | 140 |
| M257SG | 68 34 18 | 159 45 48 | .250 | 12 | .70 | 56 | 2.6 | 12 | .66 | 150 |
| M258SG | 68 34 00 | 159 45 18 | .140 | 12 | .50 | 47 | 2.6 | 12 | .73 | 150 |
| M259SG | 68 34 24 | 159 44 48 | .140 | 15 | .32 | 60 | 1.8 | 14 | .76 | 130 |
| M260SG | 68 34 42 | 159 40 36 | .120 | 10 | .28 | 31 | 1.2 | 12 | N | 150 |
| M261SG | 68 33 30 | 159 40 30 | .270 | 12 | .94 | 71 | 2.9 | 13 | 1.1 | 440 |
| M262SG | 68 32 18 | 159 41 00 | .300 | 13 | 1.4 | 64 | 4.2 | 11 | 1.1 | 230 |
| M263SG | 68 31 42 | 159 35 54 | .250 | 13 | .38 | 32 | 2.0 | 12 | .75 | 220 |
| M264SG | 68 29 24 | 159 38 24 | .300 | 14 | .89 | 87 | 3.6 | 17 | 1.0 | 200 |
| M265SG | 68 29 00 | 159 38 36 | .079 | 14 | 1.9 | 87 | 4.1 | 13 | .94 | 240 |
| M266SG | 68 29 24 | 159 36 00 | .096 | 10 | .28 | 33 | 1.3 | 12 | N | 140 |
| M267SG | 68 33 30 | 159 29 06 | N | 13 | .58 | 46 | 2.0 | 12 | .96 | 140 |
| M268SG | 68 34 30 | 159 30 00 | .150 | 12 | .21 | 56 | 1.4 | 12 | .63 | 140 |
| M269SG | 68 35 06 | 159 30 00 | .290 | 12 | .65 | 77 | 1.4 | 9.5 | .91 | 140 |
| M270SG | 68 35 18 | 159 29 30 | .120 | 8.3 | .21 | 50 | .68 | 9.4 | N | 100 |
| M271SG | 68 41 24 | 159 31 42 | N | 11 | .52 | 39 | 1.7 | 16 | N | 120 |
| M272SG | 68 41 06 | 159 31 54 | N | 6.4 | .37 | 39 | .85 | 7.8 | N | 120 |
| M273SG | 68 41 06 | 159 30 54 | N | 8.0 | .38 | 53 | 1.3 | 10 | N | 110 |
| M274SG | 68 43 20 | 159 23 36 | N | 12 | .50 | 51 | 2.0 | 13 | N | 120 |
| M275SG | 68 37 48 | 159 22 06 | N | 11 | .36 | 57 | 1.5 | 13 | N | 120 |
| M276SG | 68 37 42 | 159 20 18 | N | 11 | .53 | 38 | 2.4 | 11 | N | 100 |
| M277SG | 68 37 30 | 159 21 00 | .053 | 15 | .55 | 48 | 2.6 | 13 | N | 64 |
| M278SG | 68 37 12 | 159 12 06 | N | 12 | .59 | 40 | 3.5 | 13 | N | 32 |
| M279SG | 68 36 54 | 159 12 30 | N | 14 | .75 | 56 | 2.9 | 15 | .70 | 59 |
| M280SG | 68 36 48 | 159 09 12 | N | 16 | .27 | 56 | 1.6 | 13 | N | 53 |
| M281SG | 68 39 12 | 159 06 12 | .150 | 8.2 | .35 | 71 | 2.2 | 9.8 | .64 | 100 |
| M282SG | 68 32 48 | 159 17 36 | .280 | 13 | .61 | 58 | 3.0 | 10 | 1.1 | 82 |
| M283SG | 68 32 48 | 159 16 48 | .210 | 13 | .77 | 69 | 3.5 | 11 | 1.1 | 68 |

Table 2. Results of ICP-AES analyses of stream-sediment samples from the National Petroleum Reserve (NPRA) and adjacent areas (Cont)

| Sample | Latitude | Longitude | Ag | As | Cd | Cu | Mo | Pb | Sb | Zn |
|---|---|---|---|---|---|---|---|---|---|---|
| M284SG | 68 31 12 | 159 22 00 | N | 16 | .37 | 47 | 1.9 | 15 | N | 67 |
| M285SG | 68 31 18 | 159 21 06 | .140 | 17 | .75 | 59 | 3.5 | 12 | .77 | 76 |
| M286SG | 68 29 42 | 159 22 06 | .160 | 13 | .87 | 63 | 3.3 | 12 | .77 | 160 |
| M287SG | 68 29 00 | 159 22 00 | .220 | 11 | .23 | 46 | 1.5 | 16 | N | 110 |
| M288SG | 68 28 36 | 159 19 54 | .210 | 13 | .55 | 57 | 3.1 | 11 | .79 | 150 |
| M289SG | 68 27 24 | 159 18 48 | N | 8.2 | .24 | 48 | .75 | 9.6 | N | 95 |
| M290SG | 68 26 54 | 159 07 06 | N | 13 | .71 | 65 | 3.3 | 13 | .92 | 140 |
| M291SG | 68 27 06 | 159 08 30 | N | 10 | .44 | 55 | 2.4 | 12 | N | 120 |
| M292SG | 68 28 30 | 159 11 48 | .085 | 8.1 | .23 | 37 | .86 | 10 | N | 87 |
| M293SG | 68 30 30 | 159 09 48 | .220 | 11 | .17 | 31 | .81 | 8.9 | N | 98 |
| M294SG | 68 30 54 | 159 07 30 | .190 | 9.0 | .40 | 62 | 2.5 | 11 | .63 | 130 |
| M295SG | 68 31 30 | 159 07 00 | .190 | 9.3 | .28 | 65 | 2.3 | 13 | .62 | 150 |
| M296SG | 68 32 00 | 159 08 00 | .300 | 7.8 | .39 | 52 | 1.9 | 8.5 | N | 120 |
| M297SG | 68 32 30 | 159 06 42 | .170 | 9.3 | .31 | 55 | 2.0 | 10 | N | 130 |
| M298SG | 68 32 48 | 159 07 24 | .200 | 11 | .74 | 62 | 3.5 | 9.2 | 1.2 | 140 |
| M299SG | 68 33 30 | 159 06 42 | .240 | 9.7 | .36 | 60 | 2.0 | 9.4 | .80 | 130 |
| M300SG | 68 34 18 | 159 05 30 | N | 11 | .38 | 65 | 2.2 | 9.8 | .76 | 120 |
| M301SG | 68 33 54 | 159 05 00 | .190 | 7.2 | .28 | 35 | .95 | 7.3 | N | 97 |
| M314SG | 68 45 54 | 159 19 42 | N | 11 | .51 | 38 | 2.2 | 12 | N | 130 |
| M315SG | 68 46 24 | 159 07 25 | .190 | 29 | .75 | 58 | 2.9 | 13 | .81 | 210 |
| M316SG | 68 46 42 | 159 07 55 | .073 | 16 | .51 | 58 | 2.4 | 11 | N | 130 |
| M584SG | 68 12 00 | 161 50 06 | N | 1.5 | .09 | 37 | .22 | 6.2 | N | 43 |
| M585SG | 68 15 18 | 161 51 12 | N | .6 | .03 | 5.2 | N | N | N | 18 |