

REPORT ON GEOPHYSICAL WORK

ON

MINERAL CLAIM GROUP C-1

MCs C1-6, C7-14, C27-28

CLAIM SHEET 116-B-8

LATITUDE $64^{\circ}19'N$

LONGITUDE $139^{\circ}14'E$

JULY 23 - 28, 1976

for

STANDARD OIL COMPANY OF BRITISH COLUMBIA LIMITED

by

HELMUT H. WOBER, P.Eng.

of

CHEVRON STANDARD LIMITED



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This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 3350.00

~~Resident Geologist or
Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

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1) Claims

This report covers work performed on the C-1 Group of Claims, all held in the name of Standard Oil Company of British Columbia Limited.

C 1-6	YA 2342 - 2347
C 7-14	YA 2684 - 2691
C 27-28	YA 2704 - 2705

2) Introduction

The claims were staked in 1975 based on reconnaissance airborne radiometry and reconnaissance streamsilt sampling. The work program in 1976 was carried out by staff of Chevron Standard Limited, Minerals Staff, Suite 901, 355 Burrard Street, Vancouver on behalf of Standard Oil Company of British Columbia Limited, the registered owner of the claims.

The work was aimed at the discovery of uranium mineralization.

3) General Geology and Economic Geology

Reference is made to G.S.C. Memoir 364, by L.H. Green which contains maps and descriptions of the general geology of the area.

The claim group is underlain by unit 21b of L. H. Green which consists of hornblende and hornblende/biotite syenite belonging to an east-west trending chain of cretaceous intrusive stocks of varying composition. The stock at hand which is also referred to as the Antimony Stock is the eastern most of three syenite stocks. The two other stocks are the Deadman Stock and the Tombstone-Brenner Stock. A number of discrete smaller plugs fringe the main intrusives.

The cretaceous syenites and their varying phases intrude into Precambrian sediments (unit 3 of L. H. Green).

The stocks have been worked on in the past in the search for gold and/or copper mineralization. An Antimony showing is located at the southwest contact of the Antimony Mountain Stock.

Airborne radiometric surveys and streamsilt sampling have indicated the presence of uranium in the intrusive in geochemically anomalous quantities. It has not been determined as yet if this mineralization is characteristic of certain phases or lithologic units of the intrusive or if it has been remobilized into any structural traps.

4) Work Performed

a) General

A crew of 4 was employed to carry out the work, consisting of the establishment of a linegrid, prospecting and radiometry on grid lines as well as along elevation contours at regular intervals. Control on elevation contours was provided by the use of Thommen Altimeters and Topofil chains. The crew was mobilized from an other area in the district and supplied from Dawson City both by T.N.T.A. Helicopter (Jet Ranger 206B). The writer spent 2 days in the field and 2 days for the preparation of this report and maps.

b) Geophysical Survey

Ground radiometric surveys were carried out using 5 Scintrex BGS-1SL total count scintillometers (Serial Nos. 602315 to 602319 incl.). The instruments feature a 1.5" x 1.5" Thallium activated Sodium Iodide crystal detector coupled to a photomultiplier tube and give radiation readouts in counts per second.

The instruments also have a variable threshold audio alarm signal.

All station readings were taken at waist level. The instruments were kept in the "switched on" position and monitored while traversing between picket stations.

Changes in radioactivity were found to reflect mainly different lithologies. It will be subject to further rock geochemical studies to determine, whether the changes are due to varying contents in radioactive minerals such as uranium and thorium or whether they are due to changes in the potassium content of the rocks.

5) Conclusions and Recommendations

As a result of the survey it can be concluded that as far as observed to date, the airborne anomalies and stream silt values are due to unusually high background in certain phases of the intrusive. No structurally controlled mineralization has been found to date. It is recommended that systematic geological mapping, rock and soil/silt geochemical surveys be carried out in order to determine the content of radioactive minerals.

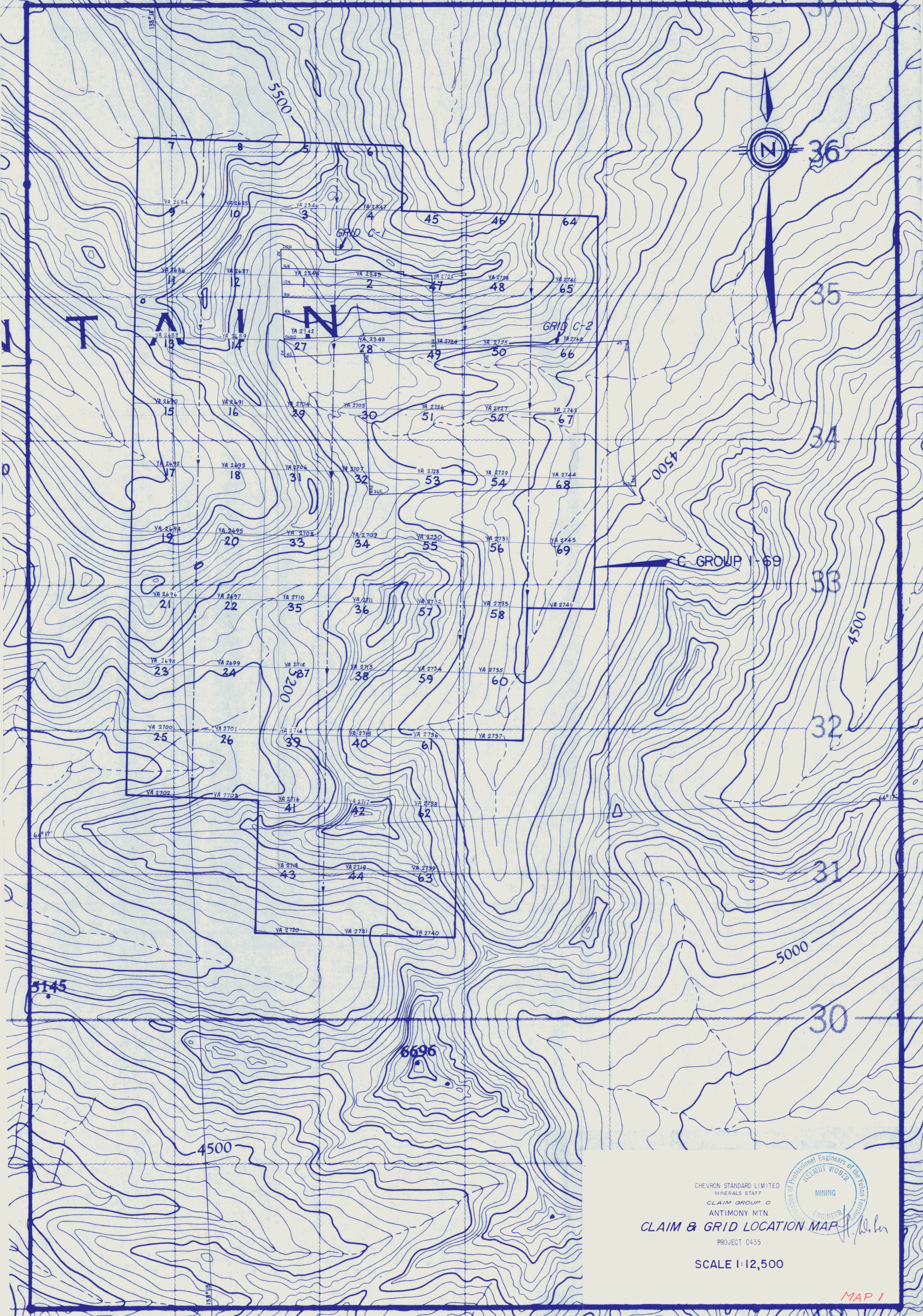
6) Personnel and Qualifications

Graeme Dales, Geologist, B.A. University of Alberta, 1974.
Graduate Work in Precambrian Geology,
Geochemical Exploration Methods, Structural
Geology and Metamorphic Petrology,
University of Toronto 1975/76.
Five summers exploration experience with
Western Warner Oils and Modesto Exploration.
May - September, 1975, Mines Branch,
Energy, Mines and Resources, Calgary.

Godfrey Walton, Geologist, B.Sc. Honours 1974
M.Sc. Queen's University, 1976
Alberta Research - summers of 1971, 72, 73.
International Nickel Co. - summers 1974, 1975.

John Gajda, Field Assistant, 3rd year Geology Major, U.B.C.
Six summers of field experience in mineral
exploration.

Warren Pritchard, Field Assistant, experience with
Rio Tinto, summer 1974.



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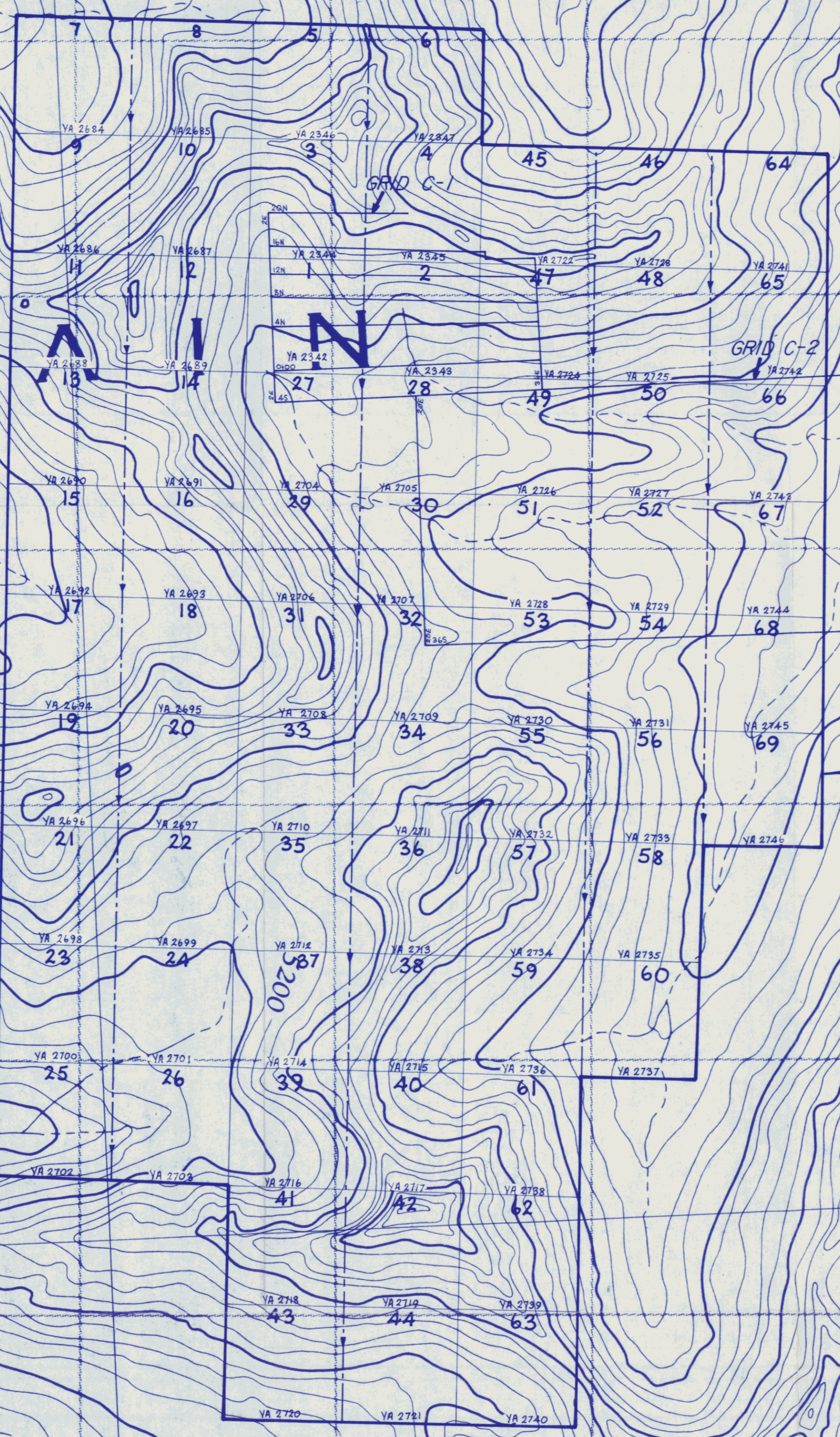
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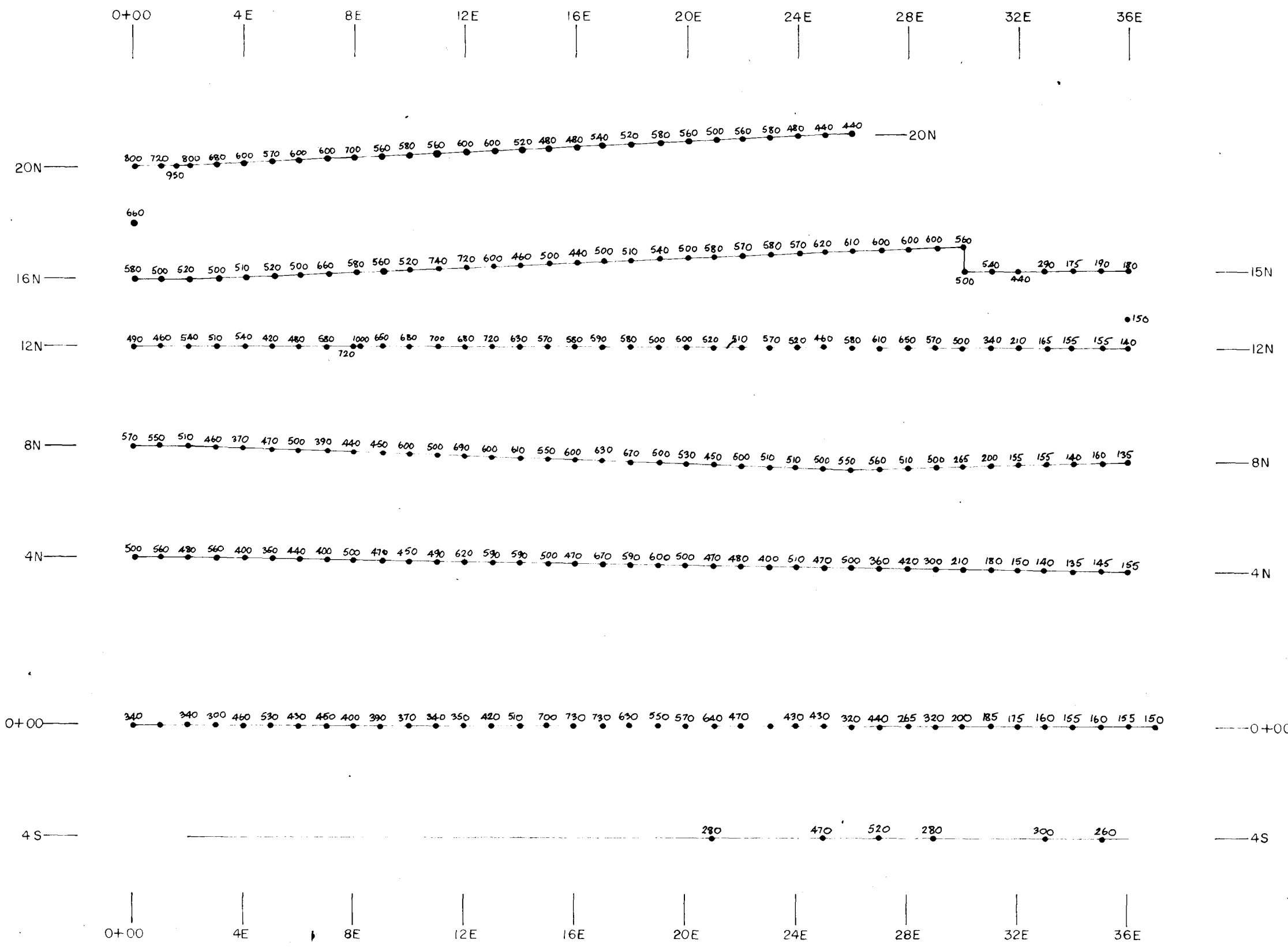
CHEVRON STANDARD LIMITED
MINERALS STAFF
CLAIM GROUP C
ANTIMONY MTN
CLAIM & GRID LOCATION MAP



PROJECT C435

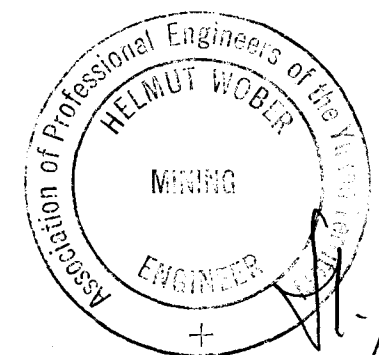
SCALE 1:12,500

MAP 1



LEGEND

•510 Scintillometer value in counts per second
Instrument - Scintrex BGS ISL.



CHEVRON STANDARD LIMITED
MINERALS STAFF

CLAIM GROUP
RADIOMETRIC SURVEY
GRID C-1
PROJECT C435



MAP 2