

ANVIL MINING CORPORATION LIMITED

017458 105 K 3

MEMORANDUM

TO:.....Distribution..... FROM:.....D. S. Jennings.....
SUBJECT:.....KERR ADDISON'S LYN CLAIM GROUP..... DATE:.....November 7, 1973.....

Kerr-Addison's and Cyprus' data on the Lyn claims (105 K-3) are summarized below:

History:

The Lyn group was staked by Kerr-Addison in 1969 on completion of a regional geochemical survey (Glenlyon Project). The claim group was covered by a detailed soil sampling survey in 1969, a gravity survey in 1971 and three follow-up diamond drill holes (1326 ft.) in 1971. Cyprus optioned the Lyn in 1972 completing 400 scale geological mapping of the claims and drilling of three holes (2177 ft.) on coincident gravity and geochemical targets. The claim group comprises 71 full mineral claims held by Kerr-Addison, good to a common date of March 1, 1977. Anvil requested data on the Lyn from Kerr-Addison and Cyprus to review the property for possible joint venture.

Geochemical Data:

A coincident Pb/Zn soil anomaly 15,000' x 4500' was defined by the 1969 survey. This anomaly is open to the NW and SE and generally parallels the regional strike of a calc-silicate phyllite unit in the area. Depths of significant sulfide intercepts (> 85') in drill core suggest the soil anomaly is not related to the drilled sulfides. Mapping by Cyprus personnel has defined numerous small surface sulfide showings in the calc-silicate sequence. The soil anomaly is most likely related to the bulk composition of the underlying rock unit(s) or near surface sulfide occurrences.

Gravity Data:

Inspection of the residual gravity map prepared by R. B. Galeski from data collected by Airborne Geophysical Surveys shows a belt of five 1.0 milligal anomalies within a broad gravity "ridge" coincident generally with both the soil geochemical anomaly and the calc-silicate unit as mapped by P. F. Lewis of Cyprus.

The coincidence of the gravity "ridge" with the calc-silicate unit and the absence of sulfide-rich mass concentrations in 3 of the 5 drilled anomalies on this "ridge" suggests the observed gravity response is due in large part to specific gravity differences between the calc-silicates and their enclosing pelitic host rocks. This calc-silicate unit is a ridge-former along the southwest margin of Tintina Trench. Buried bedrock ridges in this unit may also influence the gravity results.

Diamond Drilling:

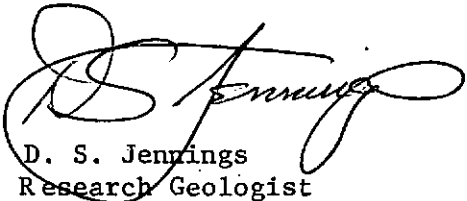
A total of six holes have been drilled on gravity or coincident gravity and geochemical anomalies on the Lyn group. Only one gravity anomaly greater than 1.0 milligal remains untested. There is no geochemical response associated with this anomaly. Of the six drill holes completed, two, 71-1 and 72-1, intersected significant sulfides. DDH 71-1 encountered disseminated sulfides in calc-silicates assaying 0.20% Pb and 4.13% Zn between 86 and 90 feet. DDH 72-1 intersected one ten foot section (150 to 160 feet) of brecciated calc-silicate phyllites assaying 5.77% Pb and 3.02% Zn with the mineralization forming part of the breccia matrix. These holes are 1500 feet apart and appear unrelated in terms of : a) stratigraphic position (see cross section along line 134 W) and b) deposit type (dissemination vs. breccia fill). The Kerr-Addison log of 71-1 further suggests the intersected sulfides do not form a mass concentration sufficient to generate the coincident gravity response.

Recommendations:

It is recommended Anvil not participate in a joint venture with Kerr-Addison on the Lyn for the following reasons:

- a) The coincident geochemical and gravity anomalies appear to be related to the calc-silicate phyllite unit on the Lyn as discussed above.
- b) Known sulfide occurrences are not particularly impressive and do not appear related to one large deposit.
- c) Previous work suggests magnetic and electromagnetic methods to be of limited use because:
 - (i) Magnetite and pyrrhotite are not known to be associated with the Pb/Zn mineralization.
 - (ii) Graphitic units are commonly present in core from drilled anomalies.

Consequently, geophysical surveys are probably of little use in exploring the calc-silicate sequence on the Lyn.



D. S. Jennings
Research Geologist

DSJ/mm

cc. R. L. Haffner
U. Jansons
A. Allan

November 23, 1973

Mr. W. Sirola
Regional Manager
Kerr Addison Mines Ltd.
1112 West Pender Street
Vancouver, British Columbia

Dear Bill:

We have reviewed the exploration data you forwarded us on the Lyn claims. As you indicated in an earlier letter, there are a large number of Pb/Zn occurrences on the property.

Basically, we attribute the nearly coincident geochemical and gravity anomalies to the bulk composition of small surface showings in, and specific gravity of the calc-silicate phyllite unit running through the central portion of the property. We've encountered somewhat similar situations on the northeast side of the trench. For these reasons, we are not interested in joint venturing the Lyn at the present time.

We've enclosed the thirteen (13) items you forwarded covering the Lyn and thank you for your cooperation.

Yours truly,

D. S. Jennings
Research Geologist

DSJ/mm

Enc.

Anom

Rk. Type

~~1-30~~ L71-1

B enveloped by
D

~~1-30~~ 72-3

L-71-1

Map
control. by
D

Log

-2

D

-3

E

72-1

D

-2

D

-3

D enveloped
by C

15,000 x 4500

71-1 unit C

86-90 4' 4.33%
combined

72-1 unit D

150-160 10' 8.79%
Combined

Brick fill

Max. possible dimensions

4500'

Lyn Group - (from K/A data)

10.5 K 3 56
7

Prospecty:

71. claims to common beds, March, 1977

History:

K/A completed detailed soil geochem survey followed by gravity survey followed by 3 DDH's and best gravity anomalies of

Gravity:

Residual map gave anomaly pattern suggestive of lithologic control. Perhaps CS unit mapped by PFI coincides w/ gravity highs. Possibly gravity anomaly should be re-evaluated in terms of 5.9 data on under-lying sub units. Also puzzling as to how regional gradients can be established because of short traverse line lengths. Only data. K/A provides a) top elevation map b) Bouger values c) contour. Bouger map d) residual NB profiles. Overlaying residual gravity & Lewis' mapping shows all unusual anomalies due to, or coinciding with unit D or C/D combinations. These cat types are: C - graphitic gty schist & phyll. interbedded w/ D

D - CS gneiss w/ minor marble interbeds

Drilling:

DDH L 71-1:

Drilled 500' @ -90° on 1.30 mgal gravity anomaly plus coincident Pb/Zn geochem. Soil Pb > 600 ppm, Zn > 200 ppm

Results:

Hole largely on schists & phyllites of Lewis' unit C. No significant sulfides. 400-481 0.22% Pb 1.74% Zn
54-90 0.20% Pb 4.13% Zn

DDH L 71-2:
Drilled 400' @ -60° on 1.60 mgal gravity anomaly plus coincident Zn geochem. Soil Zn > 200 ppm

Results:
Hole largely on schists, phyllites & CS? and graphitic units. No significant sulfides

Lyn (from Thales Exploration Rpt)Property

48 claims, KIA. Thales staked 8, filed assessment
 on 15 more. Total of 71 claims all to common
 date 1, March, 1977

History

Staked by KIA in 1969 as regional geochem. follow-up
 Detailed soil survey, gravity, selected CEM and SP. 3
 DDHs in 1971 (1326) on straight gravity. 71-2 hit
 18" of concordant sulfides (0.34 Pb, 0.97 Zn). 1:400
 scale geol mapping in 1972 by Thales w/ drilling of
 coincident gravity & geochem.

DDH Summary:

453-72-1

Drilled 691' @ -90° on 71.0 milligal anom, soil
 Pb > 300 ppm, Zn > 500 ppm.

Results:

150-160 Sulfides heal liza in CS gneiss
 5.77% Pb, 3.02% Zn

453-72-2

Drilled 797' @ -90° on 0.8 milligal anom, soil
 Pb > 300 ppm, Zn > 500 ppm

Results:

No mineralization

492-520 White mica schist bounded by
 graphitic gneiss

453-72-3

Drilled 689' @ -90° on 71.0 milligal anom, soil
 Pb > 300 ppm, Zn > 500 ppm.

Results:

Zero, 360-370 @ 0.65% Pb, 0.08% Zn
 High siderite in hole

2-691
 797
 689
 2177

DDH L 71-3:

Drilled 426' @ -60° on 1.10 mgal. gravity anomaly with
concurrent Pb/Zn geochem. Pb in soil ? 100 ppm, Zn ? 200 ppm.

Results

No sulfides

900
426
73