

PUEBLO AREA

Three I.P. anomalies in the Pueblo area have been detailed for diamond drilling: These are located in the areas given below:

Anomaly 'A'	Line 6-8 N	24-28 W
'B'	Line 22 N	10 W
'C'	Line 8-12 S	10 W

These anomalies although not particularly large are significantly above background and lie in interesting geologic situations.

1. Near to or on the diorite/skarn contact.
2. In vicinity of old Pueblo workings from which were recovered over 100,000 tons of 5% copper.
3. I.P. chargeability values equal to or larger than the high existing in the Pueblo Shaft area.

ANOMALY "A"

1000' south of the old Pueblo shaft area is most interesting as it lies associated with geochemical values of up to 4000 pp.m. copper in its immediate vicinity. The swamp directly above the anomaly was either not sampled or gave low order anomalous copper values. It also apparently strikes E-W judging by the chargeability contour map - this however is not a reliable guide and Jon Baird of Seigel Associates thinks the best way to drill would be on line 6N at 22 west, drilling west at  $-45^{\circ}$ . He also suggests that there is either low metal content causing these anomalies, or that the source of the anomaly is small with relation to the electrode spacing. A rule of thumb estimate indicates that a large mass containing 1% metal sulphides by volume (2% by weight appx) would give a chargeability of about 10 milli-seconds so long as the extent of the body is greater than the electrode separation. In the case of anomaly A, the peak is about 4 milli-seconds above the local background.

ANOMALY "B"

This is a stronger I.P. chargeability high rising to about 10 milliseconds above the local background. A trench across this anomaly on line 24 N has to be examined before commencing drilling, but assuming that no graphite is found then the anomaly should be drilled. The possibility of a blind ore shoot should not be ignored.

ANOMALY "C"

On line 10 S at 10 E (on Best Chance Grid) is a broad high with a peak of 9m/sec at 10 E, 4m/sec above background. Detailed work using 100 and 50' electrode springs confirms the peak which is very well marked.

The anomaly deserves drilling, though it should be noted that it lies parallel to the regional strike of the sediments and may be a graphitic horizon in the limestone. There are indications that the anomaly continues under swamp to the north where it was not possible to complete the I.P. survey.

#### SUMMARY

Three anomalous areas of I.P. response were found during December 1970, the Pueblo area. All three occur in areas considered very favourable on account of the geology (proximity of diorite/skarn contact) and the past production record of the area. While the anomalies are not extremely large they are significantly above background, and certainly parallel, in the case of B/ & C/, to the regional strike of the sediments in the area. All three anomalies lie in areas of interest outlined on the basis of the geochemical soil survey, though there is no direct correlation between the two.

#### DRILLING RECOMMENDED

Anomaly A/ should be drilled during the winter months as it lies in an area partly in swamp which may be inaccessible during summer.

Anomaly B must await investigation of the trench on line 2<sup>1</sup>/<sub>4</sub> North around 10 W.

Anomaly C could be drilled during summer or at the same time as Anomaly A.

- N.B.
1. Of the \$24,000 allocated to the Pueblo project, \$12,000 is estimated to have been spent to cover the 18 line miles of I.P. work and extra line cutting.
  2. Any new lines cut have been covered by M.F.I. fluxgate magnetometer and plans are being prepared (on standard plates).
  3. A report and final maps are in preparation by Seigel Associates in Vancouver.

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