

SUMMARY

The 1991 diamond drill program commenced on June 5 and was completed by June 23. A total of 1483.3 m in 17 holes was drilled during this period. This program tested a variety of coincident magnetic, induced polarization and geochemical anomalies associated with known mineralization on both the Main Grid and the Gibson Grid.

Nine holes (657.3 m) were drilled on the Gibson Grid to test recently discovered showings and strong multi-element soil geochem and IP anomalies. All holes on the Gibson grid intersected significant sections of intense clay-sericite-quartz alteration and pyrite-galena-sphalerite mineralized volcanics. Significant assays from these holes are: EA-91-01 : 9.18 m of 4.34 gpt Au, 224.3 gpt Ag, 0.9 % Pb and 0.6 % Zn. EA-91-02 : 5.3 m of 2.59 gpt Au, 122.9 gpt Ag, 0.625 % Pb and 1.50 % Zn. EA-91-05 : 4.26 m of 6.77 gpt Au, 1828.8 gpt Ag, 3.34 % Pb, 2.69 % Zn and 0.27 % Cu. EA-91-17 : Zone 1 - 4.1 m of 1.79 gpt Au, 47.72 gpt Ag, 0.53 % Pb and 1.09 % Zn. Zone 2 - 3.8 m of 1.46 gpt Au, 94.5 gpt Ag, 0.73 % Pb and 1.75 % Zn.

Eight holes (826.0 m) tested the Nighthawk and Vector Showings plus large moderate to strong chargeability anomalies. The four holes drilled in the Nighthawk and Vector zones intersected significant Cu-Au porphyry style mineralization over moderate widths with visible chalcopyrite ± bornite in sulphide stringers and disseminations. Significant assays from these holes are: Nighthawk Zone - EA-91-06 : 27.28 m of 0.87 % Cu, 0.32 gpt Au and 3.85 gpt Ag. EA-91-07 : 15.74 m of 0.69 % Cu, 0.20 gpt Au and 2.19 gpt Ag. Vector Zone - EA-91-12 : 17.9 m of 0.82 % Cu, 0.47 gpt Au and 4.11 gpt Ag. EA-91-13 : 20.2 m of 0.56 % Cu, 0.29 gpt Au and 2.84 gpt Ag.

The other four holes tested coincident magnetic and IP anomalies in the general area of the Nighthawk Zone. These intersected intense magnetite-biotite altered diorite with trace chalcopyrite, bornite and 1 % pyrite. These holes tend to indicate strong contributions to the IP response from the pervasive magnetite flooding.

of the Vector Zone mineralization associated with the IP chargeability anomaly located on line 42425N. It intersected diorite containing a zone from 22.00-48.40 m that is strongly fractured and strongly chlorite ± quartz and carbonate altered with 3-10 % chalcopryrite and 1-2 % pyrite. The zone from 22.00-42.20 m (20.20 m) averaged 0.56 % Cu and 0.29 gpt Au and 2.84 gpt Ag.

Significant assays from the 1991 program are tabulated in Tables 1 and 2 below.

Table 1.

GIBSON GRID HOLES (Holes 1-5 and 14-17)						
HOLE	INTERVAL m	WIDTH m	Au gpt	Ag gpt	Pb %	Zn %
EA-91-01	14.10-23.28	9.18	4.34	224.3	0.9	0.6
EA-91-02	17.20-22.50	5.30	2.59	122.9	0.6	1.5
EA-91-03	29.15-30.17	1.02	3.63	494.8	1.8	1.1
EA-91-04	25.89-26.88	0.99	6.41	252.0	0.8	1.0
EA-91-05	58.34-62.60	4.26	6.77	1828.8	3.3	2.7
EA-91-15	9.95-11.50	1.55	2.19	29.5	0.0	0.2
	71.55-74.40	2.85	0.62	20.6	0.1	0.5
EA-91-16	16.85-26.28	9.43	0.21	8.8	0.0	0.0
EA-91-17	39.30-43.40	4.10	1.78	47.7	0.5	1.1
	54.50-58.30	3.80	1.46	95.5	0.7	1.7

Table 2.

MAIN GRID HOLES (Holes 6-13)					
HOLE	INTERVAL m	WIDTH m	Cu %	Au gpt	Ag gpt
EA-91-06	5.07-32.35	27.28	0.87	0.32	3.85
EA-91-07	48.16-60.66	15.74	0.69	0.20	2.19
EA-91-12	18.50-36.40	17.90	0.82	0.47	4.11
EA-91-13	22.00-42.20	20.20	0.56	0.29	2.84

CONCLUSIONS :

The 1991 diamond drilling program on the Gibson Grid (holes 1-5 and 14-17) tested the strong IP chargeability anomalies and coincident multi-element geochem anomalies associated with the recently discovered Gibson Showing.

All holes drilled on the Gibson Grid encountered zones of pervasive clay-sericite alteration and from anomalous to ore grade Au-Ag-Pb-Zn zones. The first five holes were drilled at a relatively close spacing to try and determine an accurate orientation of the vein system, but failed to determine an exact orientation of the vein system, in fact the zone may be a multi-directional system. The same style of alteration and similar mineralization are present 200 m north and south of the Gibson Showing. This plus the extensive surface geochem anomalies and additional IP targets (see figures 1 & 2) indicates potential for a large high grade peripheral vein system to exist.

The drill program on the Main Grid (holes 6-13) tested the size and continuity of the Nighthawk and Vector Zone mineralization as well as large moderate to strong IP chargeability anomalies and coincident Cu  $\pm$  Au geochem anomalies.

Two holes testing the Nighthawk Showing (holes 6 and 7) delineated good copper-gold-silver grades over 27 m in hole 6 and 15 m in hole 7. This zone was not tested along strike or any deeper than 40 m vertical depth. Adjacent geophysical lines are 400 m away and holes 8-11 tested only a small part of the broad anomalies located on these lines. The Cu  $\pm$  Au geochem anomalies associated with the Nighthawk zone continues about 200 m to the south and 1000 m to the north of holes 6 and 7 (see figure 1). This leaves the system open to the north and south with excellent potential for a high grade Cu-Au porphyry system to exist.

Holes 8 to 11 were drilled to test large moderate to strong IP chargeability anomalies located on lines 40000N, 40400N and 40800N. It appears that the IP anomalies are caused by the presence of large amounts (20-50 %) of disseminated to massive magnetite combined with trace pyrite and chalcopyrite. This may represent a potassic alteration zone that consists primarily of quartz-magnetite flooding and common secondary biotite.

Holes 12 and 13 were drilled to test the width and continuity of the mineralization in the Vector Zone. These two holes were located 150 m apart along the strike of the zone and both returned good copper-gold-silver grades over 18 m in hole 12 and 20 m in hole 13. This zone is open to the north and south and has not been tested at vertical depths deeper than 25 m leaving excellent potential for a high grade Cu-Au porphyry system to exist.

RECOMMENDATIONS :

The first nine holes drilled on the Gibson Grid indicates that a fairly large alteration and mineralizing system is present in this area. Unfortunately, the principle orientation of the vein systems are still in question. To help resolve this problem it is recommended that mechanical trenching and washing be carried out near the showing, followed by close spaced geophysical surveys between lines 40200N and 41000N. This should then be followed up with further diamond drilling to determine the extent of the mineralization.

The Nighthawk and Vector Zones are both open along strike and at depth and are sufficiently documented to allow follow up by step out drilling along strike and down dip.