# RECONNAISSANCE OF TIN AND TUNGSTEN IN HEAVY MINERAL PANNED CONCENTRATES ALONG THE TRANS-ALASKA PIPELINE CORRIDOR, NORTH OF LIVENGOOD, INTERIOR ALASKA.

by James C. Barker

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DEPARTMENT OF THE INTERIOR

James G. Watt, Secretary

U.S. BUREAU OF MINES

Robert C. Horton, Director

UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT

| | |
|---|---|
| cm | centimeter |
| in. | inch/inches |
| g | gram/grams |
| mg | milligram/milligrams |
| ppm | parts per million |
| % | percent |
| sp. gr. | specific gravity |

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# RECONNAISSANCE OF TIN AND TUNGSTEN IN HEAVY MINERAL PANNED CONCENTRATES ALONG THE TRANS-ALASKA PIPELINE CORRIDOR, NORTH OF LIVENGOOD, INTERIOR ALASKA.

by James C. Barker[1/]

## ABSTRACT

In 1978 through 1980, the Bureau of Mines collected a series of 514 panned concentrates from selected granitic regions along a section of the Trans-Alaska pipeline corridor, bounded on the south by Livengood and on the north by the Koyukuk River.

The methods of sample collection and analytical procedures are described. Sample analyses for tin, as well as for tungsten and eight other common pathfinder elements, are presented.

The data indicate both tin and tungsten anomalies in the vicinity of the northern Ray Mountains to Sithylemenkat Lake area, near the Fort Hamlin Hills, and west of Caribou Mountain. Only tungsten anomalies occur on upper Bonanza Creek.

## INTRODUCTION AND SUMMARY

The Bureau of Mines collected a series of heavy mineral panned concentrates from selected upland drainages along the Trans-Alaska pipeline corridor north of Fairbanks (figure 1). The project, authorized and partially funded by the Bureau of Land Management (BLM), was designed to improve the mineral resource inventory to be utilized in developing a management plan for the corridor.

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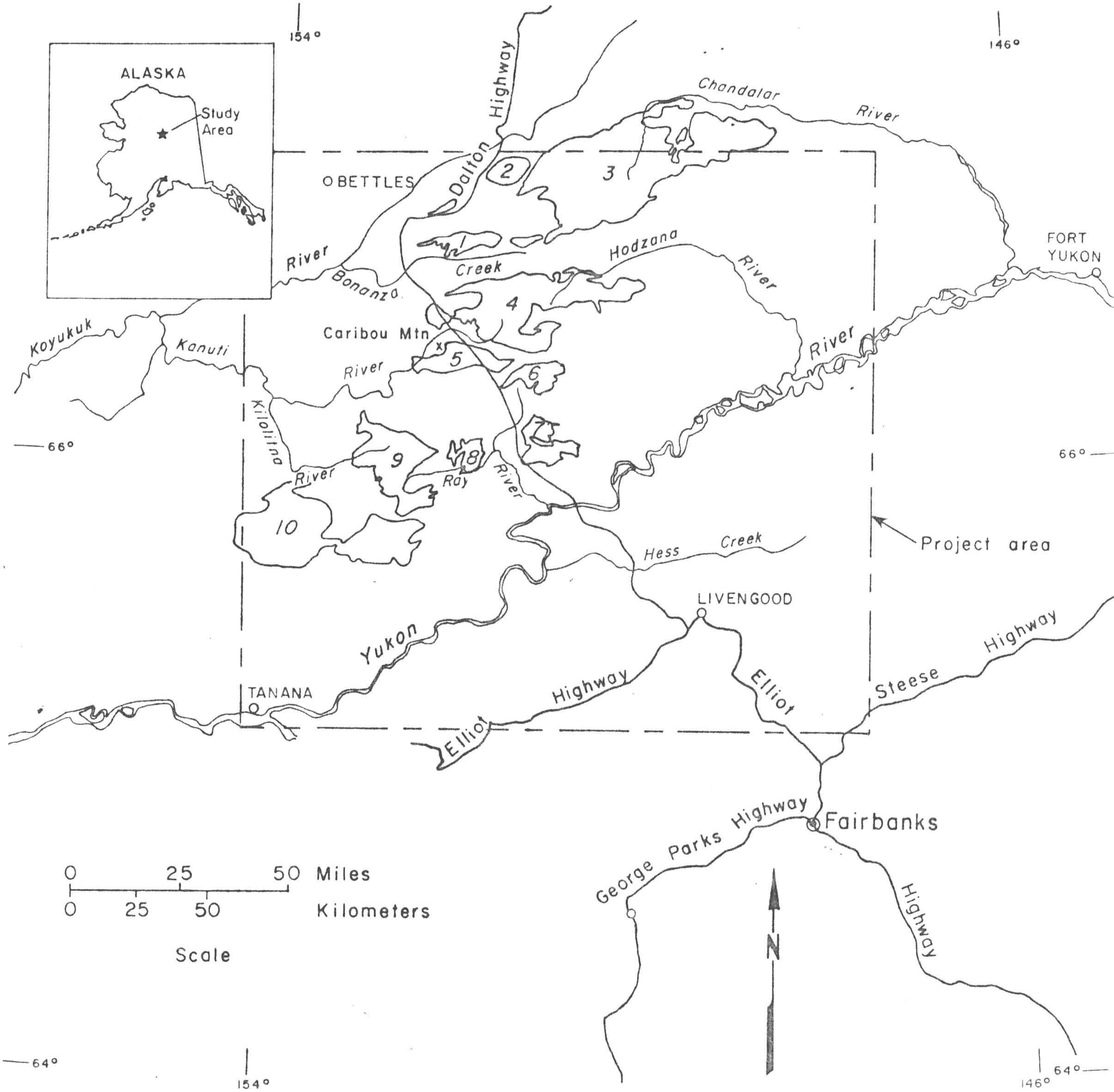


LEGEND

| | | | |
|---|---|---|---|
| 1 | Bonanza Pluton | 6 | Coal Creek Pluton |
| 2 | Jim River Pluton | 7 | Fort Hamlin Hills Pluton |
| 3 | Hodzana Pluton | 8 | Ray River Pluton |
| 4 | Kanuti Pluton | 9 | Sithylemenkat Pluton |
| 5 | Hot Springs Pluton | 10 | Ray Mtn Batholith |

As part of the mineral inventory, this report focuses on the distribution of tin, along with tungsten and eight other path-finder elements[2/] in

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2/. Path-finder elements are Ag, B, Ba, Cu, La, Nb (Cb), Pb, and Zn.

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alluvial gravels (figure 2). Sampling procedures are described and semi-quantitative analyses from optical emission spectrography are tabulated (see appendix A). Anomalous values obtained from widespread panned concentrate samplings are shown in figure 3.

The practicability of using panned concentrate sampling to delineate favorable areas for tin deposition has been demonstrated by Sainsbury[3/] on

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3/. Sainsbury, C.L. Geology, Ore Deposits, and Mineral Potential of the Seward Peninsula, Alaska. BuMines OFR 73-75, pp. 108.

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the Seward Peninsula of Alaska, and by numerous others working in the granitic regions.

Review of the data from the project area indicates a concentration of tin anomalies along the northern edge of the Ray Mountains and in the vicinity of the Sithylemenkat pluton. In addition to elemental tin recovered from the Sithylemenkat concentrates, chloritic tin-bearing greisen float was also found in this area. Two other groups of tin anomalies are evident, one near the western end of the intrusion underlying the Fort Hamlin Hills, and the second in the area west of Caribou Mountain (Hot Springs pluton). Tungsten anomalies were found in both the Sithylemenkat area (with tin) and in the Bonanza Creek area (without tin).

PROCEDURE

Samples were obtained with a steel shovel from silty gravels taken from the active channel center of smaller creeks, or in a few cases from the leading edge of gravel bars on larger streams. A 14-in. (35.6 cm) pan was heap-filled and carefully panned until about 50 to 100 g of material remained. The concentrated samples were air dried in the lab and further concentrated in bromoform (+2.85 sp. gr.). The +2.85 specific gravity material was then sized on a 14 mesh (1190 micron) screen and the undersized magnetically separated. The -14 mesh non-magnetic fraction was dried, weighed, and pulverized for analysis by semi-quantitative optical emission spectrographic techniques.[4/]

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4/. Analyses performed by Skyline Laboratories, Wheatridge, Colorado.

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These analyzed values for tin and tungsten cannot, however, be expected to accurately reflect regional background levels of the two metals. Instead, to provide regionally meaningful data, the actual elemental recovery (R) must be determined:

$$R = \frac{A}{1,000,000} \times 1000 \text{ g}$$

Where R = recovered elemental tin or tungsten in milligrams (mg) per 14 in. (35.6 cm) pan

A = analyzed values for tin or tungsten in parts per million (ppm)

g = grams of -14 mesh (1190 micron), +2.85 sp. gr. non-magnetic concentrate

The recovery (R) is determined by dividing the optical emission spectrographic results (A) in ppm by $10^6$ and then multiplying the quotient by the number of grams (g) of non-magnetic concentrate times $10^3$. Where values (A) are above the spectrographic detection limit of 10,000 ppm, then only the value of 10,000 ppm is used (see appendix A).

This formulation is applicable only when standard size gravel samples (the volume of one 14 in. [35.6 cm] gold pan) are collected and separated by consistent procedures. The value (R) now indicates the weight of elemental tin or tungsten in an unprocessed standardized volume of stream gravel rather than the proportion of the two metals to other heavy minerals in the concentrate.

The proportion of common accessory heavy minerals such as rutile, zircon, garnet, pyrite, and others to ore mineral concentrations can vary from area to area. When analytical values are not corrected as described above, the presence of these accessory minerals results in a dilution of the analyzed value. On the other, hand the absence of such accessory minerals in the heavy mineral fraction may result in an enhancement of tin or tungsten values to the point where false anomalies may seem indicated. The procedure described above eliminates the misleading factor introduced by the presence or absence of non-ore heavy minerals.

These corrected values (R) of tin and tungsten in a standardized volume of alluvial gravel should not be taken as a measure of placer grade since recovery (R) is based on an analytical determination by semi-quantitative technique. Furthermore, absolute values of strongly anomalous samples cannot be determined since analyses as reported in appendix A are limited by an upper detection level of 10,000 ppm.

## EVALUATION OF TIN AND TUNGSTEN

The calculated recovered elemental weights of tin and tungsten were determined as previously described. Data reduction followed by a visual scan of the value range groupings indicated that the upper 6.2% and 3.9% of the total number of values (R) of tin and tungsten, respectively, could be considered strongly anomalous ( $>$ 20 mg/pan). Furthermore, the next highest percentages, 8.5% and 5.4%, of the total values (R) for tin and tungsten, were arbitrarily designated as weakly anomalous ( $\geq$ 4 and $<$20 mg/pan).

Table 1. Anomalous values of tin and tungsten

| | Map symbol | | % of total | | | |
|---|---|---|---|---|---|---|
| | tin | tungsten | tin | tungsten | tin | tungsten |
| Weakly anomalous $\geq$ 4 & $<$ 20/mg/pan | ○ (small) | △ (small) | 8.5 | 5.4 | | |
| Strongly anomalous $>$ 20 mg/pan | ○ (large) | △ (large) | 6.2 | 3.9 | | |
| Value range (mg/pan) | | | | | 0-265 | 0-175 |
| Number of samples | | | | | 514 | 514 |

NOTE: Anomalous values shown on figure 3.

Appendix A. - Semi-quantitative analyses of panned concentrates

| Map no. | Field no. | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 1 | KA 12092 | 20.1 | 7 | 50 | N | 20 | 700 | N | N | 200 | N | 1,000 | 4.1 | N |
| 2 | KA 12090 | 10.4 | 2 | 70 | N | 10 | 3,000 | N | N | N | N | N | N | N |
| 3 | KA 12088 | 1.6 | 7 | 150 | 3,000 | 100 | 700 | N | 100 | N | N | N | N | N |
| 4 | PB 16164 | 4.94 | N | 200 | 200 | 50 | 500 | 50 | 10 | 20 | N | N | 0.1 | N |
| 5 | KA 12094 | 19.5 | 7 | 200 | N | 50 | 500 | N | N | 150 | N | 1,000 | 2.93 | N |
| 6 | KA 9786 | 5 | N | 30 | N | 7 | N | N | ---- | N | N | N | N | N |
| 7 | KA 9787 | 14 | 50 | 150 | G | 70 | N | N | ---- | N | N | 20 | N | N |
| 8 | KA 9784 | 2 | 15 | 700 | N | N | G | N | N | N | N | 2,000 | N | N |
| 9 | KA 9781 | 2 | 30 | 1,500 | N | N | 5,000 | N | N | N | N | N | N | N |
| 10 | KA 9923 | 8 | 10 | 100 | N | 100 | N | N | 200 | N | N | N | N | N |
| 11 | KA 9780 | 22 | 7 | 200 | N | 100 | N | N | N | N | N | 2,000 | N | N |
| 12 | KA 9965 | 20.0 | 10 | 150 | N | 70 | 1,000 | N | N | 500 | N | 3,000 | 10 | N |
| 13 | KA 9801 | 9 | 20 | 700 | N | 150 | N | N | N | N | N | 1,500 | N | N |
| 14 | BZ 10776 | 1.73 | N | 1,000 | 200 | 150 | 20 | 20 | 20 | N | N | N | N | N |
| 15 | BZ 10774 | 2.53 | N | 500 | 500 | 150 | 20 | 20 | 10 | N | N | N | N | N |
| 16 | BZ 15301 | 20.21 | N | 200 | 100 | 50 | 100 | 20 | N | N | 100 | 700 | N | .20 |
| 17 | BZ 15303 | 11.32 | N | 500 | 200 | 50 | 100 | 20 | N | N | N | 2,000 | N | N |
| 18 | BZ 15305 | 15.56 | N | 200 | 150 | 50 | 50 | 20 | N | N | 50 | 500 | N | .78 |
| 19 | BZ 15299 | 20.26 | N | 200 | 70 | 50 | 20 | N | N | N | N | 2,000 | N | N |
| 20 | BZ 10236 | 3.69 | 50 | 150 | 100 | 100 | 300 | 30 | 50 | 10 | 100 | N | .04 | .37 |
| 21 | BZ 10238 | 4.69 | N | 200 | 300 | 30 | 50 | 20 | 100 | N | N | N | N | N |
| 22 | BZ 10770 | 6.47 | N | 300 | 200 | 30 | 20 | N | N | N | N | 300 | N | N |
| 23 | BZ 10772 | 5.04 | N | 150 | 100 | 100 | 200 | 30 | N | 10 | 200 | 500 | .05 | 1.01 |
| 24 | KA 9842 | 23 | 10 | 70 | 1,000 | 50 | N | N | 500 | N | N | 5,000 | N | N |
| 25 | KA 9822 | 14 | 20 | 700 | N | 500 | N | N | N | N | N | 2,000 | N | N |
| 26 | KA 9838 | 7 | 50 | 70 | N | 150 | N | N | N | 500 | 7,000 | 500 | 3.5 | 49 |
| 27 | KA 9840 | 25 | 50 | 200 | N | 200 | N | N | 1,500 | 2,000 | 7,000 | 7,000 | 50 | 175 |
| 28 | BZ 15006 | 2.18 | N | 50 | 300 | 30 | 300 | 50 | 20 | 100 | N | N | 0.02 | N |

See footnotes at end of appendix A.

Appendix A - Continued

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 29 | BZ 15014 | 8.28 | N | 200 | 300 | 50 | 50 | N | 100 | N | N | 2,000 | N | N |
| 30 | BZ 15004 | 5.30 | 1 | 150 | 500 | 100 | 100 | N | 100 | N | N | 1,000 | N | N |
| 31 | BZ 15010 | 11.31 | N | 200 | 300 | 50 | 50 | N | N | N | N | 2,000 | N | N |
| 32 | KA 9826 | 41 | 30 | 200 | N | 200 | N | N | N | 20 | 200 | 3,000 | 0.82 | 8.2 |
| 33 | KA 9824 | 7 | 7 | 70 | N | 150 | N | N | ---- | 150 | 2,000 | N | 1.05 | 14.0 |
| 34 | BZ 15020 | 3.17 | N | 20 | 100 | 150 | 100 | 100 | 100 | 50 | G | N | 0.16 | 31.7 |
| 35 | BZ 15023 | 1.37 | N | 50 | 300 | 200 | 200 | 100 | 50 | 30 | 100 | N | 0.04 | 0.14 |
| 36 | BZ 15290 | 14.16 | N | 200 | 50 | 100 | 300 | 30 | 30 | 50 | 500 | N | 0.7 | 7.08 |
| 37 | BZ 15287 | 8.38 | N | 100 | 50 | 70 | 200 | 20 | N | N | 50 | N | N | 0.42 |
| 38 | HZ 11919 | 53.60 | N | 100 | 200 | 50 | 100 | N | 10 | N | 50 | 1,500 | N | 2.68 |
| 39 | HZ 11918 | 7.70 | N | 500 | 100 | 150 | 50 | 20 | 10 | 50 | 100 | N | 0.39 | 0.78 |
| 40 | HZ 12151 | 14.89 | N | 200 | 300 | 70 | 20 | N | N | N | 50 | 700 | N | 0.74 |
| 41 | HZ 12195 | 21.5 | N | 100 | 300 | 100 | 50 | N | 10 | 500 | N | 700 | 10.75 | N |
| 42 | HZ 12005 | 19.4 | N | 300 | 200 | 150 | N | N | 30 | N | 1,000 | N | N | 19.4 |
| 43 | HZ 11779 | 9.3 | N | 300 | 300 | 70 | N | N | 10 | N | N | 200 | N | N |
| 44 | HZ 11777 | 20.9 | N | 100 | 100 | 50 | N | 20 | N | N | 300 | N | N | 6.27 |
| 45 | HZ 11901 | 25.2 | N | 1,000 | 100 | 100 | 50 | 20 | N | N | 100 | N | N | 2.52 |
| 46 | HZ 11899 | 5.30 | N | 100 | 200 | 150 | 1,000 | 200 | 20 | 200 | N | N | 1.06 | N |
| 47 | HZ 11979 | 35.7 | N | 100 | 300 | 50 | 50 | N | N | N | 200 | 1,500 | N | 7.14 |
| 48 | HZ 11981 | 22.5 | N | 300 | 500 | 100 | 100 | N | 50 | N | N | 1,500 | N | N |
| 49 | HZ 11983 | 21.10 | N | 100 | 300 | 30 | 50 | N | 10 | N | N | 1,000 | N | N |
| 50 | HZ 11985 | 4.0 | N | 200 | 500 | 30 | 50 | N | 20 | N | N | 200 | N | N |
| 51 | HZ 11988 | 34.80 | N | 500 | 200 | 100 | 100 | 50 | 10 | 200 | 1000 | 2000 | 6.96 | 34.8 |
| 52 | HZ 11925 | 24.1 | N | 500 | 300 | 70 | 50 | N | 10 | N | N | 700 | N | N |
| 53 | HZ 11971 | 17.7 | N | 300 | 100 | 30 | N | N | N | N | 500 | 700 | N | 8.85 |
| 54 | HZ 11904 | 14.9 | N | 200 | 100 | 70 | 20 | 20 | 10 | N | N | N | N | N |
| 55 | HZ 11951 | 43.9 | N | 200 | 300 | 50 | N | N | N | N | N | N | N | N |
| 56 | HZ 11953 | 17.7 | N | 1,000 | 100 | 100 | 500 | 50 | 10 | 15 | 100 | N | 0.03 | 1.77 |

See footnotes at end of appendix A.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 57 | HZ 11957 | 18.3 | N | 700 | 50 | 100 | 200 | 70 | N | 10 | 200 | N | 0.2 | 3.7 |
| 58 | HZ 11959 | 11.0 | N | 100 | 50 | 150 | 500 | 70 | 10 | 30 | 100 | N | 0.33 | 1.1 |
| 59 | HZ 11961 | 33.6 | N | 200 | 50 | 50 | 20 | N | 10 | 10 | 200 | N | 0.34 | 6.72 |
| 60 | HZ 12043 | 33.4 | N | 50 | 100 | 100 | 200 | 20 | N | N | N | N | N | N |
| 61 | HZ 12041 | 28.6 | N | 20 | 100 | 100 | 500 | 30 | 10 | N | N | N | N | N |
| 62 | HZ 12039 | 20.7 | N | 100 | 100 | 70 | 300 | 20 | N | N | N | N | N | N |
| 63 | HZ 11994 | 38.4 | N | 30 | 200 | 150 | 1,000 | 70 | 20 | 20 | N | N | 0.77 | N |
| 64 | HZ 11995 | 63.4 | N | 20 | 100 | 200 | 1,500 | 100 | 10 | N | N | N | N | N |
| 65 | HZ 12015 | 7.15 | N | 50 | 100 | 100 | 1,000 | 200 | 50 | 50 | N | N | 0.36 | N |
| 66 | HZ 11998 | 20.3 | N | 500 | 300 | 50 | 100 | 20 | 10 | N | N | 500 | N | N |
| 67 | HZ 12056 | 15.5 | N | 500 | 100 | 100 | 1,000 | 50 | N | N | 50 | N | N | 0.78 |
| 68 | HZ 11931 | 31.10 | N | 200 | 500 | 50 | 50 | N | 20 | N | N | 1,000 | N | N |
| 69 | HZ 12018 | 7.10 | N | 20 | 100 | 100 | 300 | 70 | 50 | 20 | N | N | 0.14 | N |
| 70 | HZ 12020 | 11.00 | N | 70 | 300 | 150 | 300 | 100 | 50 | 30 | 50 | N | 0.33 | 0.55 |
| 71 | HZ 11935 | 2.3 | N | 50 | 50 | 100 | 500 | 100 | 20 | 50 | N | N | 0.12 | N |
| 72 | HZ 12022 | 6.5 | N | 200 | 200 | 100 | 500 | 100 | 30 | 20 | N | N | 0.13 | N |
| 73 | HZ 12032 | 11.0 | N | 1,000 | 200 | 100 | 100 | 20 | 50 | N | N | 700 | N | N |
| 74 | HZ 11938 | 26.4 | N | 200 | 100 | 50 | 100 | N | 10 | N | N | 5,000 | N | N |
| 75 | HZ 12035 | 17.4 | N | 150 | 100 | 100 | 500 | 100 | 20 | 10 | N | N | 0.17 | N |
| 76 | HZ 12050 | 3.9 | N | 100 | 500 | 200 | 100 | N | 30 | N | N | 200 | N | N |
| 77 | HZ 12052 | 3.4 | N | 200 | 700 | 200 | 1,500 | N | 10 | N | N | N | N | N |
| 78 | HZ 11840 | 0.40 | N | 500 | 100 | 100 | 500 | 200 | 150 | 100 | N | N | 0.04 | N |
| 79 | HZ 11844 | 0.70 | N | 700 | 100 | 100 | 500 | 500 | 150 | 50 | 100 | N | 0.03 | 0.07 |
| 80 | HZ 11838 | 5.8 | N | 150 | 100 | 100 | 500 | 200 | 100 | 50 | 1,000 | N | 0.29 | 5.8 |
| 81 | HZ 11765 | 3.0 | N | 200 | 200 | 100 | 500 | 100 | 150 | 50 | 5,000 | N | 0.15 | 15 |
| 82 | HZ 11878 | 2.00 | N | 500 | 100 | 100 | 500 | 200 | 100 | 50 | 10,000 | N | 0.10 | 20 |
| 83 | HZ 11758 | 4.6 | 5 | 200 | 70 | 100 | 500 | 200 | 150 | 50 | 5,000 | N | 0.23 | 23 |
| 84 | HZ 11768 | 60.2 | 15 | 150 | 100 | 200 | 100 | 30 | 50 | 20 | 100 | 500 | 1.20 | 6.02 |

See footnotes at end of appendix A.

Appendix A - Continued

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 85 | HZ 11868 | 5.30 | N | 700 | 500 | 300 | 200 | 20 | 30 | N | N | 200 | N | N |
| 86 | HZ 11762 | 0.50 | 10 | 700 | 500 | 3,000 | 300 | 20 | 100 | N | N | 200 | N | N |
| 87 | HZ 11833 | 5.35 | N | 100 | 100 | 100 | 500 | 200 | 100 | 100 | 200 | N | 0.53 | 1.07 |
| 88 | HZ 11885 | 53.00 | N | 300 | 100 | 70 | 200 | 50 | 30 | N | N | 1,000 | N | N |
| 89 | HZ 11767 | 17.0 | N | 150 | 500 | 100 | 100 | 20 | 20 | N | N | 700 | N | N |
| 90 | HZ 11856 | 2.4 | N | 300 | 200 | 70 | 200 | 30 | 100 | N | N | 500 | N | N |
| 91 | HZ 11858 | 2.70 | N | 200 | 200 | 150 | 1,500 | 50 | 100 | 50 | N | 200 | 0.14 | N |
| 92 | HZ 15541 | 20.40 | N | 50 | 200 | 150 | 300 | 20 | N | 20 | 100 | N | 0.41 | 2.04 |
| 93 | HZ 15640 | 14.15 | N | 100 | 100 | 30 | 500 | 70 | N | 50 | 100 | 300 | 0.71 | 1.42 |
| 94 | KA 9927 | 6 | 10 | 1,000 | N | 70 | 2,000 | N | 700 | N | N | 3,000 | N | N |
| 95 | PB 12674 | 2.33 | N | 200 | 500 | 100 | 1,000 | 20 | 50 | N | N | N | N | N |
| 96 | PB 12676 | 8.30 | N | 200 | 1,000 | 150 | 1,000 | 20 | 30 | N | N | N | N | N |
| 97 | KA 9930 | 4 | N | 1,500 | N | 100 | 5,000 | N | N | N | N | N | N | N |
| 98 | PB 12678 | 44.09 | N | 300 | 100 | 30 | 500 | 100 | N | N | N | 1,500 | N | N |
| 99 | KA 9734 | 42 | 20 | 2,000 | N | 100 | N | N | N | N | 2,000 | 2,000 | N | 84 |
| 100 | KA 9736 | 9 | 10 | 300 | N | 100 | N | N | N | 50 | N | 500 | 0.45 | N |
| 101 | PB 12680 | 6.63 | N | 70 | 100 | 100 | 500 | 200 | 10 | 10 | N | N | 0.07 | N |
| 102 | PB 12682 | 1.28 | N | 200 | 300 | 100 | 500 | 200 | 30 | 50 | 200 | N | 0.06 | 0.26 |
| 103 | KA 9732 | 10 | 10 | 500 | N | 70 | N | N | N | 200 | N | 1,000 | 2 | N |
| 104 | KA 9730 | 17 | 15 | 300 | N | 70 | 2,000 | N | N | 150 | N | N | 2.55 | N |
| 105 | PB 12684 | 33.82 | N | 100 | 300 | 100 | 500 | 150 | 10 | 10 | N | N | 0.34 | N |
| 106 | KA 9728 | 4 | 15 | 700 | N | 70 | 500 | N | N | 150 | N | 500 | 0.60 | N |
| 107 | PB 15784 | 3.44 | N | 500 | 200 | 30 | 300 | 70 | 10 | 100 | N | N | 0.34 | N |
| 108 | PB 16246 | 4.49 | N | 70 | 50 | 50 | 200 | 20 | 10 | 10 | N | N | 0.05 | N |
| 109 | PB 16231 | 11.30 | N | 70 | 100 | 100 | 200 | 20 | N | N | N | N | N | N |
| 110 | PB 16207 | 22.10 | N | 200 | 50 | 50 | 200 | 20 | N | 20 | N | N | 0.44 | N |
| 111 | KA 9726 | 8 | 15 | 700 | N | 150 | 500 | N | N | 300 | N | 1,000 | 2.4 | N |
| 112 | PB 16161 | 0.46 | N | 100 | 300 | 50 | 200 | 100 | 50 | 50 | N | N | 0.02 | N |
| 113 | KA 10848 | 26.46 | 7 | 70 | N | 30 | 3,000 | N | N | 1,000 | N | 700 | 26.46 | N |
| 114 | KA 10846 | 6.54 | 7 | 30 | N | 30 | N | N | N | 7,000 | N | 700 | 45.78 | N |

See footnotes at end of appendix A.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt. (g) of recovered non-magnatic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 115 | KA 9724 | 12 | 30 | 300 | N | 200 | 2,000 | 3,000 | 1,000 | 2,000 | 3,000 | N | 24 | 36 |
| 116 | PB 16244 | 3.44 | N | 100 | 50 | 70 | 500 | 30 | 20 | 700 | N | N | 2.41 | N |
| 117 | KA 9466 | 22 | 20 | 1,000 | N | 50 | 200 | N | 100 | 7,000 | N | 1,000 | 154 | N |
| 118 | PB 15898 | 3.32 | N | 50 | 70 | 50 | 500 | 50 | 20 | 70 | N | N | 0.23 | N |
| 119 | PB 16108 | 1 | N | 200 | 100 | 70 | 500 | 70 | 30 | 50 | N | N | 0.05 | N |
| 120 | KA 11275 | 25.6 | 7 | 30 | N | 30 | N | N | N | N | N | 300 | N | N |
| 121 | KA 11279 | 46.7 | 3 | 1,500 | N | 30 | N | N | N | 1,000 | N | 500 | 46.7 | N |
| 122 | PB 12673 | 9.00 | N | 200 | 100 | 200 | 500 | 20 | 10 | 1,000 | 200 | N | 9 | 1.8 |
| 123 | PB 16166 | 34.49 | N | 50 | 100 | 150 | 100 | N | 10 | 5,000 | N | N | 172.45 | N |
| 124 | PB 15896 | 8.92 | N | 200 | 200 | 100 | 200 | 50 | 10 | 5,000 | N | N | 44.6 | N |
| 125 | PB 15666 | 3.44 | N | 100 | 200 | 50 | 200 | 50 | 10 | 70 | N | N | 0.24 | N |
| 126 | KA 12121 | 77.77 | 15 | 100 | N | 100 | N | N | N | N | 2,000 | 700 | N | 155.54 |
| 127 | KA 9657 | 28.5 | 15 | 300 | N | 150 | N | N | 150 | 150 | N | 500 | 4.29 | N |
| 128 | PB 16155 | 11.97 | N | 20 | 100 | 30 | N | N | N | N | N | N | N | N |
| 129 | PB 15950 | 7.04 | N | 100 | 20 | 100 | 150 | 20 | N | 300 | N | N | 2.12 | N |
| 130 | PB 16003 | 10.30 | N | 10 | 50 | 100 | 50 | N | N | N | N | N | N | N |
| 131 | PB 16005 | 14.87 | N | 100 | 100 | 100 | 200 | 20 | 10 | 300 | N | N | 4.46 | N |
| 132 | PB 15952 | 7.69 | N | 200 | 200 | 200 | 200 | 20 | 50 | 200 | N | N | 1.54 | N |
| 133 | PB 16009 | 1.95 | N | 30 | 500 | 200 | 50 | N | 100 | 10 | N | N | 0.02 | N |
| 134 | PB 16153 | 2.39 | N | 70 | 200 | 150 | 100 | 20 | 20 | 10 | N | N | 0.02 | N |
| 135 | PB 16007 | 4.78 | N | 300 | 300 | 100 | 500 | 50 | 30 | 30 | N | N | 0.14 | N |
| 136 | PB 15954 | 5.77 | N | 150 | 70 | 100 | N | N | 15 | N | N | N | N | N |
| 137 | PB 15987 | 12.81 | N | 100 | 100 | 50 | 50 | N | 10 | 50 | N | N | 0.64 | N |
| 138 | PB 15990 | 5.15 | N | 500 | 200 | 70 | 20 | 20 | 30 | N | N | N | N | N |
| 139 | PB 16000 | 7.42 | N | 1,500 | 200 | 70 | 50 | N | 50 | N | N | N | N | N |
| 140 | PB 16201 | 6.03 | N | 500 | 200 | 50 | 300 | 30 | 20 | N | N | N | N | N |
| 141 | PB 16199 | 10.26 | N | 50 | 200 | 50 | 700 | 100 | 10 | 20 | N | N | 0.20 | N |
| 142 | PB 16017 | 5.05 | N | 500 | 200 | 100 | 2,000 | 100 | 50 | 10 | 100 | N | 0.05 | 0.51 |
| 143 | PB 16015 | 1.22 | N | 700 | 200 | 50 | 500 | 70 | 10 | 20 | N | N | N | N |

See footnotes at end of appendix A.

Appendix A - Continued

| Map | Field | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 144 | PB 16197 | 6.22 | N | 700 | 200 | 30 | 100 | 50 | N | 20 | N | N | 0.12 | N |
| 145 | PB 16019 | 4.46 | N | 150 | 100 | 50 | 500 | 30 | 20 | 20 | N | N | 0.09 | N |
| 146 | PB 16203 | 13.62 | N | 150 | 70 | 70 | 1,000 | 30 | 15 | 20 | 50 | N | 0.27 | 0.68 |
| 147 | PB 16205 | 8.89 | N | 150 | 200 | 50 | 1,000 | 50 | 30 | 30 | N | N | 0.27 | N |
| 148 | PB 16021 | 6.89 | N | 500 | 300 | 30 | 300 | 70 | 10 | 10 | N | N | 0.07 | N |
| 149 | KA 9721 | 6.0 | 7 | 70 | N | 5 | N | N | N | 100 | N | N | 0.60 | N |
| 150 | KA 9719 | 3.9 | 15 | 700 | N | 70 | N | N | N | 100 | N | 200 | 0.39 | N |
| 151 | KA 9717 | 14.3 | 10 | 1,500 | N | 70 | 1,500 | N | 150 | N | N | 200 | N | N |
| 152 | PB 16013 | 11.07 | N | 500 | 200 | 100 | 500 | 50 | 20 | 10 | N | N | 0.11 | N |
| 153 | PB 16195 | 3.96 | N | 300 | 200 | 50 | 200 | 50 | 10 | N | N | 1,000 | N | N |
| 154 | PB 16193 | 8.38 | N | 500 | 50 | 30 | 200 | 100 | N | 20 | N | N | 0.17 | N |
| 155 | PB 16011 | 19.62 | N | 500 | 100 | 100 | 100 | 20 | N | N | N | N | N | N |
| 156 | HZ 15608 | 10.06 | N | 1,000 | 100 | 70 | 500 | 100 | N | 30 | 50 | N | 0.30 | 0.50 |
| 157 | PB 15798 | 16.08 | N | 500 | 200 | 70 | 1,000 | 50 | 20 | 50 | N | N | 0.80 | N |
| 158 | HZ 11821 | 19.6 | N | 1,000 | 200 | 100 | 200 | 30 | N | N | N | N | N | N |
| 159 | PB 12930 | 4.45 | N | 1,000 | 100 | 100 | 500 | 70 | N | N | 100 | N | N | 0.45 |
| 160 | HZ 11817 | 7.7 | N | 3,000 | 500 | 150 | 300 | 100 | 70 | 50 | 50 | N | 0.39 | 0.39 |
| 161 | HZ 11788 | 16.2 | N | 500 | 700 | 150 | 100 | 20 | 10 | 100 | N | N | 1.62 | N |
| 162 | HZ 10175 | 17.34 | N | 700 | 500 | 70 | 300 | 50 | N | 10 | N | N | 0.17 | N |
| 163 | HZ 11831 | 113.1 | N | 700 | 100 | 50 | 50 | 20 | N | 70 | 50 | N | 7.92 | 5.66 |
| 164 | HZ 11830 | 33.2 | N | 200 | 100 | 100 | 200 | 20 | 20 | N | N | N | N | N |
| 165 | HZ 11828 | 35.1 | N | 300 | 200 | 150 | 200 | 20 | 30 | N | N | N | N | N |
| 166 | HZ 11826 | 18.2 | N | 500 | 100 | 100 | 300 | 20 | 20 | N | N | N | N | N |
| 167 | HZ 10251 | 4.41 | N | 500 | 70 | 100 | 700 | 20 | 15 | 30 | N | N | 0.13 | N |
| 168 | HZ 11801 | 4.7 | N | 700 | 200 | 100 | 200 | 20 | 20 | N | N | N | N | N |
| 169 | HZ 10208 | 4.73 | N | 500 | 100 | 100 | 500 | 20 | 15 | 3,000 | 50 | N | 14.19 | 0.24 |
| 170 | HZ 11792 | 5.3 | N | 2,000 | 200 | 150 | 200 | 20 | 20 | 500 | N | N | 2.65 | N |
| 171 | PB 15801 | 5.51 | N | 1,500 | 500 | 70 | 500 | 100 | 10 | 2,000 | 100 | N | 11.02 | 0.55 |
| 172 | PB 15796 | 1.64 | 1 | 3,000 | 100 | 50 | 700 | 100 | 15 | 3,000 | N | N | 4.92 | N |

See footnotes at end of appendix A.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 173 | PB 15794 | 1.20 | N | 2,000 | 300 | 100 | 500 | 100 | 20 | 150 | N | N | 0.18 | N |
| 174 | PB 15501 | 0.27 | N | 3,000 | 200 | 100 | N | 100 | 50 | 2,000 | N | N | 0.54 | N |
| 175 | PB 15503 | 1.87 | N | 2,000 | 50 | 70 | 1,000 | 50 | 20 | 3,000 | 100 | N | 5.61 | 0.19 |
| 176 | PBv15792 | 0.2 | N | 5,000 | 300 | 50 | 500 | 70 | 20 | 150 | N | N | 0.03 | N |
| 177 | PB 12923 | 1.15 | N | 1,500 | 200 | 100 | 500 | 200 | 20 | 200 | N | N | 0.23 | N |
| 178 | KA 9713 | 2.15 | 7 | 700 | N | 150 | 3,000 | N | 150 | N | N | N | N | N |
| 179 | KA 9711 | 5.4 | 15 | 1,000 | N | 200 | N | N | 700 | N | N | N | N | N |
| 180 | KA 10928 | 4.9 | 10 | 1,500 | 1,000 | 100 | 10,000 | N | N | N | N | N | N | N |
| 181 | PB 16190 | 3.15 | N | 3,000 | 100 | 30 | 50 | N | N | N | N | N | N | N |
| 182 | PB 10394 | 17.41 | N | 2,000 | 100 | 100 | N | 100 | 20 | 10,000 | N | N | 174.1 | N |
| 183 | KA 10941 | 4.5 | N | ---- | G | 50 | 5,000 | N | N | 7,000 | N | 500 | 31.5 | N |
| 184 | PB 10397 | 10.72 | N | 5,000 | 100 | 150 | N | 200 | 20 | 10,000 | N | N | 107.2 | N |
| 185 | PB 16060 | 15.66 | N | 500 | 50 | 150 | 100 | 30 | N | 150 | N | N | 2.35 | N |
| 186 | KA 10933 | 5.8 | 20 | ---- | N | 200 | 10,000 | N | 100 | G | N | 1,000 | 58 | N |
| 187 | KA 10936 | 2.55 | 7 | ---- | 2,000 | 150 | 5,000 | 700 | N | 1,000 | N | N | 2.55 | N |
| 188 | KA 10938 | 3.4 | 2 | 1,500 | N | 150 | N | N | N | N | N | N | N | N |
| 189 | Pbv15519 | 1.98 | N | 3,000 | 500 | 50 | N | 30 | 30 | 70 | N | N | 0.14 | N |
| 190 | PBv15517 | 1.32 | N | 1,000 | 300 | 100 | 1,000 | 100 | 100 | 200 | 50 | N | 0.164 | 0.04 |
| 191 | PBv15507 | 0.96 | | 1,500 | 500 | 100 | N | 100 | 70 | 200 | N | N | 0.19 | N |
| 192 | PBv15509 | 1.54 | N | 700 | 150 | 50 | 500 | 70 | 10 | 50 | 100 | N | 0.08 | 0.16 |
| 193 | PBv15511 | 1.77 | N | 700 | 500 | 200 | 1,000 | 100 | 100 | 50 | 100 | N | 0.09 | 0.17 |
| 194 | PBv15513 | 1.42 | N | 500 | 500 | 100 | N | 100 | 100 | 5,000 | N | N | 7.1 | N |
| 195 | PBv15515 | 1.42 | N | 200 | 300 | 300 | N | N | 100 | 200 | N | N | 0.28 | N |
| 196 | PBv15557 | 1.58 | N | 1,500 | 500 | 150 | 1,000 | 20 | 100 | 1,000 | N | 200 | 1.58 | N |
| 197 | PB 13000 | 8.76 | N | 1,500 | 100 | 100 | N | N | 10 | 20 | N | N | 0.17 | N |
| 198 | KA 9964 | 3.28 | 15 | ---- | N | 150 | 7,000 | N | 700 | G | G | N | 32.8 | 32.8 |
| 199 | PB 11144 | 1.65 | N | 3,000 | 200 | 100 | N | 300 | 100 | 100 | 200 | N | 0.17 | 0.35 |
| 200 | PB 11146 | 1.49 | N | 5,000 | 300 | 50 | 1,000 | 100 | 30 | 200 | 50 | N | 0.25 | 0.07 |
| 201 | PB 11148 | 1.06 | N | 2,000 | 200 | 100 | 2,000 | 200 | 50 | 5,000 | 500 | N | 5.3 | 0.53 |

See footnotes at end of appendix A.

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 202 | PB 10182 | 0.84 | N | 2,000 | 100 | 50 | 5,000 | 150 | 70 | 200 | 70 | N | 0.17 | 0.0 |
| 203 | PB 10181 | 0.44 | N | 3,000 | 100 | 50 | 5,000 | 150 | 50 | 50 | 50 | N | 0.02 | 0.0 |
| 204 | PB 10180 | 3.26 | N | 2,000 | 50 | 100 | 5,000 | 200 | 70 | 100 | 200 | N | 0.33 | 0.6 |
| 205 | PB 10179 | 1.24 | N | 2,000 | 20 | 100 | G | 150 | 50 | 3,000 | 500 | N | 3.72 | 0.6 |
| 206 | PB 10178 | 0.24 | N | 7,000 | 200 | 50 | 2,000 | 150 | 50 | 500 | 100 | N | 0.12 | 0.0 |
| 207 | PB 10191 | 3.89 | N | 500 | 200 | 70 | 500 | 150 | 30 | 2,000 | 50 | N | 7.78 | 0.1 |
| 208 | PB 12639 | 1.14 | N | 2,000 | 200 | 70 | 1,000 | 100 | 10 | 50 | 50 | N | 0.06 | 0.0 |
| 209 | PB 11151 | 1.36 | N | 5,000 | 200 | 100 | 500 | 70 | 10 | 200 | 100 | N | 0.22 | 0.1 |
| 210 | PB 11153 | 0.26 | N | 1,500 | 100 | 100 | 10,000 | 200 | 20 | 2,000 | 200 | N | 0.52 | 0.0 |
| 211 | PB 12641 | 1.41 | N | 2,000 | 200 | 70 | 1,000 | 100 | 10 | 50 | 50 | N | 0.07 | 0.0 |
| 212 | PB 12634 | 0.29 | N | 5,000 | 30 | 100 | 10,000 | 500 | 50 | 5,000 | 2,000 | N | 1.45 | 0.5 |
| 213A | RM 10168 | 12.83 | N | 1,500 | 50 | 70 | 5,000 | 200 | 20 | G | 2,000 | N | 128.3 | 25.6 |
| 213B | RM 10169 | 7.66 | N | 7,000 | 100 | 100 | 2,000 | 150 | 20 | G | 2,000 | N | 76.6 | 15.3 |
| 214 | PB 16170 | 5.56 | N | N | 50 | 30 | 700 | 70 | N | 50 | 50 | N | 0.28 | 0.2 |
| 215 | PB 15900 | 0.9 | N | 200 | 100 | 70 | 700 | 70 | 20 | 100 | N | N | 0.09 | N |
| 216 | PB 10184 | 1.5 | N | 2,000 | 200 | 50 | 1,000 | 150 | 20 | 1,000 | 100 | N | 1.5 | 0.1 |
| 217 | PB 10190 | 0.62 | N | 10,000 | 200 | 70 | 10,000 | 100 | 30 | 3,000 | 100 | N | 1.86 | 0.0 |
| 218 | PB 10189 | 2.46 | N | 3,000 | 100 | 100 | 10,000 | 200 | 100 | G | 10,000 | N | 24.6 | 24.6 |
| 220 | PB 16218† | 0.5 | N | 2,000 | 50 | 50 | 7,000 | 500 | 150 | G | 2,000 | N | 5 | 1 |
| 221 | PB 16219† | 2.39 | N | 3,000 | 10 | 50 | G | 500 | 100 | G | 10,000 | N | 23.9 | 23.9 |
| 222 | PB 16220† | 3.11 | N | 2,000 | N | 50 | 10,000 | 1,000 | 100 | G | G | N | 31.1 | 31.1 |
| 223 | PB 15146† | 5.71 | N | 1,500 | 50 | 70 | 7,000 | 500 | 100 | G | G | N | 57.1 | 57.1 |
| 224 | PB 10305 | 0.15 | N | 5,000 | 700 | 100 | 10,000 | 1,000 | 50 | G | G | N | 1.5 | 1.5 |
| 225 | PB 15871 | 0.52 | N | 2,000 | 200 | 150 | 1,500 | 100 | 100 | 1,000 | 200 | N | 0.52 | 0.1 |
| 226 | PB 10297* | 1.01 | N | 3,000 | 50 | 100 | 10,000 | 500 | 100 | G | G | N | 10.1 | 10.1 |
| 227 | PB 10295 | 0.46 | N | 5,000 | 100 | 100 | 5,000 | 700 | 200 | G | 5,000 | N | 4.6 | 2.3 |
| 228 | PB 15864 | 2.99 | N | 2,000 | 100 | 100 | 5,000 | 100 | 50 | G | 1,000 | 200 | 29.9 | 2.9 |
| 229 | PB 12940* | 1.20 | N | 1,500 | 10 | 100 | G | 500 | 30 | G | 1,000 | N | 12.0 | 1.2 |

See footnotes at end of appendix A.

Note. - † - Original sample was composed of 3 pans of gravel, recovered concentrate presented is 1/3 of actual total.

* - Original sample was composed of 2 pans of gravel, recovered concentrate presented is 1/2 of actual total.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 230 | PB 15862 | 3.05 | N | 1,500 | 50 | 70 | 5,000 | 200 | 30 | G | G | N | 30.5 | 30.5 |
| 231 | PB 10312 | 1.41 | N | 50 | N | 30 | 1,000 | 2,000 | 100 | G | G | N | 14.1 | 14.1 |
| 232 | PB 10308 | 1.24 | N | 2,000 | 10 | 100 | 10,000 | 700 | 100 | G | G | N | 12.4 | 12.4 |
| 233 | PB 12652 | 1.21 | N | 5,000 | 500 | 150 | 5,000 | 1,000 | 300 | G | 5,000 | N | 12.1 | 6.05 |
| 234 | PB 15876 | 0.54 | N | 7,000 | 500 | 200 | 2,000 | 150 | 150 | 10,000 | 500 | N | 5.4 | 0.27 |
| 235 | PB 10314 | 0.03 | N | 7,000 | 500 | 100 | 2,000 | 200 | 70 | 7,000 | 300 | N | 0.20 | 0.01 |
| 236 | PB 12650 | 0.41 | N | 1,000 | 200 | 100 | 1,000 | 200 | 20 | 100 | 2,000 | N | 0.04 | 0.82 |
| 237 | PB 10248 | 0.23 | N | 5,000 | 200 | 100 | 7,000 | 300 | 150 | 3,000 | 2,000 | N | 0.69 | 0.46 |
| 238 | PB 10246 | 0.04 | N | 5,000 | 100 | 100 | 2,000 | 300 | 50 | 100 | 200 | N | N | N |
| 239 | PB 12655 | 0.20 | N | 200 | 500 | 50 | 1,500 | 500 | 50 | 2,000 | 500 | N | 0.4 | 0.1 |
| 240 | PB 10241 | 0.49 | N | 1,000 | 100 | 50 | 1,000 | 100 | 20 | 1,000 | 100 | N | 0.49 | 0.05 |
| 241 | PB 15866 | 2.15 | N | 3,000 | 50 | 100 | 5,000 | 150 | 70 | 5,000 | 500 | N | 10.75 | 0.11 |
| 242 | KA 9673 | 0.45 | 7 | 1,500 | N | 15 | 5,000 | N | N | 700 | N | N | 0.32 | N |
| 243 | KA 9675 | 3.1 | 15 | 1,500 | N | 200 | N | G | 500 | 1,000 | G | N | 3.1 | 31 |
| 244 | KA 9670 | 1.45 | 15 | 1,500 | N | 150 | 5,000 | 7,000 | 300 | 2,000 | 3,000 | N | 2.90 | 4.35 |
| 245 | KA 9666 | 0.23 | 3 | 1,500 | N | 150 | 3,000 | N | 700 | 300 | N | N | 0.07 | N |
| 246 | PB 11158 | 0.37 | N | 3,000 | 100 | 50 | 1,000 | 300 | 200 | 1,500 | 500 | N | 0.56 | 0.19 |
| 247 | KA 9664 | 1.75 | 15 | 1,500 | N | 150 | 3,000 | 700 | N | 5,000 | 100 | 500 | 8.75 | 0.18 |
| 248 | PB 10294 | 3.46 | N | 3,000 | 500 | 200 | 500 | 20 | 20 | 2,000 | N | N | 6.92 | N |
| 249 | PB 11159 | 0.24 | N | 7,000 | 500 | 100 | 2,000 | 500 | 50 | 3,000 | 1,000 | N | 0.72 | 0.24 |
| 250 | PB 15994 | 3.07 | N | 2,000 | 300 | 100 | 200 | 20 | 100 | 200 | N | N | 0.61 | N |
| 251 | PB 15996 | 5.23 | N | 50 | 100 | 100 | 150 | N | 20 | N | N | N | N | N |
| 252 | PB 16189 | 1.15 | N | 100 | 300 | 100 | 200 | 20 | 100 | 50 | N | N | 0.05 | N |
| 253 | PB 16187 | 0.41 | N | 5,000 | 300 | 150 | 2,000 | 100 | 20 | 3,000 | 100 | N | 1.23 | 0.04 |
| 254 | PB 10250 | 0.67 | N | 10,000 | 200 | 150 | 2,000 | 300 | 100 | G | 2,000 | N | 6.7 | 1.34 |
| 255 | PB 10249 | 0.09 | N | 10,000 | 500 | 50 | 2,000 | 200 | 20 | 5,000 | 500 | N | 0.45 | 0.05 |
| 256 | PB 15992 | 0.6 | N | 2,000 | 50 | 50 | 1,500 | 200 | 30 | 2,000 | 200 | N | 1.2 | 0.12 |
| 257 | PB 16185 | 1.04 | N | 5,000 | 70 | 70 | 2,000 | 100 | 30 | 5,000 | 500 | N | 5.2 | 0.52 |
| 258 | PB 16178 | 0.27 | N | 2,000 | 100 | 70 | 1,500 | 300 | 150 | G | 10,000 | N | 2.7 | 2.7 |

See footnotes at end of appendix A.

Appendix A - Continued

| Map no. | Field no. | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Wt. (mg) of recovered element (R)[1] Sn | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 259 | PB 15988 | 5.97 | N | 500 | 100 | 70 | 100 | 20 | 50 | 20 | N | N | 0.12 | N |
| 260 | PT 15985 | 2.34 | N | 2,000 | 300 | 100 | 5,000 | 500 | 500 | G | G | N | 23.4 | 23.4 |
| 261 | RM 8686 | 0.9 | N | 3,000 | 100 | 100 | 5,000 | 500 | 100 | G | 10,000 | N | 9 | 9 |
| 262 | PT 16176 | 0.38 | N | 1,500 | 50 | 70 | 2,000 | 200 | 50 | 3,000 | 200 | N | 1.14 | 0.08 |
| 263 | RM 8659 | 0.81 | N | 2,000 | 150 | 150 | 2,000 | 500 | 500 | 10,000 | 1,000 | N | 8.1 | 0.81 |
| 264A | RM 8689 | 3.5 | N | 300 | 50 | 70 | N | 500 | 20 | G | N | N | 35 | N |
| 264B | PT 15983 | 13.65 | N | 500 | 50 | 150 | 7,000 | 200 | 15 | G | 1,000 | N | 136.5 | 13.65 |
| 265 | KA 11290 | 6.34 | 7 | 150 | N | 150 | 3,000 | N | 500 | 2,000 | N | N | 12.68 | N |
| 266 | PT 16172 | 0.81 | N | 10 | 100 | 150 | 700 | 100 | 50 | 50 | N | N | N | N |
| 267 | KA 10860 | 26.46 | 30 | 1,500 | N | 150 | N | N | 1,000 | G | 2,000 | N | 264.6 | 52.92 |
| 268 | KA 11292 | 14.16 | 15 | 1,000 | N | 150 | N | N | N | 7,000 | 700 | N | 99.12 | 9.12 |
| 269 | KA 11285 | 1.63 | 7 | 1,500 | N | 70 | N | N | 300 | 2,000 | N | N | 3.26 | N |
| 270 | PT 15981 | 0.21 | N | 200 | 100 | 100 | 1,000 | 50 | 70 | 3,000 | N | N | 0.63 | N |
| 271 | KA 11283 | 2.0 | 7 | 300 | N | 3,000 | N | N | 1,500 | 1,000 | N | N | 2 | N |
| 272 | KA 11281 | 0.33 | 10 | 2,000 | N | 300 | N | N | 500 | 2,000 | N | 700 | 0.66 | N |
| 273 | RM 11021 | 0.92 | N | 1,500 | 200 | 100 | 300 | 70 | 150 | 2,000 | 1,000 | N | 1.84 | 0.92 |
| 274 | RM 11003 | 0.59 | N | 1,000 | 200 | 100 | 500 | 70 | 30 | G | 1,000 | N | 5.9 | 0.59 |
| 275 | RM 8746 | 0.27 | N | 1,000 | 500 | 100 | 1,000 | 50 | 100 | 700 | 500 | N | 0.19 | 0.14 |
| 276 | RM 8747 | 1.38 | N | 1,000 | 200 | 100 | 1,500 | 500 | 100 | 10,000 | 10,000 | N | 13.8 | 13.8 |
| 277 | RM 8748 | 0.27 | N | 2,000 | 100 | 100 | 1,000 | 70 | 150 | 30 | 50 | N | 0.01 | 0.01 |
| 278 | RM 11010 | 4.89 | N | 50 | 50 | 5 | N | N | N | 10 | 10,000 | N | N | 48.9 |
| 279 | RM 11009 | 3.84 | N | 30 | 20 | 3 | N | N | N | N | N | N | N | N |
| 280 | RM 11066 | 3.59 | N | 20 | 300 | 150 | N | 20 | 15 | 70 | N | N | 0.25 | N |
| 281 | RM 11065 | 1.44 | N | 500 | 200 | 100 | 1,000 | 100 | 50 | 2,000 | 200 | N | 2.88 | 0.29 |
| 282 | RM 8716 | 4.25 | N | 200 | 20 | 150 | 700 | 50 | N | 20 | N | N | 0.09 | N |
| 283 | RM 10141 | 9.82 | N | 50 | 30 | 100 | 100 | N | N | N | N | N | N | N |
| 284 | RM 10197 | 77.48 | N | 10 | 20 | 100 | 150 | 50 | N | 30 | N | N | 2.33 | N |
| 285 | RM 10164 | 4.85 | N | 20 | 300 | 100 | N | 20 | 10 | 10 | N | N | 0.05 | N |
| 286 | RM 10097 | 1.19 | N | 30 | 20 | 70 | 700 | 50 | 10 | 30 | 50 | N | 0.03 | 0.05 |

See footnotes at end of appendix A.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Wt. (mg) of recovered element (R)[1] Sn | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 287 | RM 10100 | 2.13 | N | 1,000 | 100 | 100 | 200 | 50 | 10 | 20 | N | N | 0.04 | N |
| 288 | RM 10098 | 2.63 | N | 700 | 100 | 50 | 500 | 100 | N | N | 50 | N | N | 0.13 |
| 289 | RM 8733 | 0.66 | N | 500 | 200 | 50 | 200 | 70 | 10 | 50 | N | N | 0.03 | N |
| 290 | RM 10092 | 6.67 | N | 10 | 50 | 50 | 700 | 50 | N | 70 | 50 | N | 0.47 | 0.33 |
| 291 | RM 10090 | 1.96 | N | 50 | 100 | 100 | 700 | 50 | 10 | 150 | 50 | N | 0.29 | 0.10 |
| 292 | RM 10088 | 6.45 | N | 700 | 50 | 100 | 1,500 | 200 | 30 | 20 | 1,000 | N | 0.13 | 6.45 |
| 293 | RM 8534 | 2.08 | N | 200 | 100 | 50 | 500 | 50 | 10 | 50 | N | N | 0.10 | N |
| 294 | RM 8533 | 1.20 | N | 1,000 | 50 | 150 | 1,000 | 150 | 20 | 100 | 50 | N | 0.12 | 0.06 |
| 295 | RM 8721 | 0.09 | N | 500 | 200 | 100 | 200 | 100 | 50 | 5,000 | 100 | N | 0.45 | 0.01 |
| 296 | RM 8722 | 1.32 | N | 200 | 300 | 150 | 1,000 | 50 | 100 | 100 | N | N | 0.13 | N |
| 297 | RM 8723 | 4.60 | N | 20 | 300 | 150 | 100 | 20 | 20 | 50 | N | N | 0.23 | N |
| 298 | RM 10077 | 4.19 | N | 200 | 100 | 100 | 1,500 | 50 | 30 | 10,000 | 150 | N | 41.9 | 0.63 |
| 299 | RM 10086 | 0.81 | N | 1,000 | 100 | 100 | 300 | 100 | 20 | 50 | 500 | N | 0.04 | 0.40 |
| 300 | RM 10084 | 0.37 | N | 500 | 100 | 100 | 300 | 30 | 10 | 2,000 | 2,000 | N | 0.72 | 0.72 |
| 301 | RM 10082 | 0.19 | N | 1,000 | 150 | 500 | 1,000 | 100 | 70 | 5,000 | 1,000 | N | 0.95 | 0.19 |
| 302 | RM 10081 | 0.2 | N | 1,000 | 200 | 50 | 1,000 | 50 | 100 | 300 | 300 | N | 0.06 | 0.06 |
| 303 | RM 11046 | 0.32 | N | 2,000 | 300 | 100 | 1,000 | 70 | 70 | 200 | 100 | N | 0.06 | 0.03 |
| 304 | RM 10239 | 0.41 | N | 1,000 | 500 | 150 | 2,000 | 150 | 100 | G | 1,000 | N | 4.1 | 0.41 |
| 305 | RM 8096 | 3.21 | N | 2,000 | 100 | 100 | 10,000 | 500 | 100 | G | 5,000 | N | 32.1 | 16.05 |
| 306 | RM 8681 | 4.38 | N | 200 | 500 | 100 | 100 | 20 | 50 | 50 | 50 | N | 0.72 | 0.72 |
| 307 | RM 8679 | 8.93 | N | 500 | 100 | 70 | 1,000 | 100 | 30 | 1,000 | 1,000 | N | 8.93 | 8.93 |
| 308 | RM 8676 | 5.61 | N | 1,000 | 100 | 100 | 7,000 | 300 | 50 | 5,000 | 500 | N | 28.05 | 2.81 |
| 309 | RM 10139 | 0.88 | N | 500 | 150 | 100 | 1,500 | 200 | 10 | 200 | 50 | N | 0.18 | 0.04 |
| 310 | RM 10105 | 1.25 | N | 1,000 | 300 | 70 | 1,000 | 150 | 20 | 3,000 | 50 | N | 3.75 | 0.06 |
| 311 | RM 10110 | 0.3 | N | 1,000 | 100 | 200 | 1,000 | 200 | 50 | G | 500 | N | 3.0 | 0.15 |
| 312 | RM 10112 | 1.84 | N | 30 | 200 | 150 | 1,500 | 20 | 20 | 150 | N | N | 0.28 | N |
| 313 | RM 10115 | 10.86 | N | 100 | 300 | 100 | 100 | N | 20 | 70 | N | N | 0.71 | N |
| 314 | RM 8773 | 0.07 | N | 1,000 | 200 | 150 | 500 | 50 | 30 | 700 | N | N | 0.04 | N |
| 315 | RM 8775 | 1.34 | N | 500 | 200 | 200 | 1,000 | 100 | 100 | 2,000 | 1,000 | N | 2.68 | 1.34 |

See footnotes at end of appendix A.

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 316 | RM 8794 | 4.99 | N | 50 | 300 | 150 | 100 | N | 20 | 20 | N | N | 0.1 | N |
| 317 | RM 8777 | 3.62 | N | 10 | 300 | 100 | 100 | N | 10 | N | N | N | N | N |
| 318 | RM 8752 | 0.67 | N | 700 | 200 | 70 | 300 | 20 | 20 | 200 | 50 | N | 0.13 | 0.03 |
| 319 | RM 8670 | 0.15 | N | 50 | 200 | 100 | 500 | 20 | 100 | 700 | 100 | N | 0.105 | 0.02 |
| 320 | RM 8672 | 0.74 | N | 500 | 200 | 50 | 500 | 150 | 20 | 50 | 100 | N | 0.04 | 0.07 |
| 321 | RM 11238 | 1.14 | N | 100 | 300 | 100 | 150 | N | 20 | 20 | N | N | 0.02 | N |
| 322 | RM 10121 | 4.0 | N | 100 | 200 | 100 | 20 | N | 20 | N | N | N | N | N |
| 323 | RM 10103 | 0.53 | N | 100 | 500 | 200 | 50 | 20 | 70 | 70 | N | N | 0.04 | N |
| 324 | RM 10118 | 0.90 | N | 200 | 500 | 100 | 1,000 | 150 | 100 | 1,000 | 50 | N | 0.90 | 0.05 |
| 325 | RM 11039 | 0.43 | N | 700 | 500 | 100 | 1,000 | 50 | 30 | 50 | N | N | 0.02 | N |
| 326 | RM 11228 | 0.49 | N | 100 | 300 | 100 | 500 | 50 | 50 | 50 | N | N | 0.02 | N |
| 327 | RM 8691 | 1.91 | N | 500 | 500 | 100 | 1,000 | 200 | 100 | G | 5,000 | N | 19.1 | 9.55 |
| 328 | RM 8545 | 1.22 | N | 200 | 500 | 150 | 1,000 | 30 | 50 | 200 | 100 | N | 0.24 | 0.12 |
| 329 | RM 11212 | 1.14 | N | 50 | 700 | 150 | 200 | 20 | 70 | N | N | N | N | N |
| 330 | RM 8750 | 10.94 | N | 30 | G | 500 | 20 | N | 70 | 100 | N | N | 1.09 | N |
| 331 | RM 8664 | 21.41 | N | 20 | 300 | 100 | 50 | N | N | 50 | N | N | 1.07 | N |
| 332 | RM 8100 | 1.5 | N | 200 | 500 | 200 | 1,000 | 20 | 300 | 2,000 | N | N | 3.0 | N |
| 333 | RM 8319 | 6.20 | N | 100 | 300 | 500 | 500 | N | 200 | G | 100 | N | 62.0 | 0.62 |
| 334 | RM 8320 | 2.85 | N | 200 | 500 | 200 | 2,000 | N | 100 | 5,000 | N | N | 14.25 | N |
| 335 | RM 8768 | 3.47 | N | 200 | 500 | 300 | 300 | 30 | 100 | 3,000 | N | N | 10.41 | N. |
| 336 | RM 8779 | 1.54 | N | 150 | 500 | 200 | 1,000 | 20 | 200 | G | 50 | N | 15.4 | 0.08 |
| 337 | RM 8321 | 8.75 | 20 | 300 | 700 | 300 | 500 | 20 | 3,000 | 1,000 | N | N | 8.75 | N |
| 338 | RM 8740 | 19.34 | N | 10 | 100 | 50 | N | N | N | N | N | N | N | N |
| 339 | RM 11037 | 6.75 | N | 10 | 300 | 70 | N | N | N | N | N | N | N | N |
| 340 | RM 11035 | 6.44 | N | 10 | 300 | 150 | N | N | N | 20 | N | N | 0.13 | N |
| 341 | RM 8784 | 45.19 | N | 15 | 200 | 100 | N | N | N | 10 | N | N | 0.45 | N |
| 342 | RM 8786 | 9.07 | N | 10 | 1,000 | 70 | 70 | 20 | N | 500 | 100 | N | 4.53 | 0.91 |
| 343 | RM 8759 | 8.05 | N | 20 | 1,500 | 50 | N | N | 10 | 30 | 50 | N | 0.24 | 0.40 |
| 344 | RM 8788 | 6.07 | N | N | 5,000 | 100 | N | N | N | 50 | N | N | 0.30 | N |

See footnotes at end of appendix A.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt.(g) of recovered on-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 345 | RM 10148 | 8.75 | N | 20 | 5,000 | 100 | N | N | N | 10 | N | N | 0.09 | N |
| 346 | RM 11203 | 27.16 | N | 10 | 700 | 100 | N | N | N | N | N | N | N | N |
| 347 | RM 10150 | 22.65 | N | N | 100 | 50 | N | N | N | N | N | N | N | N |
| 348 | RM 10108 | 10.98 | N | 200 | 200 | 150 | 300 | 50 | 20 | 10,000 | 700 | N | 109.8 | 7.68 |
| 349 | RM 10107 | 0.54 | N | 2,000 | 500 | 150 | 1,000 | 50 | 100 | 700 | N | N | 0.38 | N |
| 350 | RM 10109 | 6.47 | N | 30 | 500 | 100 | 20 | N | 20 | 300 | N | N | 1.94 | N |
| 351 | RM 10145 | 6.07 | N | 10 | 1,000 | 200 | N | N | 10 | 50 | N | N | 0.30 | N |
| 352 | RM 10119 | 8.41 | N | 10 | 200 | 100 | N | N | N | 200 | N | N | 1.68 | N |
| 353 | RM 11029 | 3.23 | N | 10 | 5,000 | 100 | N | 20 | 10 | N | N | N | N | N |
| 354 | RM 11001 | 16.43 | N | 20 | 7,000 | 100 | N | 20 | 10 | 20 | N | N | 0.33 | N |
| 355 | RM 8704 | 11.92 | N | 20 | 2,000 | 50 | 50 | N | N | 300 | N | N | 3.58 | N |
| 356 | RM 8703 | 10.19 | N | 50 | 300 | 150 | 200 | N | N | 200 | 100 | N | 2.04 | 1.02 |
| 357 | RM 8702 | 3.75 | N | 20 | 500 | 150 | N | N | 10 | 50 | N | N | 0.19 | N |
| 358 | RM 10146 | 4.45 | N | 10 | 500 | 150 | N | N | 10 | N | N | N | N | N |
| 359 | PL 10234 | 15.93 | N | 15 | 70 | 150 | N | N | N | N | N | N | N | N |
| 360 | PL 11178 | 4.17 | N | 20 | 1,000 | 200 | N | N | 10 | N | N | N | N | N |
| 361 | PL 11180 | 4.25 | N | 20 | G | 150 | N | N | 10 | N | N | N | N | N |
| 362 | PL 10793 | 4.54 | N | 300 | 500 | 100 | 100 | N | N | N | N | N | N | N |
| 363 | PL 11090 | 27.5 | N | 500 | 70 | 150 | N | 20 | 10 | N | N | N | N | N |
| 364 | PL 11188 | 1.79 | N | 20 | 700 | 200 | N | N | 10 | N | N | N | N | N |
| 365 | PL 10782 | 0.27 | N | 150 | 2,000 | 150 | 100 | N | 50 | N | N | N | N | N |
| 366 | PL 10780 | 0.49 | N | 200 | 7,000 | 100 | 700 | N | 30 | N | N | N | N | N |
| 367 | PL 10786 | 0.03 | 7 | 50 | 3,000 | 200 | 30 | N | 30 | N | N | N | N | N |
| 368 | PL 10788 | 0.12 | N | 50 | 1,000 | 300 | N | N | 20 | N | N | N | N | N |
| 369 | PL 10790 | 0.35 | N | 50 | 1,500 | 150 | 20 | N | 20 | N | N | N | N | N |
| 370 | PL 10779 | 0.19 | N | 50 | 700 | 300 | N | N | 30 | N | N | N | N | N |
| 371 | PL 10778 | 0.89 | N | 50 | 3,000 | 300 | 20 | N | 30 | N | N | 200 | N | N |
| 372 | PL 12851 | 1.74 | N | 70 | 500 | 100 | 100 | N | 10 | N | N | N | N | N |
| 373 | PL 12833 | 0.04 | N | 70 | 5,000 | 150 | 20 | N | 20 | N | N | N | N | N |

See footnotes at end of appendix A.

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 374 | PL 12552 | 3.48 | 7 | 100 | 1,500 | 200 | 150 | N | 3,000 | N | N | 1,000 | N | N |
| 375 | PL 11073 | 1.47 | 30 | 300 | 2,000 | 150 | 700 | 70 | 300 | N | 50 | 200 | N | 0.07 |
| 376 | PL 8596 | 1.58 | 2 | 100 | 1,500 | 100 | 200 | 50 | 100 | N | 200 | 300 | N | 0.32 |
| 377 | PL 12804 | 0.35 | N | 100 | G | 200 | 100 | 20 | 20 | N | N | N | N | N |
| 378 | PL 12859 | 0.57 | N | 70 | 500 | 200 | 200 | 30 | 100 | N | N | 300 | N | N |
| 379 | PL 8577 | 0.74 | N | 200 | 1,500 | 150 | 300 | 20 | 70 | N | N | 300 | N | N |
| 380 | PL 12857 | 0.24 | 30 | 150 | 1,000 | 150 | 500 | 20 | 30 | N | N | N | N | N |
| 381 | PL 12858 | 0.33 | N | 150 | 500 | 150 | 200 | 50 | 100 | N | N | 200 | N | N |
| 382 | PL 12573 | 2.56 | N | 100 | 200 | 150 | N | N | 10 | N | N | N | N | N |
| 383 | PL 11088 | 3.28 | N | 500 | 70 | 100 | N | N | 10 | N | N | N | N | N |
| 384 | PL 12571 | 0.48 | 1 | 150 | 500 | 150 | N | N | 30 | N | N | N | N | N |
| 385 | PL 12806 | 14.16 | N | 50 | 300 | 200 | N | N | 15 | N | N | N | N | N |
| 386 | PL 12835 | 0.48 | N | 100 | 7,000 | 300 | 300 | N | 20 | 20 | 100 | N | 0.01 | 0.05 |
| 387 | PL 12837 | 0.02 | 100 | 200 | 2,000 | 150 | 200 | N | 10 | 10 | N | N | N | N |
| 388 | PL 8597 | 6.0 | N | 2,000 | 100 | 100 | N | N | 10 | N | N | N | N | N |
| 389 | PL 8598 | 1.71 | N | 70 | 50 | 30 | N | N | 10 | N | N | N | N | N |
| 390 | PL 8599 | 3.25 | N | 50 | 20 | 50 | N | N | 10 | N | N | N | N | N |
| 391 | PL 8588 | 4.09 | N | 20 | 50 | 30 | N | N | N | N | N | 300 | N | N |
| 392 | PL 8589 | 4.75 | N | 50 | 50 | 30 | N | N | N | N | N | 5,000 | N | N |
| 393A | PL 12847 | 0.07 | 200 | 100 | 500 | 30 | 100 | N | 10 | N | G | N | N | 0.7 |
| 393B | PL 8600 | 13.42 | N | 500 | 300 | 50 | 100 | N | 7,000 | N | N | N | N | N |
| 394 | PL 12824 | 1.55 | 1,000 | 200 | 500 | 100 | 1,000 | N | N | N | 500 | N | N | 0.77 |
| 395 | PL 12849 | 0.77 | 20 | 100 | G | 700 | 30 | 20 | 500 | N | 500 | 2,000 | N | 0.38 |
| 396 | PL 12829 | 1.21 | 1 | 200 | 500 | 150 | 50 | 20 | 50 | N | N | 700 | N | N |
| 397 | PL 12828 | 5.12 | 30 | 300 | 1,500 | 500 | 200 | N | 100 | N | 70 | 1,000 | N | 0.36 |
| 398 | PL 12826 | 5.83 | N | 200 | 700 | 300 | 20 | N | 150 | N | N | 500 | N | N |
| 399 | PL 12843 | 0.07 | N | 100 | 3,000 | 70 | 500 | 20 | 20 | N | N | N | N | N |
| 400 | PL 12845 | 0.81 | N | 70 | 2,000 | 100 | 200 | N | 30 | N | N | N | N | N |
| 401 | PL 12820 | 0.20 | 20 | 100 | 300 | 100 | 700 | N | N | N | 500 | N | N | 0.10 |

See footnotes at end of appendix A.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) Ag | B | Ba | Cu | La | Nb(Cb) | Pn | Sn | W | Zn | Wt. (mg) of recovered element (R)[1] Sn | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 402 | PL 12822 | 3.7 | N | 50 | 300 | 100 | 200 | N | 10 | N | N | N | N | N |
| 403 | PL 12818 | 4.5 | N | 50 | 500 | 70 | 200 | N | N | N | 300 | N | N | 1.35 |
| 404 | PL 12816 | 0.18 | N | 100 | 500 | 70 | 100 | 20 | 15 | 20 | N | N | N | N |
| 405 | PL 12839 | 0.21 | N | 300 | 300 | 70 | 20 | N | 20 | N | N | 1,000 | N | N |
| 406 | PL 12841 | 0.27 | N | 200 | G | 3,000 | 20 | 20 | 100 | N | 100 | 10,000 | N | 0.03 |
| 407 | PL 12814 | 3.24 | N | 30 | 500 | 150 | 20 | 20 | 20 | N | N | N | N | N |
| 408 | PL 12810 | 10.21 | N | 20 | 500 | 200 | N | N | 15 | N | N | N | N | N |
| 409 | PL 12831 | 6.19 | N | 20 | 200 | 50 | N | N | 10 | N | N | N | N | N |
| 410 | PL 12775 | 0.34 | N | 100 | G | 150 | N | N | 20 | N | N | N | N | N |
| 411 | PL 12800 | 0.54 | N | 200 | 300 | 30 | 50 | 20 | 20 | N | N | N | N | N |
| 412 | PL 12771 | 0.18 | N | 500 | G | 2,000 | 500 | 30 | 150 | N | N | 300 | N | N |
| 413 | PL 12798 | 1.2 | N | 500 | 2,000 | 100 | 300 | 20 | 100 | N | N | N | N | N |
| 414 | PL 12769 | 0.21 | N | 500 | 1,000 | 150 | 200 | 20 | 20 | N | N | N | N | N |
| 415 | PL 12796 | 0.06 | N | 200 | 300 | 100 | N | 20 | 20 | N | N | N | N | N |
| 416 | PL 12794 | 0.37 | N | 200 | 7,000 | 50 | 200 | N | 30 | N | N | N | N | N |
| 417 | PL 12788 | 0.40 | N | 1,500 | 300 | 100 | 700 | 20 | 50 | N | N | 200 | N | N |
| 418 | PL 12792 | 0.29 | N | 300 | 300 | 150 | 50 | N | 50 | N | N | N | N | N |
| 419 | PL 12790 | 1.28 | N | 300 | 500 | 150 | N | N | 50 | N | N | 200 | N | N |
| 420 | PL 12765 | 0.05 | N | 500 | 300 | 200 | 500 | N | 30 | N | N | N | N | N |
| 421 | PL 12761A | 0.82 | N | 700 | 300 | 100 | 1,000 | N | 200 | N | N | N | N | N |
| 421 | PL 12761B | 0.12 | N | 1,000 | 300 | 20 | 500 | N | 30 | N | N | N | N | N |
| 422 | PL 12763 | 0.72 | 5 | 1,500 | 500 | 150 | 200 | 30 | 20 | N | N | N | N | N |
| 423 | PL 12757 | 0.02 | 10 | 700 | 500 | 100 | 150 | 50 | 20 | N | N | 5,000 | N | N |
| 424 | PL 12786 | 0.51 | N | 150 | 200 | 150 | 50 | N | 50 | N | N | N | N | N |
| 425 | PL 12782 | 0.24 | N | 500 | 200 | 150 | 150 | 30 | 70 | N | N | N | N | N |
| 426 | PL 12784 | 0.21 | N | 500 | 300 | 100 | 200 | 20 | 20 | N | N | N | N | N |
| 427 | BE 2888 | 2.05 | 30 | 30 | 5,000 | 100 | N | N | 70 | N | N | N | N | N |
| 428 | BE 2890 | 6.40 | 3 | 50 | N | 50 | N | N | N | N | N | N | N | N |
| 429 | BE 2251 | 6.57 | 3 | 150 | N | 10 | 1,000 | N | N | N | N | N | N | N |

See footnotes at end of appendix A.

Appendix A - Continued

| Map no. | Field no. | Wt.(g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) | | | | | | | | | | Wt. (mg) of recovered element (R)[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Sn | W |
| 430 | BE 2253 | 5.31 | 3 | 150 | N | 100 | 1,000 | N | N | N | N | N | N | N |
| 431 | BE 2988 | 0.49 | 3 | 150 | 1,500 | 100 | N | N | N | N | N | N | N | N |
| 432 | BE 2992 | 4.14 | 3 | 300 | 2,000 | 50 | N | N | N | N | N | N | N | N |
| 433 | BE 2996 | 2.36 | 5 | 2,000 | 150 | 5,000 | 2,000 | N | N | 5,000 | N | 700 | 11.80 | N |
| 434 | BE 2999 | 3.06 | 5 | 20 | N | 100 | N | N | N | N | N | N | N | N |
| 435 | BE 3000 | 10.98 | 3 | 70 | N | 10 | N | N | N | N | N | N | N | N |
| 436 | BE 2893 | 10.03 | 3 | 150 | N | 100 | N | N | N | N | N | N | N | N |
| 437 | BE 2255 | 10.90 | 3 | 70 | N | 70 | 1,000 | N | N | N | N | N | N | N |
| 438 | BE 2895 | 5.29 | 3 | 1,500 | 1,000 | 50 | N | N | N | N | N | N | N | N |
| 439 | BE 2257 | 6.88 | 5 | 100 | 3,000 | 150 | 500 | N | N | N | N | N | N | N |
| 440 | BE 2259 | 0.73 | 5 | 100 | N | 1,500 | N | N | 300 | N | N | 1,500 | N | N |
| 441 | BE 383 | 1.66 | 10 | 300 | 1,500 | 150 | N | N | N | N | N | 7,000 | N | N |
| 442 | BE 384 | 2.97 | 5 | 700 | 1,500 | 100 | N | N | N | N | N | 1,000 | N | N |
| 443 | BE 387 | 0.59 | 3 | 150 | N | 20 | N | N | 50 | N | N | N | N | N |
| 444 | BE 402 | 0.33 | 5 | 500 | 1,500 | 50 | N | N | N | N | N | N | N | N |
| 445 | BE 1075 | 0.08 | 1 | 500 | N | 500 | G | N | 100 | 100 | N | N | 0.01 | N |
| 446 | BE 1122 | 1.23 | 10 | 200 | 1,000 | 500 | 200 | N | N | N | N | 1,000 | N | N |
| 447 | BE 1128 | 0.14 | 10 | 200 | 1,000 | 2,000 | N | N | 200 | 200 | N | 1,000 | 0.03 | N |
| 448 | BE 1130 | 0.65 | 2 | 500 | N | 200 | 10,000 | N | N | 100 | N | 10,000 | 0.07 | N |
| 449 | BE 1135 | 1.15 | 10 | 100 | N | 200 | 3,000 | N | N | 50 | N | 1,000 | 0.06 | N |
| 450 | BE 1136 | 2.16 | 10 | 200 | N | 500 | N | N | N | N | N | 1,000 | N | N |
| 451 | BE 1193 | 2.86 | 10 | 150 | G | 1,000 | N | 200 | N | N | N | 2,000 | N | N |
| 452 | BE 1191 | 4.75 | 10 | 50 | N | 500 | N | N | N | N | N | 2,000 | N | N |
| 453 | BE 1189 | 14.31 | 1 | 10 | N | N | N | N | N | N | N | 2,000 | N | N |
| 454 | BE 1186 | 8.53 | 10 | 20 | N | 500 | N | N | N | N | N | 2,000 | N | N |
| 455 | BE 1184 | 5.09 | 10 | 50 | N | 300 | N | N | N | N | N | 1,000 | N | N |
| 456 | BE 1181 | 3.04 | 10 | 50 | N | 500 | N | N | N | N | N | 1,000 | N | N |
| 457 | BE 1177 | 5.8 | 10 | 20 | N | 500 | N | N | N | N | N | 2,000 | N | N |
| 458 | BE 1179 | 7.81 | 10 | 150 | N | 500 | N | N | N | N | N | 2,000 | N | N |

See foot notes at end of appendix A.

Semi-quantitative analyses of panned concentrates - Continued

| Map no. | Field no. | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Wt. (mg) of recovered element (R)[1] Sn | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 459 | BE 1175 | 5.98 | 10 | 10 | N | 200 | N | N | N | 300 | N | 1,000 | 1.79 | N |
| 460 | BE 1064 | 8.14 | 2 | 30 | N | 300 | N | 200 | N | N | N | N | N | N |
| 461 | BE 1067 | 0.562 | 1 | 300 | N | 100 | N | N | N | N | N | N | N | N |
| 462 | BE 1072 | 0.149 | 1 | 150 | N | 150 | N | N | N | N | N | N | N | N |
| 463 | BE 389 | 7.52 | 5 | 70 | N | 50 | N | N | N | N | N | 1,000 | N | N |
| 464 | BE 2264 | 7.95 | 5 | 150 | N | 70 | N | N | N | N | 300 | 1,000 | N | 2.39 |
| 465 | BE 410 | 4.36 | 5 | 300 | 1,500 | 70 | N | N | N | N | N | N | N | N |
| 466 | BE 412 | 3.48 | 5 | 200 | 2,000 | 50 | N | N | N | N | N | N | N | N |
| 467 | BE 416 | | 5 | 70 | 1,500 | 100 | N | N | N | N | N | N | N | N |
| 468 | BE 2141 | 4.24 | 3 | 150 | G | 100 | 2,000 | N | 7,000 | N | N | N | N | N |
| 469 | BE 2144 | 0.6 | 5 | 150 | G | 200 | 1,000 | N | 300 | N | N | 1,000 | N | N |
| 470A | BE 2146 | 9.65 | 5 | 150 | G | 150 | 1,000 | N | N | N | N | 700 | N | N |
| 470B | BE 2266 | 2.89 | 5 | 150 | 2,000 | 100 | 1,000 | N | 70 | N | N | 700 | N | N |
| 471 | BE 2271 | 0.81 | 5 | 300 | N | 300 | N | N | 500 | N | N | 3,000 | N | N |
| 472 | BE 2275 | 0.38 | 5 | 300 | 1,500 | 150 | N | N | 150 | N | N | 1,500 | N | N |
| 473 | BE 901 | 3.15 | 20 | 300 | G | 300 | N | N | 3,000 | N | N | 1,000 | N | N |
| 474 | BE 904 | 1.26 | 7 | 100 | G | 300 | N | N | N | N | N | 100 | N | N |
| 475 | BE 420 | 1.62 | 5 | 100 | G | 200 | N | N | 300 | N | N | 1,500 | N | N |
| 476 | BE 2148 | 3.98 | 5 | 150 | 1,500 | 50 | 1,000 | N | N | N | N | 700 | N | N |
| 477 | BE 906 | 0.72 | 10 | 300 | 3,000 | 300 | N | N | 30 | 5,000 | N | 1,000 | 3.6 | N |
| 478 | BE 908 | 3.16 | 10 | 200 | 1,500 | 300 | N | N | 30 | N | N | 1,000 | N | N |
| 479 | BE 851 | 0.18 | 7 | 150 | N | 300 | N | N | 200 | N | N | 1,000 | N | N |
| 480 | BE 914 | 2.7 | 10 | 500 | G | 150 | N | N | N | N | N | 700 | N | N |
| 481 | BE 2281 | 1.41 | 7 | 200 | 5,000 | 1,000 | N | N | N | N | N | N | N | N |
| 482 | BE 2277 | 1.03 | 5 | 100 | G | 700 | 1,500 | N | 500 | N | N | 1,500 | N | N |
| 483 | BE 2283 | 2.63 | 5 | 300 | 5,000 | 150 | 1,500 | N | N | N | N | N | N | N |
| 484 | BE 915 | 9.46 | 10 | 150 | 2,000 | 200 | N | N | N | 300 | N | N | 2.84 | N |
| 485 | BE 424 | 0.45 | 10 | 150 | 2,000 | 1,000 | N | N | 500 | N | N | 1,500 | N | N |
| 486 | BE 919 | 1.81 | 50 | 1,000 | G | 1,000 | G | N | N | N | 7,000 | 1,500 | N | 12.67 |

See footnotes at end of appendix A.

Appendix A - Continued

| Map no. | Field no. | Wt. (g) of recovered non-magnetic +2.85 sp. gr. concentrate | Optical emission spectrographic analyses (ppm) Ag | B | Ba | Cu | La | Nb(Cb) | Pb | Sn | W | Zn | Wt. (mg) of recovered element (R)[1] Sn | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 487 | BE 2285 | 3.98 | 7 | 150 | 2,000 | 500 | 1,000 | N | 70 | N | N | 1,500 | N | N |
| 488 | BE 922 | 5.45 | 70 | 200 | G | 500 | G | N | N | N | N | 700 | N | N |
| 489 | BE 926 | 1.52 | 5 | 150 | G | 1,500 | G | N | 150 | N | N | 700 | N | N |
| 490 | BE 1431 | 2.12 | 1 | 200 | G | 500 | N | 200 | N | 700 | N | 500 | 1.48 | N |
| 491 | BE 1287 | 8.89 | N | 200 | G | 500 | N | N | N | N | N | N | N | N |
| 492 | BE 1291 | 4.72 | N | 300 | 1,000 | 300 | N | N | N | N | N | N | N | N |
| 493 | BE 1429 | 0.43 | N | 300 | 2,000 | 200 | N | N | N | 500 | N | 500 | 0.21 | N |
| 494 | BE 1328 | 0.50 | N | 150 | N | 15 | N | N | N | N | N | 700 | N | N |
| 495 | BE 1325 | 1.64 | N | 70 | N | 200 | N | N | N | N | N | N | N | N |
| 496 | BE 1318 | 1.16 | N | 150 | N | 20 | N | N | N | 100 | N | N | 0.12 | N |
| 497 | BE 1313 | 3.68 | N | 150 | N | 150 | N | N | N | N | N | N | N | N |
| 498 | BE 1093 | 0.96 | 10 | 500 | N | 1,000 | N | 200 | 1,000 | 5,000 | N | 1,000 | 4.80 | N |
| 499 | BE 1095 | 0.84 | 10 | 1,000 | G | 1,000 | N | 200 | 1,000 | 500 | N | 1,000 | 0.42 | N |
| 500 | BE 1031 | 0.55 | 2 | 300 | N | 500 | N | 200 | 200 | N | 7,000 | N | N | 3.85 |
| 501 | BE 1033 | 2.92 | 1 | 150 | N | 200 | N | N | N | N | N | N | N | N |
| 502 | BE 1035 | 0.33 | 2 | 2,000 | N | 300 | N | 200 | 500 | 5,000 | N | 5,000 | 1.65 | N |
| 503 | BE 1038 | 0.57 | 5 | 500 | 1,000 | 300 | N | 200 | 200 | 1,000 | N | 1,000 | 0.57 | N |
| 504 | BE 1041 | 0.36 | 5 | 1,000 | 5,000 | 150 | 200 | 200 | 50 | 5,000 | N | N | 1.80 | N |
| 505 | BE 1043 | 8.27 | 1 | 20 | N | 200 | N | N | N | N | N | N | N | N |
| 506 | BE 1306 | 0.70 | 2 | 10,000 | N | 300 | N | N | 2,000 | 5,000 | N | 700 | 3.5 | N |
| 507 | BE 1226 | 1.5 | 2 | 1,500 | N | 200 | N | N | 500 | 500 | N | 1,000 | 0.73 | N |
| 508 | BE 1230 | 4.88 | 2 | 500 | 1,000 | 700 | N | 200 | 200 | G | N | 2,000 | 48.8 | N |
| 509 | BE 1228 | 1.69 | 1 | 700 | N | 700 | 1,000 | N | N | 500 | N | 1,000 | 0.85 | N |
| 510 | BE 1232 | 0.76 | 2 | 2,000 | N | 300 | N | 200 | 500 | G | 100 | 2,000 | 7.6 | 0.08 |
| 511 | BE 1234 | 0.78 | 2 | 2,000 | 1,000 | 500 | 10,000 | 500 | 500 | G | 1,000 | 1,000 | 7.8 | 0.78 |
| 512 | BE 1236 | 0.46 | 2 | 5,000 | N | 200 | N | 500 | 200 | 1,000 | N | 1,000 | 0.46 | N |
| 513 | BE 1238 | 0.33 | 2 | 2,000 | N | 200 | N | 500 | 1,000 | 500 | N | 2,000 | 0.17 | N |
| 514 | BE 1239 | 1.71 | 2 | 700 | 1,000 | 150 | N | N | N | 150 | N | 1,000 | 0.26 | N |

1 Calculated recovery (R) of elementl Sn and W in original sample of alluvial gravel.

NOTE. - N Not detected
G is actual value greater than upper detection limit of 10,000 ppm
--- indicates not analyzed for due to spectrographic interference