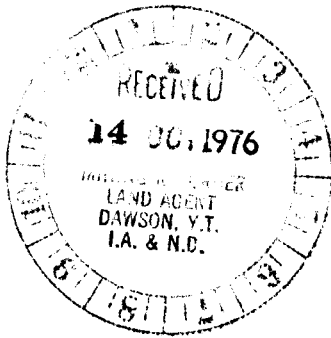


REPORT ON GEOLOGICAL,
GEOCHEMICAL AND GEOPHYSICAL SURVEYS
ON MINERAL CLAIM GROUPS

- Group C-2: C15-22, C29-36
- Group C-3: C23-26, C37-44, C59,61-63
- Group C-4: C45-55, C57, C64-68
- Group C-5: C56, C58, C60, C69



Claim Sheet 116-B-8

Latitude 64°17'

Longitude 138°13'

July 29 to August 13

for

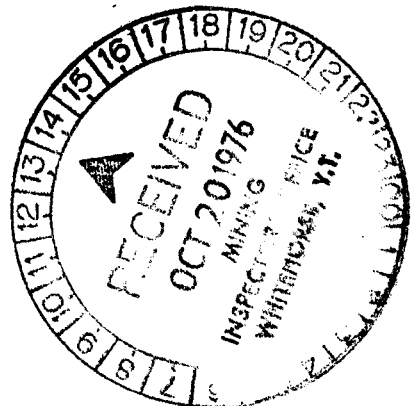
STANDARD OIL COMPANY OF BRITISH COLUMBIA LIMITED

by

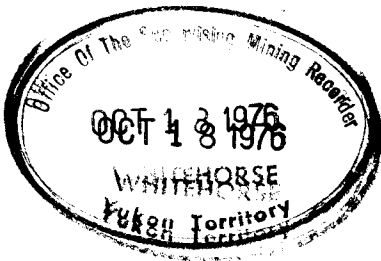
Helmut H. Wober, P.Eng.

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 \$ 5200.00

W. Sinclair

~~Resident Geologist or
Resident Mining Engineer~~

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

B.R. Baxter

B.R. BAXTER
Supervising Mining Recorder

~~Commissioner of Yukon Territory~~

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MAPS:

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2:	Geological Map
3:	Radiometric Grid C-2
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7:	Geochemical Map Grid C-3 - Uranium
8:	Geochemical Map Grid C-4 - Uranium
9:	Stream Silt Samples - Uranium

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.

Group 2	- C15 - 22	YA 2692 - 2699
	C29 - 36	YA 2706 - 2713
Group 3	- C23 - 26	YA 2700 - 2703
	C37 - 44	YA 2714 - 2721
	C59	YA 2736
	C61 - 63	YA 2738 - 2740
Group 4	- C45 - 55	YA 2722 - 2732
	C57	YA 2734
	C64 - 68	YA 2741 - 2745
Group 5	- C56, 58, 60	YA 2733, 2735, 2737
	C69	YA 2746

2) Introduction:

The claims were staked in 1975 based on reconnaissance airborne radiometry and reconnaissance stream silt 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 C.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 3 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.

c) Geological Mapping and Sampling

Geological mapping was carried out by traversing on foot using 9" x 9" airphotos as a base. Samples of the different rock types were collected both for analysis and for later study of thin sections. The present mapping and interpretation is based on field observations and the study of handspecimen.

An attempt was made to map phase boundaries of the various phases, however, outcrop is confined mainly to the ridges and large portions of the claims are covered by talus and glacial debris which obscure the relationships in those areas. The accompanying map covers not only the claim groups described in this report but also adjoining claim groups of the same owners. Part of the time and work spent on geological mapping will also be applied to these groups. G. Walton and G. Dales, the two geologists employed in the survey give the following account of their field observations:

"Petrology"

The rocks of the Antimony Stock and surrounding area consist of:

- 1) Black and white quartz monzonite to monzonite
- 2) Dyke rocks - feldspar porphyries
- 3) Contact rocks - Quartzite
Siltstone
Shale

The monzonite is the major intrusive phase on Antimony Mountain. Locally the quartz content increases enough to have the rock called a quartz monzonite, however, the change is very gradual and not mappable. The intrusive is porphyritic with feldspar phenocrysts ranging from $\frac{1}{4}$ " to 1" in length surrounded by a medium to coarse grained matrix. Hornblende is the major mafic mineral varying from 10% to 25% of the total rock.

The dykes are highly weathered with feldspar phenocrysts surrounded by a fine grained matrix.

The country rocks are thinly bedded sediments and around the intrusive they are metamorphosed but no grade was established.

Structure

The structure is represented by

- 1) small offset faults
- 2) joints
- 3) locally a poor foliation

The rocks are generally massive, poor jointed although the vertical north trending joints are sometimes most obvious."

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 streamsilt 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.

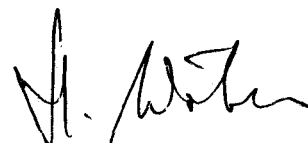
6) Personnel and Qualifications:

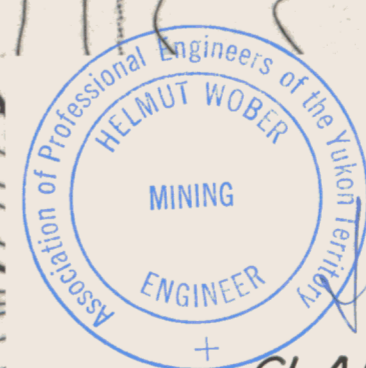
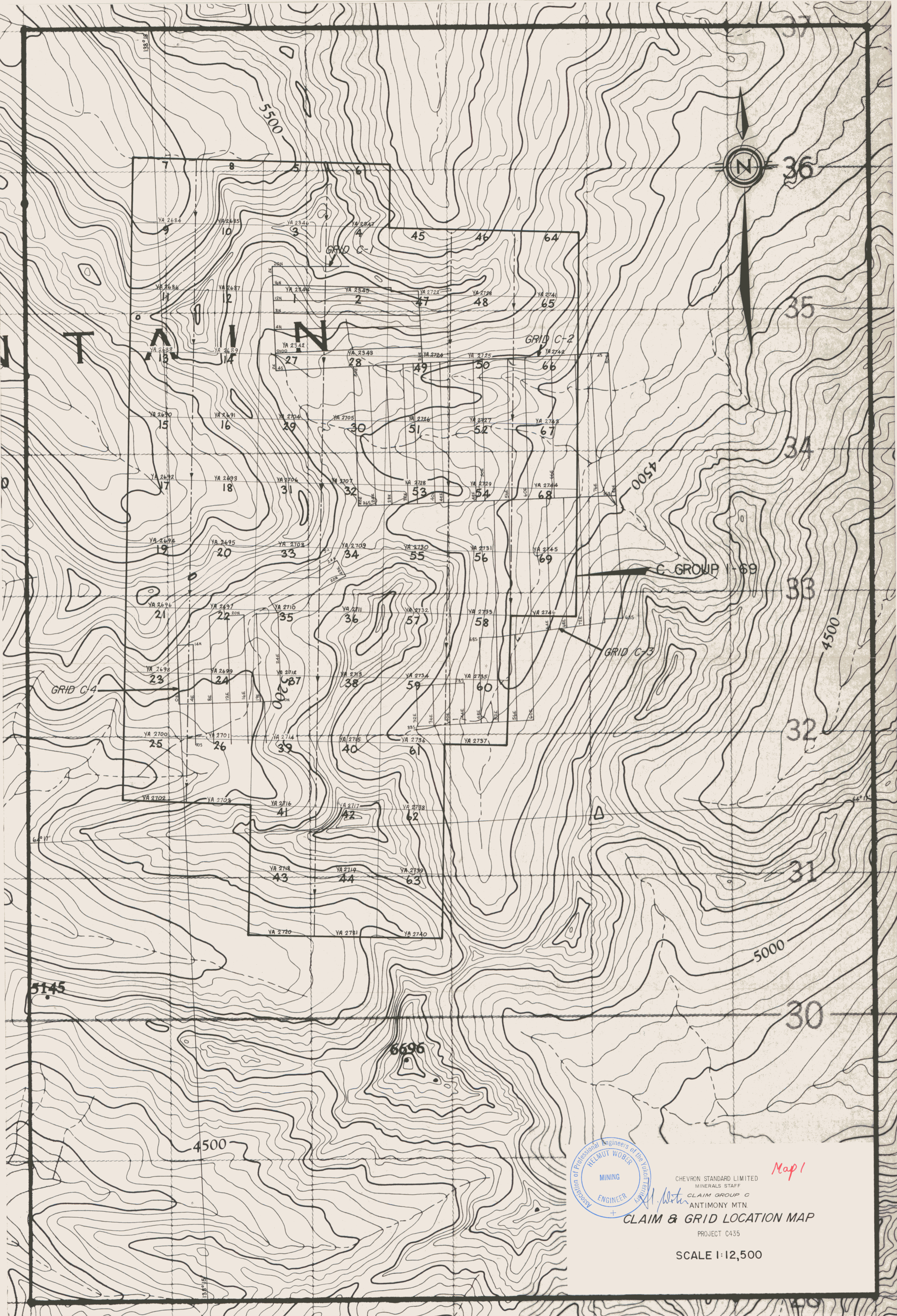
Graeme Dales, Geologist, B.A. University of Alberta, 1974.
Graduate Work in Precambrian Geology,
Geochemical Exploration Methods, Structural
Geology and Metamorphic Petrology,
University of Toronto 1975/76.
Five summers' exploration experience with
Western Warner Oils and Modesto Exploration
May - September,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

Godrey 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.

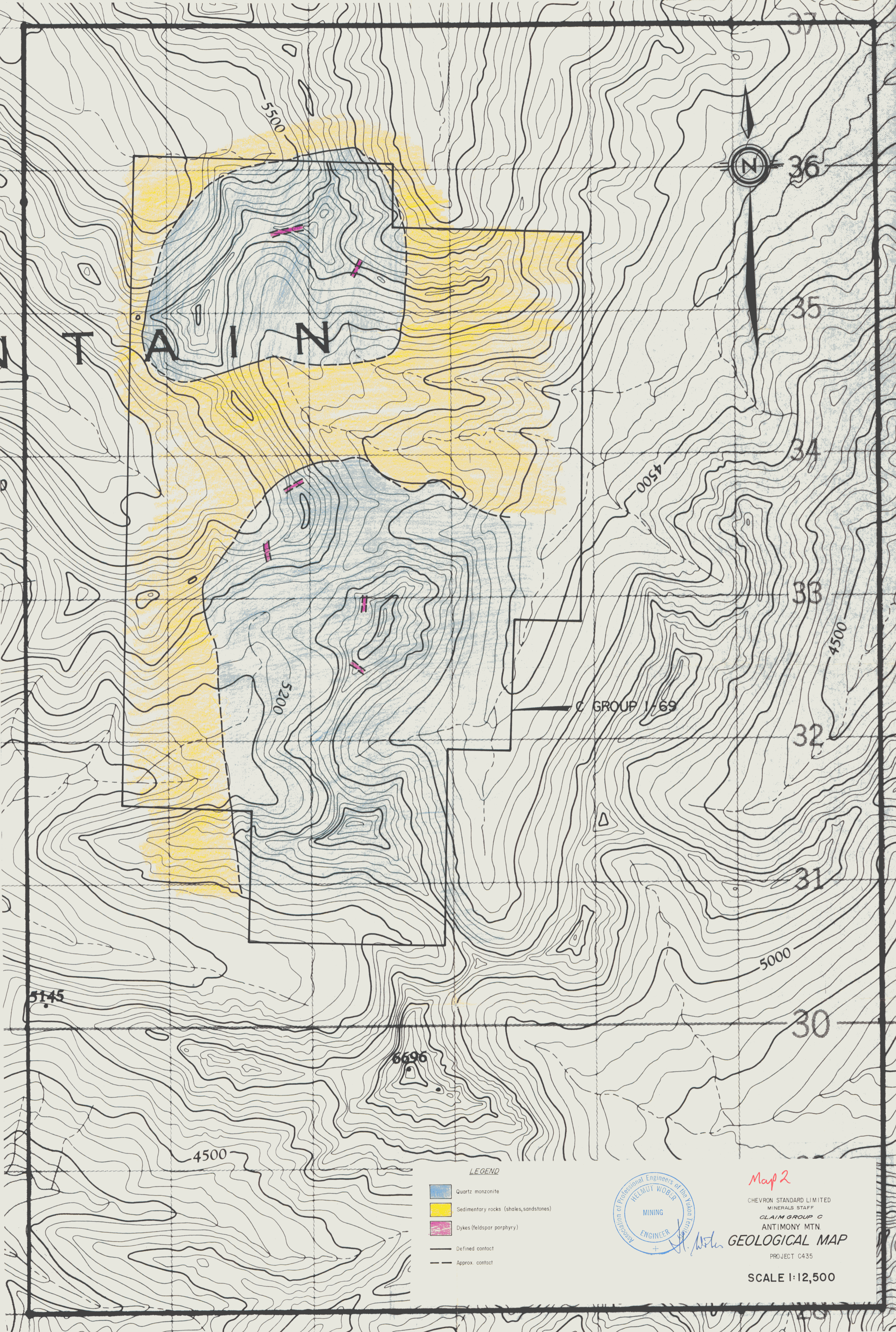
Warren Pritchard, Field Assistant, experience with Rio Tinto,
summer 1974.

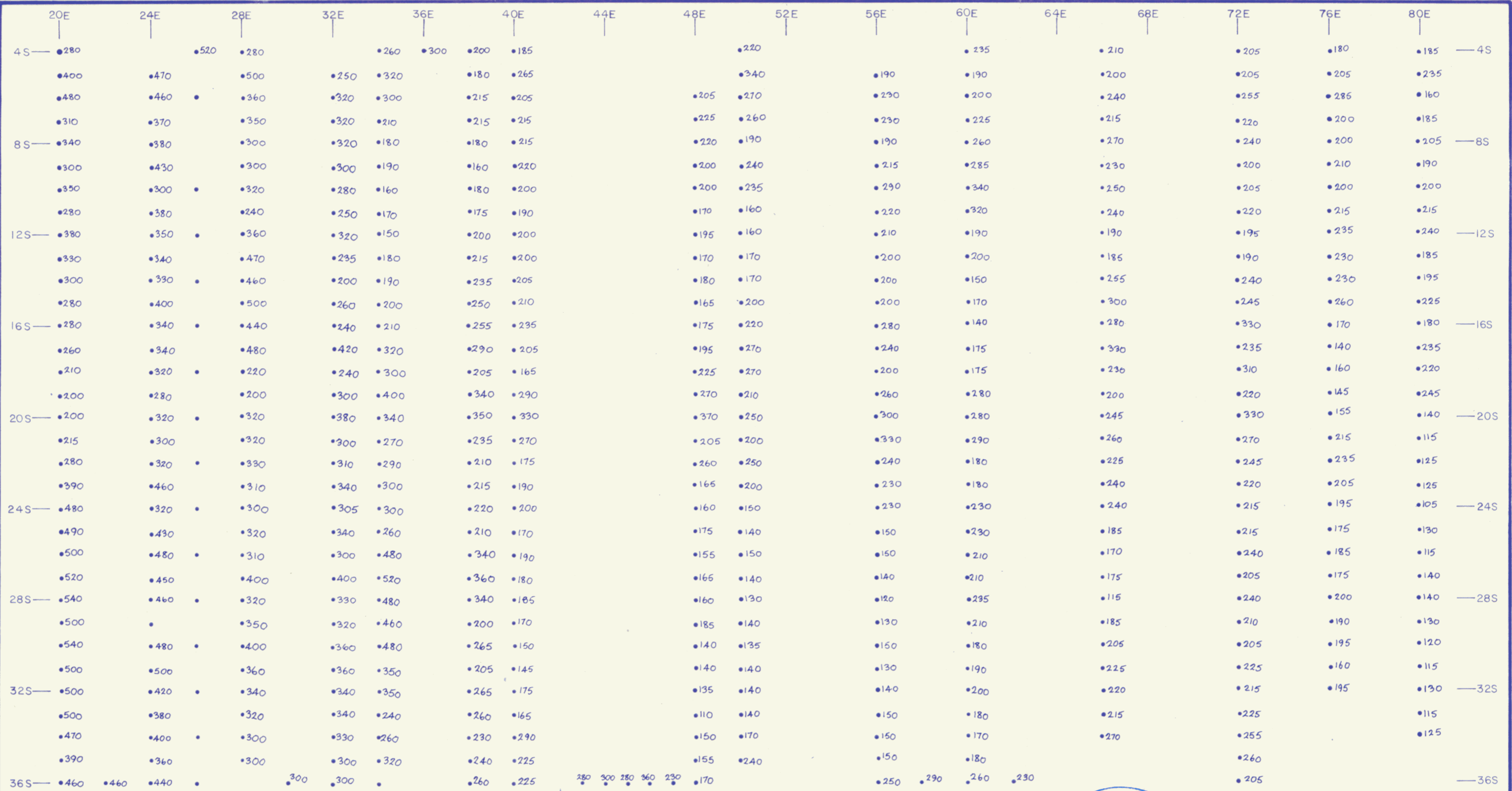




Map 1
CHEVRON STANDARD LIMITED
MINERALS STAFF
CLAIM GROUP C
ANTIMONY MTN
CLAIM & GRID LOCATION MAP
PROJECT C435

SCALE 1:12,500



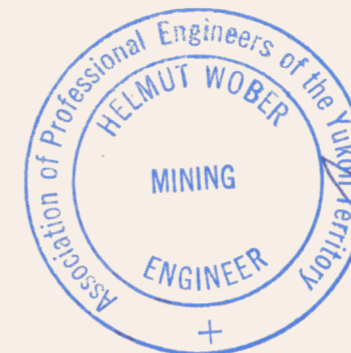
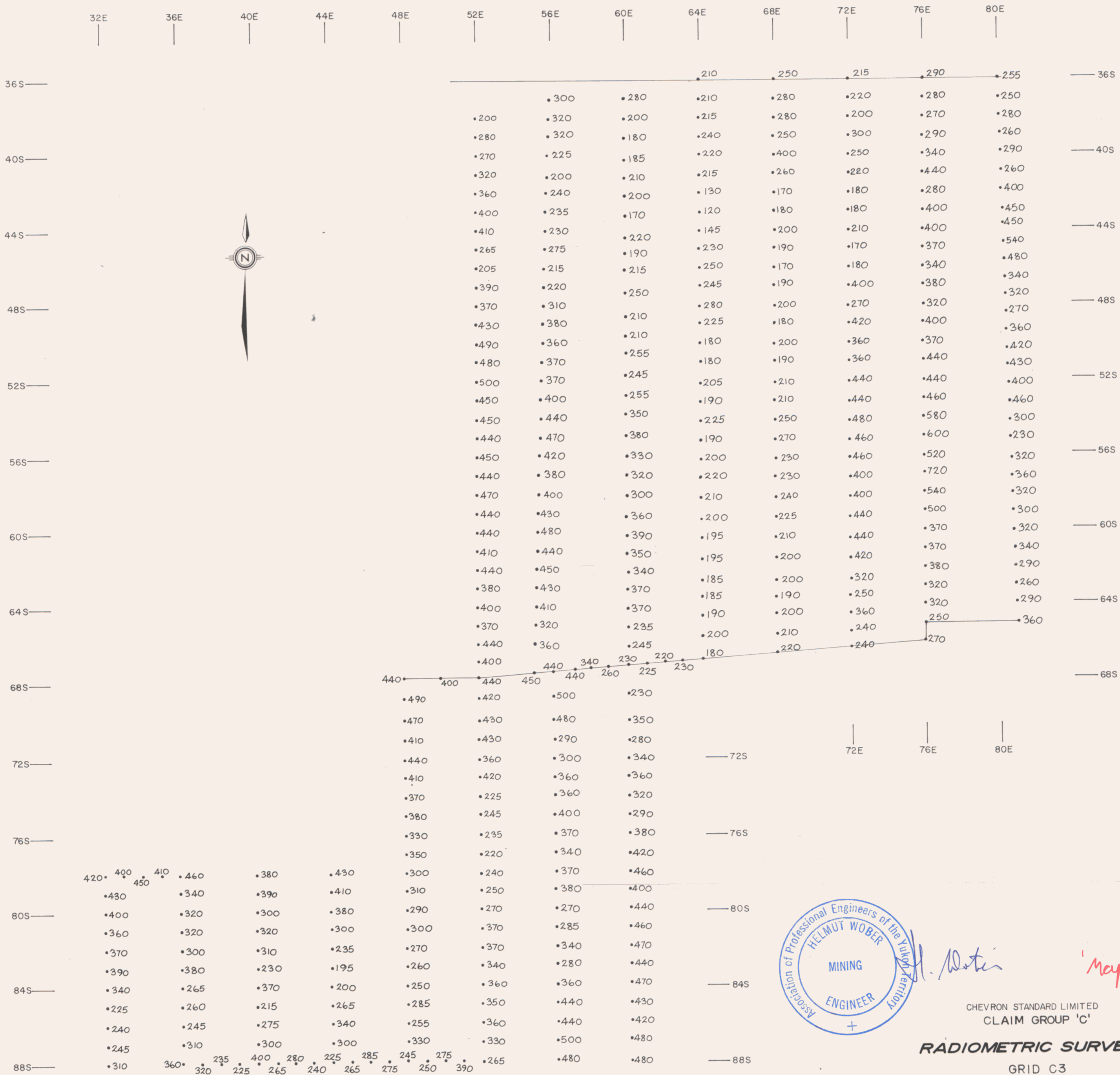


LEGEND

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



map 3
CHEVRON STANDARD LIMITED
MINERALS STAFF
CLAIM GROUP
RADIOMETRIC SURVEY
GRID C-2
PROJECT C435
SCALE IN FEET
0 400 800



H. Wober Map 4

CHEVRON STANDARD LIMITED
CLAIM GROUP 'C'

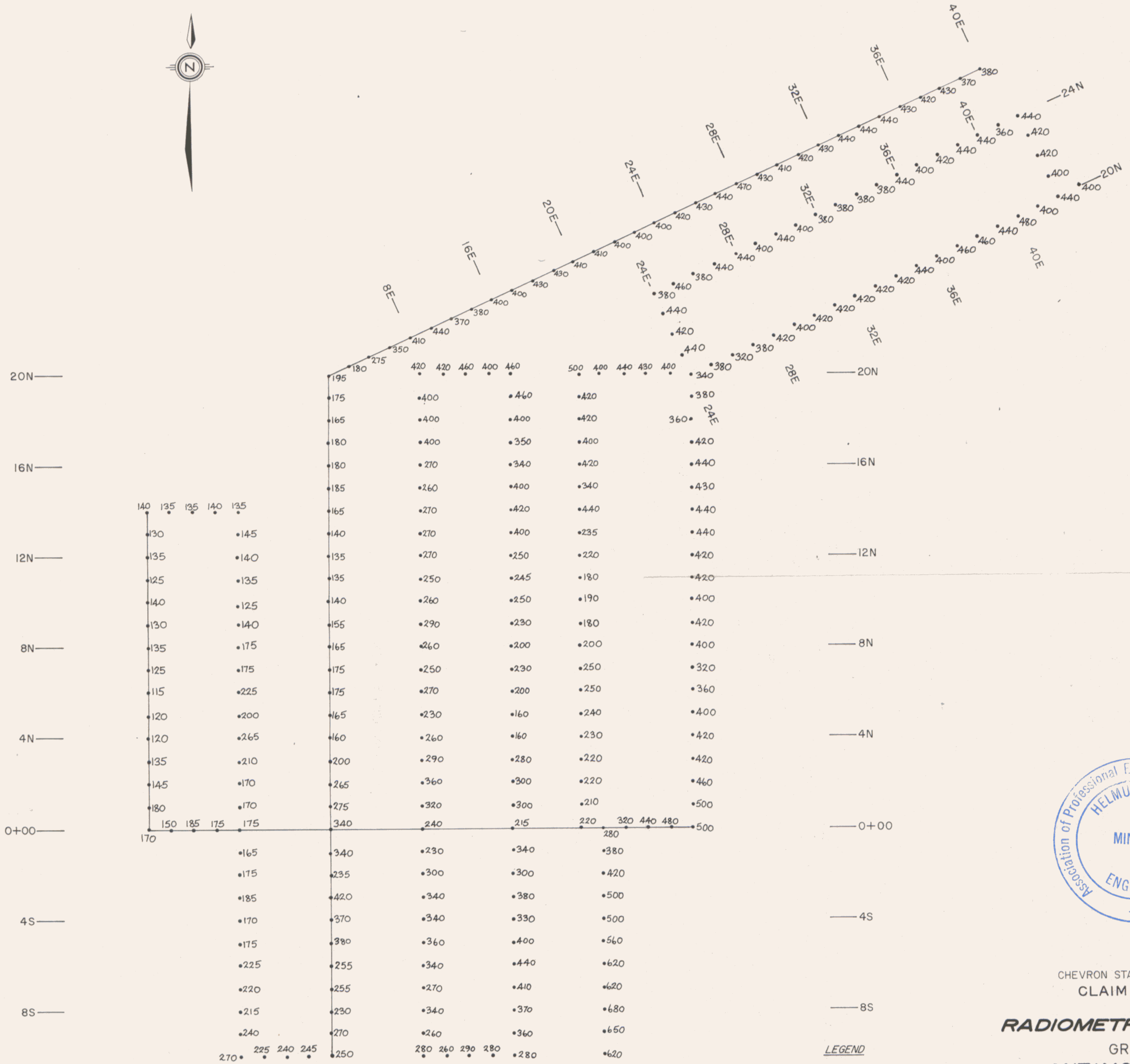
RADIOMETRIC SURVEY
GRID C3
ANTIMONY AREA
PROJECT C435

LEGEND

• 480 Scintillometer value in counts per second
Instrument: - Scintrex BGS ISL

SCALE IN FEET
0 400 800

32E 36E 40E 44E 48E 52E 56E 60E

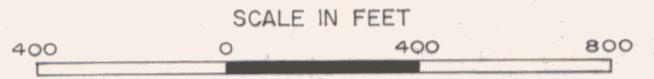


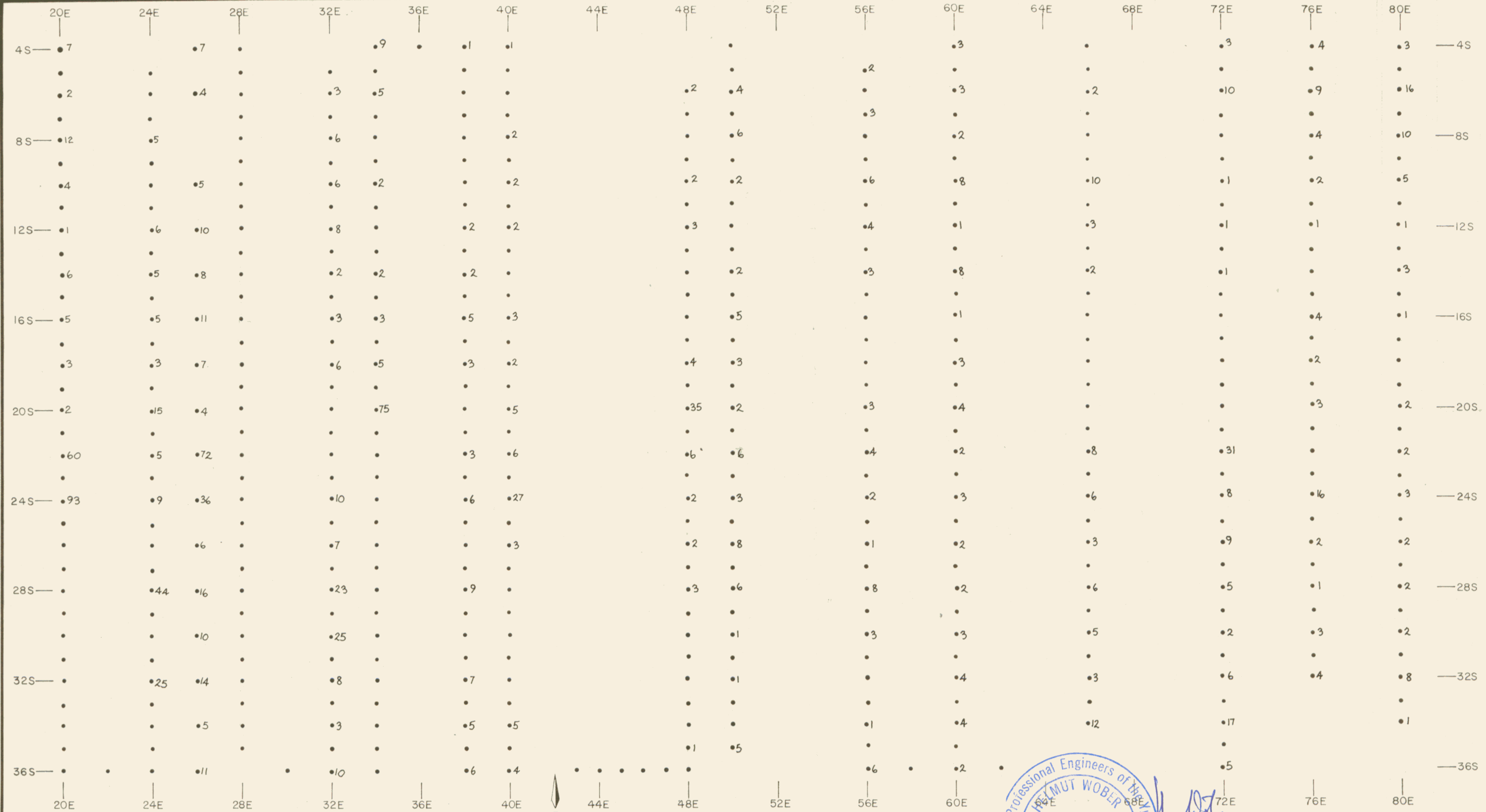
Handwritten signature of Helmut Wober

CHEVRON STANDARD LIMITED
CLAIM GROUP 'C'

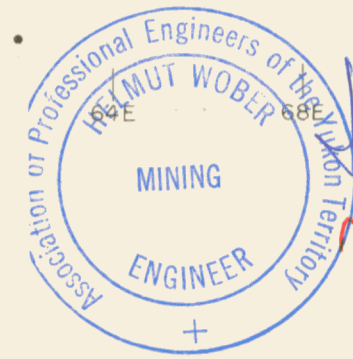
Map 5

RADIOMETRIC SURVEY
GRID C4
ANTIMONY AREA
PROJECT C435



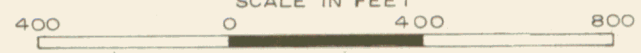


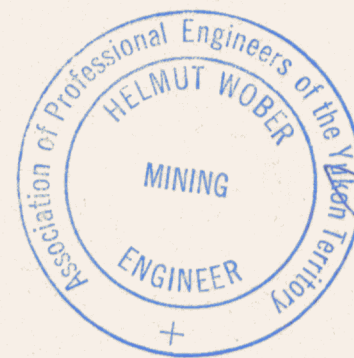
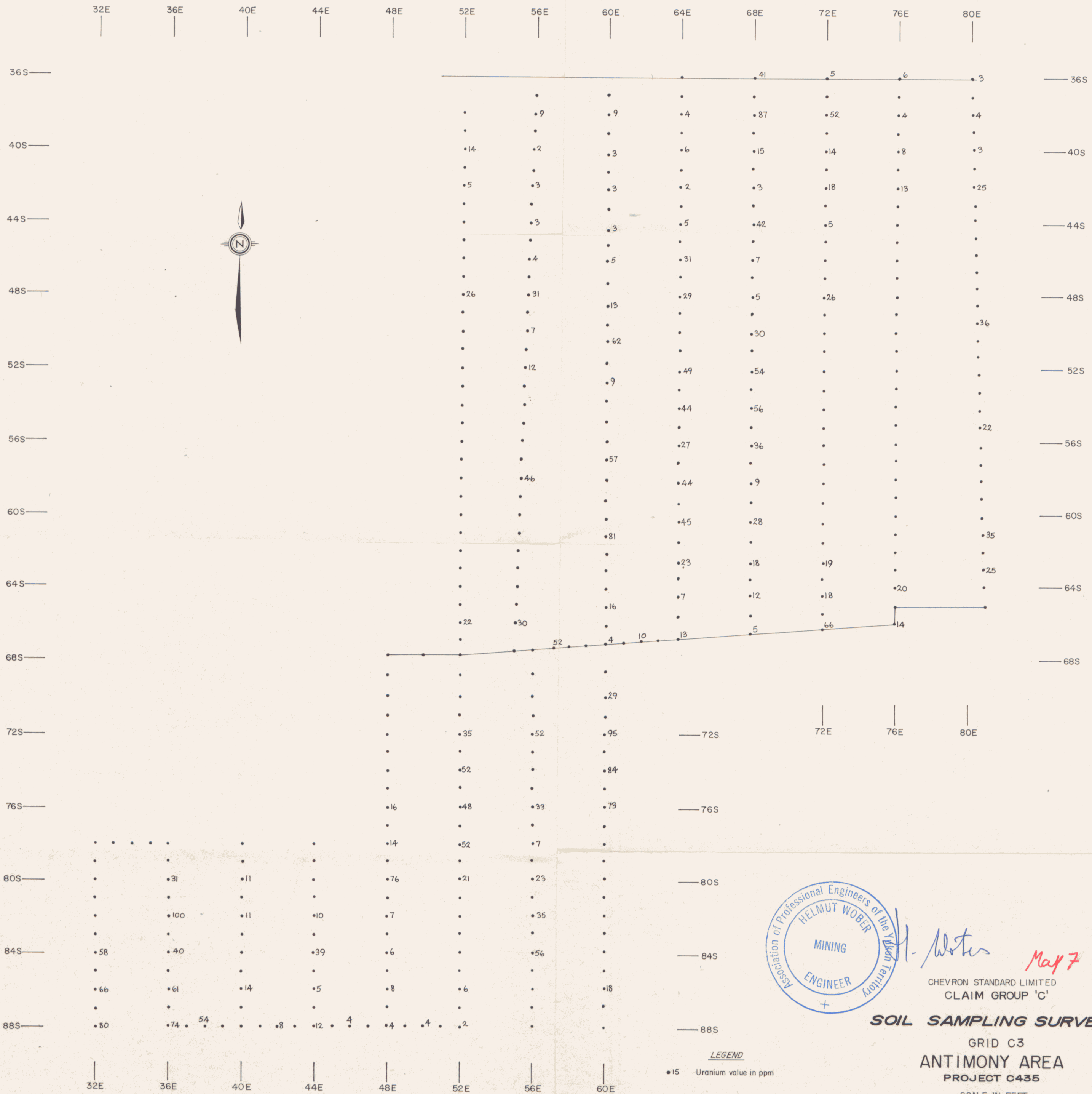
LEGEND
 •12 Uranium value in ppm



Map 6

CHEVRON STANDARD LIMITED
 MINERALS STAFF
CLAIM GROUP
GEOCHEMISTRY
GRID C-2
PROJECT C435





H. Wober
May 7

CHEVRON STANDARD LIMITED
 CLAIM GROUP 'C'

SOIL SAMPLING SURVEY

GRID C3
 ANTIMONY AREA
 PROJECT C435

LEGEND
 •15 Uranium value in ppm

