

5964

GEOCHEMICAL - GEOPHYSICAL  
REPORT  
CHINOOK CONSTRUCTION  
&  
ENGINEERING LTD.

Wendy claims, Grand Forks area, Greenwood

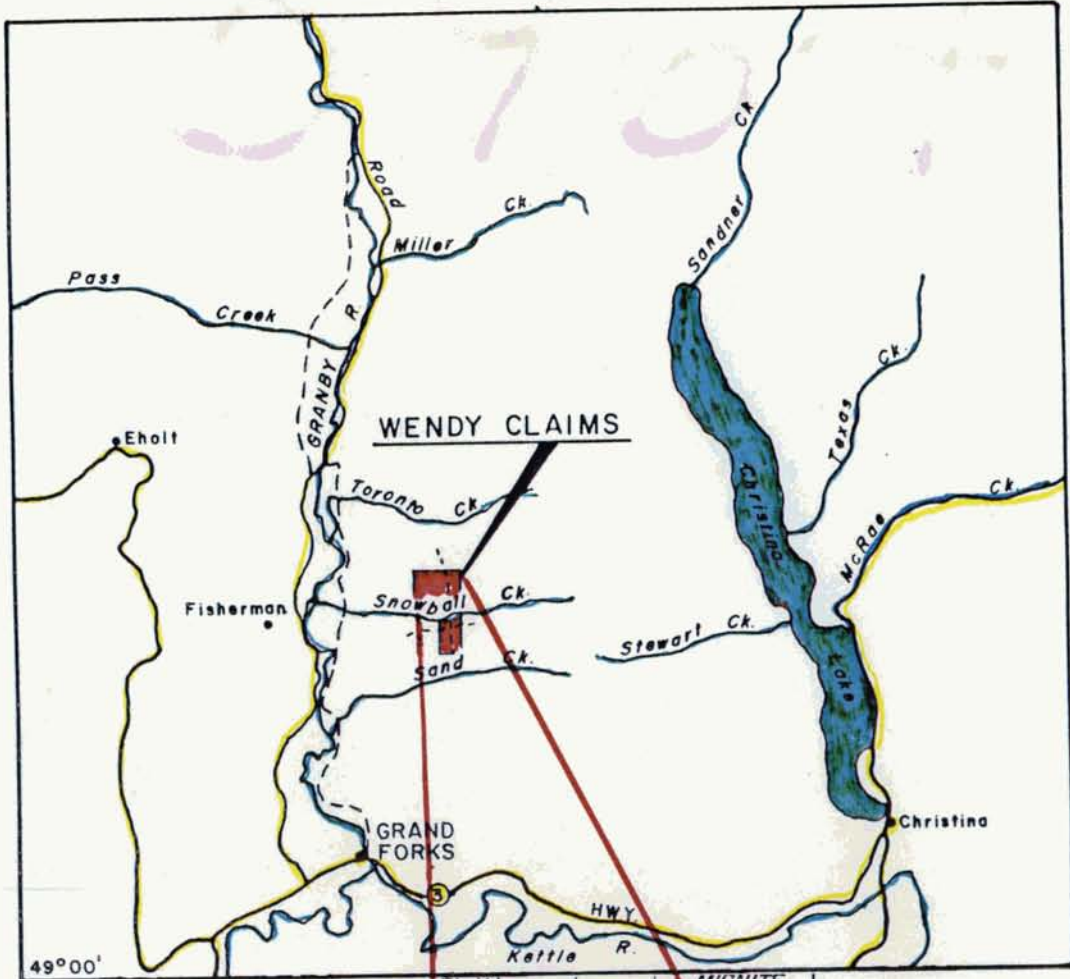
Mining Division, B.C. <sup>E/1</sup>  
Lat. 49°06'N Long. 118°27'W N.T.S. 82 ~~D/11~~

AUTHOR: Glen E. White, B.Sc., Geophysicist  
DATE OF WORK: August 11 - 19. 1976  
DATE OF REPORT: September 13, 1976

5964

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. 5964 MAP



**LOCATION MAP**  
**CHINOOK CONSTRUCTION**  
**& ENGINEERING LTD.**  
**WENDY CLAIMS**

GREENWOOD MINING DIVISION - BRITISH COLUMBIA

*Glen E. White*  
geophysical consulting  
&  
surveying Ltd.

E/I  
N.T.S. 82 DTT

SCALE: 1" = 4 MILES APPROX.

#5964

FIG. 1

## C O N T E N T S

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### Illustrations

- Figure 1 - Location and Claims Map
- # 1 " 2 - Geophysical Map - Scintillometer C.P.S.
- # 2 " 3 - Geochemical Map - Uranium p.p.m.

## INTRODUCTION

During the interum August 11 - 19, 1976, Glen E. White Geophysical Consulting & Services Ltd. conducted a program of linecutting, soil sampling and radiometric surveying on the Wendy claims, Grand Forks area on behalf of Chinook Construction & Engineering Ltd. of Vancouver, B.C.

## PROPERTY

The Wendy claim group consists of some 21 claims - Wendy 1, 2, 4-8, 11, 13, 15-18, 21-28 - as illustrated on Figure 1. Date of record - August 20, 1974.

## LOCATION AND ACCESS

The mineral claims are located some 6 miles NNE of Grand Forks on Snowball Creek, Greenwood Mining Division. Latitude  $49^{\circ}06'N$ , Longitude  $118^{\circ}27'W$ , N.T.S. 82 D/11.

Access is via a series of logging roads extending from Highway 3 at Grand Forks.

## GENERAL GEOLOGY

The general geology of the survey area is shown on G.S.C. Map 6 - 1957 Kettle River East Half 1 inch 4 miles by H. W. Little. The survey area is underlain by a complex

of highly metamorphosed rocks, paragneiss, schists and quartzite of Proterozoic age. Intrusive rocks consist of irregular masses, dikes and sills of granodiorites, quartzmonzonites, syenites and pegmatite lenses. These are considered to be of Lower Cretaceous age. The gneisses and schists are extremely folded and in a general NE-SW direction.

The uranium-bearing mineralization appears to be associated with the pegmatite lenses but reportedly has been found as vein type pitchblende or uraninite in a shear zone.

#### SURVEY SPECIFICATIONS

##### Survey Grid

The survey grid is orientated in an eastwest direction. The lines are turned off every 200 m from a north-south baseline and numbered at 50 m intervals.

##### Geochemical Survey

Soil samples were obtained at 50 m intervals along the traverse lines. Some 380 soil samples were obtained. Two soil profiles were dug, one at 8N - 0 / 50W and 34N - 4 / 00E. All horizons measured less than 0.5 p.p.m. uranium.

The sample analysis was completed by Chemex Labs Ltd. of North Vancouver as follows: one-half gram of -80 mesh sample was ashed and then twice digested with 4M HNO<sub>3</sub>. The residue was then dissolved in 25 milliliters of 4M HNO<sub>3</sub> and swirled. After settling, 0.2 milliliters of solution was placed on a platinum dish and evaporated to dryness. Subsequently, one pellet of uranium fluorescent flux was added and the mixture melted at 650°C. The resultant pellet was placed in a Taner III Fluorometer which measured the degree of fluorescence to a sensitivity of 0.5 p.p.m.

#### Radiometric Survey

The scintillometer survey was conducted utilizing a SRAT SPP-Z-NF manufactured in France. Readings were taken at hip level every 25 m and recorded as C.P.S. ( counts per second ). The instrument also has an audio output which was squelched such that any response above the local background between the 25 m readings would be immediately recognized.

### DISCUSSION OF RESULTS


The geophysical and geochemical data are illustrated on Figures 2 and 3 respectively. The uranium geochemical map shows a number of anomalous areas. The strongest response obtained was 73 p.p.m. at 34N - 7E. Two other samples in this anomalous area are 48 and 24 p.p.m. The two anomalies in the northwest corner of the survey grid may possibly be related but are separated by deeper overburden. The area of mineral claims Wendy 21-24 contains a number of anomalous soil samples in the order of 28, 32, and 23, 19 and 11 p.p.m. uranium which show line to line continuity for 200 m ( 648 feet ).

The scintillometer map shows a number of interesting radiometric anomalies the highest of which was 1500 C.P.S. at waist level on line 32N - 7 / 75E. This anomaly shows excellent correlation with the geochemical trend though the geochemical high of 73 p.p.m. only gives a reading of 200 C.P.S. which would suggest a thin cover of overburden. Not all high radiometric counts have associated geochemical responses - see 28N-2W - this may possibly be caused by surface leaching of the uranium mineralization. The southern section of the survey area Wendy 21-24 shows only one high of 140 C.P.S. on line 4N. This would suggest in view of the favourable geochemical responses, that the radioactivity is being shielded by overburden.

CONCLUSION AND RECOMMENDATIONS

During mid August 1976 a program of soil sampling and scintillometer surveying was conducted on the Wendy claims, Grand Forks area. The survey located three general areas of interest - the northwest, northeast and southern sections of the claim group. The strongest radiometric and uranium geochemical responses were obtained in the northeast corner of the traverse grid where a high of 1500 C.P.S. and 73 p.p.m. respectively were recorded. Thus, since the surveys were conducted on a reconnaissance basis, on lines 200 m apart, further detail work is warranted to examine the anomalous areas.

Respectfully submitted,  
GLEN E. WHITE GEOPHYSICAL  
CONSULTING & SERVICES LTD.



Glen E. White B.Sc.  
Geophysicist



A P P E N D I X

Instrument Specifications

SCINTILLOMETER

A. Instrument

- (a) Type - total count
- (b) Make - SCRAT SPP-Z-NF

B. Specifications

- (a) Measurement - crystal scintillation, counts  
per second
- (b) Range - 150; 500; 1500; 5000 and 15,000 c/s
- (c) Calibration - Cs 137 @ 253 c/s

C. Survey Procedure

- (a) Method - set range and audio output at squelch  
level for inbetween station detection and  
read radioactivity level at a set station  
interval.

STATEMENT OF QUALIFICATIONS

Name: WHITE, Glen E.

Profession: Geophysicist

Education: B.Sc. Geophysics - Geology  
University of British Columbia

Professional Associations: Associate member of Society of Exploration Geophysicists.

Active member B.C. Society of Mining Geophysicists.

Experience: Pre-Graduate experience in Geology - Geochemistry - Geophysics with Anaconda American Brass.

Two years Mining Geophysicist with Sulmac Explorations Ltd. and Airborne Geophysics with Spartan Air Services Ltd.

One year Mining Geophysicist and Technical Sales Manager in the Pacific north-west for W. P. McGill and Associates.

Two years Mining Geophysicist and supervisor Airborne and Ground Geophysical Divisions with Geo-X Surveys Ltd.

Two years Chief Geophysicist Tri-Con Exploration Surveys Ltd.

Five years Consulting Geophysicist.

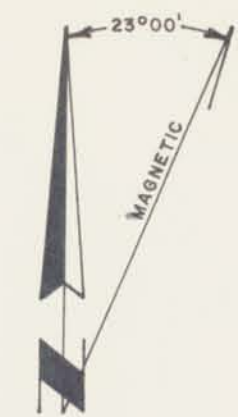
Active experience in all Geologic provinces of Canada.

<u>Personnel</u>	<u>Date</u>	<u>Wages</u>	<u>Total</u>
T. Ashworth.....	August 11-19/76.....	\$95/day.....	\$855.00
J. Behenna.....	".....	78/day.....	702.00
Vehicle 4x4 plus gas.....			360.00
Meals and Accomodations.....			450.00
Instrument Lease.....			135.00
Materials.....			70.00
Geochemical Analysis.....			1083.00
Drafting, Interpretation and Report.....			<u>850.00</u>
Total.....			<u>\$4505.00</u>



118°27'

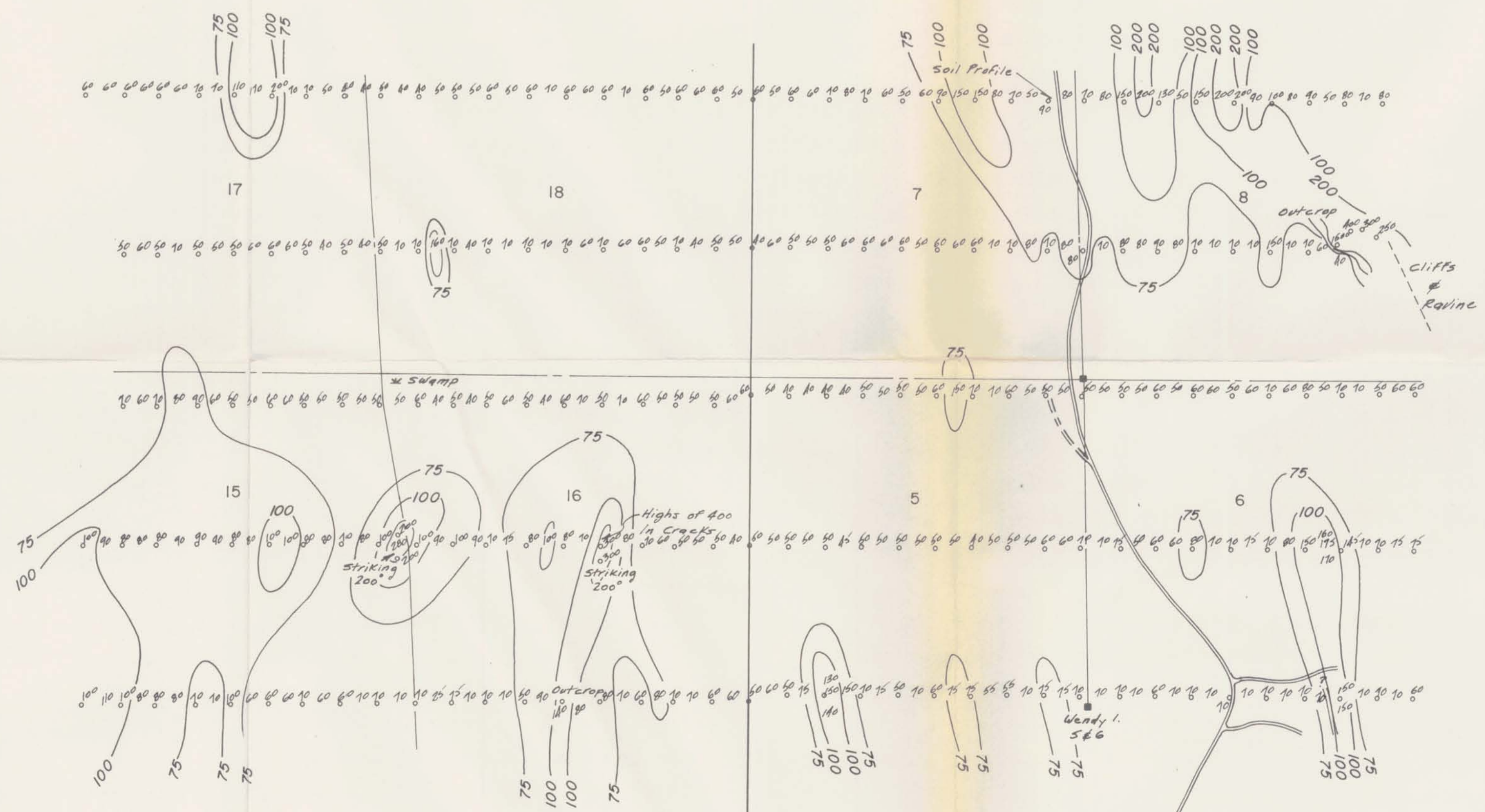
8+00 W 6+00 W 4+00 W 2+00 W 0+00 BASE LINE 2+00 E 4+00 E 6+00 E 8+00 E



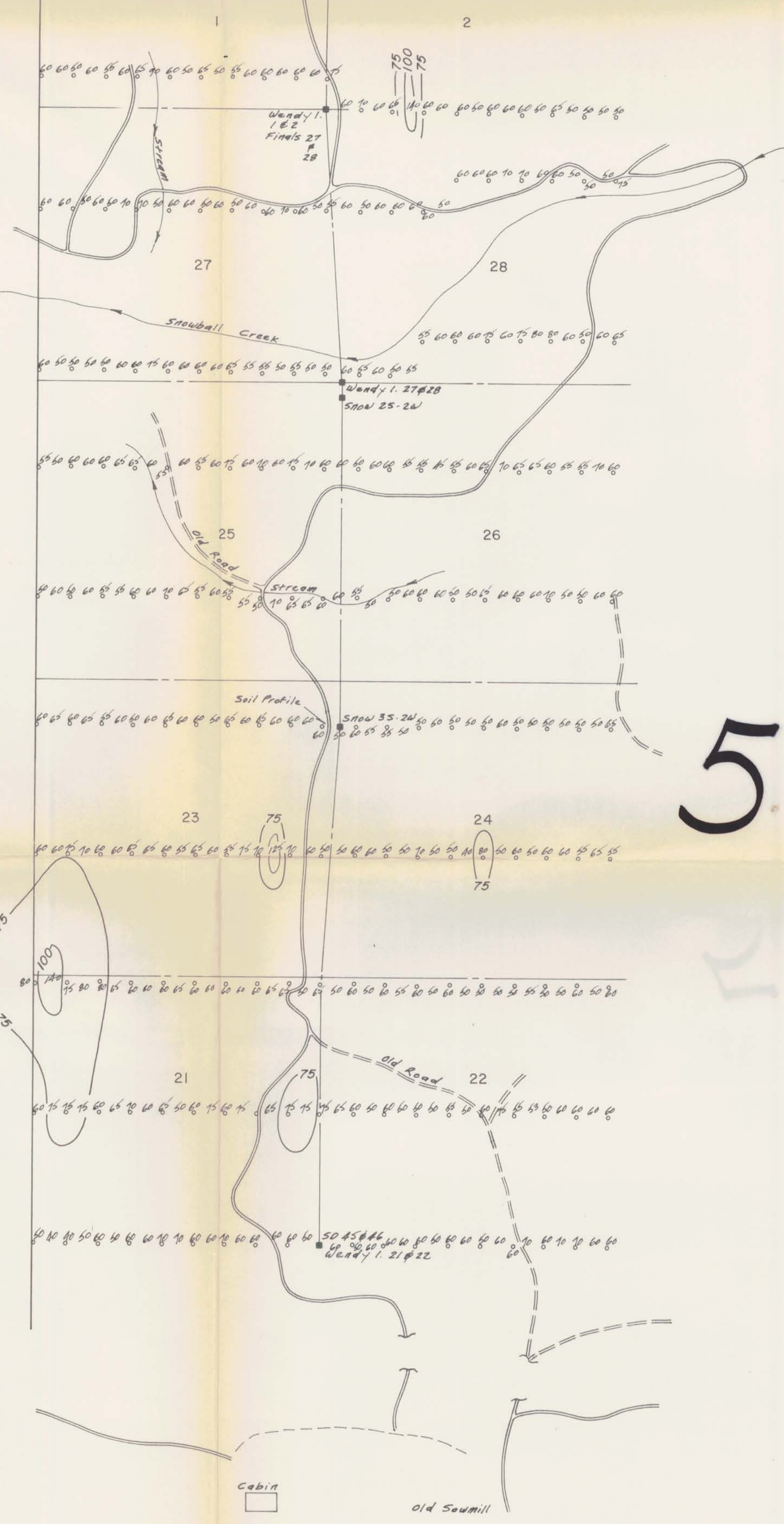
LEGEND

- Contour Line, Contour Interval 75, 100, 200 C.P.S.
- Stations
- Outline of Claims
- Claim Posts
- Unpaved Roads

34+00 N  
32+00 N  
30+00 N  
28+00 N  
26+00 N

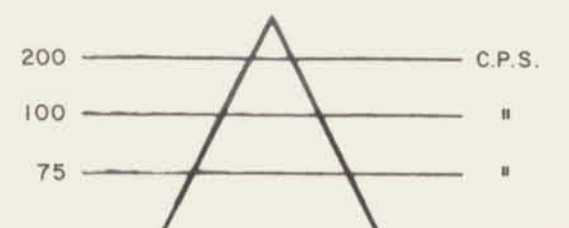


18+00 N  
16+00 N  
14+00 N  
12+00 N  
10+00 N  
8+00 N  
6+00 N  
4+00 N  
2+00 N  
0+00 N

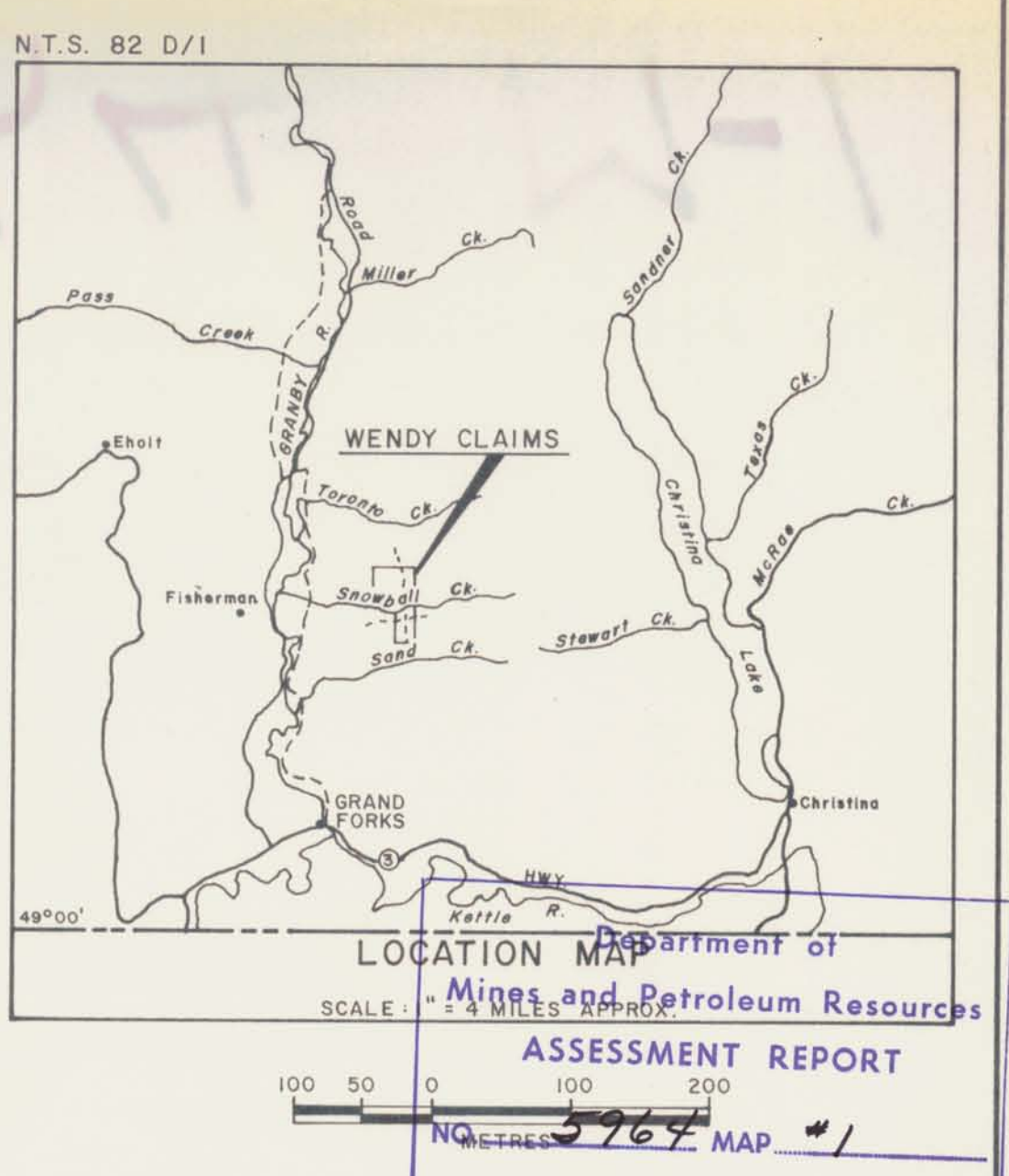


INSTRUMENT: SRAT SPP-2

SCINTILLOMETER KEY



5964 M-1



CHINOOK CONSTRUCTION & ENGINEERING LTD.  
WENDY CLAIMS  
GREENWOOD MINING DIVISION - BRITISH COLUMBIA  
GEOLOGICAL MAP  
SCINTILLOMETER C.P.S.

INTERPRETED BY: G.E.W.  
DRAWN BY: T.M.  
CHECKED BY:  
DATE: AUG. 27, 1976  
FIG. No. 2

To Accompany Geophysical Report on  
THE WENDY CLAIM GROUP  
Date September 1976  
By GLEN E. WHITE, Glen E. White GEOPHYSICIST



118°27'

8+00 W

6+00 W

4+00 W

2+00 W

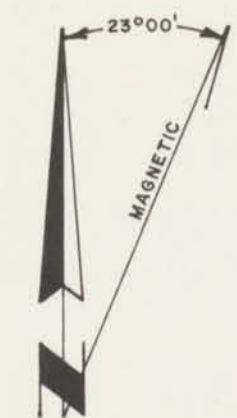
0+00 BASE LINE

2+00 E

4+00 E

6+00 E

8+00 E

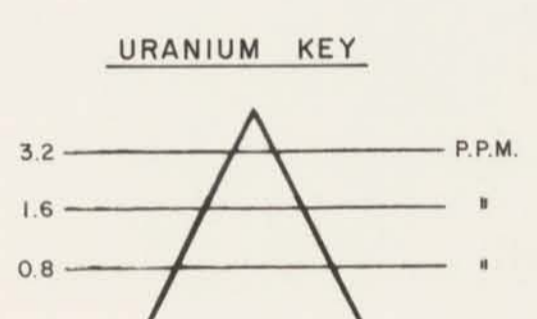
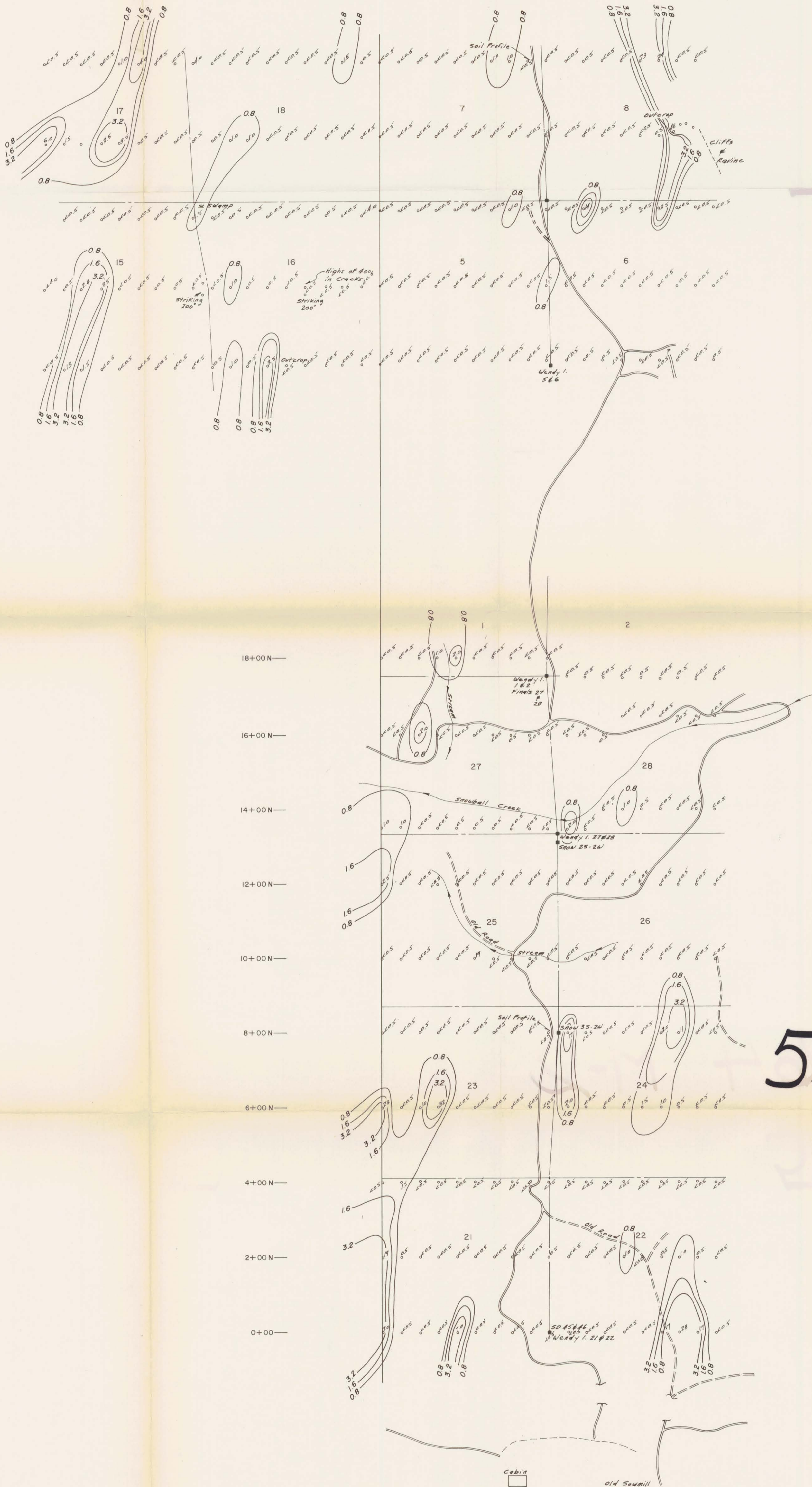


LEGEND

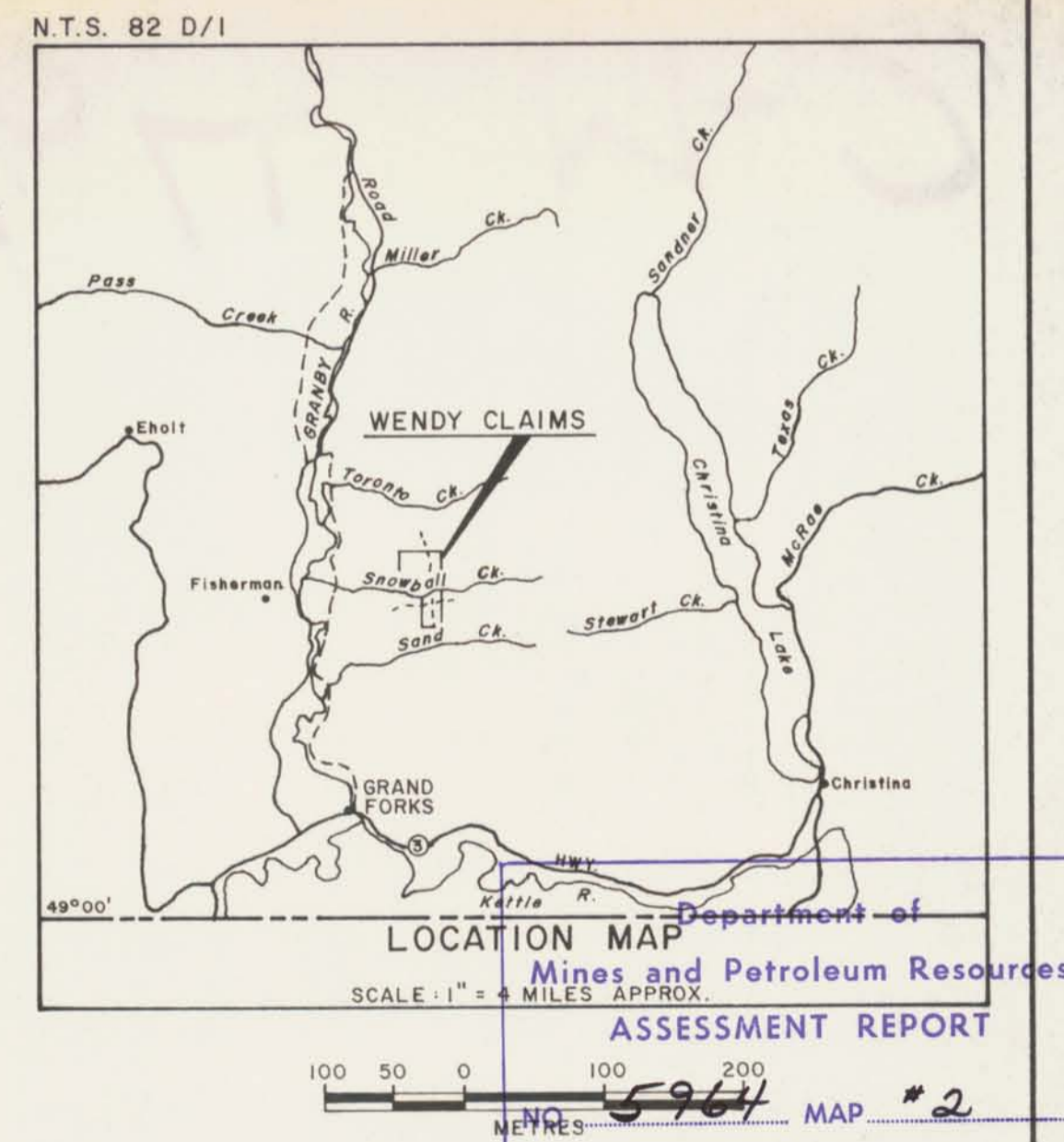
- Contour Line, Contour Interval 0.8, 1.6, 3.2 P.P.M.
- Stations
- - - Outline of Claims
- Claim Posts
- == Unpaved Roads

34+00 N  
 32+00 N  
 30+00 N  
 28+00 N  
 26+00 N

18+00 N  
 16+00 N  
 14+00 N  
 12+00 N  
 10+00 N  
 8+00 N  
 6+00 N  
 4+00 N  
 2+00 N  
 0+00 N



5964 M-2



**CHINOOK CONSTRUCTION & ENGINEERING LTD.**  
 WENDY CLAIMS  
 GREENWOOD MINING DIVISION-BRITISH COLUMBIA  
 GEOCHEMICAL MAP  
 URANIUM P.P.M.

INTERPRETED BY: G.E.W.
DRAWN BY: T.M.
CHECKED BY:
DATE: AUG. 27, 1976
FIG. No. 3

*Glen E. White*  
 geophysical consulting  
 sources ltd.

To Accompany Geophysical Report on  
 THE WENDY CLAIM GROUP  
 Date - *27-1976*  
 By GLEN E. WHITE - B.Sc. *[Signature]* GEOPHYSICIST