UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analytical results, geochemical signatures, mineralogical data, and sample locality map of placer gold, and heavy-mineral concentrates from the Circle mining district, Circle quadrangle, Alaska

By

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INTRODUCTION

Geochemical studies of Alaskan gold deposits were begun in 1984 as a joint study by the U.S. Geological Survey and the State of Alaska Division of Geological and Geophysical Surveys. The objectives of the study are (1) to characterize the deposits, (2) to determine relationships of gold in placer deposits to possible lode sources, (3) to identify possible sources of gold in placer deposits, (4) to study processes of placer formation, (5) to contribute to existing knowledge of the principles of prospecting for placer deposits, and (6) to determine if minerals associated with placer deposits might suggest economic deposits of other metals. The purpose of this report is to release both the analytical data and gold signatures for placer gold samples and also the analytical data and mineralogy of the nonmagnetic fraction of heavy-mineral-concentrate samples from placer gold deposits of the Circle mining district in Alaska. Gold signatures comprise the alloy proportions and ratios of gold, silver, and copper, and the content of trace elements (Antweiler and Campbell, 1976).

SAMPLING AND ANALYTICAL PROCEDURE

Placer gold samples and associated heavy-mineral concentrates from stream-sediment samples were obtained from most of the active claims in the Circle mining district. At some localities, miners provided us with ample amounts of gold for analysis. To determine whether differences in composition could be correlated with physical attributes, these samples were handled in various ways. Some were sieved into two or more size ranges; others were separated by color; and some were separated on the basis of physical characteristics, e.g., rounded, angular, blocky, delicate, etc. Self-explanatory, descriptive information is included in table 1. Where no descriptive information is provided, the samples were generally small, and no sorting of individual grains was attempted prior to analysis.

A total of 476 emission spectrographic analyses using a technique described by Mosier (1975) were made on placer gold from 51 mines and prospects. These are the numbered sites on the sample location map (plate 1) and correspond to the locality index (table 1). The elements analyzed and their lower limits of determination are listed on table 2. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides, graphite, and 99.999 percent pure metallic gold. Pure Al_2O_3 was added to the standards and samples as a codistillation agent. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. Standard concentrations are based on a 5-mg gold sample weight. Because of the nature of native gold, it is often difficult to weigh exact 5-mg samples and in many instances there is less than 5-mg of gold available for analysis. Therefore, the reported concentration values (table 2) are corrected to reflect a 5-mg sample weight by the following formula:

$$\text{reported concentration value} = \text{determined value} \times \frac{5}{\text{sample weight}} .$$

The trace-element content of natural gold varies greatly from grain to grain as well as from deposit to deposit and this creates a problem in determining the precision of the analytical technique. However, studies using artificial melts show that the precision of the analytical method far exceeds the natural variance of trace elements in native gold (Mosier, 1975).

Heavy-mineral-concentrate samples were obtained at most sites by wet-sieving stream sediment through a stainless-steel screen with a mesh opening of 2 mm into a 14-in steel gold pan and by panning the minus-10-mesh material. In the laboratory, the panned concentrate was air dried and sieved through a 30-mesh (0.8-mm) sieve. Since most of the rock-forming mineral grains found in stream sediment are larger than 30-mesh and the ore-mineral grains smaller than 30-mesh size, the sieving procedure greatly reduces the amount of sample that has to be further processed. The minus-30-mesh fraction was further separated using bromoform to remove the remaining minerals of a specific gravity less than 2.85. A nonmagnetic fraction of each sample was obtained using a Frantz Electromagnetic Separator with equivalent settings of 0.7 ampere and track settings of 5° forward slope and 10° side tilt. Relatively nonmagnetic fractions free of the dilutant minerals, magnetic iron oxides, garnet, amphibole, pyroxene, epidote, and other high-iron/low magnesium silicates were obtained by this procedure.

The nonmagnetic fraction of the heavy-mineral-concentrate samples were analyzed for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). The elements analyzed and their lower and upper limits of determination are listed in table 3. As with the analytical method for gold, spectrographic results were obtained by visual comparison of spectra derived from sample against spectra obtained from standards made from pure oxides and carbonates with the same geometrical spacing of concentrations. The precision of the analytical method for the nonmagnetic fraction is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976).

The nonmagnetic heavy-mineral fraction was scanned visually using a binocular microscope and shortwave ultraviolet light to identify ore-related minerals. In most cases, the mineral grains could be identified from their physical properties, but x-ray diffraction was used to confirm some species. This visual examination is an important supplement to the spectrographic analyses because the particulate nature of this sample medium poses problems for both the sample preparer and the analyst. A 5-mg split of finely pulverized sample is normally used for the spectrographic analysis, however malleable minerals such as gold, silver, and copper may be poorly represented in the sample because of smearing out on the pulverizer components. Another benefit of the visual examination is identifying artifacts such as bullet and solder fragments, wire, or other man-made contaminants. It is useful to be aware of these contaminants as they can give inflated values of the ore-related elements in the spectrographic results.

RELIABILITY OF GOLD ANALYSES

Differences in the composition of native gold from different geological settings can readily be distinguished using the analytical procedures mentioned above if enough analyses are made to ascertain the magnitude of natural variations in gold samples. In this study five or more spectrographic analyses were found desirable for a single sample site to obtain a signature in which one can place confidence. However, in the context of many other analyses from this district, a single analysis is of value.

The composition of native gold varies considerably (for example, see Gay, 1963; Jones and Fleischer, 1969). Variations in composition are present even from point to point within the same grain (Desborough, 1970). Native gold in oxidized zones and in associated placers generally contains lesser amounts of silver and other elements compared with the native gold in the corresponding primary deposits; within some specific deposits, single particles of native gold are relatively homogeneous, but in other deposits the native gold is heterogeneous (Boyle, 1979). Because variations in gold composition are natural rather than analytical, they are worthy of study, particularly so their significance can be understood. In spite of the variations, gold compositional data are useful in that they help characterize conditions of ore deposition and are commonly locally distinctive for mines, districts, or regions. Moreover, they are useful in determining the relationships of gold in placer deposits to possible lode sources, and in meeting the other objectives stated in the introductory section of this report.

The natural variability of analyses for Ag and Cu in gold from a single locality was determined by repeatedly analyzing portions of single nuggets (Mosier, 1975; Antweiler and Campbell, 1987). They found silver content of one such nugget ranged from 4.7 to 8.1 percent in four analyses with a mean silver content of 5.7 percent, and a standard deviation (S.D.) of ±1.6 percent and the copper content of this nugget ranged from .048 to .08 percent with a mean copper content of .062 percent, and a standard deviation of ±.0144 percent. Replicate analyses of portions of another nugget from the same locality showed silver content of 18.9 to 19.8 percent with a mean silver content of 19.3 percent, a standard deviation of ±0.56 percent and copper content .038 to .055 percent with a mean of .047 percent, and a standard deviation of ±.012 percent. Such analytical results indicated considerable natural variability. Another nugget from the same locality was washed with hydrofluoric acid to remove surface coatings, then heated to 1300 °C for 30 minutes to homogenize silver and copper content. Analysis of ten 5-mg portions of that nugget each time showed excellent precision; 10 percent silver, (S.D.=0) and 0.05 percent copper (S.D.=0). Prior to acid washing and heat treating, ten 5-mg portions ranged in silver content from 1.5 to 15 percent and in copper content from .015 to .05 percent indicating their natural variation (Mosier, 1975). The concentration of other elements in nuggets from the locality ranged somewhat more widely than copper and silver, even after the homogenization treatment. Significantly, however, the mean values for most elements, including copper and silver, were almost the same on 10 analyses of the natural sample as the mean values for those elements on the homogenized sample, except for elements removed by the acid and heat treatment.

Accuracy is much more difficult to determine than precision because homogeneous gold samples with known amounts of impurities are not readily available. However, standards prepared with known amounts of copper and silver show the method to be accurate within a factor of two in determination of those elements (Mosier, 1975).

One test for reliability of the method is comparison of fineness on samples from localities where large lots of gold have been analyzed for the U.S. Mint or by banks or commercial refiners who have purchased gold. Compilations of gold fineness data have been made by Smith (1941) and by Metz and Hawkins (1981). Also, the First National Bank in Fairbanks made available to us records of gold purchases from 1903 to 1937 from many Alaskan placer deposits. These compilations show excellent agreement for some areas with each other, and poor agreement in other areas. The U.S. Geological Survey

data, although acquired by analyses of relatively small samples, agree as well as the data from those sources and are therefore reliable to the extent permitted by natural variation of gold composition.

DESCRIPTION OF DATA TABLES

The analytical results for placer gold (table 4) are given in weight percent and are presented by site numbers and gold type which are keyed to table 1. The USGS-assigned sample number is given under sample. When sufficient gold was available from a particular site, multiple analyses were made and the results are listed. For this study, fineness is defined as:

$$\text{fineness} = \frac{\text{Au wt\%}}{\text{Au wt\%} + \text{Ag wt\%}} \times 1{,}000 .$$

The gold value was determined by difference, that is:

$$\text{Au\%} = 100-(\text{Ag\%} + \text{X\%}),$$

where X% is the sum of elements other than gold and silver. If an element was not detected at the lower limit of detection, a -- was entered. The actual weight in milligrams of the gold sample analyzed is given under wt. The values under r = Au/Ag, Au/Cu, Ag/Cu, and r/Cu are self-explanatory alloy ratios that are part of the gold signature (Antweiler and Campbell, 1976). Because the corrected values shown in table 4 are computer-generated data, these results often carry more digits than are significant. The analysts did not determine these values to the accuracy suggested by the extra numbers.

Table 5 lists the results of the analyses for the nonmagnetic fraction of the heavy-mineral-concentrate samples and are presented by localities. No analytical data on heavy-mineral concentrates were obtained from sites 4, 6, 8, 10-12, 16, 17, 19, 21, 24, 26-30, 32-34, 40, 42, 44, 46-49, and 51. Values determined for the major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram). The USGS-assigned sample number corresponds to the placer gold sample number.

Table 6 shows the mineralogical results of the nonmagnetic heavy-mineral-concentrate samples. No mineralogical data were obtained from sites 4, 6, 8-12, 16, 17, 19, 21, 23, 24, 26-30, 32-35, 40, 42-43, 46-49, and 51. The percentages determined for the pyrite and scheelite are visual estimates as seen in the microscope field under 20X magnification and do not reflect actual grain counts. If a mineral species was observed in the sample and determined to be less than 1% by volume of the total nonmagnetic sample, an "X" is used. This table indicates only those minerals that we believe may be ore-related and does not show extraneous minerals such as apatite, sphene, zircon, etc., most of which appeared in all samples.

OTHER PUBLICATIONS

Other U.S. Geological Survey publications showing principally analytical results, geochemical signatures, mineralogical data, and sample locality maps of placer/lode gold and heavy-mineral concentrates from other gold mining districts in Alaska are:

1. Mosier, E.L., and Lewis, J.S., 1986, Analytical results, geochemical signatures, and sample locality map of lode gold, placer gold, and heavy-mineral concentrates from the Koykuk-Chandalar mining district, Alaska: U.S. Geological Survey Open-File Report 86-345, 172 p., 1 pl.

2. Cathrall, J.B., Antweiler, J.C., and Mosier, E.L., 1987, Occurrence of platinum in gold samples from the Tolovana and Rampart mining districts, Livengood quadrangle, Alaska: U.S. Geological Survey Open-File Report 87-330, 12 pages, 1 pl.
3. McDanal, S.K., Cathrall, J.B., Mosier, E.L., Antweiler, J.C., and Tripp, R.B., 1988, Analytical results, geochemical signatures, mineralogical data, and sample locality map of placer gold and heavy-mineral concentrates from the Manley Hot Springs, Tofty, Eureka, and Rampart mining districts, Tanana and Livengood quadrangles, Alaska: U.S. Geological Survey Open-File Report 88-443, 54 p.
4. Cathrall, J.B., McDanal, S.K., Van Trump G., Mosier, E.L., and Tripp, R.B., 1988, Analytical results, geochemical signatures, mineralogical data, and sample locality map of lode gold, placer gold, and heavy-mineral concentrates from the Tolovana mining district, Livengood quadrangle, Alaska: U.S. Geological Survey Open-File Report 88-578, 32 p.

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Metz, Paul A., and Hawkins, D.B., 1981, A summary of gold fineness values for Alaska Placer deposits: School of Mineral Industry, University of Alaska, Fairbanks, Alaska 99701, MIRL Report 45.

Mosier, E.L., 1975, Use of emission spectroscopy for the semiquantitative analysis of trace elements and silver in native gold, in F.N. Ward, ed., New and refined methods of trace analysis useful in geochemical exploration: U.S. Geological Survey Bulletin 1408, p. 97-105.

Motooka, J.M., and Grimes, D.J., 1976, Analytical precision of one-sixth order semiquantitative spectrographic analyses: U.S. Geological Survey Circular 738, 25 p.

Smith, P.S., 1941, Fineness of gold from Alaska placers: U.S. Geological Survey Bulletin 910-C, p. 147-272.

TABLE 1.--Index for site, type of gold, locality name, and gold description for placer gold samples from the Circle mining district, Circle quadrangle, Alaska

Site type	Locality name	Gold description
1.01	Nome Creek, at Moose Creek	Unsorted gold.
1.02	--Do----------	Rusty gold.
1.03	--Do----------	Gold treated with mercury and nitric acid.
2.01	Sumner Creek, tributary to Nome Creek.	Minus 20-mesh gold.
2.02	--Do----------	Plus 20-mesh gold.
3.01	Nome Creek	Coarse unsorted gold.
3.02	--Do------	Plus 20-mesh gold.
3.03	--Do------	Plus 35-mesh gold; Mn and Fe stained, flattened flakes.
3.04	--Do------	Plus 35-mesh gold; clean flattened flakes.
3.05	--Do------	Gold pieces from coarse nugget.
3.06	--Do------	Minus 20-, plus 60-mesh gold; blackish appearance.
3.07	--Do------	Minus 60-, plus 100-mesh gold; resinous appearance.
3.08	--Do------	Minus 100-mesh gold.
4.01	Sourdough Creek	Unsorted gold.
5.01	Faith Creek, lower	Unsorted gold.
5.02	--Do----------	Minus 20-mesh gold; flat thin flakes.
5.03	--Do----------	Minus 20-mesh gold; blocky nugget like grains.
5.04	--Do----------	Plus 20-mesh gold.
6.01	Deep Creek	Minus 20-, plush 60-mesh gold; flat, worn, dull gray.
6.02	--Do------	Minus 20-, plus 60-mesh gold; nuggety grains, little travel.
6.03	--Do------	Plus 20-mesh gold; flat, traveled.
6.04	--Do------	Plus 20-mesh gold; vuggy, nuggety.
6.05	--Do------	Plus 20-mesh gold; flat, stained red.
6.06	--Do------	Plus 20-mesh gold; vuggy, quartz, bright yellow.
6.07	--Do------	Plus 20-mesh gold; rock fragments attached.
6.08	--Do------	Plus 20-mesh gold; vuggy, quartz, dimpled, little traveled.

TABLE 1.--Continued

7.01	Faith Creek, upper	Plus 20-mesh gold; angular, blocky.
7.02	--Do----------	Plus 20-mesh gold; intermediate shaped grains.
7.03	--Do----------	Plus 20-mesh gold; flat, thin, worn grains.
7.04	--Do----------	Minus 20-, plus 60-mesh gold; angular blocky.
7.05	--Do----------	Minus 20-, plus 60-mesh gold; intermediate shaped grains.
7.06	--Do----------	Minus 20-, plus 60-mesh gold; flat, thin, worn.
8.01	Hope Creek	Minus 60-, plus 100-mesh gold.
8.02	--Do------	Minus 100-, plus 160-mesh gold.
8.03	--Do------	Minus 160-mesh gold.
8.04	--Do------	Crinkly delicate gold; little traveled.
8.05	--Do------	Gold wires.
8.06	--Do------	Rounded grains.
8.07	--Do------	Dirty gold.
9.01	Bachelor Creek	Plus 20-mesh gold; thin, flat, traveled, flakes.
9.02	--Do----------	Plus 20-mesh gold; thick, flat, traveled, flakes.
9.03	--Do----------	Plus 20-mesh gold; nuggets, worn.
9.04	--Do----------	Plus 20-mesh gold; vuggy, bright yellow, 3-D, fresh.
9.05	--Do----------	Plus 20-mesh gold; vuggy, flat, nuggety, little traveled.
9.06	--Do----------	Plus 20-mesh gold; stained, flat, traveled.
9.07	--Do----------	Plus 20-mesh gold; stained, vuggy, 3-D, fresh.
9.08	--Do----------	Minus 20-, plus 60-mesh gold; rounded, worn, blocky grains.
9.09	--Do----------	Minus 20-, plus 60-mesh gold; thick, bright yellow grains.
9.10	--Do----------	Minus 20-, plus 60-mesh gold; thick, stained grains.
9.11	--Do----------	Pieces from large braided grain.
9.12	--Do----------	Unsorted gold.
9.13	--Do----------	Minus 20-mesh gold.
9.14	--Do----------	Plus 20-mesh gold.
10.01	Butte Creek	Unsorted gold.

TABLE 1--Continued

11.01	Porcupine Creek, I	Minus 20-, plus 60-mesh gold; flat, shiny worn.
11.02	--Do----------	Minus 60-, plus 100-mesh gold.
11.03	--Do----------	Minus 60-, plus 100-mesh gold; elongated, some crystal faces.
11.04	--Do----------	Minus 60-, plus 100-mesh gold; crinkly, curls, curliques.
11.05	--Do----------	Minus 60-, plus 100-mesh gold; spherical shiny.
11.06	--Do----------	Minus 100-, plus 160-mesh gold; crinkly, curls, curliques.
11.07	--Do----------	Gold nuggets; black on one side.
11.08	--Do----------	Plus 20-mesh gold; brilliant shiny grains.
11.09	--Do----------	Minus 20-, plus 60-mesh gold.
12.01	Porcupine Creek, II	Minus 20-mesh gold.
12.02	--Do----------	Plus 20-mesh gold.
12.03	--Do----------	Nugget like grains.
13.01	Bonanza Creek, I	Plus 20-mesh gold; flat grains.
13.02	--Do----------	Minus 20-mesh gold.
13.03	--Do----------	Unsorted gold.
13.04	--Do----------	Plus 35-mesh gold.
14.01	Bonanza Creek, II	Gold from permafrost zone in clay.
14.02	--Do----------	Minus 35-mesh gold.
14.03	--Do----------	Plus 35-mesh gold.
15.01	Miller Creek	Minus 30-mesh gold, mostly flat, little worn.
15.02	--Do--------	Nuggety angular grains.
15.03	--Do--------	Spherical grains, from coarse fraction of gold.
15.04	--Do--------	Very tiny grains, from fine fraction.
15.05	--Do--------	White grains.
16.01	Mammoth Creek, below Miller House.	Plus 20-mesh gold.
16.02	--Do----------	Plus 20-mesh gold; vuggy, bright yellow, little quartz.
16.03	--Do----------	Plus 20-mesh gold; blocky angular.
16.04	--Do----------	Plus 20-mesh gold; red stained.
16.05	--Do----------	Plus 20-mesh gold; jaggged, flat crinkly grains.
16.06	--Do----------	Plus 20-mesh gold; flat flakes with rounded edges.

TABLE 1--Continued

17.01	Mastodon Creek, I	Minus 20-mesh gold.
18.01	Mastodon Creek, II	Minus 35-mesh gold.
18.02	--Do----------	Plus 35-mesh gold.
19.01	Mastodon Creek, III	Minus 20-mesh gold.
19.02	--Do----------	Plus 20-mesh gold; nuggety.
20.01	Mastodon Creek, IV	Minus 35-mesh gold.
20.02	--Do----------	Plus 35-mesh gold.
21.01	Mastodon Fork	Unsorted gold.
22.01	Eagle Creek	Plus 20-mesh gold.
22.02	--Do-------	Minus 20-, plus 60-mesh gold; ragged, flat, thin, curled.
22.03	--Do-------	Red and black stained gold grains.
22.04	--Do-------	Gold wrapped around quartz.
22.05	--Do-------	Fine tails from Knudsen Bowl.
22.06	--Do-------	Plus 60-mesh gold; coarse.
22.07	--Do-------	Minus 60-mesh gold; coarse.
23.01	Ptarmigan Creek	Flat grains.
23.02	--Do----------	Semi-crystalline gold.
23.03	--Do----------	Unsorted gold.
24.01	Cripple Creek	Unsorted gold.
25.01	Gold Dust Creek	Minus 20-mesh gold; flat, thin, flakes.
25.02	--Do----------	Plus 20-mesh gold; flat, thin, flakes.
25.03	--Do----------	Minus 20-mesh gold; crinkly, delicate rods.
25.04	--Do----------	Plus 20-mesh gold; crinkly, delicate rods.
25.05	--Do----------	Unsorted gold.
26.01	North Fork Harrison Creek	Unsorted gold.
27.01	Independence Creek at Harrison Fork	Minus 20-, plus 60-mesh; rough edges, 3-D, rounded, traveled
27.02	--Do----------	Plus 20-mesh gold; flat, rounded, dimpled, large flakes.
27.03	--Do----------	Plus 20-mesh gold; crystalline, vuggy, fresh, bright yellow.
27.04	--Do----------	Plus 20-mesh gold; vuggy with quartz, red stained.
27.05	--Do----------	Plus 20-mesh gold; viggy, no quartz, traveled.

TABLE 1--Continued

27.06	Independence Creek at Harrison Fork	Minus 100-mesh gold; angular.
27.07	--Do----------	Minus 20-, plus 60-mesh gold; vuggy some quartz.
27.08	--Do----------	Minus 20-, plus 60-mesh gold; sphere.
27.09	--Do----------	Minus 20-, plus 60-mesh gold; crystalline with quartz.
27.10	--Do----------	Minus 20-, plus 60-mesh gold; bright, vuggy with red stained quartz.
27.11	--Do----------	Minus 20-, plus 60-mesh gold; rounded, angular, red stain.
27.12	--Do----------	Minus 20-, plus 60-mesh gold; flattened, striations, well traveled.
27.13	--Do----------	Minus 60-, plus 100-mesh gold; flattened rounded flakes.
27.14	--Do----------	Minus 60-, plus 100-mesh gold; bright, vuggy, little traveled.
28.01	Independence Creek	Unsorted gold.
29.01	Greenhorn Gulch	Unsorted gold.
29.02	--Do----------	Plus 20-mesh gold.
29.03	--Do----------	Minus 20-, plus 60-mesh gold.
29.04	--Do----------	Dirty gold.
30.01	South Fork Harrison Creek	Minus 20-, plus 60-mesh gold; flat, dull colored, traveled flakes.
30.02	--Do----------	Plus 20-mesh gold; flat, traveled, rounded edges.
30.03	--Do----------	Minus 20-mesh gold; rectangular, boxshaped, thick.
30.04	--Do----------	Minus 20-, plus 60-mesh gold; thick, rounded, blocky grains.
31.01	Harrison Creek	Minus 20-mesh gold; mostly flat.
31.02	--Do----------	Plus 20-mesh gold; flat grains.
31.03	--Do----------	Unsorted gold.
32.01	Crooked Creek, I	Unosrted gold.
33.01	Crooked Creek, II	Blocky rather thick grains.
33.02	--Do----------	Plus 35-mesh gold; flat grains.
34.01	Crooked Creek, III	Minus 20-mesh gold; mostly flat.

TABLE 1--Continued

34.02	Crooked Creek, III	Plus 20-mesh gold; very flat grains.
35.01	Deadwood Creek, bench 2	Unsorted gold.
36.01	Deadwood Creek	Unsorted gold.
37.01	Deadwood Creek, bench 1	Unsorted gold.
38.01	Ketchem Creek, I	Unsorted gold.
39.01	Twenty Two Pup	Minus 20-, plus 60-mesh gold; thin flat flakes.
39.02	--Do----------	Plus 20-mesh gold; very thin flakes.
39.03	--Do----------	Minus 60-mesh gold.
40.01	Deadwood Creek, I	Unsorted gold.
41.01	Discovery Gulch	Unsorted gold.
42.01	Sixteen Pup	Plus 20-mesh gold; blocky grains.
42.02	--Do-------	Plus 20-mesh gold; flat grains.
42.03	--Do-------	Plus 20-mesh gold; thick anuglar gains, little wear.
42.04	--Do-------	Gold wires.
43.01	Holdem Creek	Minus 20-, plus 60-mesh gold; thick, rounded, irregular spheres.
43.02	--Do--------	Plus 20-mesh gold; dimpled, some quarts, jogged edges.
43.03	--Do--------	Minus 20-, plus 60-mesh gold; flattened, smooth, rounded edges.
43.04	--Do--------	Plus 60-mesh gold; spheroids.
43.05	--Do--------	Minus 20-, plus 60-mesh gold; white with green colors.
43.06	--Do--------	Minus 20-, plus 60-mesh gold; lots of quartz.
43.07	--Do--------	Unsorted gold.
44.01	Ketchem Creek, II	Unsorted gold.
45.01	Portage Creek	Unsorted gold.
45.02	Portage Creek	Gold in mangetite.
46.01	Bottom Dollar Creek, I	Minus 20-mesh gold; Amalgam, nitric acid treated, coppery sheen.
46.02	--Do----------	Minus 20-mesh gold; Amalgam, nitric acid treated, dirty, whitish sheen.
46.03	--Do----------	Plus 20-mesh gold; concretion like.

TABLE 1--Continued

47.01	Bottom Dollar Creek, II	Unsorted gold.
48.01	Half Dollars Creek	Unsorted gold.
49.01	Bottom Dollar Creek, III	Unsorted gold.
49.02	Bottom Dollar Creek, III	Plus 20-mesh gold.
50.01	Squaw Creek	Plus 20-mesh gold.
50.02	--Do-------	Minus 20-mesh gold.
50.03	--Do-------	Unsorted gold.
50.04	--Do-------	Pieces from one nugget.
51.01	Volcano Creek	Unsorted gold.

TABLE 2.--Lower limits of determination for the spectrographic analyses of gold, based on a 5-mg sample

Elements	Lower determination limit
	Percent
Silver (Ag)	0.001
Copper (Cu)	.0005
Zinc (Zn)	.005
Gallium (Ga)	.0002
Lead (Pb)	.0002
Arsenic (As)	.005
Antimony (Sb)	.002
Cadmium (Cd)	.0002
Bismuth (Bi)	.0002
Indium (In)	.0005
Mercury (Hg)	.002
Tellurium (Te)	.005
Nickel (Ni)	.0005
Cobalt (Co)	.0005
Tin (Sn)	.0005
Molybdenum (Mo)	.0005
Germanium (Ge)	.0005
Platinum (Pt)	.001
Palladium (Pd)	.0002
Barium (Ba)	.0005
Strontium (Sr)	.01
Zirconium (Zr)	.0005
Vanadium (V)	.001
Chromium (Cr)	.001
Yttrium (Y)	.0005
Lanthanum (La)	.002
Scandium (Sc)	.0005
Niobium (Nb)	.001
Boron (B)	.0005
Tantalumm (Ta)	.005
Beryllium (Be)	.0001
Tungsten (W)	.005
Manganese (Mn)	.0001
Iron (Fe)	.001
Magnesium (Mg)	.0005
Calcium (Ca)	.001
Titanium (Ti)	.001
Silicon (Si)	.0002

TABLE 3.--Limits of determination for the spectrographic analyses of heavy-mineral concentrates, based on a 5-mg sample

Elements	Lower determination limit	Upper determination limit
	Percent	
Iron (Fe)	0.1	50
Magnesium (Mg)	.05	20
Calcium (Ca)	.1	50
Titanium (Ti)	.005	2
	Parts per million	
Manganese (Mn)	20	10,000
Silver (Ag)	1	10,000
Arsenic (As)	500	20,000
Gold (Au)	20	1,000
Boron (B)	20	5,000
Barium (Ba)	50	10,000
Beryllium (Be)	2	2,000
Bismuth (Bi)	20	2,000
Cadmium (Cd)	50	1,000
Cobalt (Co)	10	5,000
Chromium (Cr)	20	10,000
Copper (Cu)	10	50,000
Lanthanum (La)	50	2,000
Molybdenum (Mo)	10	5,000
Niobium (Nb)	50	5,000
Nickel (Ni)	10	10,000
Lead (Pb)	20	50,000
Antimony (Sb)	200	20,000
Scandium (Sc)	10	200
Tin (Sn)	20	2,000
Strontium (Sr)	200	10,000
Vanadium (V)	20	20,000
Tungsten (W)	100	20,000
Yttrium (Y)	20	5,000
Zinc (Zn)	500	20,000
Zirconium (Zr)	20	2,000
Thorium (Th)	200	5,000

TABLE 4.--Signatures of placer gold from the Circle mining district, Circle quadrangle, Alaska

[Fine = fineness where fineness = $\frac{Au\%}{Au\% + Ag\%}$ x 1,000; x = sum of elements other than gold and silver; wt = sample weight in milligrams; all element and X values are given in percent; Te, Ge, Pt and Sr analyzed, but not detected; --, not detected. See table 1 for locality name and gold description which corresponds with site locality and analysis.]

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Hg	Ni
3109A	1.01	92.2	929	7.0	.84	.0300	--	--	.1500	--	--	--	.0002	.2000	.0015
3109B	1.01	89.4	901	9.8	.83	.0196	--	--	.1957	--	.0020	--	.0010	.0978	.0010
3109D	1.01	93.5	949	5.0	1.47	.0100	--	--	.1500	--	--	--	.0005	1.0000	--
3109RA	1.02	88.3	897	10.2	1.51	.0152	--	--	.1524	.0041	.0020	--	.0010	1.0163	--
3109RB.	1.02	92.4	933	6.7	.95	.0191	--	--	.1431	.0067	.0017	--	--	.4771	.0005
3109RC	1.02	88.9	903	9.6	1.57	.0143	--	--	.1912	.0048	.0017	--	.0002	.9560	.0010
3109HA	1.03	91.0	951	4.7	4.29	.0095	--	--	.2841	.0142	.1420	--	--	1.8939	.0019
3107A	2.01	89.4	899	10.1	.49	.0202	--	--	.0030	--	.0030	--	--	.1512	--
3107B	2.01	86.0	863	13.7	.33	.0137	--	--	.0274	--	.0027	--	.0005	.0456	--
3107C	2.01	93.0	933	6.6	.35	.0189	--	--	.0019	--	--	--	--	.0284	--
3107XA	2.02	90.3	906	9.4	.35	.0140	--	--	.0005	--	--	--	--	.0281	--
3107XB	2.02	90.3	906	9.4	.32	.0188	--	--	.0047	.0047	--	--	--	.0471	.0007
3107XC	2.02	93.2	934	6.5	.31	.0187	--	--	.0002	--	--	--	--	.0466	--
3097A	3.01	89.8	900	10.0	.23	.0200	--	--	.0200	--	.0050	--	.0005	.0500	--
3097B	3.01	89.6	903	9.6	.76	.0192	--	--	.0096	.0067	.0096	--	.0007	.0288	.0014
3097C	3.01	92.3	926	7.4	.33	.0211	--	--	.0016	--	--	--	.0002	.0316	--
3097XA	3.02	91.5	919	8.0	.44	.0172	--	--	.0575	--	.0034	--	.0006	.0575	--
3097XB	3.02	95.3	956	4.4	.23	.0089	--	--	.0177	--	--	--	.0006	.0177	--
3097XC	3.02	92.0	933	6.6	1.40	.0189	--	--	.0047	.0473	--	--	--	.0663	.0028
3108A	3.02	80.5	813	18.6	.97	.0186	--	--	.0046	--	--	--	--	.0278	.0014
3108B	3.02	87.7	884	11.5	.71	.0231	--	--	.0173	--	--	--	.0012	.0577	.0012
3108C	3.02	85.3	862	13.7	.99	.0182	--	--	.1825	.0456	--	--	.0018	.0639	.0005
3097MA	3.03	89.4	902	9.8	.85	.0195	--	--	.0977	.0293	.0068	--	.0068	.0293	--
3097MB	3.03	88.9	896	10.3	.85	.0206	--	--	.0720	.0103	.0051	--	.0015	.2058	--
3097MC	3.03	90.5	909	9.1	.47	.0181	--	--	.0453	.0036	.0016	--	.0005	.0181	--
3097NA	3.04	91.1	914	8.6	.26	.0259	--	--	.0009	--	.0026	--	--	.0259	--
3097NB	3.04	87.8	885	11.4	.73	.0229	--	--	.0023	--	--	--	.0006	.1144	.0011
3097NC	3.04	94.4	946	5.3	.21	.0321	--	--	.0005	--	--	--	--	.0032	--
3097VA	3.05	90.6	911	8.8	.59	.0132	--	--	.0265	--	--	--	.0009	.0062	.0009
3097VB	3.05	88.2	894	10.5	1.31	.0210	--	--	.0524	--	--	--	.0005	.0021	.0021
3097VC	3.05	91.4	918	8.2	.39	.0163	--	--	.0408	--	--	--	.0006	.0041	.0012
3108JA	3.06	89.3	905	9.4	1.29	.0141	--	--	.0942	.0471	.0019	--	.0047	.0188	.0007
3108JB	3.06	89.4	899	10.1	.52	.0201	--	--	.1006	.0040	.0030	--	.0005	.0302	--
3108JC	3.06	89.5	899	10.0	.54	.0100	--	--	.1000	.0050	.0030	--	.0050	.0500	--
3108KA	3.07	91.9	930	6.9	1.27	.0147	--	--	.0491	.0039	.0020	--	.0010	.9823	--
3108KB	3.07	87.2	898	9.9	2.91	.0149	--	--	.0198	--	.0198	--	.0005	1.4881	.0010
3108KC	3.07	91.6	928	7.1	1.29	.0153	--	--	.0305	.0041	.0031	--	.0010	1.0183	--
3108LB	3.08	70.4	706	29.4	.25	.0147	--	--	.0015	--	.0020	--	--	.0049	--
3314	4.01	78.4	787	21.1	.76	.0211	--	--	.0040	--	.0148	.0004	.0633	--	--
3138A	5.01	77.8	780	22.0	.17	.0110	--	--	.0330	--	--	--	--	--	--
3138B	5.01	96.5	968	3.2	.27	.0213	--	--	.0007	--	--	--	--	--	.0011
3138C	5.01	89.9	901	9.9	.23	.0141	--	--	.0071	--	.0028	--	--	.0141	--
3138D	5.01	90.7	916	8.3	.93	.0167	--	--	.0017	.0117	.0033	--	--	.0083	--
3118A	5.02	92.8	929	7.1	.17	.0202	--	--	.0151	--	.0018	--	--	--	--
3118B	5.02	94.8	952	4.8	.35	.0322	--	--	.0322	--	--	--	--	.0028	--
3118C	5.02	92.2	925	7.5	.31	.0300	--	--	.0045	--	--	--	--	--	--
3118NA	5.03	95.7	958	4.1	.13	.0249	--	--	.0041	--	--	--	--	--	--
3118NB	5.03	80.5	807	19.2	.29	.0144	--	--	.0067	--	.0017	--	--	--	--
3118NC	5.03	96.4	968	3.2	.39	.0214	--	--	.0107	.0054	--	--	--	.0019	.0011
3118XA	5.04	79.8	804	19.5	.76	.0195	--	--	.0097	.0039	--	--	--	--	.0015

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3109A	1.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3109B	1.01	--	--	--	--	.0005	.0005	--	--	--	--	--	--	--	--
3109D	1.01	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3109RA	1.02	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3109RB	1.02	--	--	--	--	.0005	.0005	--	--	--	--	--	--	--	--
3109RC	1.02	--	--	--	--	.0010	.0019	--	--	--	--	--	--	--	--
3109HA	1.03	.0005	.9470	--	--	.0009	.0028	--	.0014	--	--	--	--	--	--
3107A	2.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3107B	2.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3107C	2.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3107XA	2.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3107XB	2.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3107XC	2.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3097A	3.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3097B	3.01	--	.0010	--	--	.0004	--	--	--	--	--	--	--	--	--
3097C	3.01	--	.0021	--	--	.0004	--	--	--	--	--	--	--	--	--
3097XA	3.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3097XB	3.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3097XC	3.02	--	.0005	--	--	.0005	--	--	.0009	.0007	--	--	--	--	--
3108A	3.02	--	.0046	--	--	.0009	--	--	--	--	--	--	--	--	--
3108B	3.02	--	.0058	--	--	.0012	--	--	--	--	--	--	--	--	--
3108C	3.02	--	.0027	--	--	.0027	--	--	--	--	--	--	--	--	--
3097MA	3.03	--	--	--	--	.0015	--	--	--	--	--	--	--	--	--
3097MB	3.03	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3097MC	3.03	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3097NA	3.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3097NB	3.04	--	--	--	--	.0008	--	--	--	--	--	--	--	--	--
3097NC	3.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3097VA	3.05	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3097VB	3.05	.0010	--	--	--	.0016	--	--	.0005	--	--	--	--	--	--
3097VC	3.05	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3108JA	3.06	--	.0047	--	--	.0019	--	--	--	--	--	--	--	--	--
3108JB	3.06	--	.0020	--	--	.0007	--	--	--	--	--	--	--	--	--
3108JC	3.06	--	.0010	--	--	.0010	--	--	--	--	--	--	--	--	--
3108KA	3.07	--	.0098	--	--	.0004	--	--	--	--	--	--	--	--	--
3108KB	3.07	--	.9921	--	--	.0010	--	--	--	--	--	--	--	--	--
3108KC	3.07	--	.0031	--	--	.0007	--	--	--	--	--	--	--	--	--
3108LB	3.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3314	4.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3138A	5.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3138B	5.01	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3138C	5.01	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3138D	5.01	--	.0833	--	--	.0008	.0083	.0014	--	--	--	--	--	--	--
3118A	5.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3118B	5.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3118C	5.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3118NA	5.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3118NB	5.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3118NC	5.03	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3118XA	5.04	--	--	--	--	.0010	--	--	.0008	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3109A	1.01	--	.0015	.3000	.0070	.0010	.0009	.1500	5.00	13.2	3,072	233	439
3109B	1.01	--	.0049	.1957	.0098	.0020	.0029	.2935	5.11	9.1	4,568	500	467
3109D	1.01	--	.0007	.2000	.0050	.0010	.0050	.1000	5.00	18.7	9,353	500	1,871
3109PA	1.02	--	.0010	.1524	.0051	.0020	.0009	.1524	4.92	8.7	5,795	667	570
3109RB	1.02	--	.0048	.1908	.0048	.0019	.0048	.0954	5.24	13.8	4,840	350	725
3109RC	1.02	--	.0014	.1912	.0096	.0019	.0048	.1912	5.23	9.3	6,197	667	648
3109HA	1.03	--	.0095	.4735	.0142	.0095	.0095	.4735	5.28	19.2	9,607	500	2,029
3107A	2.01	--	.0002	.1008	.0030	.0015	.0020	.2016	4.96	8.9	4,436	500	440
3107B	2.01	--	.0005	.0456	.0046	.0009	.0008	.1825	5.48	6.3	6,283	1,000	459
3107C	2.01	--	.0005	.0947	.0095	.0019	.0008	.1894	5.28	14.0	4,912	350	741
3107XA	2.02	--	.0003	.0187	.0066	.0014	.0008	.2809	5.34	9.6	6,428	667	687
3107XB	2.02	--	.0005	.0942	.0094	.0014	.0008	.1412	5.31	9.6	4,793	500	509
3107XC	2.02	--	.0002	.0466	.0047	.0009	.0065	.1866	5.36	14.3	4,993	350	765
3097A	3.01	--	.0002	.0200	.0100	.0020	--	.1000	5.00	9.0	4,489	500	449
3097B	3.01	--	.0014	.1923	.0048	.0019	.0029	.4808	5.20	9.3	4,660	500	485
3097C	3.01	--	.0007	.1055	.0021	.0011	.0011	.1582	4.74	12.5	4,375	350	592
3097XA	3.02	--	.0003	.0575	.0080	.0011	.0034	.2299	4.35	11.4	5,308	467	660
3097XB	3.02	--	.0001	.0089	.0018	.0009	--	.1773	5.64	21.5	10,754	500	2,426
3097XC	3.02	--	.0066	.9470	.0047	.0009	.0095	.2841	5.28	13.9	4,856	350	733
3108A	3.02	--	.0186	.2783	.1391	.0065	.0009	.4638	5.39	4.3	4,338	1,000	234
3108B	3.02	--	.0017	.2309	.0115	.0023	.0081	.3464	4.33	7.6	3,799	500	329
3108C	3.02	--	.0014	.1825	.0182	.0046	.0046	.4562	5.48	6.2	4,676	750	342
3097MA	3.03	--	.0020	.1465	.0195	.0049	.0015	.4883	5.12	9.2	4,576	500	469
3097MB	3.03	--	.0021	.2058	.0154	.0021	.0015	.3086	4.86	8.6	4,319	500	420
3097MC	3.03	--	.0045	.1812	.0136	.0018	.0008	.1812	5.52	10.0	4,994	500	551
3097NA	3.04	--	.0002	.0259	.0017	.0009	.0007	.1724	5.80	10.6	3,523	333	409
3097NB	3.04	--	.0011	.2288	.0114	.0023	.0011	.3432	4.37	7.7	3,838	500	335
3097NC	3.04	--	.0011	.0534	.0107	.0021	--	.1068	4.68	17.7	2,947	167	552
3097VA	3.05	--	.0044	.1764	.0882	.0088	--	.2646	5.67	10.3	6,849	667	777
3097VB	3.05	--	.0073	.5241	.1572	.0157	.0021	.5241	4.77	8.4	4,207	500	401
3097VC	3.05	--	.0025	.1225	.0408	.0016	--	.1634	6.12	11.2	5,596	500	685
3108JA	3.06	--	.0009	.1412	.0141	.0014	.0028	.9416	5.31	9.5	6,322	667	671
3108JB	3.06	--	.0005	.0503	.0070	.0010	--	.3018	4.97	8.9	4,444	500	442
3108JC	3.06	--	.0005	.0500	.0100	.0010	.0030	.3000	5.00	8.9	8,946	1,000	895
3108KA	3.07	--	.0010	.0982	.0049	.0010	.0010	.0982	5.09	13.4	6,234	467	907
3108KB	3.07	--	.0050	.1984	.0099	.0030	.0069	.1488	5.04	8.8	5,858	667	590
3108KC	3.07	--	.0020	.1018	.0071	.0020	.0010	.1018	4.91	12.8	5,995	467	841
3108LB	3.08	--	.0003	.0294	.0049	.0010	--	.1957	5.11	2.4	4,796	2,000	163
3314	4.01	.0042	.0042	.4219	.0148	.0105	.0042	.2020	2.37	3.7	3,703	1,000	176
3138A	5.01	--	.0002	.0165	.0033	.0011	--	.1099	4.55	3.5	7,084	2,000	322
3138B	5.01	--	.0002	.0213	.0032	.0011	.0021	.2132	4.69	30.2	4,528	150	1,416
3138C	5.01	--	.0014	.0282	.0071	.0071	.0014	.1412	3.54	9.1	6,364	700	644
3138D	5.01	--	.0033	.1667	.0117	.0250	.0833	.5000	3.00	10.9	5,444	500	653
3118A	5.02	--	.0003	.0202	.0101	.0015	--	.1008	4.96	13.1	4,602	350	652
3118B	5.02	--	.0002	.0241	.0161	.0016	--	.2412	3.11	19.7	2,949	150	611
3118C	5.02	--	.0008	.0300	.0150	.0030	.0030	.2252	3.33	12.3	3,070	250	409
3118NA	5.03	--	.0001	.0124	.0083	.0008	--	.0829	6.03	23.1	3,848	167	928
3118NB	5.03	--	.0007	.0672	.0096	.0010	.0010	.1919	5.21	4.2	5,593	1,333	291
3118NC	5.03	--	.0021	.1071	.0214	.0011	--	.2141	4.67	30.0	4,502	150	1,402
3118XA	5.04	--	.0019	.1946	.0292	.0019	.0146	.4864	5.14	4.1	4,101	1,000	211

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Hg	Ni
3118XB	5.04	90.3	905	9.5	.19	.0189	--	--	.0047	--	--	--	--	--	--
3118XC	5.04	92.7	932	6.8	.50	.0291	--	--	.1453	.0039	--	--	.0048	--	.0010
3259A	6.01	93.2	935	6.5	.35	.0462	--	--	.0092	--	.0018	--	.0002	.0924	--
3259B	6.01	92.8	932	6.7	.43	.0673	--	--	.0014	.0038	--	--	.0003	--	--
3259C	6.01	92.3	925	7.4	.32	.0531	--	--	.0021	--	--	--	.0002	.0019	--
3259RA	6.02	94.8	950	5.0	.23	.0500	--	--	.0200	--	.0018	--	.0007	.0018	--
3259RB	6.02	89.7	902	9.7	.62	.0292	--	--	.0146	--	.0029	--	.0015	.0017	--
3259RC	6.02	84.8	852	14.7	.51	.0294	--	--	.0098	.0039	.0489	--	.0020	.0017	--
3259XA	6.03	93.2	935	6.4	.39	.0921	--	--	.0046	--	.0016	--	--	.0046	--
3259XB	6.03	94.6	948	5.1	.26	.0720	--	--	.0015	--	--	--	--	--	--
3259XC	6.03	91.5	924	7.5	1.00	.0214	--	--	.0016	.0107	.0107	--	--	.0032	.0075
3259NA	6.04	91.7	922	7.7	.55	.0330	--	--	.0220	.0044	--	--	.0006	.0220	.0022
3259NB	6.04	94.7	953	4.7	.64	.0470	--	--	.0005	--	--	--	--	.0019	--
3259NC	6.04	94.3	952	4.8	.99	.0475	--	--	.0143	.0038	--	--	.0014	.0029	.0048
3259QA	6.05	95.1	957	4.3	.62	.0603	--	--	.0086	.0034	.0043	--	.0002	.1724	.0013
3259QB	6.05	90.0	906	9.4	.67	.0281	--	--	.0281	.0047	--	--	.0003	.0019	.0009
3259QC	6.05	94.1	945	5.5	.44	.0768	--	--	.0005	--	--	--	--	.1096	--
3259VA	6.06	93.8	944	5.6	.59	.0558	--	--	.0011	--	--	--	.0002	.0781	--
3259VB	6.06	94.3	946	5.4	.30	.0536	--	--	.0107	--	.0021	--	.0002	.1073	--
3259VC	6.06	94.2	944	5.6	.25	.0556	--	--	.0333	--	.0022	--	.0006	.1111	--
3259TA	6.07	90.7	911	8.9	.36	.0267	--	--	.0133	--	.0018	--	.0004	.0890	--
3259TC	6.07	94.5	950	5.0	.46	.0700	--	--	.0070	.0050	.0020	--	.0005	.1000	.0010
3259SA	6.08	92.6	937	6.2	1.24	.0619	--	--	.0177	.0177	--	--	.0009	.1770	--
3259SB	6.08	93.3	943	5.7	1.03	.0568	--	--	.0011	.2273	--	--	.0006	.0227	--
3259SC	6.08	91.5	922	7.7	.79	.0549	--	--	.0033	.0549	.0019	--	.0077	.0769	--
3293XA	7.01	93.7	938	6.1	.21	.0877	--	--	.0061	--	.0088	--	.0002	.0088	--
3293XB	7.01	85.7	858	14.2	.16	.0189	--	--	.0066	--	.0019	--	--	--	--
3293XC	7.01	96.8	973	2.7	.56	.0625	--	--	.0268	--	--	--	.0013	.0045	.0027
3293YA	7.02	89.7	906	9.3	1.04	.0139	--	--	.0065	--	--	--	--	.6481	.0046
3293YB	7.02	90.5	907	9.3	.26	.0648	--	--	.0139	--	.0016	--	--	--	--
3293YC	7.02	85.1	853	14.7	.18	.0196	--	--	.0098	--	.0017	--	--	--	.0010
3293ZA	7.03	92.3	925	7.4	.27	.0532	--	--	.0106	--	--	--	--	--	--
3293ZB	7.03	93.4	937	6.3	.32	.1250	--	--	.0125	--	--	--	.0006	.0625	--
3293ZC	7.03	94.1	943	5.7	.24	.0813	--	--	.0163	--	--	--	.0002	--	.0008
3293KA	7.04	90.2	910	8.9	.91	.0446	--	--	.1339	.0134	.0018	--	.0063	.0016	.0045
3293KB	7.04	92.3	927	7.3	.39	.0521	--	--	.0208	--	.0018	--	.0010	.0313	--
3293KC	7.04	80.9	811	18.9	.19	.0283	--	--	.0066	--	.0047	--	--	--	--
3293LA	7.05	91.7	919	8.0	.29	.1149	--	--	.0115	--	.0023	--	--	.0020	.0011
3293LB	7.05	83.1	833	16.7	.25	.0167	--	--	.0078	.0222	--	--	--	--	.0022
3293LC	7.05	88.3	888	11.1	.54	.0556	--	--	.0111	--	.0078	--	--	.0022	.0022
3293MA	7.06	95.2	954	4.5	.27	.0909	--	--	.0091	--	.0018	--	--	--	.0018
3293MB	7.06	94.1	944	5.6	.30	.0778	--	--	.0222	--	--	--	--	.0019	--
3293MC	7.06	89.5	897	10.3	.20	.0309	--	--	.0155	--	.0103	--	.0002	--	--
3292XA	8.01	92.2	928	7.1	.66	.0510	--	--	.0204	--	.0018	--	.0015	.1531	--
3292XB	8.01	90.1	905	9.4	.45	.0283	--	--	.0142	--	.0019	--	.0009	.0472	--
3292XC	8.01	90.0	904	9.5	.48	.0476	--	--	.0286	--	.0048	--	.0095	.0190	--
3292YA	8.02	87.4	897	10.0	2.57	.0500	--	--	.0200	--	--	--	.0015	2.0000	--
3292YB	8.02	87.8	901	9.6	2.57	.0481	--	--	.0481	--	.0029	--	.0048	1.9231	--
3292YC	8.02	88.7	907	9.1	2.25	.0455	--	--	.0136	--	.0018	--	.0027	1.8182	--
3292ZA	8.03	92.3	954	4.5	3.26	.0446	--	--	.0134	--	--	--	.0045	2.6786	--

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	P	Ta	Pc
3118XB	5.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3118XC	5.04	--	--	--	--	.0015	--	--	--	--	--	--	--	--	--
3259A	6.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3259B	6.01	.0005	--	--	--	.0004	--	--	--	--	--	--	.0005	0	--
3259C	6.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3259RA	6.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3259RB	6.02	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3259RC	6.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3259YA	6.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3259XB	6.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3259XC	6.03	.0007	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3259NA	6.04	--	--	--	--	.0011	--	--	--	--	--	--	.0004	0	--
3259NB	6.04	--	--	--	--	.0009	--	--	--	--	--	--	.0004	0	--
3259NC	6.04	.0014	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3259QA	6.05	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3259QB	6.05	--	--	--	--	.0014	--	--	--	--	--	--	.0004	0	--
3259QC	6.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3259VA	6.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3259VB	6.06	--	--	.0005	--	--	--	--	--	--	--	--	--	--	--
3259VC	6.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3259TA	6.07	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3259TC	6.07	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3259SA	6.08	.0009	--	--	--	.0013	--	--	--	--	--	--	--	--	--
3259SB	6.08	--	--	--	--	.0057	--	--	--	--	--	--	--	--	--
3259SC	6.08	--	--	--	--	.0016	--	--	--	--	--	--	--	--	--
3293XA	7.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3293XB	7.01	--	--	--	--	.0005	--	--	--	--	--	--	.0004	0	--
3293XC	7.01	--	--	--	--	.0009	--	--	--	--	--	--	.0004	0	--
3293YA	7.02	.0019	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3293YB	7.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3293YC	7.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3293ZA	7.03	--	--	--	--	.0004	.0005	--	--	--	--	--	--	--	--
3293ZB	7.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3293ZC	7.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3293KA	7.04	.0004	--	--	--	.0045	--	--	--	--	.0063	--	--	--	--
3293KB	7.04	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3293KC	7.04	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3293LA	7.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3293LB	7.05	.0006	--	--	--	--	--	--	--	--	--	--	--	--	--
3293LC	7.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3293MA	7.06	--	.0018	--	--	--	--	--	--	--	--	--	--	--	--
3293MB	7.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3293MC	7.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3292XA	8.01	--	--	--	--	.0010	.0005	--	--	--	--	--	.0004	0	--
3292YB	8.01	--	--	--	--	.0009	.0004	--	--	--	--	--	.0004	0	--
3292XC	8.01	--	.0014	--	--	.0010	.0004	--	--	--	--	--	.0004	0	--
3292YA	8.02	.0015	.1500	--	--	.0007	.0010	.0015	--	.0030	--	--	.0004	0	--
3292YB	8.02	.0019	.1923	--	--	.0007	.0014	.0014	--	.0096	--	--	.0004	0	--
3292YC	8.02	.0005	.0018	--	--	.0009	--	--	.0182	.0005	--	--	.0004	0	--
3292ZA	8.03	.0045	.1339	.0009	--	.0004	.0089	.0018	.0179	.0063	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3118XB	5.04	--	.0005	.0189	.0066	.0005	.0008	.1420	5.28	9.5	4,770	500	504
3118XC	5.04	--	.0015	.0969	.0194	.0019	.0010	.1938	5.16	13.7	3,189	233	470
3259A	6.01	--	.0006	.0462	.0065	.0014	.0028	.1386	5.41	14.4	2,017	140	312
3259B	6.01	--	.0019	.1923	.0067	.0014	.0048	.1442	5.20	13.8	1,379	100	205
3259C	6.01	--	.0011	.0743	.0159	.0016	.0053	.1592	4.71	12.4	1,738	140	234
3259BA	6.02	--	.0007	.0500	.0070	.0015	--	.1000	5.00	19.0	1,895	100	379
3259BB	6.02	--	.0019	.0681	.0068	.0019	--	.4864	5.14	9.2	3,072	333	316
3259BC	6.02	--	.0020	.1957	.0098	.0015	.0049	.1957	5.11	5.8	2,889	500	197
3259XA	6.03	--	.0018	.0921	.0092	.0014	.0028	.1842	5.43	14.5	1,012	70	157
3259XB	6.03	--	.0010	.0720	.0051	.0015	.0021	.1029	4.86	18.4	1,314	71	255
3259XC	6.03	--	.0161	.7495	.0075	.0021	.0075	.1606	4.67	12.2	4,273	350	570
3259NA	6.04	--	.0033	.2203	.0110	.0022	.0077	.2203	4.54	11.9	2,777	233	360
3259NB	6.04	--	.0014	.0940	.0188	.0019	.0066	.4699	5.32	20.1	2,014	100	429
3259NC	6.04	--	.0048	.6654	.0475	.0029	.0048	.1901	5.26	19.8	1,983	100	417
3259QA	6.05	--	.0172	.1724	.0086	.0017	.0013	.1724	5.80	22.1	1,575	71	365
3259QB	6.05	--	.0094	.2814	.0141	.0028	.0141	.2814	5.33	9.6	3,196	333	341
3259QC	6.05	--	.0016	.1645	.0022	.0016	.0016	.0768	4.56	17.2	1,226	71	224
3259VA	6.06	--	.0033	.3348	.0056	.0022	.0011	.1116	4.48	16.8	1,681	100	301
3259VB	6.06	--	.0011	.0536	.0032	.0016	.0107	.0536	4.66	17.6	1,758	100	328
3259VC	6.06	--	.0002	.0333	.0022	.0017	--	.0111	4.50	17.0	1,695	100	305
3259TA	6.07	--	.0009	.1335	.0044	.0009	--	.0890	5.62	10.2	3,400	333	382
3259TC	6.07	--	.0015	.2000	.0030	.0020	.0020	.0700	5.00	18.9	1,351	71	270
3259SA	6.08	--	.0044	.8850	.0044	.0018	.0008	.0619	5.65	14.9	1,494	100	241
3259SB	6.08	--	.0170	.5682	.0034	.0170	--	.1136	4.40	16.4	1,642	100	289
3259SC	6.08	--	.0077	.5495	.0022	.0055	--	.0220	4.55	11.9	1,666	140	217
3293XA	7.01	--	.0004	.0263	.0044	.0018	--	.0614	5.70	15.3	1,068	70	174
3293XB	7.01	--	.0005	.0283	.0066	.0019	--	.0943	5.30	6.1	4,542	750	321
3293XC	7.01	--	.0013	.2679	.0089	.0018	.0018	.1786	5.60	36.1	1,548	43	578
3293YA	7.02	--	.0019	.1852	.0278	.0046	.0019	.1389	5.40	9.7	6,459	667	698
3293YB	7.02	--	.0005	.0278	.0046	.0019	.0019	.1389	5.40	9.8	1,396	143	151
3293YC	7.02	--	.0005	.0490	.0020	.0020	--	.0980	5.10	5.8	4,341	750	295
3293ZA	7.03	--	.0005	.0319	.0032	.0032	.0053	.1596	4.70	12.4	1,735	140	233
3293ZB	7.03	--	.0003	.0250	.0019	.0025	--	.0875	4.00	14.9	747	50	120
3293ZC	7.03	--	.0004	.0569	.0016	.0008	.0012	.0813	6.15	16.5	1,157	70	203
3293KA	7.04	--	.0045	.4464	.0268	.0063	.0268	.1786	5.60	10.1	2,020	200	226
3293KB	7.04	--	.0007	.1042	.0104	.0010	.0073	.1563	4.80	12.7	1,773	140	243
3293KC	7.04	--	.0005	.0472	.0028	.0009	.0019	.0943	5.30	4.3	2,860	667	152
3293LA	7.05	--	.0006	.0345	.0057	.0023	.0034	.1149	4.35	11.4	797	70	99
3293LB	7.05	--	.0006	.0778	.0022	.0022	.0056	.1111	4.50	5.0	4,985	1,000	299
3293LC	7.05	--	.0017	.3333	.0033	.0022	.0111	.1111	4.50	8.0	1,590	200	143
3293MA	7.06	--	.0005	.0636	.0018	.0014	.0027	.0909	5.50	20.9	1,047	50	230
3293MB	7.06	--	.0003	.0222	.0022	.0017	.0017	.1667	4.50	16.9	1,210	71	219
3293MC	7.06	--	.0005	.0309	.0031	.0010	.0015	.1031	4.85	8.7	2,894	333	281
3292XA	8.01	--	.0015	.1020	.0153	.0051	.0051	.3061	4.90	12.9	1,807	140	253
3292XB	8.01	--	.0019	.1415	.0142	.0047	.0047	.1887	5.30	9.6	3,194	333	339
3292XC	8.01	--	.0019	.1429	.0190	.0067	.0048	.1905	5.25	9.4	1,890	200	198
3292YA	8.02	--	.0150	.1500	.0150	.0050	.0050	.1500	5.00	8.7	1,749	200	175
3292YB	8.02	--	.0192	.1442	.0144	.0048	.0096	.1442	5.20	9.1	1,827	200	190
3292YC	8.02	--	.0027	.1818	.0182	.0045	.0027	.1364	5.50	9.8	1,950	200	215
3292ZA	8.03	--	.0018	.2679	.0089	.0045	.0179	.0446	5.60	20.7	2,067	100	463

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ca	Pb	As	Sb	Cd	Bi	Hg	Ni
3292ZP	8.03	93.2	967	3.2	3.65	.0319	--	--	.0106	--	--	--	.0021	3.1915	--
3292ZC	8.03	90.1	950	4.7	5.18	.0283	--	--	.0943	--	.0019	--	.0028	4.7170	--
3292KA	8.04	90.2	905	9.4	.37	.0189	--	--	.0189	.0047	.0017	--	.0007	.0094	.0009
3292KB	8.04	90.2	908	9.2	.60	.0275	--	--	.0459	.0064	--	--	.0046	.0092	.0014
3292KC	8.04	90.5	911	8.8	.71	.0294	--	--	.0294	--	--	--	.0015	.1471	--
3292L	8.05	89.3	896	10.3	.40	.0309	--	--	.0309	--	.0018	--	.0103	.0309	.0005
3292RA	8.06	88.5	888	11.1	.37	.0333	--	--	.0167	--	.0056	--	.0006	.0078	.0033
3292RB	8.06	89.0	893	10.6	.31	.0213	--	--	.0160	.0043	.0074	--	.0016	.0074	--
3292TB	8.07	88.1	929	6.7	5.19	.0288	--	--	.0192	--	.0048	--	.0067	2.8846	.0010
3292TC	8.07	86.8	947	4.9	8.32	.0294	--	--	.0686	--	--	--	.0049	4.9020	.0020
3260A	9.01	94.4	948	5.2	.38	.0729	--	--	.0021	--	.0031	--	.0003	--	--
3260B	9.01	85.3	855	14.4	.31	.0288	--	--	.0067	--	.0144	--	.0002	.0019	--
3260C	9.01	95.3	956	4.4	.32	.0442	--	--	.0009	--	.0018	--	--	.0015	--
3260XA	9.02	90.4	910	8.9	.72	.0625	--	--	.0045	--	--	--	.1786	--	--
3260XB	9.02	88.0	886	11.3	.70	.1131	--	--	.0011	--	--	--	.0003	--	--
3260XC	9.02	92.2	929	7.1	.66	.1014	--	--	.0203	.0041	.0018	--	.0003	.0030	--
3260TA	9.03	88.3	888	11.1	.58	.1111	--	--	.0111	.0056	--	--	.0033	--	--
3260TB	9.03	93.5	939	6.0	.43	.1293	--	--	.0431	.0060	.0015	--	.0004	.0017	--
3260TC	9.03	85.2	854	14.6	.23	.0681	--	--	.0015	--	.0017	--	.0003	.0019	--
3260VA	9.04	92.4	930	7.0	.59	.1000	--	--	.0020	--	--	--	.0005	--	--
3260VB	9.04	92.6	930	7.0	.36	.1000	--	--	.0015	--	.0018	--	.0020	.0020	--
3260VC	9.04	89.0	896	10.3	.72	.1031	--	--	.0031	--	.0018	--	.0003	.0018	--
3260WA	9.05	88.1	886	11.3	.61	.1134	--	--	.0079	--	--	--	.0023	.0020	--
3260WB	9.05	93.1	934	6.6	.32	.0940	--	--	.0009	--	--	--	.0002	.0028	--
3260WC	9.05	93.3	937	6.2	.45	.1779	--	--	.0044	--	.0018	--	.0009	.0018	--
3260QA	9.06	88.6	889	11.1	.27	.0556	--	--	.0022	--	.0022	--	.0006	--	--
3260QB	9.06	83.2	855	14.2	2.67	.0189	--	--	.0066	--	.0094	--	.0005	.0047	--
3260QC	9.06	84.2	844	15.6	.26	.0726	--	--	.0010	--	.0021	--	.0010	--	--
3260SA	9.07	92.8	954	4.5	2.68	.1356	--	--	.0181	.0045	--	--	.0014	--	.0045
3260SB	9.07	87.5	881	11.8	.67	.0237	--	--	.0012	.0047	.0118	--	.0006	--	--
3260SC	9.07	92.0	927	7.2	.75	.0515	--	--	.0031	.0041	.0018	--	.0005	.0021	--
3260RA	9.08	92.0	926	7.4	.61	.1050	--	--	.0105	.0158	.0021	--	.0005	.0021	.0210
3260RB	9.08	85.9	860	14.0	.11	.0279	--	--	.0019	--	.0019	--	.0003	--	--
3260RC	9.08	79.4	797	20.3	.30	.0304	--	--	.0020	--	.1014	--	.0020	.0051	--
3260KA	9.09	89.2	897	10.3	.50	.0513	--	--	.0308	--	.0205	--	.0072	.0021	--
3260KB	9.09	88.9	893	10.7	.40	.0534	--	--	.0021	--	.0075	--	.0534	--	--
3260KC	9.09	80.5	809	19.0	.49	.0190	--	--	.0095	--	.0190	--	.0007	.0017	--
3260ZA	9.10	94.5	950	5.0	.49	.1000	--	--	.0100	--	.0050	--	.0005	.0050	--
3260ZB	9.10	89.4	899	10.0	.56	.0700	--	--	.0500	.0040	.0030	--	.0070	--	--
3260ZC	9.10	89.2	894	10.6	.18	.0318	--	--	.0074	--	.0032	--	.0002	.0019	--
3260IA	9.11	77.1	773	22.7	.25	.0011	--	--	.0017	--	.1134	--	.0002	.0079	--
3260PB	9.11	70.2	705	29.4	.42	.0010	--	--	.0020	--	.1471	--	.0002	.0029	--
3260PC	9.11	79.2	794	20.5	.24	.0007	--	--	.0010	--	.1027	--	--	.0031	--
3033A	9.12	94.0	947	5.3	.72	.0636	--	--	.0006	--	.0018	--	.0018	--	.0009
3033B	9.12	63.9	644	35.3	.78	.0029	--	--	.0029	--	.0980	--	.0015	.0049	--
3033C	9.12	93.5	937	6.2	.24	.0615	--	--	.0026	--	--	--	.0004	.0439	--
3033D	9.12	85.2	855	14.4	.33	.0271	--	--	.0181	--	--	--	.0009	.0027	--
3164A	9.13	95.3	953	4.6	.10	.0186	--	--	.0005	--	.0016	--	--	--	--
3164B	9.13	84.7	848	15.2	.14	.0152	--	--	.0020	.0304	.0051	--	.0020	--	.0015
3164C	9.13	84.3	844	15.5	.16	.0104	--	--	.0016	--	.0104	--	.0052	.0031	--

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	P	Ta	Be
3292ZP	8.03	.0011	.0319	.0005	--	.0004	.0160	.0011	.0319	.0021	--	--	.0004	0	--
3292ZC	8.03	.0014	.0283	.0007	--	--	.0028	.0009	.0189	.0019	--	--	.0004	0	--
3292KA	8.04	--	.0005	--	--	.0009	--	--	--	--	--	--	.0004	0	--
3292KB	8.04	--	.0005	--	--	.0009	.0005	--	--	--	--	--	.0004	0	--
3292KC	8.04	--	.0147	--	--	.0012	--	--	--	--	--	--	.0012	0	--
3292L	8.05	--	.0005	--	--	.0015	--	--	--	--	--	--	.0004	0	--
3292RA	8.06	.0008	--	--	--	.0011	--	--	--	--	--	--	.0004	0	--
3292RB	8.06	--	--	--	--	.0007	--	--	--	--	--	--	.0004	0	--
3292TR	8.07	.0005	.9615	--	--	.0010	.0192	.0010	--	.0014	--	.0005	.0004	0	--
3292TC	8.07	.0020	.9804	.0005	--	.0015	.0147	.0015	.0980	.0020	--	.0005	.0005	0	--
3260A	9.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260B	9.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3260C	9.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260XA	9.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260XB	9.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3260XC	9.02	--	--	--	--	.0015	.0010	--	--	--	.0030	--	--	--	--
3260TA	9.03	--	.0111	--	--	.0008	.0006	--	--	--	.0022	--	--	--	--
3260TB	9.03	--	--	--	--	.0017	.0004	--	--	.0003	.0086	--	--	--	--
3260TC	9.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3260VA	9.04	--	--	--	--	.0005	.0004	--	--	--	--	--	--	--	--
3260VB	9.04	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260VC	9.04	--	--	--	--	.0005	.0004	--	--	--	--	--	--	--	--
3260WA	9.05	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3260WB	9.05	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260WC	9.05	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260QA	9.06	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260QB	9.06	--	.0009	--	--	.0014	.0007	--	--	.0005	--	--	--	--	.0001
3260QC	9.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3260SA	9.07	.0009	--	--	--	.0009	.0005	.0009	--	.0009	--	--	--	--	.0001
3260SB	9.07	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3260SC	9.07	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260RA	9.08	.0053	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3260RB	9.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3260RC	9.08	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260KA	9.09	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260KB	9.09	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3260KC	9.09	--	--	--	--	.0005	--	--	--	--	--	--	.0095	0	--
3260ZA	9.10	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3260ZB	9.10	.0015	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260ZC	9.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3260PA	9.11	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3260PB	9.11	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3260PC	9.11	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3033A	9.12	--	--	--	--	--	--	.0008	--	--	--	--	--	--	--
3033B	9.12	--	.0490	--	--	--	--	--	--	--	--	--	--	--	--
3033C	9.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3033D	9.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3164A	9.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3164B	9.13	.0007	--	--	--	--	--	--	--	--	--	--	--	--	--
3164C	9.13	--	.0104	--	--	--	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	Ag/Cu
3292ZB	8.03	--	.0213	.2128	.0106	.0053	.0213	.0532	4.70	29.2	2,919	100	915
3292ZC	8.03	--	.0047	.1887	.0094	.0047	.0283	.0472	5.30	19.1	3,184	167	675
3292KA	8.04	--	.0019	.0943	.0189	.0066	.0009	.1887	5.30	9.6	4,780	500	507
3292KB	8.04	--	.0028	.1835	.0275	.0092	.0064	.2752	5.45	9.8	3,278	333	357
3292KC	8.04	--	.0029	.1471	.0294	.0059	.0029	.2941	1.70	10.3	3,076	300	349
3292L	8.05	--	.0015	.1031	.0206	.0052	.0052	.1546	4.85	8.7	2,887	333	280
3292RA	8.06	--	.0017	.1111	.0167	.0056	.0033	.1667	4.50	8.0	2,655	333	239
3292RB	8.06	--	.0016	.0745	.0160	.0032	.0009	.1596	4.70	8.4	4,185	500	393
3292TA	8.07	--	.0192	.4808	.0192	.0144	.0481	.6731	5.20	13.1	3,054	233	454
3292TC	8.07	.0098	.0490	.9804	.0294	.0686	.0980	.9804	5.10	17.7	2,950	167	602
3260A	9.01	--	.0007	.0729	.0052	.0052	.0052	.2083	4.80	18.1	1,295	71	249
3260B	9.01	--	.0007	.0962	.0067	.0029	.0048	.1442	5.20	5.9	2,956	500	205
3260C	9.01	--	.0004	.1327	.0062	.0009	.0009	.1327	5.65	21.5	2,153	100	487
3260XA	9.02	--	.0018	.2679	.0134	.0089	.0027	.1786	5.60	10.1	1,446	143	162
3260XB	9.02	--	.0008	.2262	.0113	.0023	.0017	.3394	4.42	7.8	778	100	69
3260XC	9.02	--	.0007	.3043	.0101	.0051	.0020	.2028	4.93	13.0	909	70	128
3260TA	9.03	--	.0056	.1667	.0222	.0022	.0167	.2222	4.50	7.9	795	100	72
3260TB	9.03	--	.0004	.0862	.0060	.0060	.0060	.1293	5.80	15.5	723	47	120
3260TC	9.03	--	.0003	.0486	.0049	.0029	.0015	.0973	5.14	5.8	1,251	214	86
3260VA	9.04	--	.0010	.1500	.0200	.0050	.0100	.3000	5.00	13.2	924	70	132
3260VB	9.04	--	.0007	.0700	.0150	.0050	.0070	.1500	5.00	13.2	926	70	132
3260VC	9.04	--	.0005	.0722	.0103	.0052	.0031	.5155	4.85	8.6	863	100	84
3260WA	9.05	--	.0023	.1134	.0170	.0034	.0057	.3401	4.41	7.8	777	100	68
3260WB	9.05	--	.0005	.0658	.0094	.0028	.0047	.1410	5.32	14.2	991	70	151
3260WC	9.05	--	.0006	.0623	.0178	.0044	.0008	.1779	5.62	15.0	524	35	84
3260QA	9.06	--	.0008	.0778	.0167	.0022	.0033	.1111	4.50	8.0	1,595	200	144
3260QB	9.06	--	.0047	.6604	.0472	.0142	.0094	1.8868	5.30	5.9	4,409	750	312
3260QC	9.06	--	.0003	.0726	.0052	.0021	.0016	.1037	4.82	5.4	1,159	214	75
3260SA	9.07	--	.0136	1.8083	.0271	.0181	.0090	.6329	5.53	20.5	684	33	151
3260SB	9.07	--	.0024	.3555	.0237	.0036	.0059	.2370	4.22	7.4	3,692	500	312
3260SC	9.07	--	.0010	.5155	.0072	.0021	.0031	.1546	4.85	12.8	1,786	140	247
3260RA	9.08	--	.0011	.2101	.0158	.0053	.0053	.2101	4.76	12.5	876	70	119
3260RB	9.08	--	.0001	.0093	.0047	.0009	--	.0652	5.37	6.2	3,076	500	220
3260RC	9.08	--	.0003	.0507	.0071	.0015	.0010	.1014	4.93	3.9	2,610	667	129
3260KA	9.09	--	.0010	.1540	.0205	.0021	.0051	.2053	4.87	8.7	1,738	200	169
3260KB	9.09	--	.0005	.0534	.0107	.0011	--	.2137	4.68	8.3	1,665	200	156
3260KC	9.09	--	.0010	.1905	.0476	.0014	.0014	.1905	5.25	4.2	4,224	1,000	222
3260ZA	9.10	--	.0007	.1500	.0100	.0015	.0070	.2000	5.00	18.9	945	50	189
3260ZB	9.10	--	.0007	.2000	.0100	.0020	.0100	.2000	5.00	8.9	1,278	143	128
3260ZC	9.10	--	.0003	.0531	.0053	.0011	--	.0743	4.71	8.4	2,801	333	264
3260PA	9.11	--	.0006	.0340	.0079	.0017	.0011	.0794	4.41	3.4	67,980	20,000	2,998
3260PB	9.11	--	.0007	.0490	.0147	.0010	.0029	.1961	5.10	2.4	71,574	30,000	2,434
3260PC	9.11	--	.0003	.0205	.0103	.0010	--	.1027	4.87	3.9	110,234	28,571	5,368
3033A	9.12	--	.0014	.1364	.0091	.0045	.0455	.4545	5.50	17.8	1,477	83	280
3033B	9.12	--	.0015	.0980	.0147	.0147	.0049	.4902	5.10	1.8	21,734	12,000	616
3033C	9.12	--	.0004	.0615	.0044	.0026	--	.0615	5.69	15.0	1,520	101	244
3033D	9.12	--	.0009	.0903	.0063	.0045	.0014	.1805	5.54	5.9	3,148	533	218
3164A	9.13	--	--	.0065	.0019	.0009	--	.0651	5.38	20.5	5,125	250	1,103
3164B	9.13	--	--	.0071	.0030	.0010	--	.0709	4.94	5.6	5,578	1,000	367
3164C	9.13	--	.0001	.0052	.0052	.0010	--	.1035	4.83	5.4	8,145	1,500	525

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum %	Cu	Zn	Ga	Pb	As	Sb	Cd	Pi	Hg	Ni
3164XA	9.14	91.7	922	7.8	.49	.0557	--	--	.0011	--	--	--	.1670	--	--
3164XB	9.14	91.1	914	8.6	.36	.0171	.0257	--	.0013	--	--	--	.0009	--	--
3164XC	9.14	93.4	937	6.3	.31	.0271	--	--	.0063	--	--	--	.0181	.0018	--
YD1380A	10.01	88.9	899	10.0	1.09	.0150	--	--	.0005	.0020	--	--	--	.0200	.0020
YD1380B	10.01	92.5	930	7.0	.51	.0300	--	--	.0020	--	.0070	--	--	.0500	.0010
YD1380C	10.01	92.5	930	7.0	.50	.0200	--	--	.0010	.0020	--	.0005	--	.1000	.0010
YD1380D	10.01	79.8	800	20.0	.19	.0200	--	--	.0010	--	.0300	--	--	.0150	--
3274A	11.01	89.5	899	10.0	.55	.0700	--	--	.0700	--	.0050	--	--	.0050	.0020
3274B	11.01	84.9	854	14.6	.56	.0194	--	--	.0010	--	.0971	--	--	.0291	.0015
3274C	11.01	78.3	786	21.3	.38	.0032	--	--	.0021	--	.2128	--	--	.0213	--
3274RA	11.02	86.5	869	13.0	.49	.0130	--	--	.0435	.0043	.0017	--	.0002	.0870	.0009
3274RB	11.02	83.6	844	15.5	.92	.0206	--	--	.0515	--	.0103	--	--	.0155	--
3274RC	11.02	83.2	836	16.3	.52	.0326	--	--	.0163	.0054	.0054	--	--	.0054	.0016
3274SA	11.03	79.3	795	20.4	.32	.0204	--	--	.0010	--	.1531	--	--	.0102	--
3274SB	11.03	79.3	802	19.6	1.06	.0069	--	--	.0098	--	.1471	--	--	.0490	.0020
3274SC	11.03	85.4	857	14.3	.34	.0667	--	--	.0014	--	.0029	--	--	.0667	.0005
3274TA	11.04	90.3	909	9.0	.72	.0180	--	--	.0450	.0045	--	--	.0018	.0090	.0009
3274TB	11.04	78.8	798	20.0	1.20	.0150	--	--	.5000	.0500	.0070	--	.0010	.0050	.0005
3274TC	11.04	79.7	807	19.0	1.28	.0286	--	--	.0476	.0067	.0029	--	--	.0286	--
3274VA	11.05	89.9	901	9.9	.16	.0198	--	--	.0005	--	.0020	--	--	.0198	--
3274VB	11.05	77.0	772	22.7	.27	.0023	--	--	.0170	--	.0568	--	--	.0170	--
3274VC	11.05	79.3	799	20.0	.68	.0200	--	--	.0267	.0053	.2000	--	--	.0667	.0007
3274YA	11.06	93.5	939	6.1	.43	.0244	--	--	.0012	--	--	--	--	.0854	.0012
3274YB	11.06	93.2	948	5.1	1.65	.0510	.0102	--	.1020	.0510	--	--	.0204	.0102	.0020
3274YC	11.06	89.7	901	9.8	.50	.0196	.0147	--	.0294	.0049	--	--	.0007	.0147	.0015
3297XA	11.07	86.1	863	13.6	.24	.0182	--	--	.0136	--	.0016	--	.0009	.0909	--
3297XB	11.07	91.2	933	6.5	2.28	.0935	.0093	--	.0093	.0187	.0093	--	--	.0187	.0047
3297XC	11.07	89.2	901	9.8	1.01	.0294	--	--	.0196	.0098	--	--	.0020	.0196	.0029
3297YA	11.08	92.5	930	7.0	.49	.0500	--	--	.0010	--	.0200	--	--	.0050	.0010
3297YB	11.08	79.7	799	20.0	.35	.0030	--	--	.0030	--	.1000	--	--	.0100	--
3297YC	11.08	89.7	909	9.0	1.28	.0180	--	--	.0450	.0090	.0016	--	--	.0063	.0045
3297ZA	11.09	87.6	887	11.1	1.29	.0167	--	--	.0056	--	.0222	--	.0006	.1111	.0011
3297ZB	11.09	81.7	822	17.7	.56	.0044	--	--	.0027	.0035	.2655	--	--	.0265	.0009
3297ZC	11.09	89.4	899	10.0	.59	.0500	--	--	.0020	.0040	.0018	--	--	.0150	.0020
3161A	12.01	83.1	835	16.4	.48	.0110	--	--	.0077	--	--	--	--	.0022	--
3161B	12.01	80.7	810	19.0	.29	.0047	--	--	.0028	--	.0047	--	--	.0028	.0005
3161C	12.01	89.4	895	10.5	.17	.0105	--	--	.0052	--	--	--	--	.0105	--
3161XA	12.02	84.9	851	14.9	.23	.0198	--	--	.0002	--	--	--	--	--	--
3161XB	12.02	82.5	826	17.3	.13	.0130	--	--	.0009	--	.0015	--	--	--	--
3161XC	12.02	89.9	901	9.9	.18	.0198	--	--	.0005	--	--	--	--	.0017	--
3161NA	12.03	79.4	796	20.4	.22	.0153	--	--	.0153	--	--	--	--	.0020	--
3161NB	12.03	81.8	820	18.0	.21	.0018	--	--	.0002	--	.0027	--	--	.0018	--
3294XA	13.01	93.6	940	6.0	.46	.0833	--	--	.0012	--	--	--	--	.0024	--
3294XB	13.01	94.5	950	5.0	.47	.0500	--	--	.0010	--	--	--	--	.0030	.0010
3294XC	13.01	95.2	957	4.3	.50	.0855	--	--	.0013	--	--	--	--	.0427	.0017
3294YA	13.02	87.7	882	11.7	.53	.0391	--	--	.0039	--	--	--	--	--	.0023
3294YB	13.02	87.9	886	11.4	.75	.0170	--	--	.1136	.0170	.0034	--	.0003	.0023	.0023
3294YC	13.02	77.7	781	21.7	.51	.0054	--	--	.0217	--	.0761	--	--	.0109	.0016
3101A	13.03	80.3	804	19.6	.14	.0098	--	--	.0005	--	.0196	--	--	--	--
3101B	13.03	80.1	803	19.6	.32	.0147	--	--	.0007	--	.0049	--	--	.0980	--

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3164XA	9.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3164XB	9.14	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3164XC	9.14	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
YD1380A	10.01	--	--	--	--	.0020	.0010	.0015	.0010	--	--	--	--	--	--
YD1380B	10.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
YD1380C	10.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
YD1380D	10.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3274A	11.01	--	.0010	--	.0015	.0010	--	--	--	--	--	--	--	--	--
3274B	11.01	--	.0010	--	--	.0010	--	--	--	--	--	--	--	--	--
3274C	11.01	--	.0011	--	--	--	.0005	--	--	--	--	--	--	--	--
3274RA	11.02	--	.0013	--	--	.0006	--	--	--	--	--	--	--	--	--
3274RB	11.02	--	.0015	--	--	.0005	--	--	--	--	--	--	--	--	--
3274RC	11.02	--	.0016	--	--	.0005	--	--	--	--	--	--	--	--	--
3274SA	11.03	--	.0010	--	--	--	--	--	--	--	--	--	--	--	--
3274SB	11.03	--	.0015	--	--	.0005	.0005	--	--	--	--	--	--	--	--
3274SC	11.03	--	.0005	--	--	--	--	--	--	--	--	--	--	--	--
3274TA	11.04	--	.0009	--	--	.0005	--	--	--	--	--	--	--	--	--
3274TB	11.04	--	.0010	--	--	.0020	--	--	--	--	--	--	--	--	--
3274TC	11.04	--	.0019	--	--	.0010	--	--	--	--	--	--	.0004	0	--
3274VA	11.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3274VB	11.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3274VC	11.05	--	--	--	--	.0005	.0007	--	--	--	--	--	--	--	--
3274YA	11.06	--	.0018	--	--	.0005	--	--	--	--	--	--	--	--	--
3274YB	11.06	--	.0005	--	--	.0007	--	.0015	.0010	.0007	--	--	--	--	--
3274YC	11.06	--	.0005	--	--	.0010	.0004	--	--	--	--	--	--	--	--
3297XA	11.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3297XB	11.07	.0007	--	--	--	--	.0005	--	--	--	--	--	.0007	0	--
3297XC	11.07	--	--	--	--	--	--	--	--	--	--	--	.0007	0	--
3297YA	11.08	--	.0010	--	--	.0004	--	--	--	--	--	--	--	--	--
3297YB	11.08	--	.0015	--	--	.0007	--	--	--	--	--	--	--	--	--
3297YC	11.08	--	.0027	--	--	.0018	.0005	--	--	--	--	--	.0004	0	--
3297ZA	11.09	--	.0011	--	--	.0011	--	--	--	.0011	--	--	--	--	--
3297ZB	11.09	--	.0044	--	--	.0006	--	--	--	--	--	--	--	--	--
3297ZC	11.09	--	.0005	--	--	.0005	--	--	--	--	--	--	--	--	--
3161A	12.01	--	--	--	--	.0005	--	--	--	.0011	--	--	--	--	--
3161B	12.01	--	--	--	--	.0007	--	--	--	--	--	--	.0002	0	--
3161C	12.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3161XA	12.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3161XB	12.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3161XC	12.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3161NA	12.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3161NB	12.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3294XA	13.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3294XB	13.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3294XC	13.01	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3294YA	13.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3294YB	13.02	--	--	--	--	.0017	--	--	--	--	--	--	--	--	--
3294YC	13.02	--	.0016	--	--	.0005	--	--	--	--	--	--	--	--	--
3101A	13.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3101B	13.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3164XA	9.14	--	.0003	.0223	.0111	.0022	.0056	.2227	4.49	11.8	1,647	140	211
3164XB	9.14	--	.0004	.1284	.0086	.0017	.0086	.1712	5.84	10.6	5,319	500	621
3164XC	9.14	--	.0009	.0452	.0181	.0045	.0018	.1808	5.53	14.8	3,442	233	544
YD1380A	10.01	--	.0070	.5000	.0200	--	.0200	.5000	5.00	8.9	5,927	667	593
YD1380B	10.01	--	.0015	.2000	.0070	--	.0100	.2000	5.00	13.2	3,083	233	440
YD1380C	10.01	--	.0030	.2000	.0100	--	.0100	.1500	5.00	13.2	4,625	350	661
YD1380D	10.01	--	.0005	.0500	.0020	--	.0010	.0700	5.00	4.0	3,991	1,000	200
3274A	11.01	--	.0050	.1500	.0300	.0030	.0050	.2000	5.00	8.9	1,278	143	128
3274B	11.01	--	.0019	.0971	.0146	.0019	.0049	.2913	5.15	5.8	4,371	750	300
3274C	11.01	--	.0005	.0213	.0021	.0011	.0032	.1064	4.70	3.7	24,549	6,667	1,154
3274RA	11.02	--	.0026	.1304	.0261	.0017	.0043	.1739	5.75	6.6	6,629	1,000	508
3274RB	11.02	--	.0015	.0722	.0206	.0021	--	.7216	4.85	5.4	4,055	750	262
3274RC	11.02	--	.0022	.1087	.0109	.0022	.0033	.3261	4.60	5.1	2,551	500	156
3274SA	11.03	--	.0007	.0306	.0031	.0010	--	.1020	4.90	3.9	3,884	1,000	190
3274SB	11.03	--	.0029	.2941	.0490	.0020	.0069	.4902	5.10	4.0	11,560	2,857	590
3274SC	11.03	--	.0014	.0952	.0095	.0014	--	.0952	5.25	6.0	1,281	214	90
3274TA	11.04	--	.0014	.1802	.0045	.0018	.0018	.4505	5.55	10.0	5,010	500	556
3274TB	11.04	--	.0150	.1000	.0050	.0020	--	.5000	5.00	3.9	5,253	1,333	263
3274TC	11.04	--	.0029	.1905	.0190	.0010	--	.9524	5.25	4.2	2,788	667	146
3274VA	11.05	--	.0002	.0149	.0020	.0010	--	.0990	5.05	9.1	4,542	500	459
3274VB	11.05	--	.0006	.0568	.0023	.0011	.0017	.1136	4.40	3.4	33,881	10,000	1,491
3274VC	11.05	--	.0013	.1333	.0200	.0013	.0013	.2000	3.75	4.0	3,966	1,000	198
3274YA	11.06	--	.0012	.1220	.0061	.0012	.0037	.1829	4.10	15.3	3,832	250	628
3274YB	11.06	--	.0510	1.0204	.0102	.0102	.0031	.3061	4.90	18.3	1,828	100	358
3274YC	11.06	--	.0020	.1961	.0147	.0020	--	.1961	5.10	9.1	4,575	500	467
3297XA	11.07	--	.0009	.0636	.0018	.0009	.0009	.0455	5.50	6.3	4,737	750	347
3297XB	11.07	--	.0187	1.8692	.0187	.0140	.0093	.1869	5.35	13.9	976	70	149
3297XC	11.07	--	.0098	.6863	.0147	.0098	.0069	.1961	5.10	9.1	3,032	333	309
3297YA	11.08	--	.0020	.2000	.0030	.0010	.0050	.2000	5.00	13.2	1,850	140	264
3297YB	11.08	--	.0010	.0700	.0050	.0010	.0010	.1500	5.00	4.0	26,551	6,667	1,328
3297YC	11.08	--	.0018	.2703	.0135	.0018	.0045	.9009	5.55	10.0	4,979	500	553
3297ZA	11.09	--	.0033	.2222	.1111	.0056	.0056	.7778	4.50	7.9	5,256	667	473
3297ZB	11.09	--	.0006	.0619	.0062	.0009	.0027	.1770	5.65	4.6	18,474	4,000	1,044
3297ZC	11.09	--	.0100	.3000	.0070	.0010	.0009	.2000	5.00	8.9	1,788	200	179
3161A	12.01	--	.0022	.1096	.0110	.0022	.0077	.3289	4.56	5.1	7,576	1,500	461
3161B	12.01	--	.0028	.0664	.0142	.0014	.0028	.1898	5.27	4.3	17,018	4,000	897
3161C	12.01	--	.0007	.0209	.0105	.0021	.0052	.1046	4.78	8.5	8,544	1,000	817
3161XA	12.02	--	.0010	.0992	.0050	.0015	.0008	.0992	5.04	5.7	4,279	750	288
3161XB	12.02	--	.0006	.0433	.0043	.0009	.0017	.0607	5.77	4.8	6,350	1,333	366
3161XC	12.02	--	.0010	.0494	.0030	.0010	.0020	.0988	5.06	9.1	4,551	500	461
3161NA	12.03	--	.0010	.0713	.0071	.0015	.0010	.1018	4.91	3.9	5,199	1,333	255
3161NB	12.03	--	.0004	.0180	.0063	.0009	--	.1795	5.57	4.6	45,582	10,000	2,539
3294XA	13.01	--	.0024	.2381	.0024	.0024	.0060	.1190	4.20	15.7	1,123	71	189
3294XB	13.01	--	.0050	.3000	.0050	.0020	--	.1000	5.00	18.9	1,891	100	378
3294XC	13.01	--	.0026	.1709	.0085	.0026	.0085	.1709	5.85	22.3	1,114	50	261
3294YA	13.02	--	.0023	.2344	.0117	.0016	.0039	.2344	6.40	7.5	2,246	300	192
3294YB	13.02	--	.0034	.3409	.0080	.0023	.0080	.2273	4.40	7.7	5,156	667	454
3294YC	13.02	--	.0022	.2174	.0076	.0022	.0022	.1630	4.60	3.6	14,306	4,000	658
3101A	13.03	--	.0003	.0098	.0020	.0010	--	.0978	5.11	4.1	8,206	2,000	419
3101B	13.03	--	.0007	.0490	.0049	.0010	--	.1471	5.10	4.1	5,445	1,333	278

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Hg	Ni
3101C	13.03	69.0	692	30.7	.26	.0020	--	--	.0307	.0102	.0020	--	.0002	.0051	--
3101XA	13.04	78.8	789	21.0	.21	.0158	--	--	.0011	--	--	--	--	.0105	--
3101XB	13.04	96.3	965	3.5	.28	.0346	--	--	.0012	--	--	--	--	.0576	--
3101XC	13.04	76.4	767	23.3	.39	.0233	--	--	.0006	--	.0058	--	--	.0023	--
3179	14.01	71.3	714	28.6	.10	.0020	--	--	--	--	.0086	--	--	--	--
3025A	14.02	68.0	691	30.4	1.62	.0089	--	--	.0253	.0063	.0127	--	--	.0063	--
3025B	14.02	81.3	835	16.1	2.59	.0124	--	--	.0371	.0087	.0062	--	--	.2475	.0025
3025XA	14.03	75.2	764	23.3	1.48	.0068	--	--	.0007	--	.0041	--	--	.0137	.0010
3025XD	14.03	80.2	804	19.6	.23	.0096	--	--	.0005	--	.0019	--	--	.0067	--
3141A	15.01	83.2	850	14.6	2.13	.0049	--	--	.0049	--	.0068	--	.0002	1.9531	--
3141B	15.01	78.7	797	20.0	1.32	.0100	--	--	.0150	--	--	--	--	1.0000	--
3141C	15.01	89.0	901	9.7	1.26	.0097	--	--	.0292	.0146	.0019	--	--	.9728	--
3141NA	15.02	81.6	848	14.6	3.84	.0049	.0195	--	.1946	.0486	.0146	--	2.4319	.2918	.0010
3141NB	15.02	73.2	756	23.6	3.20	.0110	.0157	--	.7862	.1572	.0157	--	.0157	1.1006	--
3141XA	15.03	73.5	744	25.3	1.16	.0013	--	--	.0422	.0169	--	--	.0004	.5902	--
3141XB	15.03	82.1	832	16.6	1.30	.0222	--	--	.0017	.0333	--	--	--	.0019	--
3141M	15.04	78.7	805	19.1	2.14	.0082	--	--	.0546	--	.0137	--	.0019	.1366	--
3141W	15.05	79.7	872	11.7	8.63	.0083	--	--	.1167	--	--	--	.0017	8.3333	--
3258SA	16.01	85.1	860	13.8	1.01	.0461	--	--	.0005	--	.0092	--	--	.0092	--
3258SB	16.01	89.6	900	10.0	.41	.0500	--	--	.0007	--	.0100	--	--	.0100	--
3258SC	16.01	88.9	890	11.0	.10	.0329	--	--	.0005	--	--	--	--	.0022	--
3258VA	16.02	84.0	848	15.0	1.01	.0100	--	--	.3000	.0500	.0030	--	.0100	.0050	.0010
3258VB	16.02	82.8	839	15.9	1.35	.0106	--	--	.0318	.0159	--	--	.0016	.0106	.0011
3258VC	16.02	84.9	857	14.2	.96	.0094	--	--	.1887	--	.0017	--	.0047	.0066	--
3258RA	16.03	92.1	924	7.6	.27	.0542	--	--	.0022	--	--	.0002	--	.0054	--
3258RB	16.03	86.4	870	12.9	.63	.0603	--	--	.0009	--	--	.0004	--	.0043	--
3258RC	16.03	88.7	890	11.0	.30	.0165	--	--	.0033	--	.0019	--	--	.0110	--
3258QA	16.04	93.9	942	5.8	.33	.0812	--	--	.0012	--	.0174	--	--	.0812	--
3258QB	16.04	94.6	949	5.1	.29	.0510	--	--	.0026	--	.0119	--	--	.0850	--
3258KA	16.05	89.7	899	10.0	.23	.0201	--	--	.0100	--	.0020	--	--	.0703	--
3258KB	16.05	92.4	928	7.2	.36	.0515	--	--	.0309	--	.0206	--	.0015	.0072	.0005
3258KC	16.05	83.6	840	15.9	.43	.0074	--	--	.0005	--	.0021	--	--	.0053	--
3258A	16.06	83.9	840	16.0	.12	.0213	--	--	.0002	--	.0021	--	--	.0021	--
3258B	16.06	90.9	914	8.6	.51	.0257	--	--	.0009	--	--	--	--	.0017	.0017
3258C	16.06	83.7	843	15.6	.69	.0208	--	--	.0104	.0104	--	--	--	.0052	.0104
3163A	17.01	79.4	839	15.2	5.36	.0102	--	--	1.0163	--	.0508	--	.0005	3.0488	--
3163B	17.01	74.3	801	18.5	7.19	.0185	--	--	1.3863	--	.0185	--	.0009	4.6211	--
3163C	17.01	72.8	794	18.9	8.28	.0095	--	--	1.8904	.0047	.0189	--	.0028	4.7259	--
3024A	18.01	73.3	788	19.7	7.04	.0060	--	--	.0597	.0048	--	--	--	5.9666	--
3024B	18.01	65.2	694	28.8	6.04	.0073	--	--	.0314	--	.0073	--	--	5.2301	.0005
3024E	18.01	71.2	769	21.5	7.31	.0093	--	--	.0653	--	.0065	--	--	5.5970	--
3024XC	18.02	68.8	741	24.1	7.07	.0105	.0105	--	.0314	--	--	--	.0002	6.2893	--
3162A	19.01	69.5	697	30.2	.35	.0070	--	--	.0101	--	.0070	--	--	.0050	.0007
3162B	19.01	84.7	849	15.1	.23	.0100	--	--	.0002	--	.0020	--	--	.0050	--
3162C	19.01	78.5	796	20.2	1.32	.0151	--	--	.0010	--	.1008	--	.0005	1.0081	--
3162XA	19.02	76.4	775	22.2	1.41	.0111	--	--	.0011	--	--	--	--	1.1111	--
3162XB	19.02	80.9	810	19.0	.11	.0014	--	--	.0066	.0095	.0028	--	--	.0095	--
3023A	20.01	70.7	714	28.3	1.03	.0053	--	--	.0107	.0053	.0107	--	.0002	.1068	--
3023B	20.01	75.2	759	23.9	.96	.0058	--	--	.0117	.0058	.0117	--	.0002	.1748	--
3023C	20.01	76.7	775	22.3	.97	.0058	--	--	.0291	.0136	.0039	--	.0010	.0969	--

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3101C	13.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3101XA	13.04	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3101XB	13.04	--	--	--	.0017	.0005	--	--	--	--	--	--	--	--	--
3101XC	13.04	--	--	--	--	.0017	--	--	--	--	--	--	--	--	--
3179	14.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3025A	14.02	--	--	--	--	--	.0063	--	--	--	--	--	--	--	--
3025B	14.02	--	--	--	--	.0025	.0124	--	--	--	--	--	--	--	--
3025XA	14.03	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3025XB	14.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3141A	15.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3141B	15.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3141C	15.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3141NA	15.02	--	.0015	--	--	.0029	.0010	.0010	.0008	.0007	--	--	.0003	0	--
3141NB	15.02	--	.0016	--	--	.0031	--	.0013	--	--	--	--	--	--	--
3141XA	15.03	--	--	--	--	.0017	--	--	--	--	--	--	--	--	--
3141XB	15.03	--	--	--	--	.0078	--	--	--	--	--	--	--	--	--
3141M	15.04	--	1.3661	--	--	--	--	--	--	--	--	--	--	--	--
3141W	15.05	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3258SA	16.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3258SB	16.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3258SC	16.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3258VA	16.02	--	--	--	--	.0010	--	--	--	--	.0050	--	.0004	0	--
3258VB	16.02	--	.0106	--	--	.0021	--	--	--	--	--	--	.0004	0	--
3258VC	16.02	--	--	--	--	.0005	--	--	--	--	--	--	.0004	0	--
3258RA	16.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3258RB	16.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3258RC	16.03	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3258QA	16.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3258QB	16.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3258KA	16.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3258KB	16.05	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3258KC	16.05	--	--	--	--	.0016	--	--	--	--	--	--	--	--	--
3258A	16.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3258B	16.06	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3258C	16.06	.0156	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3163A	17.01	--	1.0163	--	--	.0004	.0152	.0010	--	--	--	--	--	--	--
3163B	17.01	--	.9242	--	--	.0004	--	--	--	--	--	--	--	--	--
3163C	17.01	--	.9452	--	--	.0004	--	--	.0008	--	--	--	--	--	--
3024A	18.01	--	.0060	--	--	--	--	--	--	--	--	--	--	--	--
3024B	18.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3024E	18.01	--	.1866	--	--	--	--	--	--	--	--	--	--	--	--
3024XC	18.02	--	.0210	--	--	--	--	--	--	--	--	--	--	--	--
3162A	19.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3162B	19.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3162C	19.01	--	.0202	--	--	--	--	--	--	--	--	--	--	--	--
3162XA	19.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3162XB	19.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3023A	20.01	--	--	--	.0002	--	--	--	--	--	--	--	--	--	--
3023B	20.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3023C	20.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3101C	13.03	--	.0010	.0512	.0051	.0015	.0009	.1537	4.88	2.2	33,671	15,000	1,095
3101XA	13.04	--	.0002	.0210	.0032	.0016	.0009	.1576	4.76	3.7	5,000	1,333	238
3101XP	13.04	--	.0008	.0576	.0058	.0012	.0017	.1152	4.34	27.9	2,785	100	806
3101YC	13.04	--	.0023	.1163	.0058	.0017	--	.2326	4.30	3.3	3,283	1,000	141
3179	14.01	--	--	.0043	.0029	--	--	.0857	1.75	2.5	35,663	14,286	1,248
3025A	14.02	--	.0127	.3797	.0253	.1266	.1266	.8861	3.95	2.2	7,674	3,429	253
3025B	14.02	--	.0124	.6188	.0248	.1238	.6188	.8663	4.04	5.1	6,570	1,300	408
3025XA	14.03	--	.0274	.4110	.0274	.0959	.2055	.6849	3.65	3.2	10,984	3,400	472
3025XB	14.03	--	.0019	.0956	.0048	.0048	.0048	.0956	5.23	4.1	8,386	2,050	428
3141A	15.01	--	.0005	.0488	.0068	.0020	.0020	.0977	5.12	5.7	17,044	3,000	1,164
3141B	15.01	--	.0007	.0700	.0150	.0030	.0009	.2000	5.00	3.9	7,868	2,000	393
3141C	15.01	--	.0003	.0681	.0068	.0015	.0068	.1459	5.14	9.2	9,151	1,000	941
3141NA	15.02	--	.0029	.0973	.0195	.0195	.0097	.6809	5.14	5.6	16,770	3,000	1,149
3141NB	15.02	--	.0031	.2358	.0472	.0157	.0024	.7862	3.18	3.1	6,652	2,143	282
3141XA	15.03	--	.0008	.0422	.0422	.0042	.0013	.4216	5.93	2.9	58,146	20,000	2,299
3141XP	15.03	--	.0017	.1109	.0055	.0033	.0022	1.1086	4.51	4.9	3,701	750	223
3141M	15.04	.0273	.0041	.2732	.0410	.0137	.0082	.1913	1.83	4.1	9,606	2,333	502
3141W	15.05	--	.0003	.0333	.0083	.0025	.0033	.1167	3.00	6.8	9,565	1,400	820
3258SA	16.01	--	.0003	.0185	.0046	.0009	.0018	.9225	5.42	6.2	1,846	300	133
3258SP	16.01	--	.0003	.0300	.0070	.0010	.0020	.3000	5.00	9.0	1,792	200	179
3258SC	16.01	--	--	.0055	.0022	.0011	--	.0548	4.56	8.1	2,704	333	247
3258VA	16.02	--	.0010	.1000	.0150	.0020	.0100	.5000	5.00	5.6	8,399	1,500	560
3258VP	16.02	--	.0106	.1589	.0318	.0016	.0011	1.0593	4.72	5.2	7,813	1,500	492
3258VC	16.02	--	.0009	.0660	.0142	.0014	.0014	.6604	5.30	6.0	8,999	1,500	636
3258RA	16.03	--	.0003	.0325	.0054	.0016	.0016	.1627	4.61	12.1	1,699	140	224
3258RB	16.03	--	.0172	.2586	.0086	.0017	.0172	.2586	5.80	6.7	1,432	214	111
3258RC	16.03	--	.0011	.0330	.0077	.0011	.0033	.2203	4.54	8.1	5,369	667	487
3258QA	16.04	--	.0008	.0580	.0023	.0012	.0010	.0812	4.31	16.2	1,156	71	199
3258QB	16.04	--	.0003	.0510	.0034	.0026	--	.0850	2.94	18.5	1,854	100	363
3258KA	16.05	--	.0005	.0502	.0070	.0015	--	.0703	4.98	8.9	4,468	500	445
3258KB	16.05	--	.0010	.0309	.0052	.0021	.0052	.2062	4.85	12.8	1,793	140	248
3258KC	16.05	--	.0016	.0743	.0159	.0021	.0032	.3185	4.71	5.3	11,256	2,143	707
3258A	16.06	--	.0001	.0160	.0032	.0011	--	.0745	4.70	5.3	3,944	750	247
3258B	16.06	--	.0009	.0428	.0086	.0013	.0009	.4281	5.84	10.6	3,540	333	413
3258C	16.06	--	.0010	.0729	.0104	.0021	.0052	.5208	4.80	5.4	4,017	750	257
3163A	17.01	--	.0010	.0711	.0051	.0152	.0102	.1016	4.92	5.2	7,812	1,500	512
3163B	17.01	--	.0009	.0647	.0139	.0014	.0046	.1386	5.41	4.0	4,021	1,000	218
3163C	17.01	.4726	.0009	.0662	.0142	.0284	.0019	.0945	5.29	3.9	7,704	2,000	408
3024A	18.01	--	.0119	.5967	.0084	.0119	.0084	.3580	4.19	3.7	12,280	3,300	624
3024B	18.01	--	.0105	.5230	.0073	.0105	.0052	.2092	4.78	2.3	8,903	3,929	310
3024E	18.01	--	.0093	.4664	.0093	.0140	.0093	.9328	5.36	3.3	7,637	2,300	356
3024XC	18.02	--	.0052	.5241	.0105	.0105	.0010	.1572	4.77	2.9	6,565	2,300	272
3162A	19.01	--	.0015	.1509	.0101	.0015	.0050	.1509	4.97	2.3	9,865	4,286	327
3162B	19.01	--	.0007	.1004	.0050	.0010	.0015	.1004	4.98	5.6	8,437	1,500	560
3162C	19.01	--	.0015	.0504	.0101	.0050	.0050	.1008	4.96	3.9	5,193	1,333	258
3162XA	19.02	--	.0011	.1111	.0078	.0011	.0022	.1667	4.50	3.4	6,873	2,000	309
3162XB	19.02	--	.0002	.0142	.0019	.0009	--	.0664	5.27	4.3	56,854	13,333	2,996
3023A	20.01	--	.0053	.5342	.0160	.0107	.0075	.3205	4.68	2.5	13,227	5,300	467
3023B	20.01	--	.0058	.3497	.0233	.0117	.0058	.3497	4.29	3.1	12,896	4,100	540
3023C	20.01	--	.0058	.3876	.0194	.0097	.0058	.3876	2.58	3.4	13,201	3,833	592

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Hg	Ni
3023XB	20.02	79.9	819	17.6	2.51	.0160	--	--	.8013	.2404	.0240	--	.0056	.1603	--
YD4680A	21.01	81.5	819	18.0	.51	.0180	--	--	.0004	.0044	.0090	--	--	.0060	.0009
YD4680B	21.01	79.6	799	20.0	.39	.0070	--	--	.0200	--	.0300	--	.0070	.0300	--
YD4680C	21.01	69.5	698	30.0	.51	.0020	--	--	.0002	.0020	.0070	--	--	.0150	.0010
YD4680D	21.01	83.4	839	16.0	.58	.0160	--	--	.0005	.0100	.0050	--	--	.0520	.0010
3140XA	22.01	84.0	844	15.6	.39	.0207	--	--	.0207	--	.0018	--	.0010	.0207	--
3140XB	22.01	89.7	898	10.1	.19	.0152	--	--	.0020	--	.0051	--	--	.0203	--
3140XC	22.01	89.8	903	9.7	.50	.0484	--	--	.0029	--	--	--	--	.1453	--
3140A	22.02	90.2	905	9.5	.29	.0190	--	--	.0014	--	.0095	--	--	.0095	--
3140B	22.02	84.0	849	14.9	1.06	.0199	--	--	.0070	--	.0020	--	--	.4970	--
3140C	22.02	95.7	970	2.9	1.36	.0489	--	--	.0049	--	.0020	--	--	.9785	--
3140RA	22.03	89.0	893	10.7	.34	.0160	--	--	.0107	--	.0160	--	--	.1066	--
3140RB	22.03	89.5	900	10.0	.48	.0070	--	--	.0150	.0050	.0200	--	--	.0100	--
3140RC	22.03	92.5	933	6.7	.80	.0285	--	--	.0190	--	.0143	--	.0095	.4753	.0005
3140QA	22.04	84.8	895	9.9	5.34	.0297	--	--	.0020	.0050	.0099	--	--	.0198	--
3140QB	22.04	79.9	852	13.9	6.23	.0065	--	--	.0046	.1391	--	--	--	.0019	.0009
3140QC	22.04	81.1	853	13.9	4.97	.0065	--	--	.0019	.0465	--	--	--	.0093	--
3140T	22.05	94.3	952	4.7	1.01	.0472	--	--	.0009	--	--	--	--	.2358	--
3140SAA	22.06	92.4	927	7.3	.33	.0311	--	--	.0016	--	.0156	--	--	.1037	--
3140SAP	22.06	90.2	904	9.6	.24	.0144	--	--	.0010	--	.0096	--	--	.0048	--
3140SBA	22.07	81.6	838	15.8	2.53	.0158	--	--	.0158	--	.0074	--	--	2.1097	--
3140SBB	22.07	89.2	903	9.5	1.28	.0095	--	--	.0191	--	.0143	--	.0005	.9542	--
3137B	23.01	77.9	781	21.9	.23	.0022	--	--	.0055	--	.0109	--	--	.0033	--
3137C	23.01	81.8	823	17.6	.52	.0118	--	--	.0012	--	.0118	--	--	.2353	--
3137QA	23.02	84.4	849	15.0	.64	.0500	--	--	.0007	--	.0200	--	--	.1000	.0007
3137QB	23.02	68.0	687	31.1	.92	.0518	--	--	.0002	--	.1553	--	--	.0725	--
3137QC	23.02	95.2	966	3.4	1.45	.0562	--	--	.0006	--	--	--	.0002	1.1236	--
YD4180A	23.03	71.6	719	28.0	.43	.0190	--	--	.0004	--	.0930	--	--	.0190	--
YD4580A	24.01	92.9	949	5.0	2.10	.0500	--	--	.0005	--	.0100	--	--	.2000	--
YD4580B	24.01	94.6	950	5.0	.42	.0300	--	--	.0005	--	.0070	--	--	.2000	--
3176A	25.01	89.4	899	10.0	.64	.0150	--	--	.0005	--	--	--	--	--	.0007
3176B	25.01	84.2	844	15.6	.24	.0073	--	--	.0005	--	.0021	--	--	.0104	--
3176C	25.01	83.7	840	16.0	.32	.0074	--	--	.0074	--	.0053	--	--	.0213	--
3176XA	25.02	80.8	811	18.8	.36	.0141	--	--	.0019	--	--	--	--	.0047	--
3176XB	25.02	84.5	849	15.0	.50	.0030	--	--	.0030	--	.0200	--	--	.0100	.0010
3176XC	25.02	81.4	817	18.2	.36	.0137	--	--	.0005	--	.0091	--	--	.0091	.0009
3176RA	25.03	78.8	791	20.8	.35	.0073	--	--	.0052	--	.0052	--	--	.0052	.0007
3176RB	25.03	80.4	809	19.0	.61	.0095	--	--	.0005	--	--	--	--	.0048	.0005
3176RC	25.03	85.0	853	14.6	.40	.0097	--	--	.0005	--	.0292	--	--	.0029	--
3176SA	25.04	81.2	814	18.5	.27	.0028	--	--	.0005	--	.0028	--	--	.0185	.0014
3176SB	25.04	82.3	826	17.4	.33	.0017	--	--	.0609	--	.0017	--	--	.0609	--
3176SC	25.04	73.2	737	26.1	.72	.0026	--	--	.0002	--	--	--	.0002	.0087	--
YD1980A	25.05	89.6	900	10.0	.36	.0210	--	--	.0002	--	.0031	--	--	.1000	--
YD1980B	25.05	90.6	910	9.0	.45	.0180	--	--	.0007	--	.0009	--	--	.1400	.0009
YD3380A	26.01	72.7	729	27.0	.29	.0045	--	--	.0001	--	.0018	--	--	.0009	.0009
YD3380B	26.01	73.7	739	26.0	.27	.0026	--	--	.0002	--	.0017	--	--	--	--
YD3380C	26.01	69.6	699	30.0	.43	.0030	--	--	.0002	--	.0015	--	--	.0015	.0015
3265B	27.01	71.9	725	27.3	.78	.0182	--	--	.0182	--	.0018	--	.0006	.0909	.0009
3265C	27.01	67.8	684	31.3	.95	.0156	--	--	.1042	.0042	--	--	.0021	.0729	--
3265XA	27.02	79.7	813	18.3	1.96	.0183	--	--	.0366	.0049	.0024	--	.0024	.0037	.0009

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3023XB	20.02	--	.0012	--	.0002	.0008	--	--	--	--	--	--	--	--	--
YD4680A	21.01	--	--	--	--	.0018	--	--	--	--	--	--	.0013	0	--
YD4680B	21.01	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
YD4680C	21.01	--	--	--	--	.0010	--	--	--	--	--	--	.0010	0	--
YD4680D	21.01	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3140XA	22.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3140XB	22.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3140XC	22.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3140A	22.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3140B	22.02	--	--	--	--	.0015	--	--	--	--	--	--	--	--	--
3140C	22.02	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3140RA	22.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3140RB	22.03	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3140RC	22.03	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3140QA	22.04	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3140QB	22.04	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3140QC	22.04	--	--	--	--	.0046	--	--	--	--	--	--	--	--	--
3140T	22.05	--	--	--	--	--	--	--	.0033	--	--	--	--	--	--
3140SAA	22.06	--	--	--	--	.0004	.0021	--	--	--	--	--	--	--	--
3140SAB	22.06	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3140SBA	22.07	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3140SBB	22.07	--	--	--	--	.0007	.0143	--	--	--	--	--	--	--	--
3137B	23.01	--	--	--	--	.0004	--	--	--	--	--	--	.0011	0	--
3137C	23.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3137QA	23.02	--	--	--	--	.0007	--	.0009	--	--	--	--	--	--	--
3137QB	23.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3137QC	23.02	--	--	--	--	.0008	--	--	--	--	--	--	--	--	--
YD4180A	23.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
YD4580A	24.01	--	--	--	--	--	.0050	--	--	--	--	--	--	--	--
YD4580B	24.01	--	--	--	--	--	.0030	--	--	--	--	--	--	--	--
3176A	25.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3176B	25.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3176C	25.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3176XA	25.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3176XB	25.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3176XC	25.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3176RA	25.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3176RB	25.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3176RC	25.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3176SA	25.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3176SB	25.04	--	--	--	--	.0003	--	--	--	--	--	--	--	--	--
3176SC	25.04	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
YD1980A	25.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
YD1980B	25.05	--	--	--	--	--	--	.0009	--	--	--	--	--	--	--
YD3380A	26.01	--	--	--	--	--	--	.0009	--	--	--	--	--	--	--
YD3380B	26.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
YD3380C	26.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3265B	27.01	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3265C	27.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3265XA	27.02	--	--	--	--	.0018	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3023XF	20.02	--	.0080	.4006	.0120	.0401	.0024	.8013	6.24	4.5	4,983	1,100	283
YD4680A	21.01	--	.0018	.1800	.0180	--	.0044	.2600	5.70	4.5	4,527	1,000	252
YD4680B	21.01	--	.0007	.0700	.0200	--	.0030	.2000	5.00	4.0	11,373	2,857	569
YD4680C	21.01	--	.0010	.1500	.0200	--	.0100	.3000	5.00	2.3	34,745	15,000	1,158
YD4680D	21.01	--	.0030	.3100	.0100	--	.0070	.1600	4.80	5.2	5,214	1,000	326
3140XA	22.01	--	.0021	.1556	.0073	.0021	.0031	.1556	4.82	5.4	4,051	750	260
3140XB	22.01	--	.0005	.0304	.0051	.0010	.0051	.1014	4.93	8.8	5,894	667	581
3140XC	22.01	--	.0019	.1453	.0097	.0029	.0019	.1453	5.16	9.3	1,854	200	191
3140A	22.02	--	.0009	.0949	.0047	.0019	.0028	.1423	5.27	9.5	4,755	500	501
3140B	22.02	--	.0050	.1988	.0199	.0030	.0050	.2982	5.03	5.6	4,227	750	283
3140C	22.02	--	.0010	.0978	.0147	.0029	.0098	.1957	5.11	32.6	1,956	60	666
3140RA	22.03	--	.0005	.0746	.0032	.0005	.0009	.1066	4.69	8.3	5,566	667	522
3140RB	22.03	--	.0015	.2000	.0150	.0050	.0030	.2000	5.00	9.0	12,788	1,429	1,279
3140RC	22.03	--	.0014	.1426	.0095	.0029	.0048	.0951	5.26	13.9	3,245	233	488
3140QA	22.04	--	.0050	.2970	.0198	.0030	.0020	4.9505	5.05	8.6	2,853	333	288
3140QB	22.04	--	.0093	1.3915	.0186	.0093	.0093	4.6382	5.39	5.7	12,298	2,143	884
3140QC	22.04	--	.0065	.1859	.0186	.0465	.0014	4.6468	5.38	5.8	12,464	2,143	894
3140T	22.05	--	.0047	.4717	.0047	.0024	.0040	.2358	1.06	20.0	1,999	100	424
3140SAA	22.06	--	.0010	.0519	.0052	.0021	.0073	.1037	4.82	12.7	2,970	233	409
3140SAB	22.06	--	.0014	.0479	.0048	.0019	.0067	.1437	5.22	9.4	6,277	667	655
3140SBA	22.07	.1055	.0016	.1582	.0074	.0021	.0053	.1055	4.74	5.2	5,160	1,000	326
3140SBB	22.07	--	.0014	.1431	.0067	.0014	.0191	.0954	5.24	9.3	9,346	1,000	979
3137B	23.01	--	.0002	.0328	.0077	.0011	.0016	.1641	4.57	3.6	35,594	10,000	1,627
3137C	23.01	--	.0002	.0176	.0082	.0018	.0010	.2353	4.25	4.6	6,955	1,500	394
3137QA	23.02	--	.0015	.1500	.0100	.0020	.0070	.3000	5.00	5.6	1,687	300	112
3137QB	23.02	--	.0010	.1035	.0104	.0010	.0021	.5176	4.83	2.2	1,314	600	42
3137QC	23.02	--	.0011	.0787	.0112	.0112	.0017	.1685	4.45	28.2	1,694	60	503
YD4180A	23.03	--	.0009	.0930	.0093	--	.0019	.1900	2.70	2.6	3,767	1,474	135
YD4580A	24.01	--	.0050	.0500	1.7000	--	.0100	.0700	5.00	18.6	1,858	100	372
YD4580B	24.01	--	.0007	.0700	.0030	--	.0050	.1000	5.00	18.9	3,153	167	631
3176A	25.01	--	.0015	.3000	.0070	.0020	.0100	.3000	5.00	8.9	5,958	667	596
3176B	25.01	--	.0005	.1037	.0052	.0016	.0021	.1037	4.82	5.4	11,596	2,143	745
3176C	25.01	--	.0011	.1064	.0074	.0021	.0011	.1596	4.70	5.2	11,243	2,143	705
3176XA	25.02	--	.0019	.1880	.0094	.0014	.0008	.1410	5.32	4.3	5,734	1,333	305
3176XB	25.02	--	.0015	.3000	.0050	.0015	.0020	.1500	5.00	5.6	28,168	5,000	1,878
3176XC	25.02	--	.0009	.1825	.0046	.0009	.0027	.1369	5.48	4.5	5,947	1,333	326
3176RA	25.03	--	.0010	.2083	.0073	.0021	.0009	.1042	4.80	3.8	10,809	2,857	519
3176RB	25.03	--	.0029	.2852	.0143	.0014	.0095	.2852	5.26	4.2	8,455	2,000	445
3176RC	25.03	--	.0015	.1462	.0068	.0015	.0019	.1949	5.13	5.8	8,719	1,500	596
3176SA	25.04	--	.0019	.1389	.0065	.0014	.0014	.0926	5.40	4.4	29,237	6,667	1,579
3176SB	25.04	--	.0003	.0261	.0061	.0009	--	.1739	5.75	4.7	47,309	10,000	2,720
3176SC	25.04	--	.0009	.0870	.0087	.0013	.0017	.6087	5.75	2.8	28,057	10,000	1,076
YD1980A	25.05	--	.0007	.1600	.0031	--	.0021	.0730	4.80	9.0	4,268	476	427
YD1980B	25.05	--	.0006	.1800	.0045	--	.0090	.0900	5.50	10.1	5,031	500	559
YD3380A	26.01	--	.0009	.1800	.0045	--	.0064	.0900	5.50	2.7	16,158	6,000	598
YD3380B	26.01	--	.0012	.1700	.0034	--	.0017	.0860	2.90	2.8	28,359	10,000	1,091
YD3380C	26.01	--	.0010	.3000	.0030	--	.0100	.1100	3.30	2.3	23,189	10,000	773
3265B	27.01	--	.0018	.1818	.0091	.0045	.0008	.4545	5.50	2.6	3,957	1,500	145
3265C	27.01	--	.0031	.2083	.0104	.0052	.0052	.5208	4.80	2.2	4,339	2,000	139
3265XA	27.02	--	.0122	.6098	.0244	.0122	.0085	1.2195	4.10	4.4	4,360	1,000	238

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum %	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Hg	Ni
3265XB	27.02	80.2	821	17.5	2.25	.0175	--	--	.0009	.0044	--	--	--	.0026	.0018
3265YC	27.02	79.9	807	19.0	1.08	.0286	--	--	.0014	--	--	--	--	.0286	.0029
3265YA	27.03	79.5	804	19.4	1.04	.0097	--	--	.0146	--	--	--	--	.0029	--
3265YB	27.03	79.1	798	20.0	.87	.0200	--	--	.0020	--	--	--	.0005	.0200	.0020
3265YC	27.03	79.5	808	18.9	1.60	.0142	--	--	.0943	.0066	.0047	--	.0066	.0189	.0009
3265QA	27.04	77.3	782	21.5	1.16	.0054	--	--	.0022	.0054	--	--	--	.0032	.0022
3265QB	27.04	65.6	675	31.6	2.82	.0053	--	--	.1053	.0211	.0021	--	.0021	.0021	.0053
3265QC	27.04	80.1	818	17.9	2.06	.0089	--	--	.0009	--	--	--	--	.0089	--
3265NA	27.05	84.7	856	14.3	1.03	.0952	--	--	.0010	--	--	--	--	.0952	--
3265NB	27.05	77.5	781	21.7	.77	.0109	--	--	.0002	--	.0033	--	--	.1087	--
3265NC	27.05	76.3	772	22.5	1.26	.0079	--	--	.0225	--	.0022	--	.0006	.1685	.0011
3265ZA	27.06	78.9	793	20.6	.51	.0309	--	--	.0072	--	.0031	--	--	.0722	.0005
3265ZB	27.06	79.5	799	20.0	.46	.0150	--	--	.0100	--	.0020	--	--	.0700	.0010
3265ZC	27.06	80.1	805	19.4	.51	.0291	--	--	.0068	--	.0019	--	.0010	.0971	.0010
3265PA	27.07	79.0	793	20.6	.37	.0309	--	--	.0052	--	--	--	.0007	.0515	.0005
3265PB	27.07	83.9	843	15.6	.43	.0313	--	--	.0073	--	--	--	.0016	.0521	--
3265PC	27.07	80.5	810	18.9	.63	.0283	--	--	.0094	--	--	--	.0014	.0019	--
3265SA	27.08	84.5	848	15.2	.38	.0071	--	--	.0202	.0051	.0020	--	.0010	.0071	--
3265SB	27.08	89.5	899	10.1	.44	.0303	--	--	.0071	--	.0030	--	.0002	.0051	--
3265SC	27.08	79.6	799	20.0	.43	.0200	--	--	.0100	--	.0050	--	.0003	.1000	--
3265TA	27.09	77.3	791	20.4	2.27	.0102	--	--	.1020	.0102	--	--	.0015	.0102	--
3265TB	27.09	86.9	892	10.5	2.55	.0526	--	--	.0316	--	.0158	--	.0053	.0021	--
3265TC	27.09	88.7	906	9.2	2.14	.0275	--	--	.0138	--	--	--	.0005	.0046	.0028
3265WA	27.10	82.4	846	15.0	2.57	.0100	--	--	.1500	.2000	--	--	.0050	.0050	.0030
3265WB	27.10	83.5	848	15.0	1.53	.0300	--	--	.0200	.0100	.0100	--	.0050	.0050	.0030
3265WC	27.10	91.9	929	7.0	1.08	.0200	--	--	.0150	.0100	--	--	.0005	.0050	.0010
3265YA	27.11	85.5	865	13.4	1.08	.0089	--	--	.0179	.0045	.0045	--	.0009	.0268	.0045
3265YB	27.11	87.4	894	10.3	2.33	.0155	--	--	.0021	.0103	--	--	.0005	.1031	--
3265YC	27.11	89.9	904	9.5	.57	.0190	--	--	.0019	.0038	--	--	--	.0476	--
3265FA	27.12	84.8	850	15.0	.21	.0050	--	--	.0010	--	.0150	--	--	.0020	--
3265FB	27.12	85.7	859	14.0	.31	.0065	--	--	.0005	--	.0019	--	--	.0019	.0014
3265FC	27.12	79.8	800	20.0	.16	.0050	--	--	.0070	--	.0200	--	--	.0020	--
3265AA	27.13	81.4	816	18.3	.25	.0064	--	--	.0018	--	.0018	--	.0002	.0642	--
3265AB	27.13	84.9	852	14.7	.39	.0098	--	--	.0098	--	.0049	--	.0010	.0490	--
3265AC	27.13	81.4	820	17.9	.73	.0134	--	--	.0268	.0063	.0063	--	.0003	.0625	--
3265BA	27.14	84.1	849	15.0	.92	.0150	--	--	.0500	.0100	.0020	--	.0010	.0700	.0020
3265BB	27.14	84.8	853	14.6	.66	.0146	--	--	.0097	.0068	--	--	.0010	.0680	.0015
3265BC	27.14	79.6	799	20.0	.42	.0100	--	--	.0200	.0100	.0020	--	.0015	.0500	.0010
YD2880A	28.01	70.0	714	28.0	1.98	.0009	--	--	.0009	--	.0070	--	--	.0140	--
YD2880B	28.01	89.2	902	9.7	1.12	.0280	--	--	.0040	.0970	--	--	--	.0140	.0020
3299A	29.01	90.1	910	8.9	1.01	.0134	--	--	.0063	--	.0027	--	.0089	.0268	.0045
3299B	29.01	78.3	788	21.1	.64	.0105	--	--	.0016	--	.0737	--	.0011	.0032	--
3299C	29.01	80.5	814	18.3	1.17	.0064	--	--	.0275	--	.4587	--	.0018	.0092	--
3301XA	29.02	85.8	862	13.8	.43	.0138	--	--	.0183	--	--	--	--	.0138	.0018
3301XB	29.02	84.5	849	15.0	.53	.0100	--	--	.1000	--	--	--	.0300	.0200	--
3301XC	29.02	86.4	867	13.3	.28	.0133	--	--	.0088	--	.0018	--	--	.0442	--
3301YA	29.03	84.6	849	15.0	.36	.0100	--	--	.0200	--	.0020	--	.0002	.0200	--
3301YB	29.03	90.2	905	9.4	.39	.0142	--	--	.0472	--	.0019	--	.0002	.0472	.0028
3301YC	29.03	89.2	894	10.5	.26	.0105	--	--	.0032	--	.0018	--	--	.0211	--
3301A	29.04	89.1	895	10.4	.44	.0156	--	--	.0313	--	.0052	--	.0031	.0521	.0021

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3265XB	27.02	--	--	--	--	.0013	.0004	--	--	--	--	--	--	--	--
3265XC	27.02	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3265YA	27.03	--	--	--	--	.0049	--	--	--	--	--	--	--	--	--
3265YB	27.03	.0010	--	--	--	.0015	--	--	--	--	--	--	--	--	--
3265YC	27.03	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3265QA	27.04	--	--	--	--	.0022	--	--	--	--	--	--	--	--	--
3265QB	27.04	.0004	--	--	--	.0011	--	--	--	--	--	--	--	--	--
3265QC	27.04	--	--	--	--	.0027	.0004	--	--	--	--	--	.0004	0	--
3265NA	27.05	--	--	--	--	.0014	--	--	--	--	--	--	--	--	--
3265NB	27.05	--	--	--	--	.0008	--	--	--	--	--	--	--	--	--
3265NC	27.05	--	--	--	--	.0017	.0006	--	--	--	--	--	--	--	--
3265ZA	27.06	--	--	--	--	.0010	.0005	--	--	--	--	--	--	--	--
3265ZB	27.06	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3265ZC	27.06	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3265RA	27.07	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3265RB	27.07	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3265RC	27.07	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3265SA	27.08	--	.0005	--	--	.0015	--	--	--	--	--	--	--	--	--
3265SB	27.08	--	--	--	--	.0015	--	--	--	--	--	--	--	--	--
3265SC	27.08	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3265TA	27.09	--	--	--	--	.0031	--	--	--	--	--	--	--	--	--
3265TB	27.09	--	--	--	--	.0011	--	--	--	--	--	--	--	--	--
3265TC	27.09	--	--	--	--	.0138	--	--	--	--	--	--	--	--	--
3265WA	27.10	--	--	--	--	.0500	--	--	--	.0005	--	--	--	--	--
3265WB	27.10	.0010	--	--	--	.0015	--	--	--	.0005	--	--	--	--	--
3265WC	27.10	--	--	--	--	.0050	--	--	--	--	--	--	--	--	--
3265YA	27.11	.0004	--	--	--	.0018	--	--	--	--	--	--	--	--	--
3265YB	27.11	--	--	--	--	.0031	--	--	--	--	--	--	--	--	--
3265YC	27.11	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3265FA	27.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3265FB	27.12	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3265FC	27.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3265AA	27.13	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3265AB	27.13	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3265AC	27.13	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3265BA	27.14	--	--	--	--	.0020	--	--	--	--	--	--	--	--	--
3265BB	27.14	--	--	--	--	.0015	--	--	--	--	--	--	.0004	0	--
3265BC	27.14	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
YD2880A	28.01	--	--	--	--	.0011	--	--	--	--	--	--	--	--	--
YD2880B	28.01	--	--	--	--	.0028	.0014	--	--	--	--	--	.0014	0	--
3299A	29.01	--	--	--	--	.0013	--	--	--	--	--	--	--	--	--
3299B	29.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3299C	29.01	--	--	--	--	.0004	--	--	--	--	--	--	.0005	0	--
3301XA	29.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3301XB	29.02	--	--	--	--	.0010	.0005	--	--	--	--	--	--	--	--
3301XC	29.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3301YA	29.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3301YB	29.03	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3301YC	29.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3301A	29.04	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3265XB	27.02	--	.0044	.4386	.0175	.0061	.0044	1.7544	5.70	4.6	4,572	1,000	261
3265XC	27.02	--	.0029	.4762	.0143	.0048	.0476	.4762	5.25	4.2	2,795	667	147
3265YA	27.03	--	.0097	.2913	.0146	.0068	.0049	.6796	5.15	4.1	8,193	2,000	422
3265YB	27.03	--	.0015	.1000	.0150	.0050	.0015	.7000	5.00	4.0	3,957	1,000	198
3265YC	27.03	--	.0189	.9434	.0094	.0094	--	.4717	5.30	4.2	5,620	1,333	298
3265QA	27.04	--	.0161	.5376	.0323	.0108	.0032	.5376	4.65	3.6	14,385	4,000	669
3265QB	27.04	--	.0105	1.5789	.0158	.0158	.0053	1.0526	4.75	2.1	12,464	6,000	395
3265QC	27.04	--	.0018	.1339	.0893	.0045	.0179	1.7857	5.60	4.5	8,970	2,000	502
3265NA	27.05	--	.0019	.1429	.0190	.0048	.0010	.6667	5.25	5.9	889	150	62
3265NB	27.05	--	.0016	.0761	.0163	.0033	.0054	.5435	4.60	3.6	7,129	2,000	328
3265NC	27.05	--	.0056	.2247	.0337	.0056	.0017	.7865	4.45	3.4	9,697	2,857	431
3265ZA	27.06	--	.0021	.1546	.0155	.0103	.0052	.2062	4.85	3.8	2,550	667	124
3265ZB	27.06	--	.0015	.1000	.0500	.0070	.0010	.2000	5.00	4.0	5,303	1,333	265
3265ZC	27.06	--	.0015	.1456	.0146	.0097	.0049	.1942	5.15	4.1	2,749	667	142
3265RA	27.07	--	.0007	.0515	.0103	.0052	.0072	.2062	4.85	3.8	2,555	667	124
3265RB	27.07	--	.0016	.1042	.0208	.0052	--	.2083	4.80	5.4	2,686	500	172
3265RC	27.07	--	.0019	.0943	.0142	.0019	--	.4717	5.30	4.3	2,845	667	151
3265SA	27.08	--	.0010	.1010	.0101	.0051	.0202	.2020	4.95	5.6	11,946	2,143	788
3265SB	27.08	--	.0007	.0707	.0152	.0051	.0020	.3030	4.95	8.9	2,952	333	292
3265SC	27.08	--	.0007	.0700	.0100	.0050	.0050	.2000	5.00	4.0	3,979	1,000	199
3265TA	27.09	--	.0102	.5102	.0714	.0071	.0051	1.5306	4.90	3.8	7,577	2,000	371
3265TB	27.09	--	.0021	.3158	.0105	.0032	.0032	2.1053	4.75	8.3	1,652	200	157
3265TC	27.09	--	.0138	.1835	.0275	.0046	.0092	1.8349	5.45	9.7	3,222	333	351
3265WA	27.10	--	.0200	1.0000	.1000	.0200	.0100	1.0000	5.00	5.5	8,243	1,500	550
3265WB	27.10	--	.0150	.7000	.0200	.0100	.0030	.7000	5.00	5.6	2,782	500	185
3265WC	27.10	--	.0050	.3000	.0100	.0050	.0020	.7000	5.00	13.1	4,596	350	657
3265YA	27.11	--	.0063	.4464	.0893	.0089	.0089	.4464	5.60	6.4	9,579	1,500	715
3265YB	27.11	--	.0515	1.0309	.0722	.0103	.5155	.5155	4.85	8.5	5,649	667	548
3265YC	27.11	--	.0029	.1905	.0190	.0019	.0010	.2857	5.25	9.4	4,720	500	496
3265FA	27.12	--	.0010	.0700	.0100	.0020	.0020	.1000	5.00	5.7	16,958	3,000	1,131
3265FB	27.12	--	.0009	.0935	.0140	.0019	.0009	.1869	5.35	6.1	13,095	2,143	934
3265FC	27.12	--	.0005	.0200	.0070	.0020	.0009	.1000	5.00	4.0	15,967	4,000	798
3265AA	27.13	--	.0005	.0183	.0138	.0018	--	.1376	5.45	4.4	12,676	2,857	691
3265AB	27.13	--	.0010	.0980	.0147	.0029	.0020	.1961	5.10	5.8	8,660	1,500	589
3265AC	27.13	--	.0018	.1339	.0134	.0045	.0089	.4464	5.60	4.6	6,079	1,333	340
3265BA	27.14	--	.0030	.2000	.0300	.0100	.0200	.5000	5.00	5.6	5,606	1,000	374
3265BB	27.14	--	.0146	.1942	.0194	.0068	.0291	.2913	5.15	5.8	5,821	1,000	400
3265BC	27.14	--	.0020	.1000	.0150	.0050	.0030	.2000	5.00	4.0	7,958	2,000	398
YD2880A	28.01	--	.0007	.0470	.0070	--	.0050	1.9000	5.30	2.5	77,796	31,111	2,778
YD2880B	28.01	--	.0028	.2100	.0280	--	.0420	.6900	3.60	9.2	3,185	346	328
3299A	29.01	--	.0018	.2679	.0446	.0089	.0018	.6250	5.60	10.1	6,724	667	753
3299B	29.01	--	.0011	.2105	.0158	.0021	.0016	.3158	4.75	3.7	7,439	2,000	353
3299C	29.01	--	.0014	.4587	.0092	.0064	.0064	.1835	5.45	4.4	12,532	2,857	683
3301XA	29.02	--	.0009	.1835	.0064	.0046	.0064	.1835	5.45	6.2	6,235	1,000	453
3301XB	29.02	--	.0010	.1500	.0070	.0050	.0070	.2000	5.00	5.6	8,447	1,500	563
3301XC	29.02	--	.0004	.0619	.0062	.0044	.0018	.1327	5.65	6.5	6,513	1,000	491
3301YA	29.03	--	.0005	.2000	.0030	.0050	.0030	.1000	5.00	5.6	8,464	1,500	564
3301YB	29.03	--	.0007	.0660	.0094	.0047	.0066	.1887	5.30	9.6	6,372	667	675
3301YC	29.03	--	.0005	.1053	.0053	.0053	--	.1053	4.75	8.5	8,475	1,000	805
3301A	29.04	--	.0007	.1042	.0073	.0031	.0031	.2083	4.80	8.6	5,705	667	548

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Hg	Ni
3301B	29.04	83.9	842	15.8	.30	.0105	--	--	.0158	--	.0053	--	.0003	.0737	--
3301C	29.04	90.2	905	9.4	.41	.0283	--	--	.0019	--	--	--	--	.0283	.0009
3264A	30.01	89.6	902	9.7	.74	.0194	--	--	.0015	.0097	.0145	--	--	.0048	.0194
3264B	30.01	89.1	896	10.4	.53	.0311	--	--	.0207	.0052	.0018	--	--	.0726	--
3264C	30.01	94.4	948	5.2	.38	.0314	--	--	.0031	.0042	--	--	--	.0523	.0021
3264XA	30.02	81.2	818	18.1	.71	.0181	--	--	.0045	--	.0271	--	--	.0903	.0009
3264XB	30.02	90.6	909	9.0	.37	.0271	--	--	.0005	--	--	--	--	.0090	.0009
3264XC	30.02	90.9	914	8.6	.50	.0123	--	--	.0123	--	.0061	--	--	.0123	.0012
3264LA	30.03	90.0	906	9.4	.65	.0188	--	--	.0007	.0038	--	--	--	.0469	.0014
3264LB	30.03	95.5	966	3.4	1.10	.1131	--	--	.0079	.0170	--	--	--	.1131	.0023
3264LC	30.03	89.9	904	9.5	.55	.0143	--	--	.0010	--	--	--	.0002	.0019	.0029
3264RA	30.04	90.0	905	9.4	.56	.0270	--	--	.0007	--	--	--	--	.0067	--
3264RB	30.04	89.0	897	10.2	.72	.0146	--	--	.0007	--	--	--	--	.0731	--
3121A	31.01	92.8	933	6.7	.52	.0286	--	--	.0286	--	--	--	.0048	.0095	.0010
3121B	31.01	85.2	856	14.4	.45	.0479	--	--	.0144	--	--	--	--	.0144	.0007
3121C	31.01	90.8	909	9.0	.20	.0136	--	--	.0181	--	.0018	--	.0002	.0271	--
3121XA	31.02	97.6	980	2.0	.39	.0498	--	--	.0050	--	--	--	--	.0100	.0010
3121XB	31.02	91.6	920	8.0	.42	.0080	--	--	.0228	--	--	--	--	.0023	.0023
3121XC	31.02	90.0	907	9.2	.81	.0185	--	--	.0009	--	--	--	--	.0185	.0028
3121M	31.03	88.7	898	10.1	1.18	.0202	--	--	.1008	.1411	--	--	.0202	.0403	--
YD3980A	32.01	85.8	860	14.0	.24	.0140	--	--	.0003	--	.0014	--	--	.0070	--
YD3980B	32.01	96.6	968	3.2	.21	.0320	--	--	--	--	--	--	--	.0053	--
YD3980C	32.01	85.7	860	14.0	.26	.0040	--	--	--	--	--	--	--	.0060	--
3114A	33.01	72.4	727	27.2	.41	.0064	--	--	.1815	.0635	.0091	--	.0027	.0018	--
3114B	33.01	76.9	770	22.9	.20	.0115	--	--	.0006	--	--	--	--	.0080	--
3114C	33.01	93.6	937	6.3	.10	.0180	--	--	.0005	--	--	--	.0009	.0018	--
3114XA	33.02	82.2	824	17.5	.21	.0088	--	--	.0004	--	.0018	--	--	.0439	--
3114XB	33.02	89.2	893	10.6	.15	.0032	--	--	.0005	--	--	--	--	.0053	--
3114XC	33.02	78.7	789	21.1	.20	.0105	--	--	.0005	--	.0105	--	--	.0158	--
3115A	34.01	94.9	951	4.9	.27	.0292	--	--	.0010	--	--	--	--	.0146	--
3115B	34.01	84.0	842	15.8	.23	.0053	--	--	.0002	--	.0105	--	--	.1050	--
3115C	34.01	89.6	898	10.2	.17	.0071	--	--	.0001	--	--	--	.0005	.0509	--
3115XA	34.02	89.4	896	10.4	.22	.0156	--	--	.0001	--	--	--	--	.0021	.0005
3115XB	34.02	84.5	846	15.3	.18	.0153	--	--	.0204	.0072	--	--	.0005	--	--
3115XC	34.02	89.1	893	10.6	.21	.0213	--	--	.0011	--	--	--	--	.0032	--
3183	35.01	78.3	790	20.8	.83	.0156	--	--	.0031	--	.0313	--	.0010	.0073	.0031
3244	36.01	96.6	973	2.6	.78	.0013	--	--	--	--	--	--	.0013	--	--
3241A	37.01	87.1	880	11.9	.99	.0238	--	--	.0006	--	.0024	--	--	.2381	.0012
3241B	37.01	87.2	880	11.9	.86	.0119	--	--	.0006	--	.0024	--	--	.1190	.0012
3241C	37.01	86.6	872	12.7	.76	.0089	--	--	.0006	--	.0063	--	--	.0063	.0025
3241D	37.01	87.5	880	11.9	.55	.0357	--	--	.0060	--	.0119	--	.0018	.0083	.0006
3241E	37.01	85.1	855	14.5	.39	.0072	--	--	.0007	--	.0043	--	--	.0043	.0007
3175	38.01	82.1	830	16.9	1.06	.0112	--	--	.0843	--	--	--	.0011	.5618	--
3100A	39.01	84.9	851	14.9	.23	.0030	--	--	.0050	.0040	.0020	--	.0002	.0149	--
3100B	39.01	80.0	804	19.5	.46	.0097	--	--	.0682	.0146	.0019	--	.0049	.0146	--
3100C	39.01	80.2	805	19.4	.36	.0049	--	--	.0097	.0068	.0097	--	.0005	.0291	.0019
3100XA	39.02	80.1	803	19.7	.18	.0098	--	--	.0010	--	.0049	--	--	.0197	--
3100XB	39.02	80.9	812	18.7	.36	.0066	--	--	.0047	--	.0140	--	.0094	.0655	--
3100XC	39.02	70.4	706	29.4	.20	.0098	--	--	.0001	--	.0029	--	.0010	.0049	--
3100TA	39.03	70.5	707	29.2	.28	.0146	--	--	.0068	--	.0029	--	--	.0487	--

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3301B	29.04	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3301C	29.04	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3264A	30.01	.0145	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3264B	30.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3264C	30.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3264XA	30.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3264XB	30.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3264XC	30.02	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3264LA	30.03	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3264LB	30.03	--	--	--	--	.0011	--	--	--	--	--	--	--	--	--
3264LC	30.03	.0010	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3264RA	30.04	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3264RB	30.04	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3121A	31.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3121B	31.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3121C	31.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3121XA	31.02	--	--	--	--	.0004	.0005	--	.0008	--	--	--	--	--	--
3121XB	31.02	.0011	--	--	--	.0008	--	--	--	--	--	--	--	--	--
3121XC	31.02	--	--	--	--	.0005	--	--	.0008	--	--	--	--	--	--
3121M	31.03	--	.0605	--	--	.0008	.0202	--	--	--	.0101	--	--	--	--
YD3980A	32.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
YD3980B	32.01	--	--	--	--	.0011	--	--	--	--	--	--	--	--	--
YD3980C	32.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3114A	33.01	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3114B	33.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3114C	33.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3114XA	33.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3114XB	33.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3114XC	33.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3115A	34.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3115B	34.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3115C	34.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3115XA	34.02	--	--	--	--	.0004	.0004	--	--	--	--	--	--	--	--
3115XB	34.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3115XC	34.02	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3183	35.01	--	.0021	--	--	.0021	--	--	.0010	--	--	--	.0004	0	--
3244	36.01	--	--	--	--	--	.0395	--	--	.0026	.0395	--	--	--	--
3241A	37.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3241B	37.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3241C	37.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3241D	37.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3241E	37.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3175	38.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3100A	39.01	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3100B	39.01	--	.0010	--	--	.0005	--	--	--	--	--	--	--	--	--
3100C	39.01	--	.0005	--	--	.0010	--	--	--	--	--	--	--	--	--
3100XA	39.02	--	.0020	--	--	--	--	--	--	--	--	--	--	--	--
3100XB	39.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3100XC	39.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3100TA	39.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3301B	29.04	--	.0003	.0737	.0053	.0053	--	.1053	4.75	5.3	7,972	1,500	505
3301C	29.04	--	.0009	.1887	.0094	.0047	.0014	.1415	5.30	9.6	3,186	333	338
3264A	30.01	--	.0019	.2907	.0484	.0097	.0097	.2907	5.16	9.2	4,622	500	477
3264B	30.01	--	.0016	.2075	.0207	.0052	.0031	.1556	4.82	8.6	2,863	333	276
3264C	30.01	--	.0010	.1569	.0157	.0052	.0010	.1046	4.78	18.0	3,008	167	575
3264XA	30.02	--	.0009	.0903	.0181	.0027	.0008	.4513	5.54	4.5	4,501	1,000	249
3264XB	30.02	--	.0014	.1808	.0136	.0018	.0014	.1356	5.53	10.0	3,340	333	369
3264XC	30.02	--	.0012	.2457	.0184	.0061	.0025	.1843	4.07	10.6	7,399	700	860
3264LA	30.03	--	.0019	.4690	.0094	.0047	.0019	.0938	5.33	9.6	4,795	500	511
3264LB	30.03	--	.0034	.5656	.0226	.0170	.0057	.2262	4.42	28.1	844	30	249
3264LC	30.03	--	.0029	.2863	.0286	.0095	.0067	.1908	5.24	9.4	6,282	667	658
3264RA	30.04	--	.0013	.2022	.0270	.0135	.0094	.2695	3.71	9.5	3,339	350	354
3264RP	30.04	--	.0022	.2924	.0292	.0102	.0073	.2924	3.42	8.7	6,091	700	595
3121A	31.01	--	.0048	.2857	.0067	.0014	.0048	.1428	5.25	13.9	3,248	233	487
3121B	31.01	--	.0010	.0479	.0287	.0010	.0014	.2874	5.22	5.9	1,779	300	124
3121C	31.01	--	.0009	.0452	.0045	.0014	.0008	.0904	5.53	10.0	6,692	667	740
3121XA	31.02	--	.0070	.1992	.0050	.0020	.0100	.0996	5.02	49.0	1,960	40	984
3121XB	31.02	--	.0023	.1708	.0171	.0114	.0080	.1708	4.39	11.5	11,490	1,000	1,441
3121XC	31.02	--	.0046	.4613	.0138	.0046	.0046	.2768	5.42	9.8	4,876	500	529
3121M	31.03	.0202	.0060	.3024	.0202	.0141	.1008	.3024	2.48	8.8	4,401	500	437
YD3980A	32.01	--	.0003	.0690	.0028	--	.0070	.1400	3.60	6.1	6,126	1,000	438
YD3980B	32.01	--	.0005	.0530	.0032	--	.0016	.1100	4.70	30.2	3,019	100	943
YD3980C	32.01	--	.0002	.0400	.0040	--	.0060	.2000	2.50	6.1	21,435	3,500	1,531
3114A	33.01	--	.0002	.0454	.0018	.0009	.0008	.0907	5.51	2.7	11,393	4,286	419
3114B	33.01	--	.0008	.0573	.0034	.0023	.0010	.1147	4.36	3.4	6,703	2,000	292
3114C	33.01	--	.0001	.0135	.0014	.0014	--	.0631	5.55	14.8	5,194	350	824
3114XA	33.02	--	.0003	.0175	.0018	.0009	--	.1316	5.70	4.7	9,376	2,000	534
3114XB	33.02	--	.0003	.0319	.0021	.0011	--	.1064	4.70	8.4	27,953	3,333	2,628
3114XC	33.02	--	.0016	.0527	.0053	.0016	--	.1055	4.74	3.7	7,461	2,000	354
3115A	34.01	--	.0002	.0195	.0049	.0019	.0019	.1949	5.13	19.5	3,244	167	666
3115B	34.01	--	.0001	.0053	.0016	.0011	--	.1050	4.76	5.3	15,995	3,000	1,015
3115C	34.01	--	.0001	.0051	.0020	.0020	--	.1018	4.91	8.8	12,576	1,429	1,235
3115XA	34.02	--	.0002	.0208	.0052	.0016	.0156	.1559	4.81	8.6	5,733	667	551
3115XB	34.02	--	.0002	.0307	.0031	.0010	--	.1022	4.89	5.5	5,508	1,000	359
3115XC	34.02	--	.0002	.0213	.0032	.0021	.0011	.1596	4.70	8.4	4,190	500	394
3183	35.01	--	.0021	.2083	.0208	.0073	.0031	.5208	4.80	3.8	5,014	1,333	241
3244	36.01	--	.0013	.2632	.0079	.0526	.1842	.1842	1.90	36.7	73,409	2,000	27,895
3241A	37.01	--	.0012	.1190	.0060	.0012	.0012	.5952	4.20	7.3	3,658	500	307
3241B	37.01	--	.0012	.1190	.0060	.0024	.0012	.5952	4.20	7.3	7,328	1,000	616
3241C	37.01	--	.0013	.0886	.0038	.0019	.0025	.6329	3.95	6.8	9,772	1,429	772
3241D	37.01	--	.0018	.1190	.0060	.0024	.0024	.3571	4.20	7.4	2,451	333	206
3241F	37.01	--	.0010	.0725	.0072	.0014	.0014	.2899	3.45	5.9	11,746	2,000	810
3175	38.01	--	.0393	.0562	.0169	.0056	--	.2809	.89	4.9	7,306	1,500	433
3100A	39.01	--	.0007	.0198	.0149	.0099	.0010	.1488	5.04	5.7	28,524	5,000	1,917
3100B	39.01	--	.0049	.0975	.0292	.0146	.0015	.1949	5.13	4.1	8,213	2,000	421
3100C	39.01	--	.0019	.0680	.0194	.0068	.0008	.1942	5.15	4.1	16,527	4,000	851
3100XA	39.02	--	.0010	.0295	.0148	.0020	.0008	.0984	5.08	4.1	8,141	2,000	414
3100XB	39.02	--	.0014	.0936	.0140	.0028	.0028	.1404	5.34	4.3	12,346	2,857	659
3100XC	39.02	--	.0005	.0294	.0049	.0020	.0010	.1468	5.11	2.4	7,199	3,000	245
3100TA	39.03	--	.0005	.0487	.0049	.0019	.0049	.1462	5.13	2.4	4,821	2,000	165

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Hg	Ni
3100TB	39.03	80.4	805	19.5	.19	.0068	--	--	.0049	--	.0029	--	.0029	.0195	--
YT1580A	40.01	79.3	799	20.0	.71	.0100	--	--	.0001	.0030	.0030	--	--	.0070	.0010
3026A	41.01	64.3	648	35.0	.72	.0051	--	--	.0720	.0514	.0154	--	.0010	.0206	.0005
3026B	41.01	74.2	744	25.5	.25	.0051	--	--	.0015	--	.0051	--	--	.0153	--
3026C	41.01	70.0	706	29.2	.79	.0070	--	--	.0151	.0050	.0070	--	.0030	.0201	.0005
3026D	41.01	74.4	750	24.8	.77	.0030	--	--	.0069	--	.0099	--	--	.0298	.0005
3026E	41.01	79.0	797	20.1	.84	.0074	--	--	.0318	--	.0053	--	.0005	.0212	.0007
3296KA	42.01	84.8	852	14.7	.54	.0098	--	--	.0196	.0049	.0020	--	.0029	.0294	.0020
3296KB	42.01	85.9	864	13.5	.54	.0063	--	--	.0027	.0036	.0027	--	--	.0450	.0045
3296KC	42.01	88.6	891	10.9	.57	.0109	--	--	.0016	--	.0022	--	--	.0163	.0054
3296LA	42.02	83.0	833	16.7	.30	.0056	--	--	.0111	--	.0019	--	.0008	.0111	--
3296LB	42.02	95.1	954	4.6	.26	.0648	--	--	.0014	--	--	--	.0002	.0926	--
3296LC	42.02	86.3	867	13.3	.40	.0088	--	--	.0027	.0035	.0015	--	.0002	.0088	.0013
3296MA	42.03	78.0	789	20.8	1.14	.0021	--	--	.0021	.0052	.0313	--	--	.0031	.0073
3296MB	42.03	82.8	830	16.9	.26	.0059	--	--	.0004	--	.0127	--	--	.0127	.0025
3296MC	42.03	83.5	837	16.3	.18	.0076	--	--	.0005	--	.0163	--	--	.0109	.0011
3296PA	42.04	78.6	792	20.6	.82	.0010	--	--	.0010	--	.5155	--	.0021	.0021	.0072
3296PB	42.04	82.5	830	16.9	.55	.0013	--	--	.0017	--	.2542	--	.0017	.0017	.0127
3296PC	42.04	77.7	781	21.7	.57	.0016	--	--	.0033	--	.1630	--	.0002	.0022	--
3267A	43.01	84.2	849	15.0	.75	.0200	--	--	.0700	.0100	.0150	--	.0010	.0070	--
3267B	43.01	79.3	799	20.0	.70	.0100	--	--	.0020	.0500	.0070	--	.0003	.0200	--
3267C	43.01	82.3	824	17.5	.16	.0175	--	--	.0006	--	.0175	--	--	.0088	--
3267WA	43.02	79.4	809	18.8	1.86	.0063	--	--	.0006	--	.0125	--	--	.0063	.0012
3267WB	43.02	85.6	860	13.9	.53	.0093	--	--	.0014	--	.0065	--	.0002	.0093	.0009
3267WC	43.02	82.0	825	17.4	.52	.0116	--	--	.0006	--	.0023	--	.0002	.0023	.0012
3267FA	43.03	79.5	799	20.0	.49	.0300	--	--	.0010	--	.0200	--	.0200	.0050	--
3267FB	43.03	85.3	855	14.4	.30	.0096	--	--	.0010	--	.0288	--	.0019	.0048	--
3267FC	43.03	84.8	850	15.0	.24	.0015	--	--	.0020	--	.0100	--	.0002	.0050	--
3267SA	43.04	79.6	799	20.0	.45	.0050	--	--	.0200	--	.0300	--	.0020	.0100	--
3267SB	43.04	80.7	809	19.0	.29	.0029	--	--	.0019	--	.0476	--	.0003	.0095	--
3267SC	43.04	77.6	785	21.3	1.10	.0213	--	--	.0532	.0053	.0160	--	.0021	.0160	.0016
3267CA	43.05	80.1	810	18.8	1.15	.0063	--	--	.0038	.1250	.0125	--	.0003	.2500	.0012
3267CB	43.05	73.2	739	25.9	.92	.0052	--	--	.0345	.0069	.0259	--	.0034	.3448	--
3267QA	43.06	78.9	798	20.0	1.15	.0100	--	--	.0030	--	.0030	--	.0010	.0070	--
3267QB	43.06	85.2	862	13.6	1.15	.0136	--	--	.0014	.0064	.0045	--	.0005	.0064	--
3298	43.07	85.5	860	13.9	.61	.0139	--	--	.0278	.0046	.0185	--	.0046	.0463	--
3027A	44.01	72.6	737	25.9	1.56	.0043	--	--	.0086	--	.0862	--	.0017	--	--
3053A	45.01	75.5	759	24.0	.48	.0200	--	--	.0015	--	--	--	.0007	.0200	.0005
3053B	45.01	68.0	685	31.3	.65	.0098	--	--	.0010	--	.0049	--	.0005	.0196	--
3053C	45.01	73.3	736	26.2	.45	.0067	--	--	.0048	--	.0029	--	.0003	.0286	--
3054A	45.01	72.8	733	26.5	.70	.0098	--	--	.0029	--	.0049	--	.0010	.0196	--
3054A	45.01	74.2	748	25.0	.81	.0100	--	--	.0020	.0040	.0050	--	.0003	.0500	--
3055A	45.02	71.5	718	28.0	.50	.0054	--	--	.0054	--	.0032	--	.0002	.0216	--
3055B	45.02	78.0	794	20.2	1.84	.0101	--	--	.0101	--	--	--	.0007	.0101	.0005
3055C	45.02	72.1	727	27.1	.88	.0093	--	--	.0028	--	--	--	--	.0140	--
3055D	45.02	73.9	742	25.6	.48	.0175	--	--	.0058	--	.0117	--	--	.0023	--
3055E	45.02	73.8	747	25.0	1.20	.0051	--	--	.0071	--	--	--	.0010	.0306	--
3266A	46.01	83.3	855	14.2	2.59	.0472	.0660	--	.0047	.0189	.0066	--	--	1.8868	--
3266B	46.01	81.8	848	14.7	3.50	.0294	.0294	--	.0147	.0049	.0069	--	.0007	1.4706	.0020
3266C	46.01	77.8	802	19.2	2.99	.0481	.0962	--	.0096	.0038	.0096	--	.0003	1.9231	.0010

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3100TB	39.03	--	.0019	--	--	.0005	--	--	--	--	--	--	--	--	--
YD1580A	40.01	--	--	--	--	.0010	.0050	--	--	--	--	--	.0015	0	--
3026A	41.01	--	--	--	--	.0031	--	--	--	--	--	--	--	--	--
3026B	41.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3026C	41.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3026D	41.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3026E	41.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3296KA	42.01	--	--	--	--	--	--	--	.0010	--	--	--	.0005	0	--
3296KB	42.01	--	--	--	--	--	--	--	--	--	--	--	.0018	0	--
3296KC	42.01	--	--	--	--	.0004	--	--	--	--	--	--	.0011	0	--
3296LA	42.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3296LB	42.02	--	--	--	.0005	--	--	--	--	--	--	--	--	--	--
3296LC	42.02	--	--	--	--	--	--	--	--	--	--	--	.0004	0	--
3296MA	42.03	.0007	--	--	--	--	--	--	--	--	--	--	.0016	0	--
3296MB	42.03	--	--	--	--	--	--	--	--	--	--	--	.0008	0	--
3296MC	42.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3296PA	42.04	.0005	--	--	--	--	--	--	--	--	--	--	--	--	--
3296PB	42.04	--	--	--	--	--	.0004	--	--	--	--	--	.0008	0	--
3296PC	42.04	--	--	--	--	--	--	--	--	--	--	--	.0004	0	--
3267A	43.01	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3267B	43.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3267C	43.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3267WA	43.02	--	--	--	--	.0025	--	--	--	--	--	--	--	--	--
3267WB	43.02	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3267WC	43.02	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3267FA	43.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3267FB	43.03	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3267FC	43.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3267SA	43.04	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3267SB	43.04	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3267SC	43.04	--	--	--	--	.0011	--	--	--	--	--	--	--	--	--
3267CA	43.05	--	.0012	--	--	.0625	--	--	--	--	--	--	--	--	--
3267CB	43.05	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3267QA	43.06	--	--	--	--	.0020	.0004	--	--	--	--	--	--	--	--
3267QB	43.06	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3298	43.07	--	--	--	--	.0014	--	--	.0139	--	.0028	--	--	--	--
3027A	44.01	--	.1724	--	--	--	--	--	--	--	.0431	--	--	--	--
3053A	45.01	.0010	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3053B	45.01	.0005	--	--	--	--	--	--	--	--	--	--	--	--	--
3053C	45.01	.0005	--	--	--	--	--	--	--	--	--	--	--	--	--
3054A	45.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3054A	45.01	--	--	--	--	.0020	--	--	--	--	--	--	--	--	--
3055A	45.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3055B	45.02	--	.0010	--	--	.0015	--	.0020	--	--	--	--	--	--	--
3055C	45.02	--	--	--	--	.0007	.0009	--	--	--	--	--	--	--	--
3055D	45.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3055F	45.02	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3266A	46.01	--	.0005	--	--	.0009	--	--	--	--	--	--	--	--	.0002
3266B	46.01	--	.0015	--	--	.0010	--	.0010	.0015	--	--	--	--	--	--
3266C	46.01	--	.0010	--	--	.0007	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3100TR	39.03	--	.0010	.0292	.0146	.0049	.0010	.0973	5.14	4.1	11,801	2,857	607
YD1580A	40.01	--	.0100	.3000	.0150	--	.1500	.2000	5.00	4.0	7,929	2,000	396
3026A	41.01	--	.0031	.2058	.0103	.0154	.0031	.3086	4.86	1.8	12,501	6,800	357
3026B	41.01	--	.0010	.1020	.0051	.0051	.0031	.1020	4.90	2.9	14,552	5,000	570
3026C	41.01	--	.0020	.2012	.0101	.0101	.0070	.5030	4.97	2.4	9,945	4,143	341
3026D	41.01	--	.0020	.1984	.0069	.0099	.0099	.4960	5.04	3.0	25,007	8,333	1,008
3026F	41.01	--	.0021	.2119	.0106	.0106	.0106	.5297	4.72	3.9	10,658	2,714	530
3296KA	42.01	--	.0029	.2941	.0098	.0069	.0029	.1471	5.10	5.8	8,645	1,500	588
3296KB	42.01	--	.0014	.1802	.0090	.0063	.0063	.2703	5.55	6.4	13,629	2,143	1,009
3296KC	42.01	--	.0016	.1630	.0217	.0109	.0109	.3261	4.60	8.1	8,147	1,000	750
3296LA	42.02	--	.0011	.0778	.0167	.0056	.0009	.1667	4.50	5.0	14,946	3,000	897
3296LB	42.02	--	.0005	.0278	.0019	.0019	.0008	.0648	5.40	20.5	1,467	71	317
3296LC	42.02	--	.0027	.1770	.0088	.0062	.0009	.1770	5.65	6.5	9,755	1,500	735
3296MA	42.03	--	.0052	.5208	.0313	.0073	.0031	.5208	4.80	3.7	37,452	10,000	1,798
3296MB	42.03	--	.0006	.0424	.0025	.0085	.0025	.1695	5.90	4.9	13,956	2,857	823
3296MC	42.03	--	.0003	.0326	.0054	.0011	--	.1087	4.60	5.1	10,976	2,143	673
3296PA	42.04	--	.0010	.0722	.0103	.0021	--	.2062	4.85	3.8	76,204	20,000	3,696
3296PB	42.04	--	.0008	.0847	.0085	.0042	.0059	.1695	5.90	4.9	64,902	13,333	3,829
3296PC	42.04	--	.0033	.2174	.0109	.0011	--	.1630	4.60	3.6	47,653	13,333	2,192
3267A	43.01	--	.0015	.1000	.0200	.0070	.0009	.5000	5.00	5.6	4,212	750	281
3267B	43.01	--	.0007	.1000	.0100	.0010	.0009	.5000	5.00	4.0	7,930	2,000	396
3267C	43.01	--	.0001	.0175	.0044	.0009	--	.0877	5.70	4.7	4,691	1,000	267
3267WA	43.02	--	.0025	.3750	.1875	.0087	.0087	1.2500	4.00	4.2	12,702	3,000	677
3267WB	43.02	--	.0019	.1852	.0278	.0046	.0009	.2778	5.40	6.2	9,243	1,500	666
3267WC	43.02	--	.0012	.1163	.0116	.0116	.0081	.3488	4.30	4.7	7,056	1,500	405
3267FA	43.03	--	.0020	.2000	.0070	.0020	.0050	.2000	5.00	4.0	2,650	667	133
3267FB	43.03	--	.0005	.0481	.0096	.0019	.0008	.1923	5.20	5.9	8,869	1,500	615
3267FC	43.03	--	--	.0150	.0050	.0010	--	.2000	5.00	5.7	56,507	10,000	3,767
3267SA	43.04	--	.0070	.1500	.0200	.0030	--	.2000	5.00	4.0	15,910	4,000	796
3267SB	43.04	--	.0003	.0286	.0048	.0010	--	.1905	5.25	4.2	28,233	6,667	1,482
3267SC	43.04	--	.0032	.1596	.0213	.0532	.0016	.7447	4.70	3.6	3,648	1,000	171
3267CA	43.05	--	.0063	.3750	.0375	.0125	.0062	.2500	4.00	4.3	12,816	3,000	684
3267CB	43.05	--	.0026	.1207	.0259	.0034	--	.3448	2.90	2.8	14,156	5,000	547
3267QA	43.06	--	.0015	.1000	.0150	.0050	.0020	1.0000	5.00	3.9	7,885	2,000	394
3267QB	43.06	--	.0018	.1818	.0136	.0045	.0009	.9091	5.50	6.2	6,249	1,000	458
3298	43.07	--	.0019	.1389	.0463	.0093	.0019	.2778	5.40	6.2	6,156	1,000	443
3027A	44.01	--	.0431	.4310	.1293	.0086	.0259	.6034	.58	2.8	16,839	6,000	651
3053A	45.01	--	.0010	.1000	.0200	.0150	.0015	.3000	5.00	3.1	3,776	1,200	157
3053B	45.01	--	.0010	.0978	.0147	.0098	.0029	.4892	5.11	2.2	6,953	3,200	222
3053C	45.01	--	.0029	.0954	.0095	.0095	.0019	.2863	5.24	2.8	10,976	3,929	418
3054A	45.01	--	.0015	.1473	.0098	.0069	.0015	.4912	5.09	2.7	7,409	2,700	279
3054A	45.01	--	.0020	.2000	.0150	.0200	.0020	.5000	5.00	3.0	7,419	2,500	297
3055A	45.02	--	.0016	.1078	.0162	.0108	.0022	.3233	4.64	2.6	13,268	5,200	474
3055B	45.02	--	.0152	.5051	.0202	.1010	.1515	1.0101	4.95	3.9	7,718	2,000	382
3055C	45.02	--	.0019	.1399	.0187	.0187	.0187	.6530	5.36	2.7	7,726	2,900	286
3055D	45.02	--	.0012	.0583	.0082	.0233	.0017	.3497	4.29	2.9	4,226	1,467	165
3055F	45.02	--	.0051	.1020	.0204	.0102	.0015	1.0204	4.90	3.0	14,464	4,900	579
3266A	46.01	--	.0007	.0660	.0189	.0019	.0014	.4717	5.30	5.9	1,765	300	125
3266B	46.01	--	.0049	.1961	.0686	.0049	.1961	1.4706	5.10	5.6	2,781	500	189
3266C	46.01	--	.0019	.1923	.0192	.0029	.0048	.6731	5.20	4.0	1,618	400	84

Circle Data--Continued

Sample	Site	% Au	Fine	Ag	Sum X	Cu	Zn	Ga	Pb	As	Sb	Cd	Bi	Mg	Ni
3266CA	46.02	74.9	814	17.1	7.99	.0732	.1220	--	.0012	--	.0049	--	--	7.3171	--
3266CB	46.02	78.0	824	16.7	5.32	.0333	.0833	--	.0025	--	.0500	--	--	5.0000	--
3266CC	46.02	67.9	721	26.3	5.81	.0526	.1316	--	.0013	--	.0263	--	--	5.2632	--
3266XA	46.03	81.5	847	14.7	3.75	.0490	.0686	--	.0980	.0196	.0147	--	.0049	2.9412	--
3266XB	46.03	79.6	819	17.6	2.72	.0588	.0588	--	.0012	--	.0118	--	.0002	2.3529	--
3021D	47.01	72.8	732	26.7	.49	.0057	--	--	.0227	--	.0227	--	.0017	.0170	--
3021E	47.01	61.9	624	37.3	.80	.0015	--	--	.0010	.0147	.0196	--	--	.0049	.0005
3022A	48.01	66.4	674	32.1	1.51	.0021	.0075	--	.0107	--	.0161	--	--	.0749	--
3022B	48.01	68.7	696	30.0	1.30	.0020	--	--	.0050	--	.0500	--	--	.0200	--
3022C	48.01	67.2	691	30.0	2.85	.0018	--	--	.0240	.0084	.0240	--	.0006	.0180	--
3116A	49.01	79.9	802	19.8	.37	.0049	--	--	.0020	--	.0020	--	--	.0198	--
3116B	49.01	82.1	823	17.6	.28	.0044	--	--	.0009	.0044	.0616	--	--	.0440	--
3116C	49.01	78.7	805	19.1	2.24	.0010	--	--	.0095	.0095	.0019	--	--	1.9084	--
3116XA	49.02	76.9	787	20.8	2.24	.0073	--	--	.0010	--	.0021	--	--	.0104	--
3116XB	49.02	70.6	717	27.9	1.53	.0007	--	--	.9294	--	.0186	--	--	.0651	--
3116XC	49.02	73.5	744	25.3	1.18	.0084	--	--	.0253	.0422	.0059	--	.0084	.0169	--
3295X	50.01	96.2	968	3.2	.59	.1064	--	--	.0021	--	--	--	.0003	.0106	.0021
3295SA	50.02	88.4	895	10.4	1.19	.0208	--	--	.1563	.0042	.0021	--	.0016	.0208	.0052
3295SB	50.02	92.7	935	6.5	.80	.0195	--	--	.2597	--	--	--	.0006	.0195	--
3243A	50.03	84.6	849	15.0	.37	.0100	--	--	--	--	--	--	--	.0200	--
3243B	50.03	86.5	869	13.0	.48	.0091	--	--	.0065	--	--	--	--	.0195	--
3243C	50.03	80.4	810	18.8	.72	.0094	--	--	.0471	--	--	--	--	.0282	.0014
3300A	50.04	97.1	973	2.7	.17	.0636	--	--	.0018	--	.0018	--	.0002	.0091	--
3300B	50.04	96.2	967	3.3	.48	.1111	--	--	.0111	--	.0019	--	--	.0078	.0017
3300C	50.04	97.6	979	2.1	.38	.1546	--	--	.0015	--	--	--	--	.0021	--
YD5080A	51.01	91.3	917	8.3	.36	.0190	--	--	.0019	--	.0055	--	--	.0280	--

Circle Data--Continued

Sample	Site	Co	Sn	Mo	Pd	Ba	Zr	V	Cr	Y	La	Nb	B	Ta	Be
3266CA	46.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3266CB	46.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3266CC	46.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3266XA	46.03	--	--	--	--	.0007	--	--	--	--	--	--	--	--	--
3266XB	46.03	--	--	--	--	--	--	--	--	--	--	--	--	--	.0001
3021D	47.01	--	--	--	--	.0006	--	--	--	--	.0023	--	--	--	--
3021E	47.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3022A	48.01	--	--	--	--	.0011	--	--	--	--	--	--	--	--	--
3022B	48.01	--	.5000	--	--	.0007	--	--	--	--	--	--	--	--	--
3022C	48.01	--	1.7986	--	--	.0012	.0240	--	--	.0024	.0180	--	--	--	--
3116A	49.01	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3116B	49.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3116C	49.01	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
3116XA	49.02	--	--	--	--	.0010	--	--	--	--	--	--	--	--	--
3116XB	49.02	--	--	--	--	.0009	--	--	--	--	--	--	--	--	--
3116XC	49.02	--	--	--	--	.0042	--	--	--	--	--	--	--	--	--
3295X	50.01	.0005	--	--	--	.0011	--	--	--	--	--	--	.0004	0	--
3295SA	50.02	.0005	--	--	--	.0010	.0521	--	--	.0007	--	--	--	--	--
3295SB	50.02	--	--	--	--	.0009	.0649	--	--	.0006	--	--	--	--	--
3243A	50.03	--	--	--	--	.0010	.0005	--	--	--	--	--	--	--	--
3243B	50.03	--	--	--	--	.0005	--	--	--	--	--	--	--	--	--
3243C	50.03	--	--	--	--	.0005	--	--	.0008	--	--	--	--	--	--
3300A	50.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3300B	50.04	--	--	--	--	.0006	--	--	--	--	--	--	--	--	--
3300C	50.04	--	--	--	--	.0004	--	--	--	--	--	--	--	--	--
YD5080A	51.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Circle Data--Continued

Sample	Site	W	Mn	Fe	Mg	Ca	Ti	Si	Wt	Au/Ag	Au/Cu	Ag/Cu	r/Cu
3266CA	46.02	--	.0024	.0732	.0244	.0049	.0049	.3659	2.05	4.4	1,024	233	60
3266CP	46.02	--	.0003	.0167	.0167	.0017	--	.1167	3.00	4.7	2,340	500	140
3266CC	46.02	--	.0008	.0395	.0184	.0079	.0026	.2632	1.90	2.6	1,290	500	49
3266XA	46.03	--	.0005	.0490	.0098	.0020	.0008	.4902	5.10	5.5	1,664	300	113
3266XB	46.03	--	.0008	.0353	.0176	.0024	--	.1765	4.25	4.5	1,354	300	77
3021D	47.01	--	.0011	.0568	.0057	.0080	.0080	.3409	4.40	2.7	12,813	4,700	480
3021F	47.01	--	.0010	.0491	.0069	.0069	.0029	.6876	5.09	1.7	41,992	25,333	1,125
3022A	48.01	--	.0107	.2141	.0749	.0214	.0011	1.0707	4.67	2.1	30,997	15,000	965
3022B	48.01	.0200	.0050	.1000	.0200	.0700	.0100	.5000	5.00	2.3	34,349	15,000	1,145
3022C	48.01	--	.0120	.1799	.0180	.0600	.0600	.5995	4.17	2.2	37,349	16,667	1,246
3116A	49.01	--	.0010	.0296	.0148	.0015	--	.2964	5.06	4.0	16,165	4,000	818
3116B	49.01	--	.0002	.0264	.0044	.0009	.0007	.1320	5.68	4.7	18,656	4,000	1,060
3116C	49.01	--	.0001	.0095	.0067	.0014	.0008	.2863	5.24	4.1	82,457	20,000	4,321
3116XA	49.02	--	.0016	.0729	.0521	.0104	.0009	2.0833	4.80	3.7	10,550	2,857	506
3116XB	49.02	--	.0005	.0139	.0186	.0139	.0046	.4647	5.38	2.5	108,504	42,857	3,892
3116XC	49.02	--	.0127	.4223	.0253	.0084	.0084	.5912	5.92	2.9	8,700	3,000	343
3295X	50.01	--	.0021	.2128	.0213	.0160	.0011	.2128	4.70	30.1	904	30	283
3295SA	50.02	--	.0021	.3125	.0521	.0156	.0208	.5208	4.80	8.5	4,243	500	407
3295SB	50.02	--	.0013	.1299	.0260	.0130	.0039	.2597	3.85	14.3	4,759	333	733
3243A	50.03	--	.0010	.0500	.0500	.0300	.0050	.2000	5.00	5.6	8,463	1,500	564
3243B	50.03	--	.0020	.1953	.0260	.0130	.0130	.1953	3.84	6.6	9,490	1,429	729
3243C	50.03	--	.0019	.1883	.1412	.0188	.0014	.2825	5.31	4.3	8,543	2,000	454
3300A	50.04	--	.0002	.0455	.0018	.0009	.0009	.0455	5.50	35.6	1,526	43	559
3300B	50.04	--	.0011	.2222	.0056	.0022	.0022	.1111	4.50	28.9	866	30	260
3300C	50.04	--	.0007	.1031	.0052	.0021	.0031	.1031	4.85	47.3	631	13	306
YD5080A	51.01	--	.0006	.1400	.0190	--	.0028	.1400	1.80	11.0	4,808	437	579

TABLE 5.--Spectrographic analyses for the nonmagnetic fraction of the heavy-mineral-concentrate samples from placer gold samples from the Circle mining district, Circle quadrangle, Alaska

[N, not detected; <, detected but below limit of determination shown; >, determined to be greater than value shown; values in parts per million except where noted; %, percent. No concentrate samples collected at sites 4, 6, 8, 10-12, 16, 17, 19, 21, 24, 26-30, 32-34, 40, 42-44, 46-49, and 51. See table 1 for locality name.]

Sample	Site	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-AU	S-B	S-BA	S-BE	S-BI	S-CO	S-CR	S-CU
3109A	1	2.0	.15	<.1	.7	150	70	N	300	100	100	7	20	N	N	150
3109B	1	.5	.07	<.1	1.0	50	N	N	N	70	100	N	N	N	N	<10
3107	2	2.0	.20	.1	1.0	500	N	N	N	200	200	N	N	10	N	30
3097	3	5.0	<.05	<.1	.3	50	10	N	50	50	<50	5	200	20	N	70
3108A	3	1.5	<.05	<.1	.3	100	7	1,000	70	50	<50	3	<20	N	N	30
3108B	3	2.0	.05	<.1	.5	100	3	<500	20	70	50	7	200	15	N	30
3138A	5	2.0	.50	.5	.7	150	N	N	N	20	70	N	N	15	N	50
3138B	5	1.0	.30	.5	1.0	150	N	N	N	70	50	N	N	N	N	20
3293	7	10.0	.07	<.1	.3	150	1,000	20,000	500	300	70	N	N	30	N	1,000
3033	9	5.0	<.05	1.0	.7	70	700	15,000	>1,000	N	100	N	2,000	70	N	50
3294	13	15.0	.10	1.0	>2.0	100	200	20,000	30	30	700	N	1,000	100	N	70
3025	14	50.0	.15	.3	1.5	200	5	10,000	N	50	500	2	N	100	N	100
3179	14	2.0	.30	<.1	1.0	100	N	10,000	N	200	300	N	N	10	20	20
3141A	15	2.0	.20	.2	.5	500	1	1,000	N	100	100	N	30	10	N	30
3141C	15	1.5	.15	.2	.5	100	N	10,000	N	30	100	N	300	30	N	50
3024	18	1.0	<.05	.3	.5	70	>10,000	3,000	>1,000	100	300	2	N	N	N	1,000
3023	20	2.0	.50	10.0	>2.0	300	70	1,000	200	150	700	3	N	N	100	70
3312A	22	.5	.07	.2	>2.0	200	100	N	1,000	50	100	15	N	N	20	<10
3312B	22	1.0	.15	1.0	>2.0	150	10	500	300	70	150	7	N	N	50	10
3140A	22	2.0	.50	.1	.7	200	N	N	N	70	200	N	N	15	N	20
3140B	22	1.5	.20	.1	1.0	200	N	N	N	200	150	N	N	10	N	15
3140C	22	2.0	.20	.1	1.0	200	N	N	N	200	150	N	N	10	N	15
3140D	22	1.5	.20	<.1	.7	200	N	N	N	50	100	N	N	10	N	10
3140E	22	2.0	.30	.1	.7	200	N	N	N	70	200	N	N	10	N	20
3140F	22	2.0	.07	.2	>2.0	200	50	N	700	300	70	5	50	100	N	200
3137A	23	1.5	.30	.1	.7	200	N	N	N	70	200	N	N	10	N	15
3137B	23	1.5	.20	.1	.5	150	N	N	N	150	200	N	N	N	N	10
3176	25	20.0	<.05	<.1	.1	70	150	10,000	N	N	500	N	20	150	N	100
3121	31	2.0	.50	.3	.7	300	N	N	N	100	150	N	N	15	N	20
3183	35	1.5	.10	.5	2.0	1,500	7	<500	200	100	100	7	N	N	150	20
3244	36	1.5	1.00	.5	2.0	1,000	5	500	N	200	100	20	N	N	100	50
33241	37	.5	.05	.3	1.0	200	7	N	30	50	50	10	<20	N	100	500
3175	38	.7	.15	.5	.7	200	N	N	N	N	150	3	N	N	N	<10
3100	39	.5	<.05	.2	.5	700	7	N	30	30	<50	15	20	N	N	30
3026	41	5.0	.70	.5	1.0	700	2	N	N	150	1,000	7	N	10	N	50
3027	41	1.0	.10	5.0	>2.0	1,000	1	N	100	20	200	50	N	N	100	20
3053A	45	20.0	.05	5.0	.3	200	1,000	>20,000	>1,000	20	700	15	100	70	N	15
3053B	45	10.0	.30	3.0	1.5	700	100	20,000	200	200	700	7	500	70	N	50
3053C	45	5.0	.30	5.0	2.0	1,000	500	20,000	1,000	1,000	500	5	700	50	N	70
3243	50	5.0	.70	10.0	>2.0	700	7	N	30	500	300	5	N	50	200	50
3295	50	1.5	.20	5.0	2.0	100	10	500	N	50	500	N	N	N	20	50

CIRCLE C3 DATA--Continued

Sample	Site	S-LL	S-MO	S-NB	S-NI	S-PB	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH
3109A	1	N	N	N	15	30,000	700	N	2,000	N	20	N	N	N	150	N
3109B	1	N	N	N	N	30	N	N	1,000	N	20	N	N	N	700	N
3107	2	70	N	<50	20	N	N	10	2,000	N	50	100	30	N	700	N
3097	3	N	N	700	50	500	N	30	>2,000	N	N	700	<20	N	2,000	N
3108A	3	150	N	500	30	200	N	20	>2,000	N	20	1,500	<20	N	500	N
3108B	3	700	N	500	50	150	N	20	>2,000	N	30	1,000	20	N	700	N
3138A	5	N	N	N	30	N	N	N	200	N	70	N	N	N	150	N
3138B	5	N	N	N	10	N	N	N	200	N	70	N	N	N	300	N
3293	7	50	N	N	50	>50,000	10,000	<10	>2,000	N	50	500	N	5,000	1,000	N
3033	9	N	N	N	70	15,000	700	30	>2,000	N	500	10,000	70	N	1,000	N
3294	13	N	N	N	100	5,000	N	--	>2,000	500	70	20,000	150	N	>2,000	N
3025	14	N	N	70	300	500	N	N	>2,000	N	N	2,000	70	N	1,000	N
3179	14	N	N	N	20	300	N	10	70	N	100	N	N	N	200	N
3141A	15	N	N	N	15	300	N	15	>2,000	N	70	2,000	<20	N	500	N
3141C	15	N	N	N	20	200	N	10	>2,000	N	70	1,500	N	N	1,000	N
3024	18	N	N	N	N	300	N	20	>2,000	N	300	3,000	20	N	100	N
3023	20	50	N	100	N	500	N	10	>2,000	700	200	5,000	150	N	>2,000	N
3312A	22	N	N	N	N	200	N	--	200	N	20	500	1,000	N	>2,000	N
3312B	22	N	N	50	N	N	N	--	150	200	50	200	500	N	>2,000	N
3140A	22	N	N	N	20	N	N	N	50	N	70	N	N	N	200	N
3140B	22	N	N	N	20	N	N	N	50	N	70	N	<20	N	300	N
3140C	22	N	N	N	20	N	N	N	50	N	70	N	20	N	1,000	N
3140D	22	N	N	N	15	N	N	N	<20	N	50	N	N	N	100	N
3140F	22	50	N	N	20	N	N	N	30	N	70	N	<20	N	200	N
3140F	22	500	N	N	50	1,500	N	10	>2,000	N	50	500	1,000	N	>2,000	N
3137A	23	N	N	N	20	N	N	10	70	N	50	N	<20	N	150	N
3137B	23	N	N	N	10	N	N	N	100	N	50	N	N	N	150	N
3176	25	N	N	N	500	>50,000	N	N	>2,000	N	N	N	N	N	50	N
3121	31	N	N	N	20	N	N	15	100	N	100	N	<20	N	150	N
3183	35	500	N	<50	N	300	200	--	>2,000	N	50	<100	500	N	>2,000	<200
3244	36	2,000	N	<50	N	500	N	--	>2,000	N	100	300	1,000	N	>2,000	500
33241	37	150	N	50	N	50	N	--	>2,000	N	70	700	200	N	>2,000	<200
3175	38	70	N	50	N	N	N	N	1,500	N	30	N	100	N	100	N
3100	39	500	N	50	N	50	N	50	>2,000	N	150	2,000	200	N	100	N
3026	41	N	N	N	20	70	N	15	>2,000	N	200	10,000	30	N	200	N
3027	41	300	N	500	N	100	N	10	>2,000	N	200	700	1,500	N	>2,000	1,000
3053A	45	700	70	N	50	5,000	N	10	>1,000	N	N	10,000	200	N	500	N
3053B	45	2,000	30	100	150	1,000	N	10	>1,000	N	150	7,000	300	N	>2,000	1,000
3053C	45	700	15	150	30	700	N	10	>1,000	200	200	7,000	500	N	>2,000	300
3243	50	50	N	<50	30	30	N	--	2,000	500	150	150	300	N	>2,000	N
3295	50	N	N	50	N	1,000	N	--	1,000	200	50	100	70	N	>2,000	N

TABLE 6.--Mineralogy of the nonmagnetic fraction of the heavy-mineral-concentrate samples from placer gold samples from the Circle mining district, Circle quadrangle, Alaska

[Amalgam, AuHg, arsenopyrite, FeAsS; barite, $BaSO_4$; cassiterite, SnO_2; chalcopyrite, $CuFeS_2$; cinnabar, HgS; fluorite, $CaFe_2$; galena, PbS; gold, Au; pyrite, FeS_2; scheelite, $CaWO_4$; rutile, TiO_2; and stibnite, Sb_2S_3. No mineralogy for sites 4, 6, 8-12, 16, 17, 19, 21, 23, 24, 26-30, 32-35, 40, 42-43, 46-49, and 51. X, present; 70, estimated percentage (%). See table 1 for locality name.]

Site number	Gold	Arsenopyrite	Chalcopyrite	Galena	Pyrite	Barite	Cinnabar	Cassiterite	Scheelite	Stibnite	Amalgam	Rutile	Fluorite
1	X							X	X				
2	X				X			X	X				
3	X			X	X			2	80				
3	X	X			X			90	2				
3	X				X	X		30	X				
5	X				X			X	X				
7	X	10	X	20	30			30		X			
13	X	10		X	40			20	10				
14	X	X		X	X			X	X				
15	X				X			X	X				
18	X	X			X			X	X			X	
20	X	X		X				X	X	X	X		
22	X	X	X						X			20	
22	X				X				X			20	
25	X	30		10	60								

TABLE 6--Continued

Site number	Gold	Arsenopyrite	Chalcopyrite	Galena	Pyrite	Barite	Cinnabar	Cassiterite	Scheelite	Stibnite	Amalgam	Rutile	Fluorite
31	X	X			X								
36	X								X				
37	X								X				
38	X								X				
39	X				X			90	2				
41	X	X			X			X	X				
44	X				X			X	X				
45	X	X		X	X			X	X			X	X
45	X	X			X			X	X			X	
50	X				X	X	X	X	X			10	