

019068

DEC 17 1973

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

Vangorda
(K)

To G. M. Hogg From W. M. Sirola

Subject VANGORDA MINES LIMITED - POSSIBLE INTER-
PRETATION OF GRAVITY CROWDING AT DOAL LAKE Date December 14, 1973

Vangorda Mines
(4)

W.J.
D.M.H.
G.M.H.
M.D.R.
I.D.B.
R.D.S.
G.R.
T.W.B.
E.C.J.

In an effort to determine whether or not the somewhat steeper gradient in the gravity contours at Doal Lake relates in any way to the mineralization encountered in AEX drill hole No. A-4, we took a 201 foot section which encompassed both massive sulphide bands together with some unmineralized phyllite and calculated the density of this section to be 3.08 g/cm³. Since the density of the phyllites is 2.70, there is a 0.38 contrast between the mineralized zone and the rock. By projecting this mineralized zone up-dip in accordance with the core angles in drill hole A-4, the mineralized zone would sub-outcrop at the northeast shore of Doal Lake. If we assume the center of this mineralized zone to be buried 100 feet then the gravity relief of this zone, using the equation for a flat slab, would be 0.46 milligals. The actual equation is: depth to center = 0.65 x G (max.) ÷ maximum slope. This checks well with the amplitude increase shown by the crowding of the gravity contours.

The calculation was checked by assuming a horizontal buried cylinder with a radius of 100 feet and a density contrast of 0.38 and the gravity relief for this geometry would be 0.485 milligals.

Since there is always more than one solution to any gravity problem the only purpose this exercise serves is to suggest that the crowding of gravity contours at Doal Lake could be a manifestation of a gently dipping mineralized zone. To some extent this possibility is enhanced by the fact that the airborne magnetic work done by Dynasty Explorations in 1965 indicates a causative mass at 1000 foot sub-flight or approximately 800 feet below ground surface. The intersection of highly magnetic sulphides in drill hole A-1 was at a depth of 850 feet.

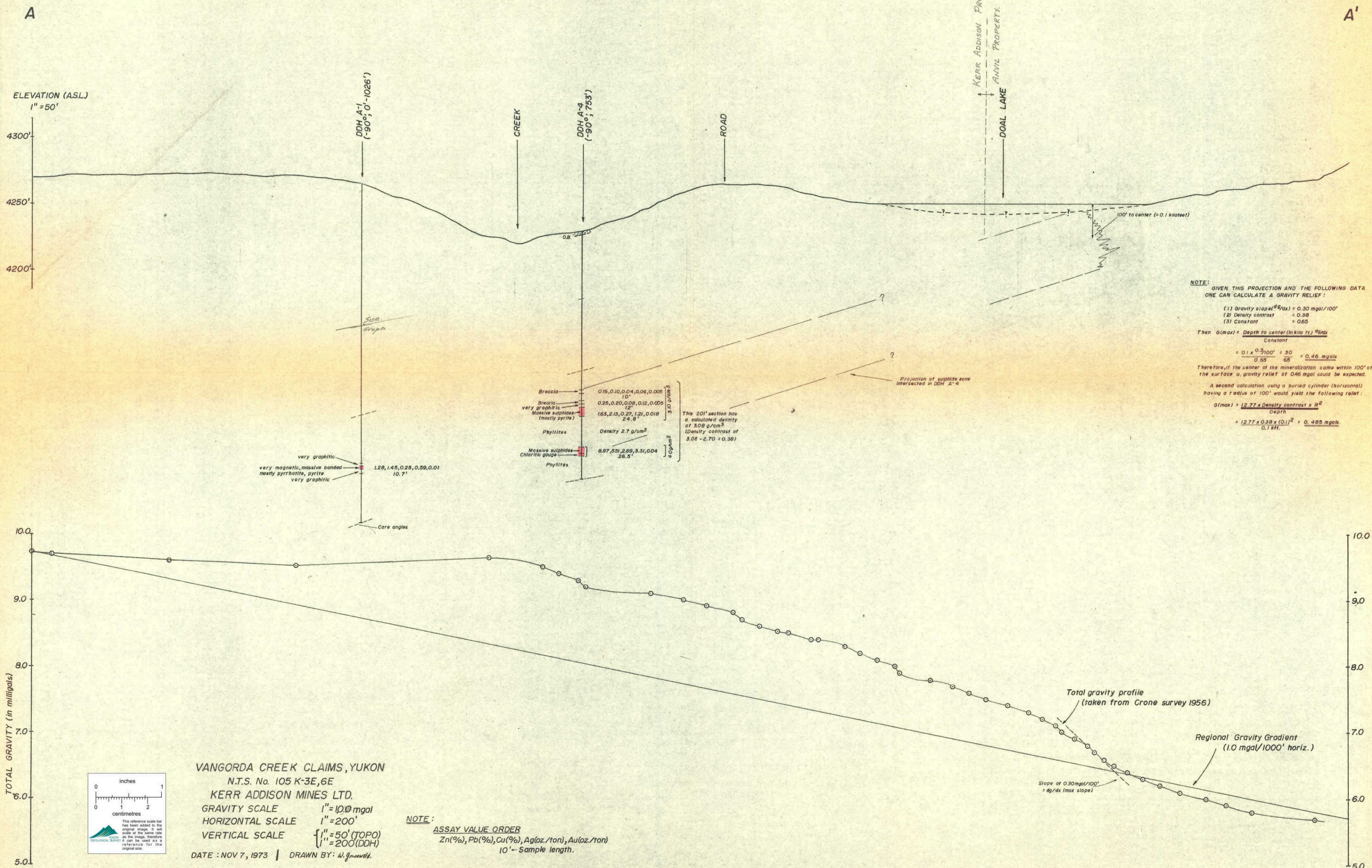
WMS

WMS/rb

W. M. Sirola

Encl. Vangorda Creek Claims,
Gravity Section A-A'.

VANGORDA CREEK CLAIMS, YUKON
GRAVITY SECTION A-A'
(LOOKING NORTHWEST)



VANGORDA CREEK CLAIMS, YUKON
N.T.S. No. 105 K-3E, 6E
KERR ADDISON MINES LTD.
GRAVITY SCALE 1" = 100 mgal
HORIZONTAL SCALE 1" = 200'
VERTICAL SCALE 1" = 50' (TOPO)
1" = 200' (DDH)

NOTE:
ASSAY VALUE ORDER
Zn(%), Pb(%), Cu(%), Ag(oz./ton), Au(oz./ton)
10' - Sample length.

DATE: NOV 7, 1973 | DRAWN BY: W. J. G. [signature]

