

DRILLING RESULTS AT THE FARAH GARAN
ANCIENT MINE,
SOUTHWESTERN SAUDI ARABIA

by

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ABSTRACT

The Farah Garan ancient mine is located at lat 17°41'00" N., long 43°38'15" E. in the southwestern part of the Kingdom of Saudi Arabia. Three diamond drill holes intersected base-metal sulfides, which are present both as conformable layers in Precambrian tuffaceous volcanic rocks and as fracture fillings, irregularly shaped masses, disseminations, and clots in intensely hydrothermally altered and brecciated fault zones. The sulfides probably formed through volcanic processes in a shallow-marine environment and subsequently were greatly modified by tectonism and hydrothermal activity.

Drill hole F.G.-1 intersected sparse base and precious metal minerals along a length of 30 m; several narrow, isolated zones contain as much as 22 grams per metric ton (g/t) silver, 1.25 percent copper, and 3.10 percent zinc. Drill hole F.G.-2 intersected low-grade base and precious metal minerals along a length of 50 m. Within this zone, a 10-m interval contains an average of 0.15 g/t gold, 10.7 g/t silver, and 0.86 percent zinc. Drill hole F.G.-3 cut commercial-grade base and precious metal minerals in a 3.55-m interval that contains an average of 20.06 g/t gold, 32.75 g/t silver, and 6.28 percent zinc.

Additional exploration, including drilling and laboratory studies, is recommended to further define potential tonnages of base and precious metals intersected in drill hole F.G.-3 and to learn more about their genesis and mineral form.

Arsenic and antimony are locally abundant in both drill-core and surface samples. Because of its weathering characteristics, mobility, and association with precious metals, arsenic commonly is a pathfinder for gold. Approximately 1,100 splits of surface samples collected in the Farah Garan area are stored at the Directorate General of Mineral Resources-U.S. Geological Survey chemical laboratory in Jiddah, and any further exploration should include assaying these samples for arsenic and antimony by wet-chemical analysis.

INTRODUCTION

The Farah Garan ancient mine, at lat 17°41'00" N., long 43°38'15" E. in the Mayza quadrangle, sheet 17/43 B, (fig. 1), was discovered by R. E. Anderson (1979) during geologic mapping of the quadrangle. Detailed mapping, sampling, and geophysical studies in the mine area have also been done (Smith, 1979).

Precambrian layered rocks in the area were assigned to the Jiddah group by R. E. Anderson (1979), and the senior author of this report used this group name on detailed maps of several mineral zones including the Farah Garan ancient mine (Smith, 1979). However, additional age dating is in progress and should define within narrow limits the age of the layered rocks in this region. Therefore, the group name used in this report is tentative.

Drilling by the Arabian Drilling Company began on October 23, 1978, and was terminated on March 19, 1979, after 809.40 m were drilled in three angled drill holes. Before drilling began, it was necessary for the drilling company to bulldoze a 7-km-long road over rough, mountainous terrain to bring equipment and water to the drill site. This took approximately 2 weeks.

Weis Essa Assumali of the U.S. Geological Survey (USGS) stayed at the drill sites during the drilling program and acted as the USGS representative in the absence of a geologist. He arranged the core in sequential order to facilitate logging, split and bagged drill core marked for sampling, and transported samples to Jiddah.

ACKNOWLEDGEMENTS

This investigation is one of a series of mineral-resource studies conducted by the USGS as part of a cooperative agreement with the Saudi Arabian Ministry of Petroleum and Mineral Resources. All analyses were done at the Directorate General of Mineral Resources (DGMR)-USGS geochemical laboratory, Jiddah, under the supervision of K. J. Curry. Mineral identification studies were made by Mohammed Naqvi in laboratories of the USGS, Jiddah, under the supervision of John Matzko. Gary Selner of the USGS Computer Section, Jiddah, performed a statistical analysis of metal contents.

GEOLOGIC SETTING

The main geologic feature of the Farah Garan ancient mine area is a series of felsic to intermediate volcanic Precambrian rocks interbedded with sedimentary rocks including siltstone, black argillite, carbonaceous schist, and dolomite. These layered rocks dip steeply west and are cut by

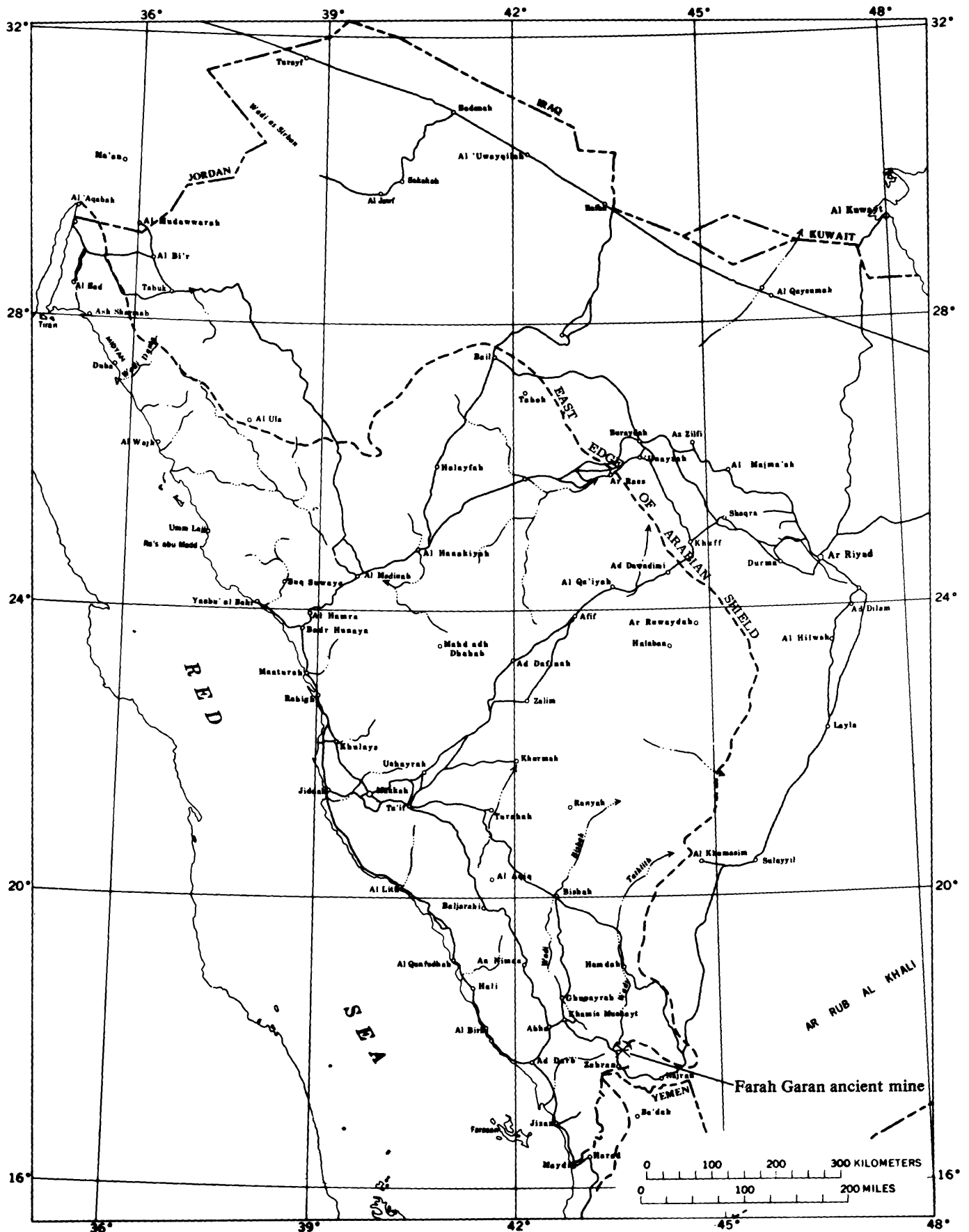


Figure 1.—Index map of western Saudi Arabia showing the location of the Farah Garan ancient mine area.

the Farah Garan fault, which trends north-northwest and has moderate horizontal displacement. West of the fault, the layered rocks trend northeast and are composed mainly of thick sections of banded and quartz crystal tuff interlayered with lensoidal dolomite. East of the fault, the layered rocks trend north and include banded and calcareous tuffs interbedded with siltstone and black argillite that grades into carbonaceous or graphitic schists (fig. 2). Some of the tuffs contain quartz crystals in a matrix permeated by carbonaceous material. None of the section is repeated by faulting.

In detailed surface mapping, most layered rocks east of the Farah Garan fault were classified as sedimentary rocks interbedded with pyroclastic rocks (Smith 1979). However, drill intersections of this zone indicate a predominance of tuffs. These rocks were probably deposited in a shallow-marine environment with sporadic volcanic activity nearby.

The rocks in the Farah Garan area have been intensely folded and sheared, and primary layering is almost parallel with schistosity and cleavage. Dolomitic lenses serve as marker horizons at the ancient mine site and locally display sharp isoclinal and drag folding and shearing at their contacts with volcanic rocks.

Most rocks in the mine area show various stages of chloritic, sericitic, siliceous, and pyritic hydrothermal alteration. Siliceous limonite-stained zones, which in most places are intensely cleaved, were noted during surface mapping (Smith 1979). These zones are evident along tuff contacts with marble lenses, but because the contacts are gradational they were not mapped separately. Drill holes F.G.-1 and -3 intersected extensive zones of silicified breccia in contact with marble. The siliceous zones at the surface (Smith, 1979) probably are an expression of the breccias; intense cleavage apparently masks the breccia pattern.

DRILLING STATISTICS

Drilling began on October 23, 1978, was interrupted by the Haj holiday between November 2 and November 15, 1978, and was terminated on March 19, 1979.

The lengths of the drill holes are:

F.G.-1	- - - - -	225.50 m
F.G.-2	- - - - -	292.35
F.G.-3	- - - - -	291.55
	TOTAL	<u>809.40 m</u>

The average drilling advance per day was 8.89 m, which breaks down into 4.76 m for the day shift and 4.13 m for the evening shift. The drill contractor, Arabian Drilling Company, encountered difficulty in obtaining local crew for drill helpers and therefore was limited to one shift per day for a 2-week period.

Drill hole F.G.-2 did not reach a secondary target because of upward hole deviation (fig. 5). The hole started at -45° and terminated at -17° . The secondary target was the projection of a brecciated and silicified sulfide-bearing zone intersected in drill hole F.G.-1. This zone would have been intersected approximately 50 m below drill hole F.G.-1. Upward deviation also occurred in drill hole F.G.-3. This hole started at -45° and terminated at -22° . Although a secondary target was intersected in this drill hole, the presence of sphalerite only a few centimeters above the bottom of the hole at 291.55 m indicates that the hole should have been extended.

DISCUSSION OF DRILLING RESULTS

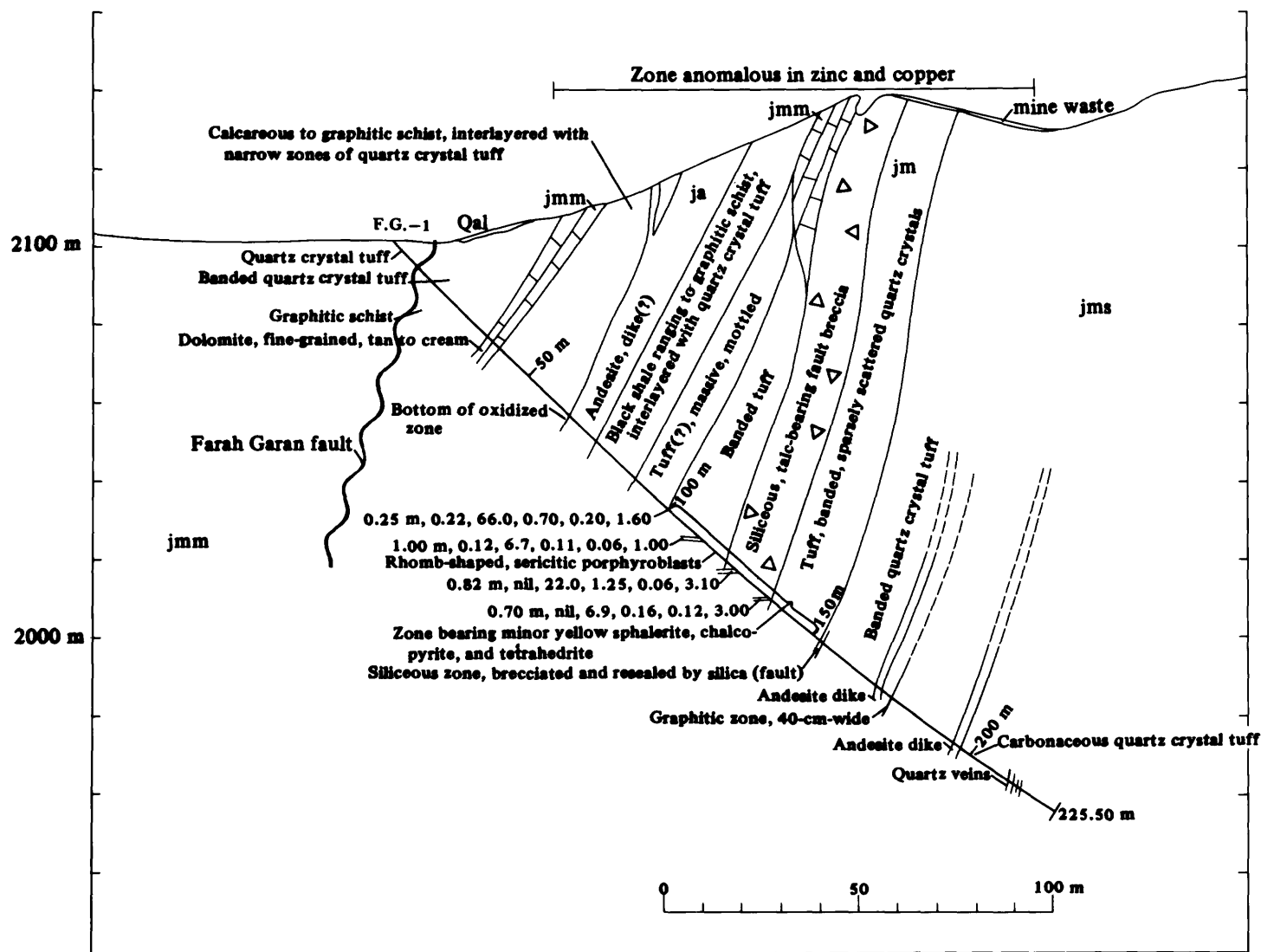
Detailed drill logs are included in this report (pl. 1), and drill-core log summaries are in the appendix. Geologic and sample location maps prepared during the surface study of the Farah Garan ancient mine area (Smith, 1979) are included in this report (figs. 2 and 3).

Drill holes F.G.-1 and -2 intersected rocks on both sides of the Farah Garan fault (figs. 2, 4, and 5). Drill hole F.G.-3 is more than 300 m north of F.G.-1 and -2 and intersected approximately the same stratigraphic sequence (figs. 2 and 6); the rocks are roughly correlative with those intersected by F.G.-1 and -2.

Drill hole F.G.-1

Drill hole F.G.-1 (pl. 1) was positioned to intersect a zinc-bearing zone found in surface sampling of the largest open-cut workings in the area. In addition, it was sited to intersect a wide zone anomalous in copper and zinc, which was delineated by trace-metal analyses of rock-chip samples, and a zone of gossanized shears at marble contacts (figs. 2, 3, and 4).

The first 100 m of drill core consists of interbedded tuff, black argillitic dolomite, and calcareous to graphitic schist; pyrite is disseminated throughout. The Farah Garan fault was intersected at 11.65 m, where it was found to be a broken, graphite-bearing zone. The first base-metal sulfides, intersected at a depth of 104.05 m, consist of thinly banded brown sphalerite accompanied by very sparse chalc-



EXPLANATION

Qal	ALLUVIUM	---	CONTACT —Dashed where location is uncertain
ja	ANDESITE —Massive, weakly foliated. Contains minor feldspar phenocrysts. Metamorphosed to greenschist facies	~~~~~	MAJOR FAULT
jmm	METAVOLCANIC ROCKS —Predominantly of intermediate composition. Most contain quartz crystals as much as 3 mm in diameter. Strongly foliated		DRILL-HOLE INTERSECTION —Measuring 0.82 m; weighted assay averages of which are: nil gold, 22.0 g/t silver, 1.25 percent copper, 0.06 percent lead, and 3.10 percent zinc.
jms	METASEDIMENTARY ROCKS —Includes interbedded felsic tuff, calcareous tuff, siltstone, black argillite, and carbonaceous sedimentary rocks		
jmm	METASEDIMENTARY MARBLE —Fine-grained, textureless. Weathers to medium-brown color		

Figure 4.—Vertical section through drill hole F.G.-1. Looking north.

pyrite in calcareous tuff. Sulfide and rock layering are parallel in this part of the hole. Beginning at 112.50 m, the rocks show evidence of intense chloritic and talc alteration. These altered rocks also contain porphyroblastic rhomb-shaped voids, which are partly filled with sericite, and thin wisps and disseminations of yellow sphalerite and lesser chalcopyrite. A fault breccia, intersected between 119.5 and 134 m, contains pale-green, translucent chlorite and patchy talc zones. At 125 m, the lithology changes to siliceous material including zones that are brecciated and resealed by silica. Siliceous material then alternates with translucent chlorite, talc, and calcite to 134.0 m, where the fault breccia zone ends. Late-forming, milky-white quartz is in much of the breccia, and yellow to light-brown sphalerite and lesser chalcopyrite are dispersed erratically throughout the breccia as wisps, disseminations, bands, clots, and veinlets. Very fine grained galena and tetrahedrite are present in small amounts; in places, tetrahedrite occurs in the late-forming quartz veins. Base-metal sulfides are dispersed very sparsely throughout the fault breccia zone except for two widely spaced intervals, each less than 1 m wide, which assay 3.0 and 3.1 percent zinc.

Below the breccia zone, the lithology changes to quartz crystal tuff that is intensely altered to quartz and sericite; sphalerite with pyrite and traces of chalcopyrite is erratically and sparsely disseminated in bands to a depth of 159.00 m. At 151.15 m, 55 cm of fault breccia was intersected; this breccia also has been resealed by silica.

Below 159 m, the drill core contains only very minor base-metal sulfides. Pyrite with minor pyrrhotite is found disseminated and as thin bands parallel with layering.

Although a wide sulfide-bearing zone was intersected in the drill hole, the ore grade is too low to be of commercial interest. Atomic absorption assays for several drill-core intervals are as follows:

From	To		Sample	Gold	Silver	Copper	Lead	Zinc
(in meters)		Length	number	(g/t)			(percent)	
105.05	105.30	0.25	130450	0.22	66.0	0.70	0.20	1.60
111.00	112.00	1.00	130457	.12	6.7	.11	.06	1.00
123.92	124.74	.82	130470	-	22.0	1.25	.06	3.10
133.35	133.45	.10	130482	.16	6.1	.11	.003	1.30
134.70	135.40	.70	130485	-	6.9	.16	.12	3.00

Drill hole F.G.-2

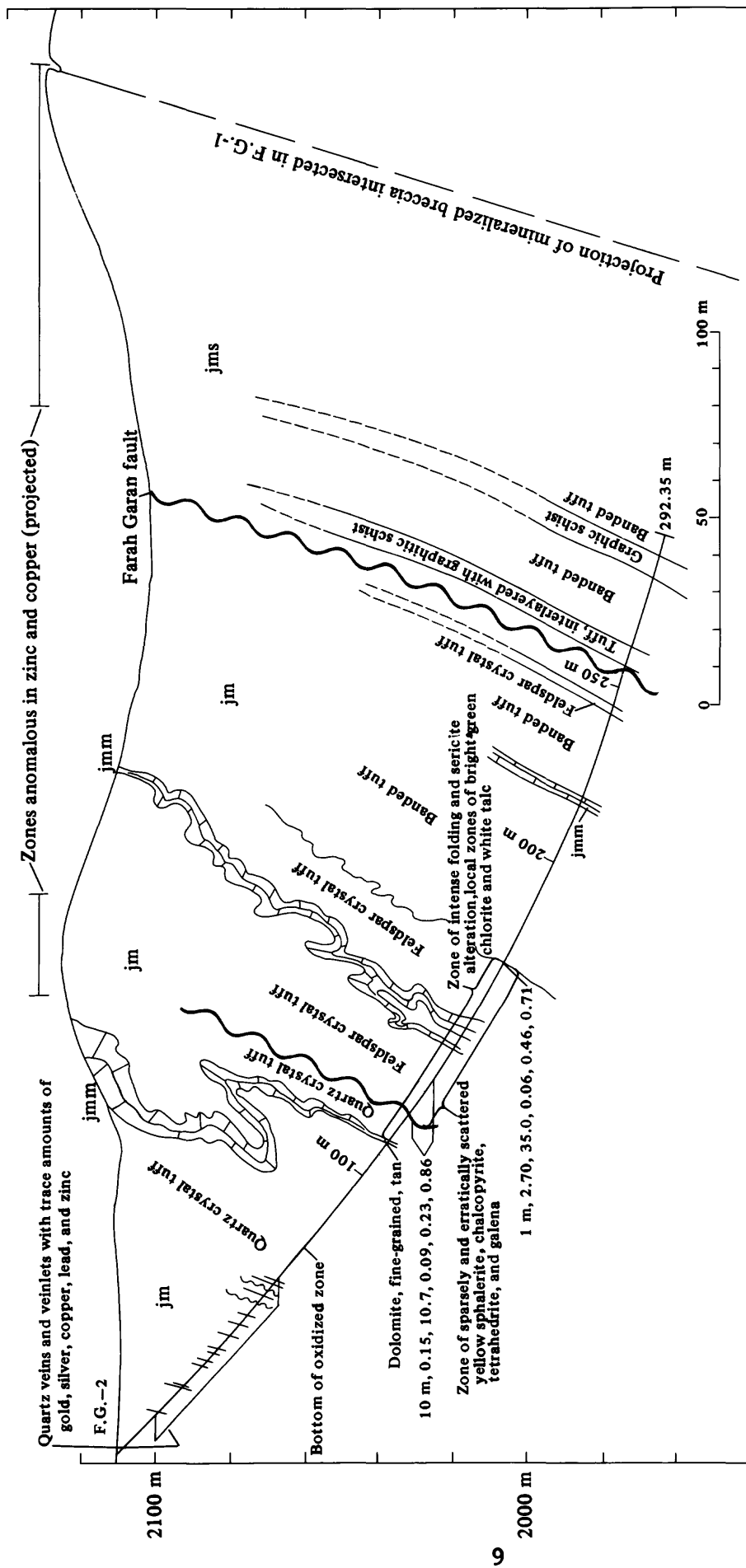
Drill hole F.G.-2 (pl. 1) was positioned to undercut folded and sheared marble lenses where lenticular gossans at the contact with marble had been worked by ancient miners. In addition, the hole was designed to intersect the projection of narrow quartz veins that contained small to moderate amounts of gold and also to penetrate the mineralized zone intersected in drill hole F.G.-1 (figs. 2 - 5). The drill hole stopped short of the last objective because of upward hole deviation.

The drill hole first intersected banded quartz crystal tuff and numerous 1- to 2-m-long intervals of tightly folded rocks, some of which are moderately to intensely altered to sericite and contain fault gouge. At 62.10 m, a brecciated fault zone has been resealed by silica in a manner similar to those found in drill hole F.G.-1. White quartz veins are numerous to a depth of 77.25 m. Wide intervals of folded and intensely sericitized rocks begin at 86.0 m. From 122.0 to 140.0 m, intensely folded and faulted rocks have been altered to sericite and light-green, translucent chlorite and contain yellow sphalerite in lacy patterns, bands, fracture fillings, clots, and disseminations. Lesser chalcopyrite accompanies the sphalerite, and minor amounts of tetrahedrite and galena are erratically dispersed throughout the interval. Pyrite, either in bands or disseminated, is associated with the base-metal sulfide minerals.

Sparsely and erratically dispersed sphalerite and lesser chalcopyrite, galena, and tetrahedrite continue in the drill core to a depth of 170.0 m. Fine-grained, cream-colored, dolomitic marble was intersected twice; between 144 and 151 m it contains thin fractures filled with bornite. Below 170.0 m the drill hole intersected other marble lenses, the Farah Garan fault, graphitic schists, and numerous white quartz veins; no base-metal sulfides are present. The drill hole came within 50 m of the projection of the mineralized interval found in F.G.-1.

All of the white quartz veins intersected in the drill hole are barren of precious and base metals, and the folded and altered tuffs contain only low-grade metals. Weighted averages of atomic absorption assays from core between 123.0 and 133.0 m are as follows:

Length (in meters)	Gold (g/t)	Silver	Copper	Lead (percent)	Zinc
10.0	0.15	10.7	0.09	0.23	0.86



EXPLANATION

- jm METAVOLCANIC ROCKS—Predominantly of intermediate composition. Most contain quartz crystals as much as 3 mm in diameter. Strongly foliated
- jms DRILL-HOLE INTERSECTION—Measuring 0.82 m; weighted assay averages of which are: nil gold, 22.0 g/t silver, 1.25 percent copper, 0.06 percent lead, and 3.10 percent zinc.
- jmm METASEDIMENTARY MARBLE—Fine-grained, textureless. Weathers to medium-brown color
- CONTACT—Dashed where location is uncertain
- MAJOR FAULT

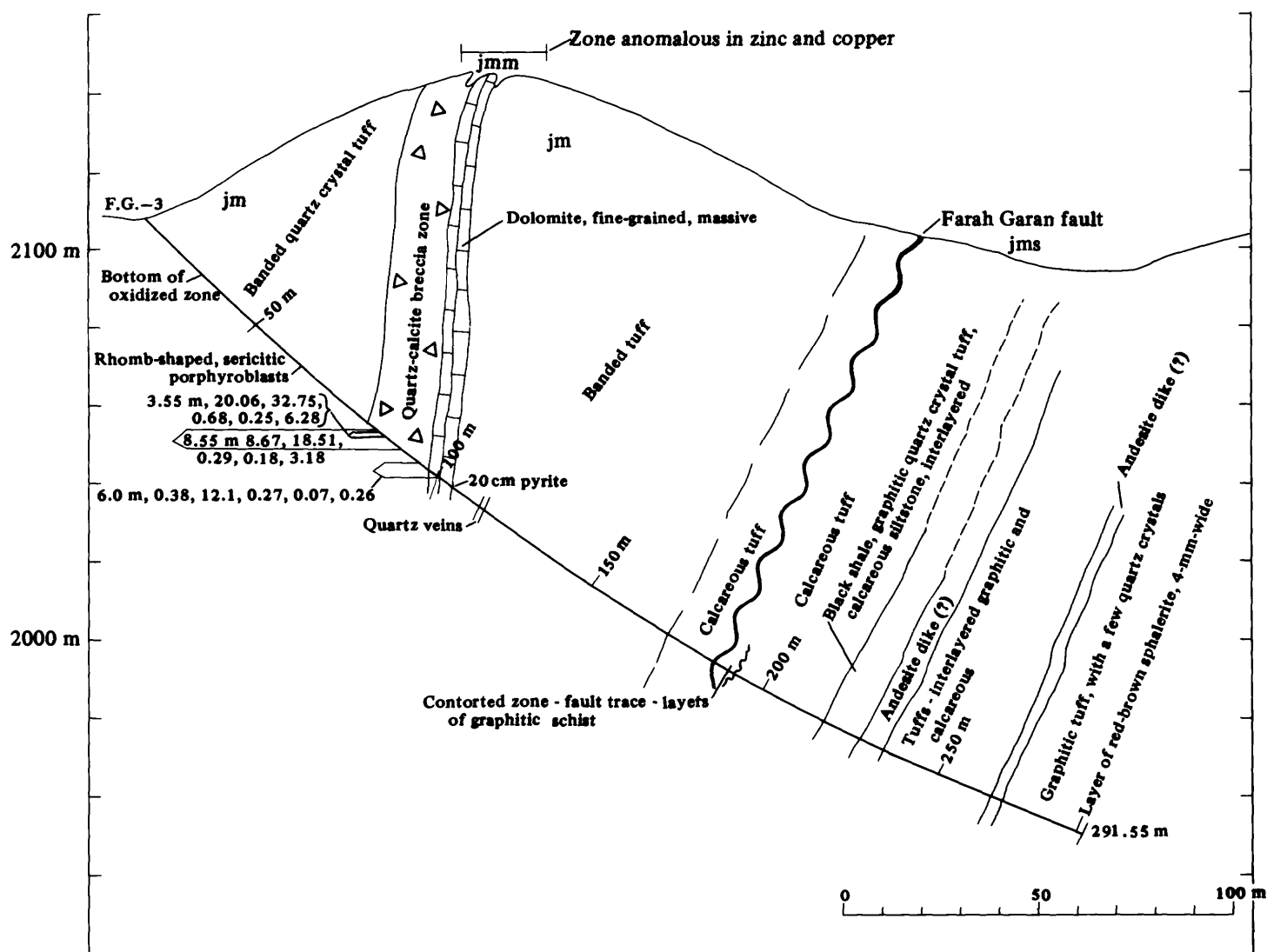
Figure 5.—Vertical section through drill hole F.G.-2. Looking N.25° E.

The remainder of the assayed material is of very low grade with the exception of that from 1 m of core beginning at 169.0 m, which assayed 2.7 g/t gold, 35.0 g/t silver, 0.06 percent copper, 0.46 percent lead, and 0.71 percent zinc.

Drill hole F.G.-3

Drill hole F.G.-3 (pl. 1) was positioned to intersect the projection of gossans found at the sheared contacts of a large dolomite lens and to penetrate the northern extension of metallized shear zones intersected in drill hole F.G.-1 (figs. 2 and 6). Both objectives were attained, but the intersection of narrow, banded sphalerite only 10 cm above the end of the drill hole indicates that the hole should have been continued at least 10 m.

The drill hole penetrated quartz crystal tuff to 77.80 m. Only a few barren quartz veins and faults were intersected within this interval, and from 65.85 to 77.80 m, siliceous rhomb-shaped porphyroblasts are disseminated throughout the tuff. From 77.80 to 98.20 m, the drill hole intersected a fault breccia that consists mostly of siliceous zones resealed by silica, accompanied by calcite and lesser pale-green, translucent chlorite. In places, the siliceous zones are dark gray and mottled and contain extremely fine grained sulfides. From 81.45 to 85.0 m, dark-brown sphalerite is massive in places but also occurs as bands, streaks, clots, veinlets, and dense disseminations. There appear to be two stages of sphalerite, with the more abundant dark-brown variety cutting a yellowish to light-brown sphalerite. Lesser chalcopryrite, galena, and tetrahedrite accompany the sphalerite, and fine-grained pyrite permeates much of the rock. Below 85.0 m, the base-metal sulfides diminish in quantity but are erratically distributed in 10- to 20-cm-long bands to a depth of 100.40 m. The breccia zone essentially terminates at 98.20 m and is followed by light-tan dolomite or very calcareous tuffs. From 102.0 to 106.15 m, the drill core consists of massive, faintly banded, cream-colored dolomite. Below the dolomite, the drill core consists mostly of tuffaceous rocks free of quartz crystals to a depth of 181.0 m. The Farah Garan fault, which is centered on tightly folded carbonaceous schist, was intersected at 194.05 m. The remainder of the drill hole intersected carbonaceous quartz crystal tuff, andesite dikes, and calcareous siltstone. Ten centimeters above the end of the hole, in a zone consisting of alternating layers of tuff and black carbonaceous argillite, the tuff contains narrow bands of red-brown sphalerite.



EXPLANATION

- | | | | |
|--|---|---|---|
| <div style="border: 1px solid black; padding: 2px; display: inline-block;">jm</div> | METAVOLCANIC ROCKS —Predominantly of intermediate composition. Most contain quartz crystals as much as 3 mm in diameter. Strongly foliated | <div style="border-bottom: 1px dashed black; width: 50px; display: inline-block;"></div> | CONTACT —Dashed where location is uncertain |
| <div style="border: 1px solid black; padding: 2px; display: inline-block;">jms</div> | METASEDIMENTARY ROCKS —Includes interbedded felsic tuff, calcareous tuff, siltstone, black argillite, and carbonaceous sedimentary rocks | <div style="border-bottom: 2px solid black; width: 50px; display: inline-block;"></div> | MAJOR FAULT |
| <div style="border: 1px solid black; padding: 2px; display: inline-block;">jmm</div> | METASEDIMENTARY MARBLE —Fine-grained, textureless. Weathers to medium-brown color | <div style="display: inline-block; vertical-align: middle;"> <div style="border-bottom: 1px solid black; width: 50px; display: inline-block;"></div>
 <div style="display: inline-block; vertical-align: middle; text-align: center;"> 0.82 m, nil,
 22.0, 1.25
 0.06, 3.10 </div> </div> | DRILL-HOLE INTERSECTION —Measuring 0.82 m; weighted assay averages of which are: nil gold, 22.0 g/t silver, 1.25 percent copper, 0.06 percent lead, and 3.10 percent zinc. |

Figure 6.—Vertical section through drill hole F.G.-3. Looking N.10°E.

Drill hole F.G.-3 intersected metallic material of economic grade; atomic absorption assays from core for selected intervals between 80.50 and 89.00 m are as follows:

From (in meters)	To	Length	Sample number	Gold (g/t)	Silver	Copper	Lead (percent)	Zinc
80.50	81.45	0.95	130733	0.44	20.00	0.03	0.27	1.23
81.45	81.72	.27	130734	8.58	40.00	1.65	.97	9.00
81.72	82.20	.48	130735	<.005	2.00	.07	.02	.97
82.20	82.70	.50	130736	93.00	50.00	1.47	.11	14.52
82.70	83.00	.30	130737	63.60	65.00	.70	.36	3.30
83.00	83.50	.50	130738	3.20	60.00	.77	.06	3.77
83.50	84.00	.50	130739	3.00	40.00	1.07	.81	10.50
84.00	85.00	1.00	130740	.22	10.00	.06	.02	4.00
85.00	86.00	1.00	130741	.10	2.80	.01	.01	1.20
86.00	87.00	1.00	130742	1.80	11.00	.005	.20	.48
87.00	88.00	1.00	130743	.14	6.80	.03	.19	.86
88.00	89.00	1.00	130744	<.005	1.5	.005	.006	1.01

Weighted averages of various intervals between 80.50 and 89.00 m are as follows:

From (in meters)	To	Gold (g/t)	Silver	Copper	Lead (percent)	Zinc
80.50	89.00	8.67	18.51	0.29	0.18	3.18
81.45	84.00	27.84	41.67	0.93	0.34	7.17
82.20	83.00	81.98	55.63	1.19	0.20	10.35
81.45	85.00	20.06	32.75	0.68	0.25	6.28

STATISTICAL ANALYSIS OF DRILL-CORE ASSAY RESULTS

The object of the drilling program was to investigate the economic potential of two geologic environments mapped and sampled at the surface (figs. 2 and 3). One environment contains gossans that resulted from the oxidation of massive to disseminated sulfides. In most places the gossans are found in sheared and hydrothermally altered tuffs that are in contact with dolomitic marble lenses. The second environment contains quartz veins, some of which are gold bearing at the surface. Hydrothermally altered gossanous zones on the surface correlate well with drill-core intersections of their

projections at depth (figs. 2-6). However, all of the numerous quartz veins intersected in the three drill holes were found to be barren of precious or base metals.

Ranges of metal contents (in ppm) for the three drill holes are as follows:

Drill hole (F.G.)	Gold	Silver	Copper	Lead	Zinc
1	0 - 0.82	0.6-66.0	20-12,500	5-2,000	25- 31,000
2	0 - 2.70	<.5-35.0	0- 3,000	0-6,600	35- 21,000
3	<.005-93.0	.3-65.0	20-16,500	0-9,750	55-145,250

Arithmetic mean metal contents (in ppm) are as follows:

Drill hole (F.G.)	Gold	Silver	Copper	Lead	Zinc
1	0.12	2.7	1,139	210	5,878
2	0.28	4.9	819	654	2,618
3	8.42	153	2,649	1,439	18,274

Metal ratios were computed for all atomic absorption assays for gold, silver, copper, lead, and zinc in all combinations. The drill-core samples are in downhole sequence, and the values for most metal pairs show random scatter and no metal zoning.

Only lead-zinc, lead-silver, and silver-zinc show moderate to strong correlation in all three drill holes (fig. 7). Copper and zinc are strongly correlated in drill holes F.G.-1 and F.G.-3, whereas gold-zinc and gold-silver, respectively, are strongly correlated in drill holes F.G.-3 and F.G.-2. In drill hole F.G.-3, high-grade precious metals are associated with late-stage brown sphalerite and chalcopyrite; however, precious metals are of little importance in drill holes F.G.-1 and -2, a fact which suggests that the presence of high-grade precious metals requires a special set of geologic conditions.

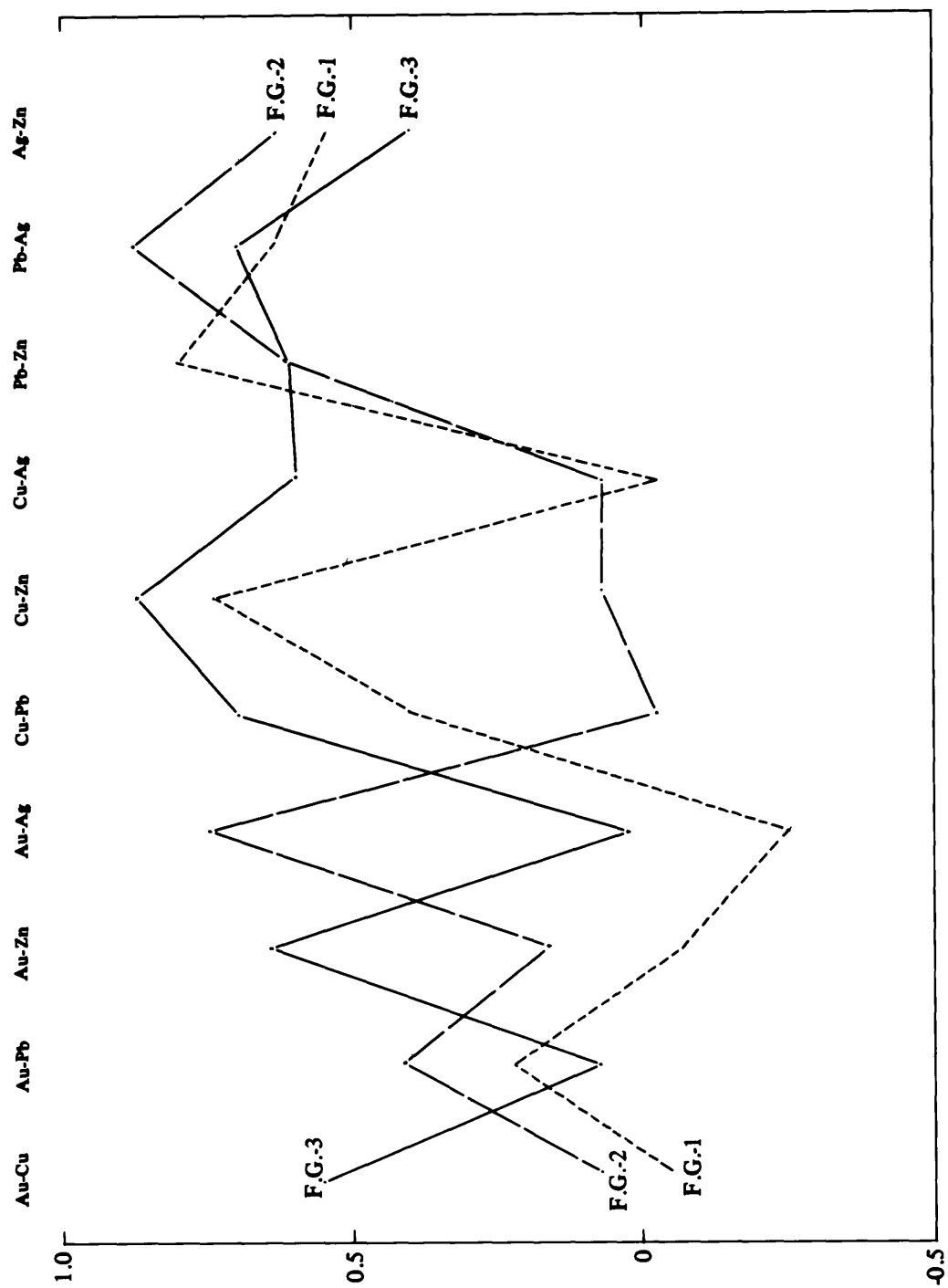


Figure 7.—Correlation coefficients for metal pairs in drill holes F.G.-1, -2, and -3. Drill hole F.G.-3 represents the only significant gold values; mean \bar{x} = 8.42 ppm gold.

OTHER GEOCHEMICAL SAMPLING

Wet-chemical assays for arsenic and antimony were completed on drill-core samples from the Farah Garan ancient mine. Results are given in table 1 and in the drill logs (pl. 1). High arsenic and antimony contents correlate well with tetrahedrite in the drill core, but all samples contain much more than 1.8 ppm arsenic and 0.2 ppm antimony, the average for the Earth's crust (Siegel, 1974). Both elements may serve as pathfinders for precious or base metals. Arsenic is more plentiful and mobile than antimony and would lead to larger targets because of primary and secondary dispersion. Table 2 lists the results, for 30 elements, of semiquantitative spectrographic analysis of drill-core samples at Farah Garan. Anomalous elements in the drill core include barium, molybdenum, and tin.

Approximately 1,100 rock-chip and vein samples had previously been collected from the Farah Garan area, including the ancient mine, the hydrothermally altered zone at Al Ashyab, and ancient workings at Hemair, Lejourah, and Al Asharfah (Smith, 1979). Semiquantitative spectrographic analysis indicates that vein and gossan samples from both Farah Garan and Hemair contain as much as 3,000 ppm arsenic and 10,000 ppm antimony. The same analytical technique was used on rock-chip samples from Farah Garan; no arsenic or antimony was detected, a fact that indicates semiquantitative spectrographic analysis is not a sensitive test for these elements on rock-chip samples. Splits for all samples collected in the Farah Garan area are stored at the DGMR-USGS geochemical laboratory in Jiddah and are available for assaying by more sensitive methods.

Assay results on all samples previously collected in the Farah Garan area are archived in the U.S. Geological Survey Rock Analysis Storage System (RASS) computerized data base. Inquiries regarding this data base should be directed to the U.S. Geological Survey office in Jiddah, Saudi Arabia.

MINERALOGY

Microscopic study of polished mounts from drill hole F.G.-3 revealed pyrite, sphalerite, chalcopyrite, galena, tetrahedrite, and altaite (PbTe), in a gangue of quartz, dolomite, and minor chlorite. Gold and silver were not detected either by microscope or X-ray methods. The bar graph in figure 8 shows the probable sequence of mineral formation.

Pyrite was the first sulfide to form. It ordinarily appears as well-formed crystals, partly corroded and replaced by other sulfides, dolomite, and quartz. Crystals are slightly deformed and range from less than 1 mm to as much as 2 mm in diameter (fig. 9).

Table 1.--Arsenic and antimony content of drill-core samples from
the Farah Garan ancient mine
[Results in parts per million. Analysis by wet-chemical
methods, DGMIR-USGS chemical laboratory, Jiddah, Saudi Arabia]

Sample number	Arsenic	Antimony	Sample number	Arsenic	Antimony
DRILL HOLE F.G.-1					
130448	140	7.5	130469	80	20.0
130449	40	0	130470	60	0
130450	80	3.0	130471	20	20.0
130451	20	0	130472	40	6.0
130452	20	1.0	130473	40	4.0
130453	20	1.0	130474	40	1.0
130454	60	1.0	130475	240	45.0
130455	100	12.5	130476	20	3.0
130456	160	20.0	130477	80	11.0
130457	40	0	130478	100	17.5
130458	0	1.0	130479	160	16.0
130459	20	1.0	130480	40	22.0
130460	40	0	130481	160	105.0
130461	20	1.0	130482	240	22.0
130462	20	1.0	130483	120	35.0
130463	160	1.0	130484	120	30.0
130464	20	1.0	130485	80	20.0
130465	40	6.0	130486	40	0
130466	200	20.0	130487	40	0
130467	160	22.0	130488	1000	0
130468	80	20.0			
DRILL HOLE F.G.-2					
130539	20	0	130563	20	1.0
130540	40	20.0	130564	20	1.0
130541	20	4.0	130566	20	1.0
130542	20	0	130567	40	1.0
130543	120	4.0	130568	20	1.0
130544	120	6.0	130569	20	1.0
130545	20	17.5	130570	20	1.0
130546	20	30.0	130571	40	1.0
130547	60	3.0	130572	20	1.0
130548	0	0	130573	20	1.0
130549	80	5.0	130574	20	1.0
130550	20	4.0	130575	20	1.0
130551	20	1.0	130576	20	1.0
130552	20	0	130577	20	1.0
130553	20	1.0	130578	20	1.0
130554	20	1.0	130579	20	1.0
130555	80	1.0	130580	80	1.0
130556	20	1.0	130581	80	1.0
130557	20	1.0	130582	40	1.0
130558	20	1.0	130583	40	1.0
130559	20	1.0	130584	20	1.0
130560	20	1.0	130585	20	1.0
130561	20	1.0	130586	40	1.0
130562	20	1.0	130587	20	1.0
DRILL HOLE F.G.-3					
130730	20	1.0	130745	15	6.0
130731	160	1.0	130746	20	2.0
130732	10	0	130747	20	3.0
130733	10	1.0	130748	20	6.0
130734	80	11.0	130749	0	1.0
130735	20	1.0	130750	40	30.0
130736	80	22.5	130751	140	80.0
130737	120	22.5	130752	140	70.0
130738	100	20.0	130753	180	200.0
130739	40	44.0	130754	160	350.0
130740	40	44.0	130755	20	6.0
130741	20	22.0	130756	120	125.0
130742	40	11.0	130757	20	0
130743	100	45.0	130758	20	0
130744	0	10.0			

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE

[Fe, Mg, Ca, and Ti in percent; all other results in ppm. G = greater than 10 percent or value shown; N = not detected at value shown; L = detected, but below limit of detection (value shown)]

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
DRILL HOLE FG-1										
130440	7.00	5.00	1.00	0.15	1500.00	0.50L	200.00N	10.00N	10.00	20.00L
130441	5.00	5.00	3.00	0.15	1500.00	0.50L	200.00N	10.00N	10.00L	20.00L
130442	3.00	1.00	2.00	0.15	1000.00	1.00	200.00N	10.00N	10.00	150.00
130443	2.00	0.50	2.00	0.15	700.00	0.50	200.00N	10.00N	10.00	20.00L
130444	7.00	5.00	5.00	0.15	2000.00	0.50	200.00N	10.00N	10.00L	20.00L
130445	3.00	3.00	3.00	0.15	1000.00	0.50L	200.00N	10.00N	10.00	20.00L
130446	5.00	5.00	3.00	0.10	1500.00	0.50	200.00N	10.00N	10.00	1500.00
130447	5.00	5.00	1.00	0.10	700.00	3.00	200.00N	10.00N	10.00N	3000.00
130448	3.00	5.00	1.00	0.10	700.00	3.00	200.00N	10.00N	10.00N	20.00N
130449	0.30	0.20	0.15	0.00L	70.00	0.50N	200.00N	10.00N	10.00N	20.00N
130450	1.50	7.00	2.00	0.03	1000.00	30.00	200.00N	10.00N	10.00	20.00N
130451	3.00	5.00	2.00	0.10	700.00	0.50	200.00N	10.00N	10.00L	500.00
130452	3.00	7.00	0.50	0.15	700.00	1.00	200.00N	10.00N	10.00N	1000.00
130453	3.00	7.00	0.50	0.15	1000.00	3.00	200.00N	10.00N	10.00	20.00N
130454	2.00	7.00	0.50	0.15	1000.00	3.00	200.00N	10.00N	10.00N	5000.00G
130455	1.50	10.00	1.00	0.05	2000.00	3.00	200.00N	10.00N	10.00N	20.00L
130456	1.50	7.00	2.00	0.05	2000.00	3.00	200.00N	10.00N	10.00N	20.00L
130457	1.50	5.00	1.00	0.07	1500.00	2.00	200.00N	10.00N	10.00	20.00L
130458	2.00	5.00	0.10	0.15	500.00	2.00	200.00N	10.00N	10.00L	5000.00G
130459	3.00	5.00	0.05L	0.10	1000.00	3.00	200.00N	10.00N	10.00L	1000.00
130460	3.00	7.00	0.70	0.15	1000.00	3.00	200.00N	10.00N	10.00N	20.00N
130461	2.00	7.00	0.30	0.10	1500.00	2.00	200.00N	10.00N	10.00N	20.00N
130462	3.00	7.00	0.05L	0.15	1000.00	1.00	200.00N	10.00N	10.00N	20.00N
130463	1.50	5.00	1.00	0.07	2000.00	0.50L	200.00N	10.00N	10.00N	20.00N
130464	2.00	7.00	0.70	0.10	1500.00	0.50	200.00N	10.00N	10.00N	20.00N
130465	2.00	7.00	0.50	0.15	1500.00	0.50	200.00N	10.00N	10.00N	20.00N
130466	1.50	7.00	0.50	0.10	1000.00	0.50	200.00N	10.00N	10.00N	20.00N
130467	1.00	10.00	2.00	0.03	3000.00	0.50	200.00N	10.00N	10.00N	20.00N
130468	1.00	10.00	2.00	0.05	3000.00	1.00	200.00N	10.00N	10.00N	20.00N
130469	2.00	10.00	2.00	0.05	2000.00	2.00	200.00N	10.00N	10.00N	20.00N
130470	3.00	7.00	2.00	0.01	2000.00	20.00	200.00N	10.00N	10.00N	20.00N
130471	2.00	10.00	3.00	0.03	2000.00	3.00	200.00N	10.00N	10.00N	20.00N
130472	1.00	7.00	7.00	0.01	5000.00	1.00	200.00N	10.00N	10.00N	20.00N
130473	1.00	10.00	7.00	0.02	5000.00	3.00	200.00N	10.00N	10.00N	20.00N
130474	1.50	10.00	7.00	0.01	5000.00	1.00	200.00N	10.00N	10.00N	20.00N
130475	0.50	5.00	1.00	0.02	1500.00	1.50	200.00N	10.00N	10.00N	20.00N
130476	0.70	10.00	0.30	0.02	700.00	0.50L	200.00N	10.00N	10.00N	20.00N
130477	0.70	10.00	3.00	0.02	3000.00	2.00	200.00N	10.00N	10.00N	20.00N
130478	1.50	10.00	3.00	0.07	3000.00	0.50	200.00N	10.00N	10.00N	20.00N
130479	1.50	10.00	5.00	0.05	3000.00	3.00	200.00N	10.00N	10.00N	20.00N

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
DRILL HOLE FG-1										
130440	1.00L	10.00N	20.00N	50.00	500.00	150.00	20.00L	5.00N	20.00L	70.00
130441	1.00L	10.00N	20.00N	50.00	500.00	150.00	20.00L	5.00N	20.00L	70.00
130442	1.00L	10.00N	20.00N	15.00	200.00	150.00	20.00L	5.00N	20.00L	30.00
130443	1.00L	10.00N	20.00N	15.00	500.00	150.00	20.00L	15.00	20.00L	50.00
130444	1.00L	10.00N	20.00N	70.00	700.00	150.00	20.00L	5.00N	20.00L	100.00
130445	1.00L	10.00N	20.00N	30.00	300.00	300.00	20.00L	5.00N	20.00L	30.00
130446	1.00L	10.00N	20.00N	30.00	300.00	700.00	20.00L	5.00N	20.00L	70.00
130447	1.00L	10.00N	20.00N	30.00	2000.00	500.00	20.00L	5.00N	20.00L	50.00
130448	1.00L	10.00N	20.00N	5.00N	150.00	500.00	20.00L	5.00N	20.00L	5.00
130449	1.00L	10.00N	20.00N	5.00N	200.00	20.00	20.00L	5.00N	20.00L	5.00L
130450	1.00L	10.00N	20.00N	5.00N	70.00	10000.00	20.00L	5.00N	20.00L	5.00L
130451	1.00L	10.00N	20.00N	30.00	300.00	200.00	20.00L	5.00N	20.00L	30.00
130452	1.00L	10.00N	20.00N	10.00	300.00	500.00	20.00L	5.00N	20.00L	20.00
130453	1.00L	10.00N	20.00N	10.00	200.00	2000.00	20.00L	20.00	20.00L	7.00
130454	1.00L	10.00N	20.00N	10.00	200.00	1000.00	20.00L	20.00	20.00L	7.00
130455	1.00L	10.00N	20.00N	5.00	150.00	300.00	20.00L	5.00N	20.00L	5.00L
130456	1.00L	10.00N	20.00N	5.00	150.00	500.00	20.00L	5.00L	20.00L	5.00L
130457	1.00L	10.00N	20.00N	5.00	50.00	1000.00	20.00L	5.00L	20.00L	5.00L
130458	1.00L	10.00N	20.00N	10.00	150.00	700.00	20.00L	10.00	20.00L	5.00
130459	1.00L	10.00N	20.00N	10.00	150.00	1000.00	20.00L	15.00	20.00L	5.00
130460	1.00L	10.00N	20.00N	10.00	150.00	1000.00	20.00N	15.00	20.00N	15.00
130461	1.00L	10.00N	20.00N	10.00	150.00	1000.00	20.00N	15.00	20.00N	15.00
130462	1.00L	10.00N	20.00N	10.00	200.00	200.00	20.00N	15.00	20.00N	15.00
130463	1.00L	10.00N	20.00N	5.00N	50.00	100.00	20.00N	7.00	20.00N	5.00
130464	1.00L	10.00N	20.00N	10.00	150.00	200.00	20.00N	10.00	20.00N	15.00
130465	1.00L	10.00N	20.00N	10.00	150.00	200.00	20.00N	15.00	20.00N	15.00
130466	1.00L	10.00N	20.00N	5.00	70.00	1000.00	20.00N	5.00L	20.00N	5.00
130467	1.00L	10.00N	20.00N	7.00N	100.00	200.00	20.00N	5.00L	20.00N	5.00
130468	1.00L	10.00N	20.00N	7.00N	70.00	300.00	20.00N	5.00L	20.00N	5.00
130469	1.00L	10.00N	20.00N	7.00	150.00	700.00	20.00N	20.00	20.00N	15.00
130470	1.00L	20.00	150.00	5.00	70.00	20000.00	20.00N	30.00N	20.00N	20.00
130471	1.00L	10.00	20.00N	5.00L	50.00	1500.00	20.00N	20.00	20.00N	10.00
130472	1.00L	10.00N	20.00N	5.00L	200.00	200.00	20.00N	5.00L	20.00N	10.00
130473	1.00L	10.00	20.00N	5.00L	70.00	500.00	20.00N	5.00	20.00N	10.00
130474	1.00L	10.00L	20.00N	5.00L	100.00	300.00	20.00N	5.00	20.00N	10.00
130475	1.00L	10.00N	20.00N	5.00L	70.00	500.00	20.00N	5.00L	20.00N	5.00L
130476	1.00L	10.00N	20.00N	5.00L	100.00	20.00	20.00N	5.00N	20.00N	5.00L
130477	1.00L	10.00N	20.00N	5.00L	100.00	700.00	20.00N	5.00L	20.00N	5.00L
130478	1.00L	10.00L	20.00N	5.00L	100.00	2000.00	20.00N	20.00	20.00N	10.00
130479	1.00L	10.00L	20.00N	5.00L	100.00	700.00	20.00N	10.00	20.00N	10.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
DRILL HOLE F6-1										
130440	10.00L	100.00N	30.00	10.00N	150.00	300.00	50.00N	10.00	200.00L	10.00N
130441	10.00L	100.00N	30.00	10.00N	200.00	200.00	50.00N	10.00	200.00L	10.00N
130442	10.00L	100.00N	20.00	10.00N	200.00	100.00	50.00N	20.00	200.00L	30.00
130443	10.00L	100.00N	15.00	10.00N	200.00	200.00	50.00N	20.00	200.00L	70.00
130444	10.00L	100.00N	50.00	10.00N	200.00	200.00	50.00N	15.00	200.00L	10.00N
130445	10.00L	100.00N	30.00	10.00N	300.00	200.00	50.00N	10.00	200.00L	10.00N
130446	15.00	100.00N	30.00	10.00N	100.00	200.00	50.00N	10.00	300.00	10.00N
130447	100.00	100.00N	30.00	10.00N	100.00	200.00	50.00N	15.00	500.00	20.00
130448	300.00	100.00N	10.00	10.00N	100.00	100.00	50.00N	10.00	1000.00	30.00
130449	10.00N	100.00N	5.00N	10.00N	100.00	20.00	50.00N	10.00L	200.00L	10.00N
130450	700.00	100.00N	5.00N	10.00N	100.00	50.00	50.00N	10.00L	7000.00	10.00N
130451	20.00	100.00N	30.00	10.00N	100.00	150.00	50.00N	10.00L	7000.00	10.00N
130452	20.00	100.00N	30.00	10.00N	100.00	150.00	50.00N	10.00	500.00	50.00
130453	50.00	100.00N	15.00	10.00N	100.00	30.00	50.00N	10.00	3000.00	50.00
130454	30.00	100.00N	15.00	10.00N	100.00	70.00	50.00N	20.00	700.00	70.00
130455	70.00	100.00N	7.00	10.00N	100.00	20.00	50.00N	10.00	300.00	10.00
130456	70.00	100.00N	7.00	10.00N	100.00	20.00	50.00N	10.00	500.00	10.00
130457	100.00	100.00N	7.00	10.00N	100.00	50.00	50.00N	10.00	500.00	20.00
130458	100.00	100.00N	15.00	10.00N	100.00	50.00	50.00N	20.00	1000.00	30.00
130459	70.00	100.00N	15.00	10.00N	100.00	50.00	50.00N	15.00	1000.00	30.00
130460	200.00	100.00N	15.00	10.00N	100.00L	50.00	50.00N	20.00	1000.00	30.00
130461	70.00	100.00N	15.00	10.00N	100.00L	30.00	50.00N	10.00	2000.00	30.00
130462	10.00	100.00N	15.00	10.00N	100.00L	30.00	50.00N	20.00	500.00	20.00
130463	10.00	100.00N	15.00	10.00N	100.00L	30.00	50.00N	10.00	300.00	30.00
130464	10.00	100.00N	15.00	10.00N	100.00L	30.00	50.00N	20.00	300.00	30.00
130465	10.00L	100.00N	15.00	10.00N	100.00L	30.00	50.00N	30.00	500.00	20.00
130466	10.00L	100.00N	10.00	10.00N	100.00L	30.00	50.00N	10.00	1500.00	20.00
130467	10.00	100.00L	10.00	10.00N	100.00L	20.00	50.00N	10.00L	1000.00	20.00
130468	10.00	100.00L	5.00	10.00N	100.00L	30.00	50.00N	10.00L	1000.00	20.00
130469	70.00	100.00L	10.00	10.00N	200.00	30.00	50.00N	10.00L	700.00	10.00N
130470	200.00	100.00	10.00	10.00N	200.00	50.00	50.00N	10.00L	5000.00	15.00
130471	100.00	100.00N	7.00	10.00N	200.00	30.00	50.00N	10.00L	1500.00	10.00N
130472	70.00	100.00N	10.00	10.00N	500.00	20.00	50.00N	10.00L	1000.00	10.00N
130473	200.00	100.00N	5.00	10.00N	200.00	30.00	50.00N	10.00L	2000.00	10.00N
130474	30.00	100.00N	5.00	10.00N	200.00	20.00	50.00N	10.00L	500.00	10.00N
130475	15.00	100.00	5.00L	10.00N	200.00	30.00	50.00N	10.00L	500.00	10.00N
130476	10.00L	100.00N	5.00L	10.00N	100.00L	20.00	50.00N	10.00L	700.00	10.00N
130477	10.00L	100.00N	5.00L	10.00N	200.00	20.00	50.00N	10.00L	3000.00	10.00N
130478	10.00L	100.00N	7.00	10.00N	200.00	30.00	50.00N	20.00	2000.00	20.00
130479	50.00	100.00N	5.00	10.00N	300.00	30.00	50.00N	10.00L	500.00	20.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
DRILL HOLE FG-1 (CONTINUED)										
130480	1.50	5.00	5.00	0.07	2000.00	1.00	200.00N	10.00N	10.00N	20.00N
130481	1.00	7.00	15.00	0.01	2000.00	1.50	200.00N	10.00N	10.00N	20.00N
130482	1.00	7.00	15.00	0.01	5000.00	3.00	200.00N	10.00N	10.00N	20.00N
130483	0.70	5.00	10.00	0.01	3000.00	2.00	200.00N	10.00N	10.00N	20.00N
130484	0.70	7.00	10.00	0.01	3000.00	2.00	200.00N	10.00N	10.00N	20.00N
130485	1.50	5.00	7.00	0.05	5000.00	3.00	200.00N	10.00N	10.00N	150.00
130486	2.00	5.00	2.00	0.10	1500.00	2.00	200.00N	10.00N	10.00	1500.00
130487	3.00	1.50	1.00	0.15	700.00	1.00	200.00N	10.00N	15.00	5000.00
130488	3.00	1.00	1.50	0.15	700.00	1.50	200.00N	10.00N	15.00	1500.00
130489	3.00	5.00	5.00	0.15	1500.00	0.50L	200.00N	10.00N	15.00	1000.00
130490	2.00	2.00	2.00	0.10	1500.00	1.00	200.00N	10.00N	15.00	500.00
130491	2.00	2.00	3.00	0.15	1500.00	0.50	200.00N	10.00N	15.00	500.00
130492	2.00	3.00	1.00	0.10	500.00	0.50N	200.00N	10.00N	15.00	700.00
130493	2.00	3.00	1.00	0.15	500.00	0.50N	200.00N	10.00N	10.00L	300.00
130494	2.00	3.00	1.00	0.01	500.00	0.50N	200.00N	10.00N	15.00	700.00
130495	2.00	3.00	1.00	0.15	700.00	0.50N	200.00N	10.00N	15.00	1000.00
130496	2.00	3.00	0.30	0.15	1000.00	0.50N	200.00N	10.00N	15.00	1500.00
130497	3.00	3.00	0.20	0.15	2000.00	0.50L	200.00N	10.00N	15.00	1500.00
130498	3.00	1.50	0.10	0.15	1000.00	0.50L	200.00N	10.00N	15.00	1500.00
130499	3.00	5.00	0.20	0.15	2000.00	0.50	200.00N	10.00N	10.00	2000.00
130500	3.00	5.00	0.50	0.15	3000.00	0.50	200.00N	10.00N	10.00	2000.00
130501	3.00	7.00	0.20	0.15	5000.00	0.50	200.00N	10.00N	10.00	1500.00
130502	3.00	5.00	0.70	0.15	3000.00	0.50L	200.00N	10.00N	10.00	700.00
130503	3.00	5.00	1.50	0.15	2000.00	0.50N	200.00N	10.00N	10.00L	700.00
130504	3.00	7.00	0.70	0.15	1500.00	0.50N	200.00N	10.00N	10.00	1000.00
130505	3.00	5.00	0.10	0.15	1500.00	0.50	200.00N	10.00N	10.00	700.00
130506	3.00	3.00	0.70	0.15	1500.00	1.00	200.00N	10.00N	10.00	1000.00
130507	3.00	3.00	2.00	0.15	1500.00	0.50	200.00N	10.00N	10.00	1000.00
130508	5.00	5.00	1.00	1.006	1500.00	0.50N	200.00N	10.00N	20.00	2000.00
130509	3.00	7.00	1.00	0.10	3000.00	2.00	200.00N	10.00N	10.00L	700.00
130510	2.00	5.00	0.15	0.15	500.00	0.50L	200.00N	10.00N	10.00L	1500.00
130511	3.00	5.00	1.00	1.00	1500.00	0.50N	200.00N	10.00N	10.00L	1000.00
130512	3.00	7.00	1.50	0.15	3000.00	0.50N	200.00N	10.00N	10.00L	700.00
130513	3.00	5.00	2.00	0.15	5000.00	0.50N	200.00N	10.00N	10.00L	300.00
130514	3.00	5.00	2.00	0.15	2000.00	1.50	200.00N	10.00N	15.00	700.00
130515	3.00	7.00	2.00	0.15	1500.00	0.50N	200.00N	10.00N	15.00	300.00
130516	3.00	5.00	2.00	0.15	1000.00	0.50N	200.00N	10.00N	15.00	300.00
DRILL HOLE FG-2										
130517	2.00	0.10	0.70	0.10	1500.00	0.50N	200.00N	10.00N	10.00L	200.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAH ANCIENT MINE (CONTINUED)

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
DRILL HOLE FG-1 (CONTINUED)										
130480	1.00	10.00N	20.00N	5.00L	100.00	200.00	20.00L	7.00	20.00N	7.00
130481	1.00	10.00N	20.00N	5.00L	100.00	300.00	20.00L	5.00N	20.00N	7.00
130482	1.00	10.00N	20.00N	5.00L	150.00	700.00	20.00L	5.00N	20.00N	7.00
130483	1.00	10.00N	20.00N	5.00L	70.00	300.00	20.00L	5.00N	20.00N	7.00
130484	1.00	10.00N	20.00N	5.00L	70.00	300.00	20.00L	5.00N	20.00N	7.00
130485	1.00	10.00N	20.00N	5.00L	70.00	1500.00	20.00L	50.00	20.00N	7.00
130486	1.00	10.00N	20.00N	5.00	70.00	300.00	20.00L	10.00	20.00N	10.00
130487	1.00	10.00N	20.00N	7.00	200.00	200.00	20.00L	5.00N	20.00N	15.00
130488	1.00	10.00N	20.00N	10.00	150.00	700.00	20.00L	20.00	20.00N	15.00
130489	1.00	10.00N	20.00N	10.00	150.00	100.00	20.00L	5.00L	20.00N	15.00
130490	1.00	10.00N	20.00N	7.00	150.00	1000.00	20.00L	5.00L	20.00N	15.00
130491	1.00	10.00N	20.00N	7.00	100.00	100.00	20.00L	5.00N	20.00N	15.00
130492	1.00	10.00N	20.00N	7.00	100.00	50.00	20.00L	5.00N	20.00N	15.00
130493	1.00	10.00N	20.00N	7.00	70.00	50.00	20.00L	5.00N	20.00N	15.00
130494	1.00	10.00N	20.00N	7.00	100.00	50.00	20.00L	5.00N	20.00N	15.00
130495	1.00	10.00N	20.00N	7.00	150.00	70.00	20.00L	5.00N	20.00N	15.00
130496	1.00	10.00N	20.00N	7.00	150.00	300.00	20.00L	10.00	20.00N	15.00
130497	1.00L	10.00N	20.00N	7.00	100.00	300.00	20.00L	15.00	20.00N	15.00
130498	1.00L	10.00N	20.00N	7.00	150.00	300.00	20.00L	15.00	20.00N	15.00
130499	1.00	10.00N	20.00N	10.00	100.00	500.00	20.00L	7.00	20.00N	10.00
130500	1.00	10.00N	20.00N	10.00	100.00	300.00	20.00L	10.00	20.00N	10.00
130501	1.00	10.00N	20.00N	10.00	150.00	1500.00	20.00L	5.00N	20.00N	15.00
130502	1.00	10.00N	20.00N	10.00	150.00	300.00	20.00L	5.00N	20.00N	20.00
130503	1.00	10.00N	20.00N	10.00	150.00	100.00	20.00L	5.00N	20.00N	20.00
130504	1.00	10.00N	20.00N	7.00	150.00	150.00	20.00L	5.00N	20.00N	15.00
130505	1.00	10.00N	20.00N	7.00	100.00	100.00	20.00L	5.00N	20.00N	15.00
130506	1.00	10.00N	20.00N	10.00	150.00	100.00	20.00L	5.00N	20.00N	15.00
130507	1.00L	10.00N	20.00N	10.00	150.00	70.00	20.00L	5.00N	20.00N	7.00
130508	1.00L	10.00N	20.00N	15.00	150.00	150.00	20.00L	5.00N	20.00N	7.00
130509	1.00	10.00N	20.00N	5.00	100.00	2000.00	20.00L	15.00	20.00N	10.00
130510	1.00	10.00N	20.00N	5.00	100.00	100.00	20.00L	7.00	20.00N	5.00
130511	1.00	10.00N	20.00N	10.00	150.00	200.00	20.00L	5.00N	20.00N	20.00
130512	1.00	10.00N	20.00N	7.00	100.00	100.00	20.00L	5.00N	20.00N	15.00
130513	1.00	10.00N	20.00N	7.00	100.00	300.00	20.00L	5.00	20.00N	15.00
130514	1.00	10.00N	20.00N	10.00	200.00	700.00	20.00L	5.00N	20.00N	15.00
130515	1.00	10.00N	20.00N	10.00	200.00	70.00	20.00L	5.00N	20.00N	20.00
130516	1.00	10.00N	20.00N	10.00	150.00	70.00	20.00L	5.00N	20.00N	20.00
DRILL HOLE FG-2										
130517	1.00N	10.00N	20.00N	5.00	150.00	20.00	20.00	5.00N	20.00N	20.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
DRILL HOLE FG-1 (CONTINUED)										
130480	10.00	100.00N	7.00	10.00N	150.00	30.00	50.00N	10.00	1000.00	10.00
130481	20.00	100.00N	5.00L	10.00N	500.00	20.00	50.00N	10.00	1000.00	10.00N
130482	30.00	300.00	5.00	10.00N	500.00	20.00	50.00N	10.00	7000.00	10.00N
130483	150.00	100.00L	5.00	10.00N	500.00	20.00	50.00N	10.00	1500.00	10.00N
130484	30.00	100.00	5.00L	10.00N	500.00	20.00	50.00N	10.00	1000.00	10.00N
130485	300.00	100.00N	10.00	10.00N	300.00	20.00	50.00N	10.00	1000.00	10.00
130486	70.00	100.00N	15.00	10.00N	150.00	50.00	50.00N	15.00	1000.00	30.00
130487	70.00	100.00N	15.00	10.00N	150.00	50.00	50.00N	20.00	200.00	50.00
130488	70.00	100.00N	15.00	10.00N	200.00	70.00	50.00N	20.00	2000.00	50.00
130489	10.00	100.00N	15.00	10.00N	200.00	70.00	50.00N	20.00	200.00L	30.00
130490	10.00L	100.00N	15.00	10.00N	200.00	50.00	50.00N	20.00	200.00L	50.00
130491	10.00L	100.00N	15.00	10.00N	200.00	50.00	50.00N	20.00	200.00L	50.00
130492	10.00L	100.00N	15.00	10.00N	100.00	50.00	50.00N	30.00	200.00L	50.00
130493	10.00L	100.00N	15.00	10.00N	100.00	50.00	50.00N	20.00	200.00L	50.00
130494	10.00L	100.00N	15.00	10.00N	150.00	50.00	50.00N	30.00	200.00L	50.00
130495	10.00L	100.00N	15.00	10.00N	100.00	50.00	50.00N	20.00	200.00L	50.00
130496	10.00L	100.00N	15.00	10.00N	100.00	50.00	50.00N	20.00	700.00	50.00
130497	10.00L	100.00N	15.00	10.00N	100.00	50.00	50.00N	20.00	700.00	50.00
130498	10.00L	100.00N	15.00	10.00N	100.00	50.00	50.00N	20.00	1500.00	50.00
130499	10.00N	100.00N	15.00	10.00N	100.00L	150.00	50.00N	30.00	500.00	70.00
130500	10.00N	100.00N	15.00	10.00N	100.00	100.00	50.00N	30.00	300.00	50.00
130501	10.00L	100.00N	15.00	10.00N	100.00	100.00	50.00N	30.00	500.00	70.00
130502	10.00	100.00N	15.00	10.00N	100.00	150.00	50.00N	20.00	200.00	50.00
130503	10.00L	100.00N	15.00	10.00N	100.00	100.00	50.00N	50.00	200.00L	70.00
130504	10.00L	100.00N	15.00	10.00N	100.00	100.00	50.00N	20.00	200.00	70.00
130505	100.00	100.00N	15.00	10.00N	100.00	100.00	50.00N	20.00	200.00	50.00
130506	10.00N	100.00N	20.00	10.00N	100.00L	100.00	50.00N	30.00	200.00L	70.00
130507	10.00N	100.00N	20.00	10.00N	200.00	150.00	50.00N	30.00	200.00L	50.00
130508	10.00N	100.00N	20.00	10.00N	200.00	150.00	50.00N	30.00	200.00L	70.00
130509	10.00N	100.00N	10.00	10.00N	150.00	100.00	50.00N	20.00	300.00	30.00
130510	10.00	100.00N	15.00	10.00N	100.00L	100.00	50.00N	30.00	200.00L	70.00
130511	10.00L	100.00N	20.00	10.00N	100.00	150.00	50.00N	20.00	200.00L	70.00
130512	10.00L	100.00N	15.00	10.00N	100.00	100.00	50.00N	20.00	500.00	70.00
130513	10.00L	100.00N	20.00	100.00L	100.00	100.00	50.00N	20.00	1000.00	50.00
130514	10.00L	100.00N	20.00	100.00L	200.00	100.00	50.00N	30.00	1000.00	70.00
130515	10.00L	100.00N	20.00	100.00L	300.00	70.00	50.00N	30.00	200.00L	70.00
130516	10.00N	100.00N	20.00	100.00L	300.00	100.00	50.00N	30.00	200.00L	70.00
DRILL HOLE FG-2										
130517	10.00N	100.00N	15.00	10.00N	150.00	20.00	50.00N	20.00	200.00L	50.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAH ANCIENT MINE (CONTINUED)

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
DRILL HOLE FG-2 (CONTINUED)										
130518	2.00	0.50	2.00	0.20	200.00	0.50N	200.00N	10.00N	10.00L	100.00
130519	3.00	0.50	2.00	0.15	2000.00	0.50N	200.00N	10.00N	10.00L	100.00
130520	5.00	1.00	2.00	0.50	2000.00	0.50N	200.00N	10.00N	10.00L	200.00
130521	5.00	1.00	2.00	0.50	2000.00	0.50N	200.00N	10.00N	10.00	500.00
130522	3.00	1.00	2.00	0.07	1500.00	0.50N	200.00N	10.00N	10.00	200.00
130523	3.00	1.00	2.00	0.07	1500.00	0.50N	200.00N	10.00N	10.00	200.00
130524	5.00	1.00	1.00	1.00	1500.00	0.50N	200.00N	10.00N	10.00	100.00
130525	5.00	1.00	1.50	0.15	2000.00	0.50N	200.00N	10.00N	10.00L	50.00
130526	5.00	1.00	1.50	0.15	2000.00	0.50N	200.00N	10.00N	10.00L	70.00
130527	2.00	1.50	1.00	0.15	1500.00	0.50N	200.00N	10.00N	10.00L	50.00
130528	3.00	1.50	1.50	0.20	2000.00	0.50N	200.00N	10.00N	10.00	100.00
130529	3.00	1.00	0.50	0.20	1500.00	0.50N	200.00N	10.00N	10.00	50.00
130530	5.00	1.50	1.00	0.30	1500.00	0.50N	200.00N	10.00N	20.00	50.00
130531	1.50	0.30	2.00	0.10	500.00	0.50N	200.00N	10.00N	10.00L	50.00
130532	1.50	0.30	0.70	0.15	300.00	0.50N	200.00N	10.00N	10.00L	70.00
130533	2.00	2.00	1.00	0.15	700.00	0.50N	200.00N	10.00N	10.00L	50.00
130534	1.50	2.00	3.00	0.15	700.00	0.50N	200.00N	10.00N	10.00L	20.00L
130535	2.00	2.00	2.00	0.50	100.00	0.50N	200.00N	10.00N	10.00L	20.00
130536	2.00	2.00	0.70	0.15	300.00	0.50N	200.00N	10.00N	10.00L	300.00
130537	3.00	2.00	0.70	0.50	1000.00	0.50N	200.00N	10.00N	10.00	20.00
130538	1.00	0.30	0.70	0.07	300.00	0.50N	200.00N	10.00N	10.00L	100.00
130539	2.00	5.00	0.70	0.07	700.00	1.50	200.00N	10.00N	10.00L	500.00
130540	5.00	5.00	3.00	0.07	2000.00	10.00	200.00N	10.00N	10.00L	100.00
130541	2.00	5.00	0.05	0.07	2000.00	3.00	200.00N	10.00N	10.00L	50.00
130542	2.00	5.00	0.07	0.10	2000.00	2.00	200.00N	10.00N	10.00L	20.00
130543	3.00	5.00	0.50	0.10	2000.00	7.00	200.00N	10.00N	10.00L	50.00
130544	3.00	5.00	0.20	0.10	2000.00	7.00	200.00N	10.00N	10.00L	500.00
130545	5.00	5.00	0.30	0.15	3000.00	10.00	200.00N	10.00N	10.00N	200.00
130546	3.00	5.00	0.30	0.15	3000.00	15.00	200.00N	10.00N	10.00N	70.00
130547	3.00	5.00	0.70	0.15	3000.00	10.00	200.00N	10.00N	10.00N	100.00
130548	2.00	5.00	0.05	0.15	3000.00	0.50L	200.00N	10.00N	10.00N	70.00
130549	5.00	5.00	0.07	0.02	2000.00	1.50	200.00N	10.00N	10.00N	30.00
130550	3.00	5.00	0.05	0.00	500.00	2.00	200.00N	10.00N	10.00N	20.00L
130551	3.00	5.00	0.70	0.20	500.00	0.50L	200.00N	10.00N	10.00N	20.00L
130552	2.00	0.50	0.70	0.15	500.00	0.50L	200.00N	10.00N	10.00N	50.00
130553	2.00	0.50	0.70	0.10	500.00	0.50L	200.00N	10.00N	10.00N	70.00
130554	2.00	0.50	0.70	0.15	500.00	0.50L	200.00N	10.00N	10.00N	70.00
130555	2.00	0.50	0.70	0.15	500.00	0.50L	200.00N	10.00N	10.00N	50.00
130556	2.00	5.00	1.00	0.10	700.00	0.50L	200.00N	10.00N	10.00N	70.00
130557	2.00	0.70	1.00	0.10	700.00	0.50L	200.00N	10.00N	10.00N	100.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAM ANCIENT MINE (CONTINUED)

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
DRILL HOLE FG-2 (CONTINUED)										
130518	1.00N	10.00N	20.00N	30.00	300.00	20.00	20.00L	5.00N	20.00N	70.00
130519	1.00N	10.00N	20.00N	20.00	300.00	20.00	20.00	5.00N	20.00N	70.00
130520	1.00N	10.00N	20.00N	50.00	500.00	50.00	20.00	5.00N	20.00N	100.00
130521	1.00N	10.00N	20.00N	50.00	500.00	50.00	20.00L	5.00N	20.00N	100.00
130522	1.00N	10.00N	20.00N	30.00	3000.00	30.00	20.00L	5.00N	20.00N	70.00
130523	1.00N	10.00N	20.00N	30.00	5000.00	30.00	20.00L	5.00N	20.00N	100.00
130524	1.00N	10.00N	20.00N	50.00	200.00	500.00	20.00L	5.00N	20.00N	70.00
130525	1.00N	10.00N	20.00N	50.00	500.00	50.00	20.00L	5.00N	20.00N	200.00
130526	1.00N	10.00N	20.00N	50.00	500.00	30.00	20.00L	5.00N	20.00N	100.00
130527	1.00N	10.00N	20.00N	30.00	500.00	30.00	20.00L	5.00N	20.00N	100.00
130528	1.00N	10.00N	20.00N	30.00	200.00	50.00	20.00L	5.00N	20.00N	50.00
130529	1.00N	10.00N	20.00N	30.00	700.00	30.00	20.00L	5.00N	20.00N	100.00
130530	1.00N	10.00N	20.00N	50.00	1000.00	150.00	20.00L	5.00N	20.00N	500.00
130531	1.00N	10.00N	20.00N	5.00	200.00	20.00	20.00L	5.00N	20.00N	50.00
130532	1.00N	10.00N	20.00N	5.00	150.00	70.00	20.00L	5.00N	20.00N	5.00L
130533	1.00N	10.00N	20.00N	30.00	500.00	100.00	20.00L	5.00N	20.00N	70.00
130534	1.00N	10.00N	20.00N	30.00	500.00	100.00	20.00L	5.00N	20.00N	70.00
130535	1.00N	10.00N	20.00N	30.00	300.00	70.00	20.00L	5.00N	20.00N	100.00
130536	1.00N	10.00N	20.00N	5.00	200.00	10.00	20.00L	5.00N	20.00N	5.00
130537	1.00N	10.00N	20.00N	30.00	150.00	50.00	20.00L	5.00N	20.00N	50.00
130538	1.00N	10.00N	20.00N	5.00L	200.00	20.00	20.00L	5.00N	20.00N	5.00L
130539	1.00N	10.00N	20.00N	5.00L	100.00	300.00	20.00L	5.00N	20.00N	5.00L
130540	1.00N	10.00N	20.00N	5.00L	100.00	1000.00	20.00L	5.00N	20.00N	5.00
130541	1.00N	10.00N	20.00N	5.00L	30.00	200.00	20.00L	5.00N	20.00N	5.00L
130542	1.00N	10.00N	20.00N	5.00L	50.00	50.00	20.00L	5.00N	20.00N	5.00L
130543	1.00N	10.00N	20.00N	5.00	50.00	300.00	20.00L	5.00N	20.00N	5.00
130544	1.00N	10.00N	20.00N	5.00	70.00	300.00	20.00L	5.00N	20.00N	5.00
130545	1.00N	10.00N	20.00N	5.00L	70.00	300.00	20.00	5.00N	20.00L	5.00L
130546	1.00N	10.00N	20.00N	5.00L	100.00	200.00	20.00	5.00N	20.00L	5.00L
130547	1.00N	10.00N	20.00N	5.00L	100.00	200.00	20.00	5.00N	20.00L	5.00L
130548	1.00N	10.00N	20.00N	5.00L	100.00	10.00	20.00	5.00N	20.00L	5.00L
130549	1.00N	10.00N	20.00N	5.00	100.00	1000.00	20.00	5.00N	20.00L	30.00
130550	1.00N	10.00N	20.00N	5.00L	100.00	700.00	20.00	5.00N	20.00L	5.00L
130551	1.00N	10.00N	20.00N	5.00	150.00	1000.00	20.00	5.00N	20.00L	5.00L
130552	1.00N	10.00N	20.00N	5.00L	150.00	30.00	20.00	5.00N	20.00L	5.00L
130553	1.00N	10.00N	20.00N	5.00	150.00	50.00	20.00	5.00N	20.00L	5.00L
130554	1.00N	10.00N	20.00N	5.00	200.00	10.00	20.00	5.00N	20.00L	5.00L
130555	1.00N	10.00N	20.00N	5.00	200.00	50.00	20.00	5.00N	20.00L	5.00L
130556	1.00N	10.00N	20.00N	5.00	200.00	20.00	20.00	5.00N	20.00L	5.00L
130557	1.00N	10.00N	20.00N	5.00	150.00	10.00	20.00	5.00N	20.00L	5.00L

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
DRILL HOLE FG-2 (CONTINUED)										
130518	10.00N	100.00N	30.00	10.00N	150.00	200.00	50.00N	30.00	200.00L	70.00
130519	10.00N	100.00N	20.00	10.00N	150.00	100.00	50.00N	30.00	200.00L	50.00
130520	15.00	100.00N	20.00	10.00N	150.00	150.00	50.00N	10.00L	200.00	100.00
130521	10.00N	100.00N	30.00	10.00N	200.00	150.00	50.00N	10.00	200.00L	100.00
130522	10.00N	100.00N	30.00	10.00N	200.00	150.00	50.00N	10.00L	200.00L	10.00N
130523	10.00N	100.00N	50.00	10.00N	150.00	150.00	50.00N	10.00L	200.00L	10.00N
130524	10.00N	100.00N	30.00	10.00N	150.00	150.00	50.00N	30.00	200.00	100.00
130525	10.00	100.00N	30.00	10.00N	200.00	150.00	50.00N	20.00	200.00	10.00L
130526	10.00N	100.00N	50.00	200.00	200.00	100.00	50.00N	20.00	300.00	10.00N
130527	10.00N	100.00N	30.00	10.00N	200.00	150.00	50.00N	10.00	200.00L	15.00
130528	10.00N	100.00N	50.00	10.00N	100.00	150.00	50.00N	15.00	200.00L	15.00
130529	10.00N	100.00N	30.00	10.00N	100.00	50.00	50.00N	20.00	200.00L	15.00
130530	10.00N	100.00N	20.00	10.00N	100.00	50.00	50.00N	10.00L	700.00	10.00N
130531	10.00N	100.00N	10.00	10.00N	150.00	100.00	50.00N	10.00L	200.00L	10.00L
130532	15.00	100.00N	30.00	10.00N	150.00	20.00	50.00N	10.00L	200.00L	50.00
130533	10.00N	100.00N	30.00	10.00N	150.00	100.00	50.00N	10.00L	200.00L	10.00L
130534	10.00N	100.00N	30.00	10.00N	200.00	70.00	50.00N	10.00L	200.00L	10.00L
130535	10.00L	100.00N	30.00	10.00N	200.00	150.00	50.00N	10.00	200.00L	150.00
130536	10.00N	100.00N	20.00	10.00N	100.00	20.00	50.00N	10.00	200.00L	70.00
130537	10.00N	100.00N	50.00	10.00N	100.00	200.00	50.00N	20.00	200.00L	100.00
130538	10.00N	100.00N	7.00	10.00N	100.00	50.00	50.00N	10.00L	200.00L	10.00
130539	100.00	100.00N	7.00	10.00N	100.00L	30.00	50.00N	10.00	500.00	50.00
130540	200.00	100.00N	5.00	10.00N	100.00L	20.00	50.00N	10.00L	10000.00	50.00
130541	150.00	100.00N	5.00	10.00N	100.00L	10.00	50.00N	10.00	1500.00	50.00
130542	70.00	100.00N	5.00	10.00N	100.00L	10.00	50.00N	10.00	500.00	30.00
130543	1000.00	100.00N	5.00	10.00N	100.00L	10.00	50.00N	10.00	7000.00	50.00
130544	1000.00	100.00N	10.00	10.00N	100.00L	20.00	50.00N	20.00	7000.00	100.00
130545	1000.00	100.00N	7.00	10.00N	100.00	20.00	50.00N	20.00	7000.00	50.00
130546	500.00	100.00N	5.00	10.00N	100.00	20.00	50.00N	20.00	5000.00	50.00
130547	500.00	100.00N	10.00	10.00N	100.00	20.00	50.00N	30.00	5000.00	50.00
130548	10.00	100.00N	5.00	10.00N	100.00	20.00	50.00N	10.00	300.00	50.00
130549	15.00	100.00N	5.00L	10.00N	100.00	20.00	50.00N	10.00L	10000.00G	10.00L
130550	50.00	100.00N	5.00L	10.00N	100.00	20.00	50.00N	10.00L	10000.00	10.00L
130551	10.00	100.00N	5.00L	10.00N	100.00	30.00	50.00N	10.00L	5000.00	10.00
130552	10.00	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	50.00
130553	10.00	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	50.00
130554	10.00	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	50.00
130555	50.00	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	50.00
130556	15.00	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	30.00
130557	10.00L	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	30.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
DRILL HOLE FG-2 (CONTINUED)										
130558	2.00	0.50	1.00	0.10	700.00	0.50L	200.00N	10.00N	10.00N	70.00
130559	2.00	2.00	2.00	0.15	700.00	0.50N	200.00N	10.00N	10.00L	300.00
130560	1.50	2.00	2.00	0.10	700.00	0.50N	200.00N	10.00N	10.00L	300.00
130561	1.50	3.00	0.70	0.10	3000.00	0.50N	200.00N	10.00N	10.00L	50.00
130562	5.00	5.00	0.70	0.10	5000.00	0.50L	200.00N	10.00N	10.00L	70.00
130563	5.00	3.00	0.70	0.10	3000.00	0.50L	200.00N	10.00N	30.00	70.00
130564	2.00	1.00	0.70	0.05	1500.00	0.50L	200.00N	10.00N	30.00	70.00
130565	1.00	0.50	0.70	0.05	500.00	0.50L	200.00N	10.00N	10.00L	100.00
130566	0.50	0.50	0.70	0.03	700.00	0.50N	200.00N	10.00N	10.00L	100.00
130567	0.50	0.50	0.70	0.03	700.00	0.50N	200.00N	10.00N	10.00L	70.00
130568	0.50	0.50	0.50	0.03	500.00	1.00	200.00N	10.00N	10.00L	70.00
130569	0.50	0.50	0.70	0.10	2000.00	0.50L	200.00N	10.00N	10.00	70.00
130570	0.50	0.50	0.70	0.10	2000.00	0.50L	200.00N	10.00N	10.00	500.00
130571	0.50	0.50	0.50	0.15	2000.00	0.50N	200.00N	10.00N	10.00	500.00
130572	2.00	5.00	0.70	0.15	1000.00	0.50N	200.00N	10.00N	10.00L	500.00
130573	2.00	2.00	0.70	0.20	2000.00	0.50N	200.00N	10.00N	10.00L	700.00
130574	2.00	2.00	0.70	0.20	2000.00	0.50L	200.00N	10.00N	10.00L	700.00
130575	2.00	2.00	0.70	0.20	2000.00	0.50N	200.00N	10.00N	10.00L	700.00
130576	2.00	3.00	0.70	0.20	2000.00	0.50N	200.00N	10.00N	10.00L	700.00
130577	1.50	3.00	0.70	0.15	2000.00	0.50L	200.00N	10.00N	10.00L	700.00
130578	2.00	3.00	0.70	0.15	2000.00	0.50L	200.00N	10.00N	10.00L	700.00
130579	2.00	3.00	1.00	0.20	1000.00	0.50N	200.00N	10.00N	10.00L	700.00
130580	3.00	2.00	0.70	0.20	2000.00	0.50N	200.00N	10.00N	10.00L	700.00
130581	3.00	3.00	1.00	0.20	1000.00	7.00	200.00N	10.00N	10.00L	500.00
130582	2.00	2.00	0.70	0.20	2000.00	0.50L	200.00N	10.00N	10.00L	500.00
130583	2.00	3.00	1.50	0.30	1000.00	0.50L	200.00N	10.00N	10.00L	200.00
130584	3.00	2.00	1.00	0.20	1000.00	2.00	200.00N	10.00N	10.00L	300.00
130585	2.00	2.00	0.70	0.20	300.00	0.50L	200.00N	10.00N	10.00L	700.00
130586	2.00	2.00	0.70	0.20	300.00	0.50L	200.00N	10.00N	10.00L	700.00
130587	3.00	2.00	2.00	0.15	700.00	30.00	200.00N	10.00N	20.00	700.00
130588	2.00	5.00	5.00	0.05	2000.00	0.50N	200.00N	10.00N	10.00	30.00
130589	2.00	10.00	15.00	0.02	5000.006	0.50N	200.00N	10.00N	10.00L	20.00N
130697	5.00	3.00	3.00	0.20	1500.00	0.50N	200.00N	10.00N	10.00L	200.00
130698	5.00	3.00	3.00	0.70	1000.00	0.50N	200.00N	10.00N	10.00L	200.00
130699	5.00	3.00	3.00	0.20	1000.00	0.50N	200.00N	10.00N	10.00L	200.00
130700	5.00	3.00	5.00	0.20	1000.00	0.50N	200.00N	10.00N	10.00L	300.00
130701	5.00	3.00	3.00	0.20	1000.00	0.50N	200.00N	10.00N	10.00L	200.00
130702	5.00	3.00	3.00	0.30	1000.00	0.50N	200.00N	10.00N	10.00L	150.00
130703	3.00	3.00	3.00	0.20	1000.00	0.50N	200.00N	10.00N	10.00	70.00
130704	2.00	1.50	3.00	0.07	700.00	0.50N	200.00N	10.00N	10.00	50.00

TABLE 2.—SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
DRILL HOLE FG-2 (CONTINUED)										
130558	1.00N	10.00N	20.00N	5.00	100.00	5.00	20.00	5.00N	20.00L	5.00L
130559	1.00N	10.00N	20.00N	5.00L	100.00	20.00	20.00L	5.00N	20.00N	5.00
130560	1.00N	10.00N	20.00N	5.00L	150.00	20.00	20.00L	5.00N	20.00N	5.00L
130561	1.00N	10.00N	20.00N	5.00L	100.00	70.00	20.00L	5.00N	20.00N	5.00L
130562	1.00N	10.00N	20.00N	5.00L	70.00	20.00	20.00	5.00N	20.00N	5.00N
130563	1.00N	10.00N	20.00N	5.00L	50.00	20.00	20.00	5.00N	20.00N	5.00N
130564	1.00L	10.00N	20.00N	5.00L	100.00	30.00	20.00L	5.00N	20.00N	5.00N
130565	1.00L	10.00N	20.00N	5.00L	100.00	30.00	20.00L	5.00N	20.00N	5.00N
130566	1.00L	10.00N	20.00N	5.00L	70.00	10.00	20.00L	5.00N	20.00N	5.00N
130567	1.00L	10.00N	20.00N	5.00L	70.00	20.00	20.00L	5.00N	20.00N	5.00N
130568	1.00	10.00N	20.00N	5.00L	70.00	30.00	20.00L	5.00N	20.00N	5.00N
130569	1.00N	10.00N	20.00N	5.00	70.00	500.00	30.00	5.00N	20.00N	5.00N
130570	1.00N	10.00N	20.00N	5.00	70.00	200.00	30.00	5.00N	20.00N	5.00N
130571	1.00N	10.00N	20.00N	5.00	70.00	20.00	30.00	5.00N	20.00N	5.00N
130572	1.00N	10.00N	20.00N	5.00	70.00	15.00	30.00	5.00N	20.00N	5.00N
130573	1.00N	10.00N	20.00N	5.00N	200.00	100.00	20.00L	5.00N	20.00N	5.00N
130574	1.00N	10.00N	20.00N	5.00N	100.00	300.00	20.00L	5.00N	20.00N	5.00N
130575	1.00N	10.00N	20.00N	5.00N	100.00	50.00	20.00L	5.00N	20.00N	5.00N
130576	1.00N	10.00N	20.00N	5.00N	100.00	300.00	20.00L	5.00N	20.00N	5.00N
130577	1.00N	10.00N	20.00N	5.00N	70.00	200.00	20.00L	5.00N	20.00N	5.00N
130578	1.00N	10.00N	20.00N	5.00N	70.00	300.00	20.00L	5.00N	20.00N	5.00N
130579	1.00N	10.00N	20.00N	5.00N	70.00	70.00	20.00L	5.00N	20.00N	5.00N
130580	1.00N	10.00N	20.00N	5.00	150.00	100.00	20.00L	5.00N	20.00N	7.00
130581	1.00N	10.00N	20.00N	5.00	150.00	300.00	20.00L	5.00N	20.00N	7.00
130582	1.00N	10.00N	20.00N	5.00N	150.00	100.00	20.00L	5.00N	20.00N	5.00
130583	1.00N	10.00N	20.00N	10.00	200.00	100.00	20.00L	5.00N	20.00N	5.00
130584	1.00N	10.00N	20.00N	10.00	200.00	200.00	20.00L	5.00N	20.00N	5.00
130585	1.00N	10.00N	20.00N	5.00	200.00	100.00	20.00L	5.00N	20.00N	5.00N
130586	1.00N	10.00N	20.00N	5.00	150.00	100.00	20.00L	5.00N	20.00N	5.00N
130587	1.00N	10.00N	20.00N	5.00L	200.00	700.00	20.00N	5.00	20.00N	10.00
130588	1.00N	10.00N	20.00N	5.00L	100.00	70.00	20.00N	5.00N	20.00N	5.00
130589	1.00N	10.00N	20.00N	5.00L	70.00	7.00	20.00N	5.00N	20.00N	5.00
130697	1.00N	10.00N	20.00N	5.00L	200.00	70.00	20.00N	5.00N	20.00N	20.00
130698	1.00N	10.00N	20.00N	5.00	150.00	50.00	20.00N	5.00N	20.00N	20.00
130699	1.00N	10.00N	20.00N	5.00L	100.00	70.00	20.00N	5.00N	20.00N	5.00
130700	1.00N	10.00N	20.00N	5.00L	150.00	50.00	20.00N	5.00N	20.00N	5.00
130701	1.00N	10.00N	20.00N	5.00L	100.00	70.00	20.00N	5.00N	20.00N	5.00
130702	1.00N	10.00N	20.00N	5.00	200.00	100.00	20.00N	5.00N	20.00N	15.00
130703	1.00N	10.00N	20.00N	5.00	100.00	70.00	20.00N	5.00N	20.00N	5.00
130704	1.00	10.00N	20.00N	5.00L	150.00	50.00	20.00N	5.00N	20.00N	5.00

TABLE 2.—SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
DRILL HOLE FG-2 (CONTINUED)										
130558	10.00L	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	50.00
130559	10.00N	100.00N	20.00	10.00N	150.00	30.00	50.00N	20.00	200.00L	30.00
130560	10.00N	100.00N	15.00	10.00N	150.00	20.00	50.00N	20.00	200.00L	10.00
130561	15.00	100.00N	10.00	10.00N	100.00	20.00	50.00N	20.00	200.00	50.00
130562	10.00N	100.00N	10.00	10.00N	100.00	30.00	50.00N	20.00	200.00L	10.00
130563	10.00N	100.00N	10.00	10.00N	100.00L	30.00	50.00N	20.00	200.00	10.00
130564	50.00	100.00N	5.00	10.00N	100.00L	30.00	50.00N	20.00	500.00	20.00
130565	70.00	100.00N	5.00N	10.00N	100.00	20.00	50.00N	10.00	200.00L	20.00
130566	100.00	100.00N	5.00L	10.00N	100.00	20.00	50.00N	10.00L	200.00L	20.00
130567	100.00	100.00N	5.00L	10.00N	100.00L	20.00	50.00N	10.00	200.00L	20.00
130568	100.00	100.00N	5.00L	10.00N	100.00L	20.00	50.00N	10.00	200.00L	20.00
130569	10.00N	100.00N	10.00	10.00N	100.00	20.00	50.00N	20.00	300.00	20.00
130570	10.00N	100.00N	10.00	10.00N	100.00	30.00	50.00N	20.00	200.00L	20.00
130571	10.00N	100.00N	15.00	10.00N	100.00	20.00	50.00N	20.00	200.00L	20.00
130572	10.00N	100.00N	15.00	10.00N	150.00	20.00	50.00N	20.00	200.00L	20.00
130573	50.00	100.00N	20.00	10.00N	150.00	20.00	50.00N	30.00	500.00	70.00
130574	30.00	100.00N	20.00	10.00N	200.00	20.00	50.00N	30.00	1000.00	100.00
130575	10.00L	100.00N	20.00	10.00N	200.00	20.00	50.00N	30.00	200.00L	100.00
130576	150.00	100.00N	20.00	10.00N	200.00	20.00	50.00N	30.00	3000.00	70.00
130577	100.00	100.00N	20.00	10.00N	200.00	20.00	50.00N	30.00	300.00	100.00
130578	150.00	100.00N	20.00	10.00N	200.00	30.00	50.00N	30.00	700.00	70.00
130579	10.00L	100.00N	20.00	10.00N	200.00	30.00	50.00N	30.00	200.00L	100.00
130580	15.00	100.00N	20.00	10.00N	200.00	50.00	50.00N	30.00	200.00L	100.00
130581	200.00	100.00N	20.00	10.00N	200.00	70.00	50.00N	30.00	2000.00	100.00
130582	10.00L	100.00N	30.00	10.00N	200.00	50.00	50.00N	30.00	200.00L	100.00
130583	10.00L	100.00N	20.00	10.00N	100.00	50.00	50.00N	30.00	200.00L	100.00
130584	500.00	100.00N	30.00	10.00N	200.00	70.00	50.00N	50.00	1000.00	70.00
130585	15.00	100.00N	20.00	10.00N	100.00	30.00	50.00N	50.00	200.00L	100.00
130586	15.00	100.00N	20.00	10.00N	100.00	30.00	50.00N	50.00	200.00L	100.00
130587	5000.00	100.00N	20.00	10.00N	100.00L	100.00	50.00N	10.00	10000.00	30.00
130588	50.00	100.00N	7.00	10.00N	100.00	100.00	50.00N	10.00L	200.00L	10.00L
130589	20.00	100.00N	5.00L	10.00N	100.00	20.00	50.00N	10.00L	200.00L	10.00L
130697	10.00L	100.00N	15.00	10.00N	100.00L	50.00	50.00N	10.00	200.00L	30.00
130698	10.00	100.00N	20.00	10.00N	100.00L	100.00	50.00N	30.00	200.00L	100.00
130699	10.00L	100.00N	15.00	10.00N	100.00L	150.00	50.00N	15.00	200.00L	20.00
130700	10.00L	100.00N	15.00	10.00N	100.00L	50.00	50.00N	30.00	200.00L	30.00
130701	10.00L	100.00N	15.00	10.00N	100.00L	20.00	50.00N	20.00	200.00L	30.00
130702	10.00L	100.00N	20.00	10.00N	100.00L	100.00	50.00N	15.00	200.00L	30.00
130703	10.00	100.00N	20.00	10.00N	100.00L	200.00	50.00N	20.00	200.00L	10.00
130704	10.00L	100.00N	7.00	10.00N	100.00L	70.00	50.00N	10.00L	200.00L	10.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	FE PCT	HG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
DRILL HOLE FG-2 (CONTINUED)										
130705	1.50	3.00	5.00	0.05	700.00	0.50N	200.00N	10.00N	10.00L	70.00
130706	5.00	5.00	5.00	0.70	1500.00	0.50N	200.00N	10.00N	10.00L	200.00
130707	3.00	5.00	5.00	0.10	700.00	0.50N	200.00N	10.00N	10.00L	500.00
130708	3.00	5.00	7.00	0.30	1000.00	0.50N	200.00N	10.00N	10.00L	500.00
130709	3.00	5.00	7.00	0.10	1000.00	0.50N	200.00N	10.00N	10.00L	500.00
130710	5.00	5.00	5.00	0.20	1000.00	0.50N	200.00N	10.00N	10.00L	700.00
130711	5.00	5.00	5.00	0.15	1500.00	0.50N	200.00N	10.00N	10.00L	200.00
130712	5.00	5.00	7.00	0.15	1000.00	0.50N	200.00N	10.00N	10.00L	200.00
130713	7.00	7.00	10.00	0.20	1500.00	0.50N	200.00N	10.00N	10.00L	700.00
130714	5.00	5.00	7.00	0.15	1000.00	0.50N	200.00N	10.00N	10.00L	700.00
130715	5.00	5.00	5.00	0.15	1000.00	0.50N	200.00N	10.00N	10.00	500.00
130716	5.00	5.00	7.00	0.20	1500.00	0.50N	200.00N	10.00N	10.00	500.00
130717	3.00	5.00	7.00	0.15	1000.00	0.50N	200.00N	10.00N	15.00	700.00
130718	7.00	5.00	7.00	0.20	1500.00	0.50N	200.00N	10.00N	10.00	700.00
130719	5.00	5.00	7.00	0.15	1000.00	0.50N	200.00N	10.00N	10.00	700.00
130720	7.00	5.00	7.00	0.30	1500.00	0.50N	200.00N	10.00N	15.00	1000.00
130721	7.00	5.00	7.00	0.30	1500.00	0.50N	200.00N	10.00N	10.00	1000.00
130722	5.00	5.00	10.00	0.07	1000.00	0.50N	200.00N	10.00N	10.00	300.00
130723	5.00	1.50	3.00	0.20	700.00	0.50N	200.00N	10.00N	50.00	300.00
DRILL HOLE FG-3										
130724	2.00	2.00	5.00	0.07	1000.00	0.50N	200.00N	10.00N	10.00	150.00
130725	5.00	2.00	5.00	0.20	1500.00	0.50N	200.00N	10.00N	20.00	500.00
130727	3.00	0.30	0.70	0.20	700.00	0.50N	200.00N	10.00N	70.00	300.00
130728	5.00	0.30	7.00	0.30	3000.00	3.00	200.00N	10.00N	50.00	300.00
130729	3.00	1.50	3.00	0.20	1000.00	0.50N	200.00N	10.00N	70.00	300.00
130730	3.00	7.00	7.00	0.10	1500.00	0.50N	200.00N	10.00N	10.00L	500.00
130731	15.00	7.00	7.00	1.00G	1500.00	1.50	200.00N	10.00N	20.00	700.00
130732	3.00	2.00	3.00	0.15	1500.00	0.50N	200.00N	10.00N	70.00	300.00
130733	5.00	7.00	7.00	0.10	2000.00	7.00	200.00N	10.00N	10.00	700.00
130734	7.00	3.00	7.00	0.01	1000.00	50.00	200.00N	10.00N	10.00L	150.00
130735	5.00	3.00	1.50	0.20	1000.00	2.00	200.00N	10.00N	15.00	2000.00
130736	10.00	7.00	5.00	0.01	2000.00	70.00	200.00N	10.00N	10.00	200.00
130737	3.00	7.00	0.50	0.00	1000.00	100.00	200.00N	15.00	10.00L	20.00N
130738	3.00	7.00	0.30	0.00	500.00	70.00	200.00N	70.00	10.00L	20.00N
130739	3.00	5.00	3.00	0.00	2000.00	30.00	200.00N	10.00N	10.00L	20.00N
130740	3.00	7.00	3.00	0.01	3000.00	7.00	200.00N	10.00N	10.00L	70.00
130741	3.00	10.00	7.00	0.01	3000.00	2.00	200.00N	10.00N	10.00L	20.00N
130742	1.50	7.00	7.00	0.00L	1500.00	10.00	200.00N	10.00N	10.00L	20.00N

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAM ANCIENT MINE (CONTINUED)

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
DRILL HOLE FG-2 (CONTINUED)										
130705	1.00N	10.00N	20.00N	5.00L	300.00	50.00	20.00N	5.00N	20.00N	20.00
130706	1.00	10.00N	20.00N	10.00	300.00	100.00	20.00N	5.00N	20.00N	100.00
130707	1.00	10.00N	20.00N	7.00	300.00	50.00	20.00N	5.00N	20.00N	100.00
130708	1.00	10.00N	20.00N	5.00	150.00	70.00	20.00N	5.00N	20.00N	30.00
130709	1.00N	10.00N	20.00N	7.00	300.00	50.00	20.00N	5.00N	20.00N	100.00
130710	1.00N	10.00N	20.00N	20.00	700.00	70.00	20.00N	5.00N	20.00N	150.00
130711	1.00N	10.00N	20.00N	20.00	500.00	70.00	20.00N	5.00N	20.00N	150.00
130712	1.00N	10.00N	20.00N	20.00	500.00	70.00	20.00N	5.00N	20.00N	150.00
130713	1.00N	10.00N	20.00N	30.00	100.00	30.00	20.00N	5.00N	20.00N	200.00
130714	1.00N	10.00N	20.00N	20.00	500.00	70.00	20.00N	5.00N	20.00N	150.00
130715	1.00N	10.00N	20.00N	30.00	1000.00	70.00	20.00N	5.00N	20.00N	200.00
130716	1.00N	10.00N	20.00N	20.00	1000.00	70.00	20.00N	5.00N	20.00N	200.00
130717	1.00N	10.00N	20.00N	10.00	300.00	30.00	20.00N	5.00N	20.00N	100.00
130718	1.00N	10.00N	20.00N	20.00	700.00	30.00	20.00N	5.00N	20.00N	150.00
130719	1.00N	10.00N	20.00N	10.00	700.00	70.00	20.00N	5.00	20.00N	150.00
130720	1.00N	10.00N	20.00N	30.00	1500.00	70.00	20.00N	5.00N	20.00N	200.00
130721	1.00N	10.00N	20.00N	30.00	1500.00	100.00	20.00N	5.00N	20.00N	200.00
130722	1.00N	10.00N	20.00N	10.00	500.00	30.00	20.00N	5.00	20.00N	100.00
130723	1.00N	10.00N	20.00N	5.00	300.00	150.00	20.00N	20.00	20.00N	100.00
DRILL HOLE FG-3										
130724	1.00N	10.00N	20.00N	5.00L	200.00	50.00	20.00N	5.00	20.00N	10.00
130725	1.00	10.00N	20.00N	5.00L	200.00	50.00	20.00N	5.00N	20.00N	10.00
130727	1.00N	10.00N	20.00N	10.00	150.00	700.00	20.00N	5.00N	20.00L	15.00
130728	1.00N	10.00N	20.00N	15.00	150.00	500.00	20.00N	5.00	20.00L	20.00
130729	1.00N	10.00N	20.00N	7.00	200.00	70.00	20.00N	5.00N	20.00L	7.00
130730	1.00N	10.00N	20.00N	7.00	70.00	150.00	20.00N	5.00N	20.00L	5.00
130731	1.00N	10.00N	20.00N	30.00	150.00	1500.00	20.00N	5.00N	20.00L	30.00
130732	1.00N	10.00N	20.00N	5.00	150.00	100.00	20.00N	5.00N	20.00L	7.00
130733	1.00N	10.00N	20.00N	15.00	150.00	700.00	20.00N	5.00N	20.00L	10.00
130734	1.00N	10.00	150.00	5.00N	150.00	15000.00	20.00N	5.00N	20.00N	10.00
130735	1.00N	10.00L	20.00N	5.00N	150.00	700.00	20.00N	5.00N	20.00N	5.00L
130736	1.00N	10.00	150.00	5.00N	30.00	15000.00	20.00N	15.00	20.00N	5.00L
130737	1.00N	10.00L	20.00N	5.00N	100.00	7000.00	20.00N	10.00	20.00N	5.00L
130738	1.00N	10.00L	20.00N	5.00N	70.00	7000.00	20.00N	5.00N	20.00N	5.00L
130739	1.00N	10.00L	150.00	5.00N	10.00	7000.00	20.00N	5.00N	20.00N	5.00L
130740	1.00N	10.00	150.00	7.00	100.00	700.00	20.00N	5.00	20.00L	7.00
130741	1.00N	10.00	70.00	7.00	70.00	150.00	20.00N	5.00N	20.00L	7.00
130742	1.00N	30.00	20.00N	5.00	150.00	70.00	20.00N	5.00N	20.00L	5.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
DRILL HOLE FG-2 (CONTINUED)										
130705	10.00L	100.00N	5.00	10.00N	100.00L	30.00	50.00N	10.00L	200.00L	10.00
130706	10.00L	100.00N	20.00	10.00N	100.00	300.00	50.00N	20.00	200.00L	30.00
130707	10.00L	100.00N	15.00	10.00N	100.00	100.00	50.00N	10.00L	200.00L	20.00
130708	10.00L	100.00N	15.00	10.00N	100.00	100.00	50.00N	10.00L	200.00L	20.00
130709	10.00L	100.00N	15.00	10.00N	100.00	150.00	50.00N	10.00L	200.00L	30.00
130710	10.00L	100.00N	30.00	10.00N	100.00	200.00	50.00N	15.00	200.00L	70.00
130711	10.00L	100.00N	30.00	10.00N	100.00	200.00	50.00N	15.00	200.00L	50.00
130712	10.00L	100.00N	30.00	10.00N	100.00	200.00	50.00N	10.00	200.00L	50.00
130713	10.00L	100.00N	50.00	10.00N	200.00	300.00	50.00N	20.00	200.00L	70.00
130714	10.00L	100.00N	30.00	10.00N	100.00	200.00	50.00N	15.00	200.00L	50.00
130715	10.00L	100.00N	30.00	10.00N	100.00	200.00	50.00N	15.00	200.00L	50.00
130716	10.00L	100.00N	50.00	10.00N	150.00	200.00	50.00N	15.00	200.00L	50.00
130717	10.00L	100.00N	30.00	10.00N	100.00	200.00	50.00N	10.00	200.00L	30.00
130718	10.00L	100.00N	50.00	10.00N	100.00	200.00	50.00N	10.00	200.00L	50.00
130719	10.00L	100.00N	30.00	10.00N	100.00	200.00	50.00N	10.00	200.00L	50.00
130720	10.00L	100.00N	50.00	10.00N	150.00	300.00	50.00N	20.00	200.00L	50.00
130721	10.00L	100.00N	30.00	10.00N	100.00	300.00	50.00N	15.00	200.00L	50.00
130722	10.00L	100.00N	20.00	10.00N	200.00	100.00	50.00N	10.00	200.00L	10.00
130723	10.00L	100.00N	30.00	10.00N	100.00	500.00	50.00N	30.00	200.00L	70.00
DRILL HOLE FG-3										
130724	10.00L	100.00N	15.00	10.00N	100.00L	30.00	50.00N	10.00	200.00L	20.00
130725	10.00L	100.00N	30.00	10.00N	150.00	150.00	50.00N	20.00	200.00L	50.00
130727	30.00	100.00N	15.00	10.00N	100.00	70.00	50.00N	20.00	200.00	50.00
130728	300.00	100.00N	20.00	10.00N	150.00	100.00	50.00N	30.00	1500.00	50.00
130729	30.00	100.00N	15.00	10.00N	150.00	70.00	150.00	15.00	200.00L	70.00
130730	30.00	100.00N	10.00	10.00N	100.00	70.00	50.00N	10.00	300.00	15.00
130731	30.00	100.00N	30.00	10.00N	100.00	300.00	50.00N	50.00	300.00	150.00
130732	30.00	100.00N	15.00	10.00N	100.00	70.00	50.00N	15.00	200.00L	30.00
130733	3000.00	100.00N	15.00	10.00N	150.00	70.00	50.00N	15.00	10000.00G	15.00
130734	7000.00	100.00N	5.00N	20.00	100.00N	30.00	50.00N	10.00N	10000.00G	10.00N
130735	300.00	100.00N	15.00	10.00N	100.00N	30.00	50.00N	10.00	10000.00	20.00
130736	7000.00	100.00L	5.00N	15.00	100.00N	20.00	50.00N	10.00N	10000.00	10.00N
130737	3000.00	1000.00	5.00N	10.00N	100.00N	20.00	50.00N	10.00N	10000.00	10.00N
130738	500.00	500.00	5.00N	10.00N	100.00N	20.00	50.00N	10.00N	10000.00	10.00N
130739	5000.00	100.00N	5.00N	10.00N	100.00N	15.00	50.00N	10.00N	10000.00	10.00N
130740	150.00	100.00	5.00L	10.00N	100.00N	20.00	50.00N	10.00L	10000.00G	10.00N
130741	150.00	100.00N	5.00L	10.00N	100.00	30.00	50.00N	10.00L	10000.00G	10.00N
130742	3000.00	100.00N	5.00L	10.00N	100.00	15.00	50.00N	10.00L	7000.00	10.00N

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
DRILL HOLE FG-3 (CONTINUED)										
130743	1.50	10.00	7.00	0.00L	1500.00	5.00	200.00N	10.00N	10.00N	20.00N
130744	1.50	7.00	7.00	0.00L	1500.00	1.00	200.00N	10.00N	10.00N	20.00N
130745	0.70	7.00	7.00	0.00L	1000.00	0.50N	200.00N	10.00N	10.00L	20.00L
130746	3.00	7.00	3.00	0.10	700.00	0.50N	200.00N	10.00N	10.00L	1000.00
130747	1.00	7.00	7.00	0.02	1500.00	0.50N	200.00N	10.00N	10.00L	20.00L
130748	1.00	10.00	10.00	0.00L	1000.00	0.50N	200.00N	10.00N	10.00N	20.00L
130749	1.00	7.00	15.00	0.00L	700.00	0.50N	200.00N	10.00N	10.00N	20.00N
130750	1.00	7.00	7.00	0.00	1000.00	1.00	200.00N	10.00N	10.00N	20.00N
130751	0.50	5.00	7.00	0.00L	500.00	7.00	200.00N	10.00N	10.00N	20.00N
130752	1.00	7.00	7.00	0.00L	500.00	10.00	200.00N	10.00N	10.00N	20.00N
130753	1.50	7.00	5.00	0.00	500.00	15.00	200.00N	10.00N	10.00N	20.00N
130754	3.00	5.00	0.30	0.07	500.00	15.00	200.00N	10.00N	10.00L	300.00
130755	5.00	5.00	3.00	0.30	1500.00	0.50N	200.00N	10.00N	10.00L	500.00
130756	3.00	5.00	3.00	0.15	1500.00	15.00	200.00N	10.00N	10.00L	700.00
130757	3.00	3.00	3.00	0.07	1000.00	0.50N	200.00N	10.00N	10.00L	700.00
130758	5.00	5.00	1.00	0.30	1500.00	0.50N	200.00N	10.00N	10.00L	1000.00
130759	3.00	7.00	7.00	0.50	1500.00	0.50N	200.00N	10.00N	10.00L	20.00N
130760	3.00	7.00	7.00	0.30	3000.00	0.50N	200.00N	10.00N	10.00L	20.00N
130761	3.00	3.00	3.00	0.15	1500.00	0.50N	200.00N	10.00N	10.00L	300.00
130763	7.00	7.00	3.00	0.15	700.00	0.50N	200.00N	10.00N	10.00L	150.00
130764	3.00	3.00	3.00	0.03	700.00	0.50N	200.00N	10.00N	10.00	300.00
130765	5.00	1.50	3.00	0.15	700.00	0.50N	200.00N	10.00N	20.00	200.00
130766	3.00	0.70	3.00	0.15	1000.00	0.50N	200.00N	10.00N	20.00	300.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAM ANCIENT MINE (CONTINUED)

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
DRILL HOLE FG-3 (CONTINUED)										
130743	1.00N	10.00L	20.00N	5.00N	50.00	300.00	20.00N	5.00N	20.00N	5.00
130744	1.00N	10.00L	20.00N	5.00N	100.00	50.00	20.00N	5.00N	20.00N	5.00
130745	1.00N	10.00L	20.00N	5.00N	150.00	30.00	20.00N	5.00N	20.00N	5.00
130746	1.00N	10.00L	20.00N	5.00N	30.00	20.00	20.00N	5.00N	20.00N	5.00
130747	1.00N	10.00L	20.00N	5.00N	100.00	20.00	20.00N	5.00N	20.00N	5.00
130748	1.00N	10.00L	20.00N	5.00N	30.00	50.00	20.00N	5.00N	20.00N	5.00
130749	1.00N	10.00L	20.00N	5.00N	50.00	20.00	20.00N	5.00N	20.00N	5.00
130750	1.00N	10.00L	20.00N	5.00N	100.00	150.00	20.00N	5.00N	20.00N	20.00
130751	1.00N	10.00L	20.00N	5.00N	70.00	700.00	20.00N	5.00N	20.00N	10.00
130752	1.00N	10.00L	20.00N	5.00N	100.00	2000.00	20.00N	5.00N	20.00N	5.00
130753	1.00N	10.00L	20.00N	5.00N	70.00	5000.00	20.00N	5.00N	20.00N	10.00
130754	1.00N	10.00L	20.00N	5.00	70.00	3000.00	20.00N	5.00N	20.00N	20.00
130755	1.00N	10.00L	20.00N	15.00	70.00	100.00	20.00N	5.00N	20.00N	20.00
130756	1.00N	10.00L	20.00N	5.00	70.00	3000.00	20.00N	5.00N	20.00N	15.00
130757	1.00N	10.00N	20.00N	10.00	70.00	70.00	20.00N	5.00N	20.00N	20.00
130758	1.00N	10.00N	20.00N	10.00	70.00	70.00	20.00N	5.00N	20.00N	15.00
130759	1.00N	10.00N	20.00N	15.00	300.00	30.00	20.00N	5.00N	20.00L	15.00
130760	1.00N	10.00N	20.00N	15.00	150.00	15.00	20.00N	5.00N	20.00L	15.00
130761	1.00N	10.00N	20.00N	15.00	300.00	150.00	20.00N	5.00N	20.00L	70.00
130763	1.00N	10.00N	20.00N	15.00	100.00	150.00	20.00N	5.00N	20.00L	30.00
130764	1.00N	10.00N	20.00N	5.00N	100.00	30.00	20.00N	5.00N	20.00L	7.00
130765	1.00N	10.00N	20.00N	7.00	100.00	70.00	20.00N	7.00	20.00L	15.00
130766	1.00N	10.00N	20.00N	5.00	70.00	70.00	20.00N	5.00N	20.00L	7.00

TABLE 2.--SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL CORE SAMPLES FROM FARAH GARAN ANCIENT MINE (CONTINUED)

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
DRILL HOLE FG-3 (CONTINUED)										
130743	200.00	100.00N	5.00N	10.00N	100.00L	20.00	50.00N	10.00N	10000.00	10.00N
130744	70.00	100.00N	5.00N	10.00N	100.00L	20.00	50.00N	10.00N	10000.00G	10.00N
130745	50.00	100.00N	5.00N	10.00N	100.00L	20.00	50.00N	10.00N	300.00	10.00N
130746	70.00	100.00N	10.00	10.00N	100.00L	30.00	50.00N	10.00L	200.00L	10.00
130747	50.00	100.00N	5.00N	10.00N	100.00L	20.00	50.00N	10.00N	300.00	10.00N
130748	70.00	100.00N	5.00N	10.00N	100.00	20.00	50.00N	10.00N	500.00	10.00N
130749	70.00	100.00N	5.00N	10.00N	150.00	20.00	50.00N	10.00N	200.00L	10.00N
130750	100.00	100.00N	5.00N	10.00N	100.00L	30.00	50.00N	10.00N	2000.00	10.00N
130751	200.00	100.00N	5.00N	10.00N	100.00L	20.00	50.00N	10.00N	2000.00	10.00N
130752	2000.00	100.00N	5.00N	10.00N	100.00L	20.00	50.00N	10.00N	7000.00	10.00N
130753	500.00	100.00N	5.00N	10.00N	100.00L	20.00	50.00N	10.00N	5000.00	10.00N
130754	300.00	100.00N	20.00	10.00N	100.00N	200.00	50.00N	10.00L	1000.00	10.00L
130755	20.00	100.00N	50.00	10.00N	100.00L	300.00	50.00N	15.00	200.00L	30.00
130756	500.00	100.00N	30.00	10.00N	100.00L	200.00	50.00N	10.00	1500.00	10.00
130757	20.00	100.00N	30.00	10.00N	100.00L	200.00	50.00N	10.00	200.00L	10.00L
130758	10.00	100.00N	30.00	10.00N	100.00L	300.00	50.00N	15.00	200.00L	20.00
130759	10.00N	100.00N	15.00	10.00N	100.00	200.00	50.00N	15.00	200.00L	20.00
130760	10.00N	100.00N	15.00	10.00N	100.00N	150.00	50.00N	10.00	200.00L	15.00
130761	30.00	100.00N	15.00	10.00N	100.00	150.00	50.00N	10.00L	200.00L	15.00
130763	15.00	100.00N	30.00	10.00N	100.00	200.00	50.00N	10.00L	200.00L	10.00
130764	10.00	100.00N	7.00	10.00N	100.00	30.00	50.00N	10.00L	200.00L	10.00
130765	15.00	100.00N	15.00	10.00N	150.00	70.00	50.00N	30.00	200.00L	70.00
130766	10.00N	100.00N	15.00	10.00N	150.00	70.00	50.00N	10.00L	200.00L	30.00

Galena is found throughout the sulfide zone as tiny relict crystals partly replaced by sphalerite, chalcopyrite, dolomite, and in one case altaite. Near the periphery of the sulfide zone, veinlets of galena fill fractures between host-rock minerals (fig. 10).

Tetrahedrite is found only as tiny crystals in zones free of galena. X-ray studies indicate no association with gold or silver.

Sphalerite is the major sulfide concentrated in the center of the sulfide zone and is associated mainly with chalcopyrite. Sphalerite forms large, anhedral crystals with well-developed lamellar twinning. It replaces older sulfides, especially pyrite, and fills minor fractures (fig. 11).

Chalcopyrite replaces sphalerite along cleavage planes or is present as inclusions.

METALLOGENY

Sulfides at Farah Garan occur as conformable layers within volcanic rocks and as stringers, irregularly shaped masses, disseminations, and wisps in intensely altered fault breccias. The sulfides are hosted by a complex of volcano-sedimentary rocks including dacitic tuff, calcareous tuff, andesite, dolomite, argillite, and carbonaceous rocks. In one locality, gold and silver are intimately associated with either sphalerite or chalcopyrite in a fault breccia that has been intensely altered by silica, dolomite, chlorite, and talc.

In the northern part of the ancient workings, quartz veins contain moderate amounts of gold; short distances east and west of the workings (Smith, 1979), gold is associated with silicified shears in metasedimentary rocks and with limonitic quartz veins in a lightly metamorphosed basalt that is thought to be much younger than the volcano-sedimentary rocks in the mine area.

The original sulfides probably were deposited under volcanogenic conditions and later modified by shearing and continuing hydrothermal activity. There clearly are two stages of sphalerite, and the younger seems to be associated with gold and silver.

A. M. Goodwin (1965) described the mineralized volcanic complexes in the Porcupine-Kirkland Lake-Noranda region, Canada in which massive-sulfide deposits, gold-bearing quartz veins, argentiferous galena at volcano-sedimentary contacts, banded-iron formations, and gold-bearing quartz-vein stockworks are all associated with Precambrian volcanic rocks of varied compositions. Goodwin (1965 p. 970) indicated that

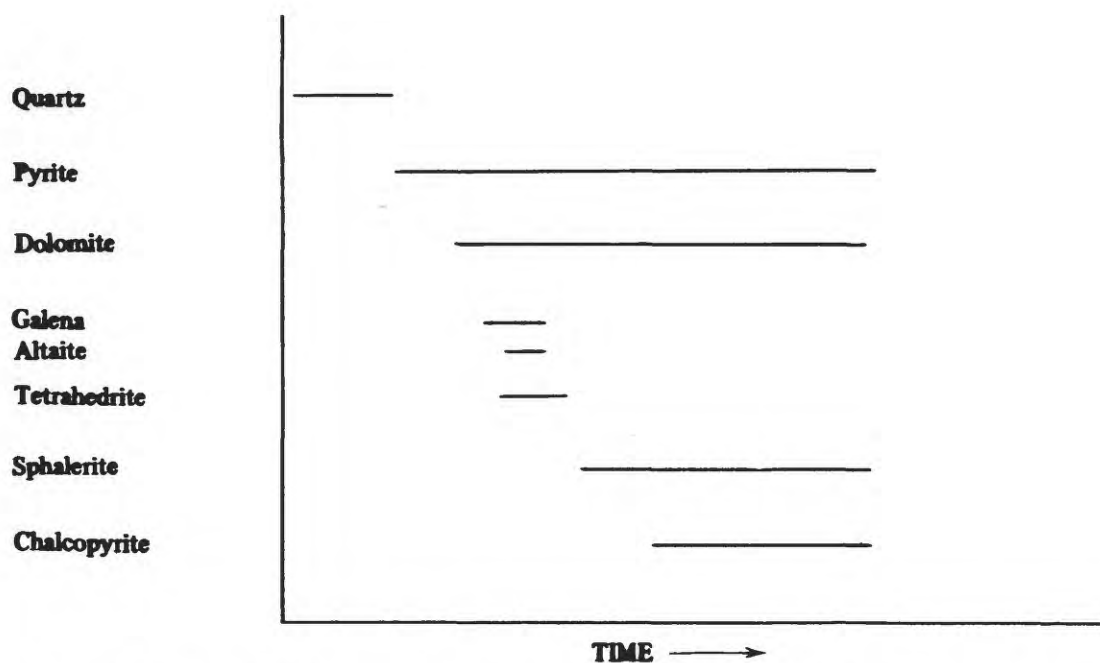


Figure 8.—The probable sequence of mineral formation at the Farah Garan ancient mine.

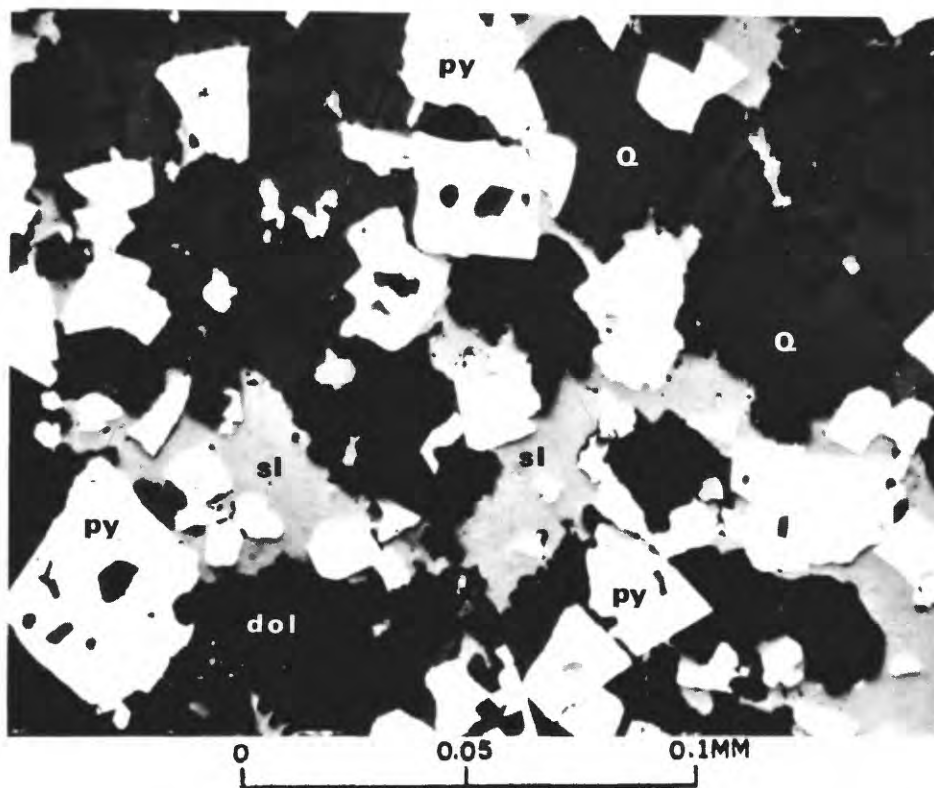


Figure 9.—Subhedral crystals of pyrite (py) corroded and replaced by sphalerite (sl), quartz (Q), and dolomite (dol). Drill hole F.G.-3 at 82.3 m.

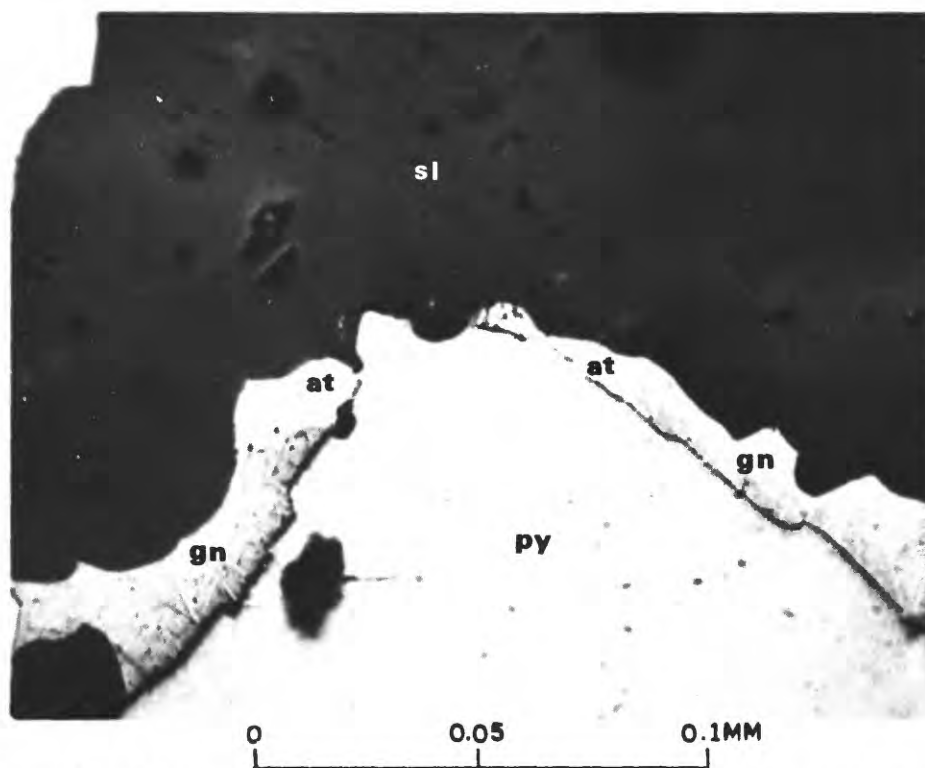


Figure 10.—Galena (gn) corroded by sphalerite (sl) and replaced by altaite (at).
Drill hole F.G.-3 at 82.5 m.

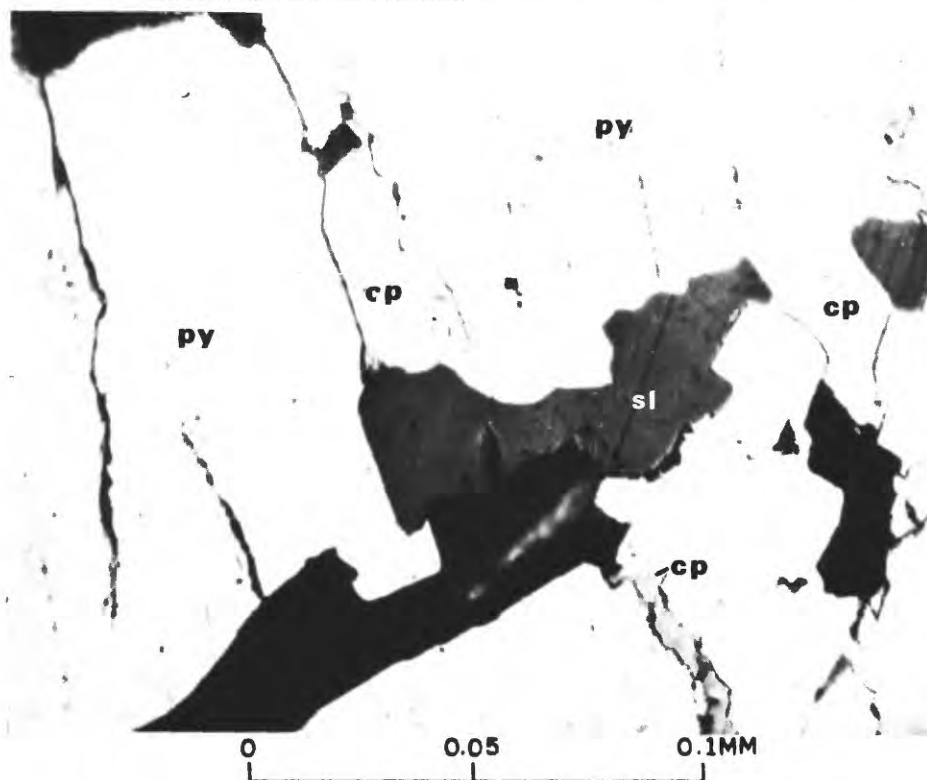


Figure 11.—Sphalerite (sl) partially replaced by chalcopyrite (cp) fracture filling and replacing
pyrite (py). Drill hole F.G.-3 at 82.8 m.

the valuable metal contents of the complexes are "an integral, consanguineous phase of igneous events that gave rise to the volcanic complexes themselves." This generalized explanation for a set of complex conditions may also be applied to the mineral genesis at Farah Garan. Additional laboratory work, including sulfur-isotope, fluid inclusion, and electron microprobe studies, would provide much more information concerning the genesis of the sulfides and precious metals and the mineral form of the gold and silver.

RECOMMENDATIONS

Any further work should include assays for arsenic and antimony of surface samples previously collected at Farah Garan. These elements, which are known to be present in the rocks of the area, might serve as pathfinders to precious or base metal deposits and assist in locating future drill holes.

Drill holes F.G.-1 and -2 did not intersect economic-grade base-metal sulfides or precious metals, even though they are found in intensely altered, sheared, and folded zones throughout wide intervals in both drill holes. Drill hole F.G.-3 intersected economic-grade base-metal sulfides and precious metals approximately 85 m below the surface. This drill hole is 300 m north of drill hole F.G.-2 (fig. 2), and the area between the holes is unexplored. The marble lens that crops out at the location of drill hole F.G.-3 continues north for 250 m, 60 m of which contain ancient workings on gossans at the marble-tuff contact. Thus, there is a good possibility of finding additional base-metal sulfides and precious metals along the marble-tuff contact of the lens drilled in F.G.-3. This lens could be tested by holes sited at 50-m intervals and drilled to depths of more than 100 m.

South of drill hole F.G.-1, gossanous zones in contact with marble lenses have been worked intensely by ancient miners (fig. 2). Drilling was originally proposed for this area, but access is difficult in the rugged terrain. Analyses of gossan surface samples show moderately positive results for gold, silver, and zinc. Gossanous marble-tuff contacts extend 300 m south of drill hole F.G.-1 and should be drilled. Many of the contacts lie approximately 100 m below the gossans explored in drill hole F.G.-1, and drilling in this area would provide information as to types and grades of metal deposition at much lower levels.

With drill core available for comparison, additional surface mapping would be helpful in delineating mineralized siliceous fault breccias. Refinement of rock types could also be made.

TURAM electromagnetic and self-potential ground geophysical surveys were conducted over the mine area (see Blank, in Smith, 1979). Neither was successful in outlining anomalies associated with known sulfide-bearing rocks. The main source of the geophysical anomalies appears to be carbonaceous layers in the metasedimentary rocks, and correlations between these anomalies and the carbonaceous rocks were obtained over wide areas. Blank (in Smith, 1979) stated that if drilling were successful, consideration should be given to using an electromagnetic method with closer spacing and mise-a-la-masse (downhole) induced-polarization methods. Very likely, the three drill holes could be used for this purpose.

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APPENDIX.-*Summary of drill-core logs*

F.G.-1

From (meters)	To	Description
0	10.00	Quartz crystal tuff, weathered
10.00	13.20	Graphitic schist with calcareous lenses. Fault with tight folding at 13.20 m (Farah Garan fault)
13.20	35.00	Quartz crystal tuff
35.00	37.80	Marble, dolomitic, tan to cream, fine-grained, unlayered
37.80	42.30	Tuff, gray-green, intense sericitic alteration
42.30	62.60	Sedimentary rocks, argillaceous, calcareous ranging to carbonaceous, and calacareous. Thin interbeds of quartz crystal tuff. Bottom of oxidized zone at 62.00 m
62.60	74.70	Andesite dike
74.70	87.60	Shale, gray to black, laminated, interbedded with thin layers of quartz crystal tuff
87.60	101.60	Tuff, nonfoliated, mottled
101.60	102.00	Shale, black
102.00	119.50	Tuff, banded, calcareous. Rhomb-shaped calcite porphyroblasts, 114.00-119.50 m
119.50	135.00	Breccia zone, siliceous, with zones of talc and chlorite alteration-fault breccia (?). Light-brown sphalerite, chalcopyrite, and pyrite scattered sparsely throughout; tetrahedrite very sparse in tiny crystals
135.00	169.80	Tuff, laminated. Moderately intense quartz-sericite alteration
169.80	171.60	Andesite dike, fine-grained, green, massive

APPENDIX.-*Summary of drill-core logs*-Continued

F.G.-1 (cont.)

From (meters)	To	Description
171.60	174.30	Tuff, gray to dark-gray, banded, contains few quartz crystals
174.30	174.70	Shale, graphitic
174.70	195.30	Tuff, banded, with few quartz crystals
195.30	197.40	Andesite dike, with coarse sericite crystals
197.40	225.00	Quartz crystal tuff, slightly carbonaceous, banded
225.00	225.50	Tuff, green
		End of hole, 225.50 m

APPENDIX.-Summary of drill-core logs-Continued

F.G.-2

From (meters)	To	Description
0	13.5	Tuff, banded, weathered, contains quartz crystals as much as 3 mm in diameter. Scattered veins and veinlets of milky quartz throughout
13.5	46.45	Tuff, banded, bearing both oxidized and unoxidized zones. Tight folding and faulting at 36.35 m and 45.15 m. Quartz veins and veinlets scattered throughout
46.45	53.30	Tuff, banded, contains feldspar crystals
53.30	72.55	Quartz crystal tuff, banded. Tightly folded zone bounded by fault gouge, 57.20-59.20 m. Tight folding-crenulations bordered by fault breccia resealed by silica; intense sericitic alteration, 62.10-64.00 m. Bottom of oxidized zone, 66.00 m. Tightly folded zone followed by a quartz vein, 72.10-72.55 m
72.55	92.80	Tuff, banded, light-gray, fine-grained, with very few quartz crystals. Tightly folded-crenulated, 85.00-92.80 m
92.80	93.30	Tuff with quartz crystals, intense sericitic alteration. Tightly folded-crenulated throughout
93.30	99.50	Tuff, finely laminated. Tightly folded-crenulated, 93.30-96.00 m
99.50	111.35	Quartz crystal tuff, intensely sericitized; folding-crenulations, 99.50-104.50 m and 107.00-109.80 m
111.35	111.85	Marble, cream, dolomitic, finely crystalline
111.85	133.65	Quartz crystal tuff, unbanded, locally contains feldspar crystals. Sulfide mineralization includes tan to yellow sphalerite, chalcopyrite, and tetrahedrite

APPENDIX.-*Summary of drill-core logs*-Continued

F.G.-2 (cont.)

From (meters)	To	Description
		in minor quantities; accompanied by pyrite, 122.00-133.65 m. Intense folding, shearing, sericitization with local bright-green, translucent chlorite and talc, 129.50-133.65 m
133.65	144.00	Quartz crystal tuff, intensely sericitized, very minor sulfides, scattered; intense folding, 133.65-140.00 m
144.00	144.80	Marble, cream, dolomitic, fine-grained
144.80	146.80	Feldspar porphyry tuff, gray, mottled; sparse sphalerite and chalcopyrite associated with abundant pyrite
146.80	151.00	Marble, cream, dolomitic, fine-grained
151.00	154.20	Tuff with feldspar crystals and tuff with quartz crystals, interlayered
154.20	169.40	Quartz crystal tuff. Sphalerite with chalcopyrite, 3-cm-wide band at 156.10 m. Sphalerite, yellow with pyrite, 10-cm-wide band at 163.30 m. Quartz vein with sphalerite and pyrite in selvage at 166.60 m
169.40	188.50	Feldspar crystal tuff grading into banded tuff
188.50	216.85	Tuff, banded, light-gray to dark-green, chloritized. Tuff, slightly calcareous, banded, 208.00-216.85 m
216.85	219.00	Marble, dolomitic, gray, massive
219.00	236.60	Tuff, faintly banded, fine-grained
236.60	243.00	Tuff, mottled, faintly banded
243.00	245.00	Tuff with feldspar phenocrysts
245.00	255.90	Tuff, finely banded, with scattered bright-green chlorite

APPENDIX. *Summary of drill-core logs*-Continued

F.G.-2 (cont.)

From (meters)	To	Description
255.90	261.00	Tuff and graphite, interlayered
261.00	277.80	Quartz crystal tuff, banded, slightly graphitic
277.80	281.20	Tuff, becoming more graphitic downhole
281.20	286.80	Schist, graphitic
286.80	292.35	Tuff, banded. Abundant pyrite at 288.00 m
		End of hole, 292.35 m

APPENDIX.-*Summary of drill-core logs*-Continued

F.G.-3

From (meters)	To	Description
0	49.95	Quartz crystal tuff, banded. Alternating oxidized and unoxidized zones, 0-35.90 m Bottom of oxidized zone, 45.90 m
49.95	62.50	Tuff, with numerous blue-tinted quartz crystals as much as 0.5 cm in diameter
62.50	65.85	Quartz feldspar tuff, dark-green
65.85	80.20	Tuff, contains scattered siliceous, rhomb-shaped porphyroblasts, approximately 2 mm in diameter, that cut foliation
80.20	98.20	Breccia zone (fault), flooded by quartz and calcite. Sphalerite abundant, chalcopyrite moderate, tetrahedrite scattered, 80.50-86.00 m
98.20	106.15	Marble, dolomitic, light-tan, faintly banded
106.15	173.30	Quartz crystal tuff, grading into banded tuff. Chlorite, bright-green, scattered, 130.00-133.00 m
173.30	194.05	Tuff, calcareous, slightly oxidized, grading into calcareous siltstone
194.05	198.00	Argillite-shale, black, folded and faulted
198.00	219.30	Tuff, banded, moderately calcareous
219.30	230.55	Shale, black, interlayered with calcareous siltstone
230.55	236.00	Dike, fine-grained, crystalline, massive
236.00	245.25	Tuff, banded
245.25	264.00	Tuff, calcareous siltstone, and partially graphitic siltstone and tuff, interlayered

APPENDIX.-*Summary of drill-core logs*-Continued

F.G.-3 (cont.)

From (meters)	To	Description
264.00	267.35	Siltstone, partially calcareous
267.35	270.00	Dike, andesitic feldspar porphyry
270.00	291.55	Tuff, with quartz crystals locally, partially graphitic. Red-brown sphalerite, in 4 mm-wide bands at 291.45 m
		End of hole, 291.55 m

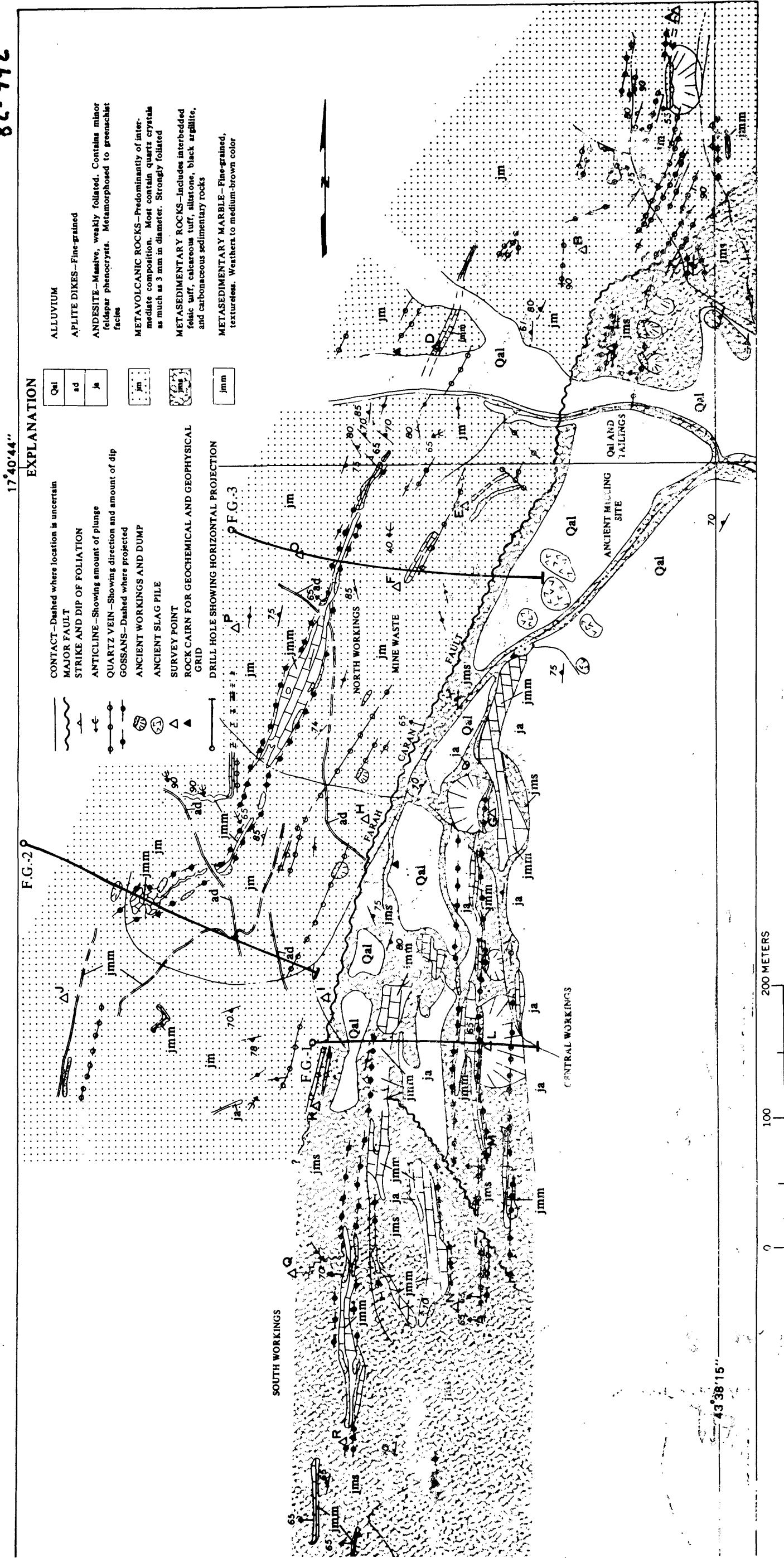


Figure 2.—Geologic map of the Farah Garan ancient mine area (adapted from Smith, 1979).

82-942

43°38'15"

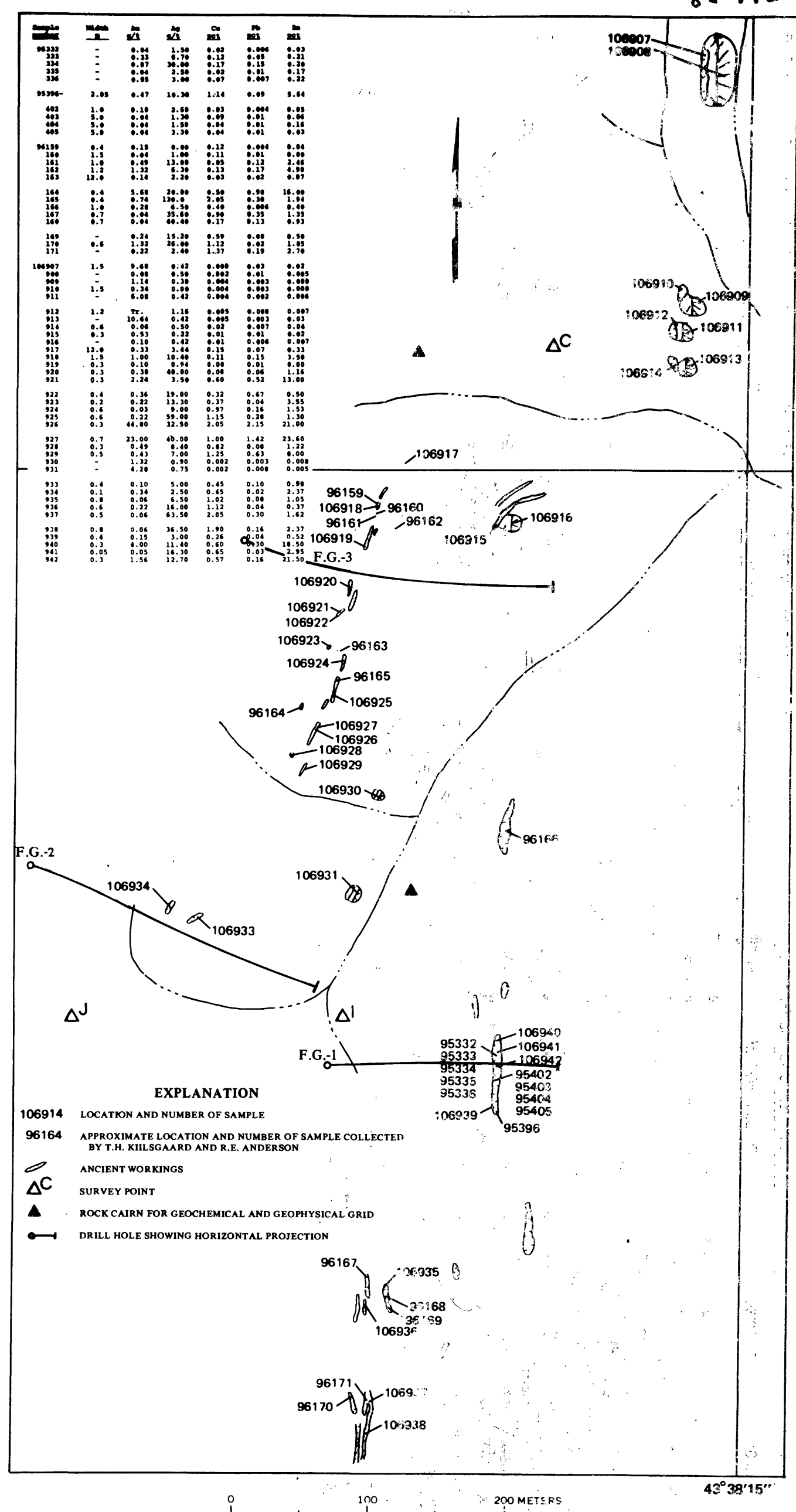


Figure 3.-Sample locality map and some geochemical results, Farah Garan ancient mine (adanted from Smith 1979)