GEOLOGICAL AND GEOPHYSICAL REPORT

ON THE

R.G. 1 - 8 CLAIM GROUP

CLINTON CREEK AREA

Y.T.

by

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INTRODUCTION

During the period from June 16 to June 25, 1964, a magnetometer and geological survey was conducted on the R.G. 1-8 claim group in the Clinton Creek area. This claim group is held by Asbestos Corporation (Explorations) Limited,

Field work was conducted by Mr. J.F. Prochnau, assisted by Mr. O. Bergman, and under the supervision of Mr. A.W. Dean, all employed by Asbestos Corporation (Explorations) Limited. Addresses and qualifications of persons involved are included in Appendix "A".

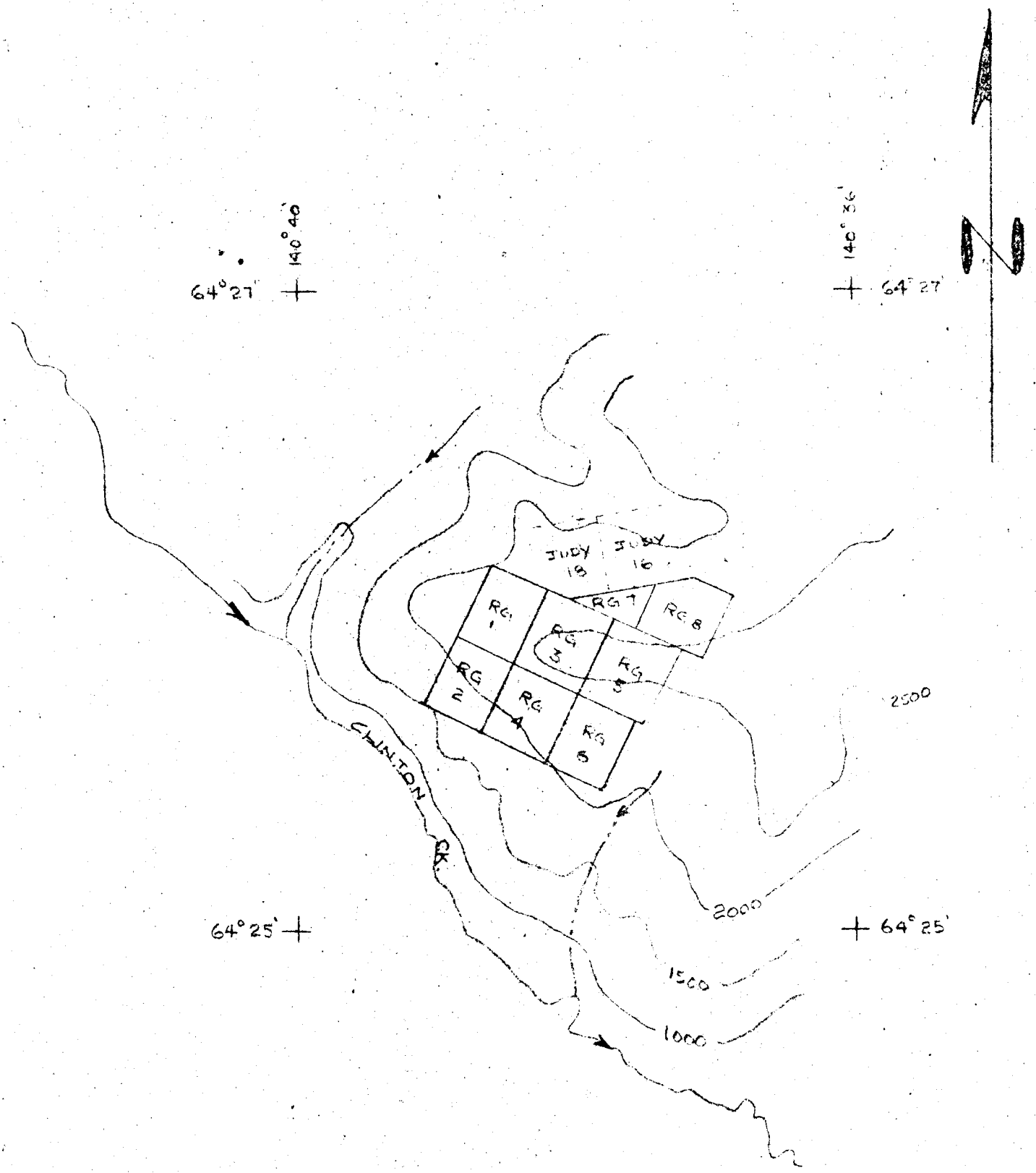
Cost of the survey totaled $832.39. A breakdown of these costs are tabulated in Appendix "B".

LOCATION

The R.G. 1-8 claim group is situated in the vicinity of latitude 64°26' and longitude 140°138' (plotted on Claim Sheet 116-C-7). The claim group covers part of a high ridge one-half mile north of Clinton Creek and lies two miles southeast of Cassiar's Clinton Creek camp. It is some fifty-eight miles northwest of Dawson City, Y.T.

PURPOSE OF INVESTIGATION

The purpose of the magnetometer and geological survey was to locate and outline serpentinized peridotite rock, and possible favourable structural phenomena, with hopes of uncovering an asbestos deposit in commercial quantities.



LOCATION SKETCH
RG CLAIM GROUP
CLINTON CK. AREA

1" = ½ MILE

SEPT 10/64

METHOD

Geological observations and magnetometer readings were tied into a grid system. The grid system was controlled by a baseline established along a previously cut and blazed claim line and extended along the same bearing (N65°W) to tie into mineral claim Judy #3 of Cassiar Asbestos Corporation. Stations were marked at 100 foot intervals along the 6800 feet of baseline.

Blazed grid lines were established with a tape and compass at right angles (N25°E) to the baseline every 400 feet. Stations were marked every 100 feet. Loops of two lines were run to tie into the baseline, and the direction of each line is shown by a small arrow on the accompanying map.

Approximately 62,000 feet of line was established, including the baseline.

A Magcrometer ES 180, manufactured by Edgar Sharpe and Associates Ltd., was used to conduct the magnetometer survey. The instrument measures the vertical component of the earth's magnetic field.

For plotting purposes a background reading with a total gamma value of 9150 gammas was assumed and subtracted from the field readings. Therefore, all gamma values plotted and contoured on the accompanying map are plus gamma values. (An example calculation is shown in Appendix "C".)

ACCESSIBILITY

The general vicinity is accessible by either wheel or float airplane from Dawson City some fifty-eight air miles southeast. The claim group is reached by a three mile walk either from an air strip located on Cassiar's Clinton Creek property or from the Forty-Mile River.

There is also a heliport located on the claim group.

TOPOGRAPHY

The claim group covers part of an east-west ridge and its south slope. Elevations range from 1500 to 2500 ft. above sea level. The area is unglaciated and for the most part, heavily-wooded.

GEOLOGY AND GEOPHYSICAL INTERPRETATION

Very little outcrop is exposed on the property. However, rock chips were noted and were considered to represent the underlying rock formation.

The following rock types were observed and appear to belong to Map Unit C of the G.S.C. Dawson Map, No. 13-1962, by L.H. Green and J.A. Roddick (1 in. = 4 miles).

Serpentinized Peridotite: is dark green and generally massive, in places it is highly fractured and slickensided. It contains "ghost" phenocryst of pyroxene and minor magnetite as disseminations and small stringers.

Quartzose Schist and Quartzite: are highly silicious and contain abundant mica along the foliation. The rock is generally buff coloured. Foliation does not always conform to bedding, and secondary quartz veining along foliation is common.

Slate: is green to black, extremely fine grained and quite fissile.

Magnetics indicate two distinctive anomalous zones within the claim group underlain by serpentinized peridotite.

The first and most intense zone indicates an elongate mass trending easterly and conforming to the top of a ridge. No definite outcrop was found on this anomaly but abundant barren serpentinized peridotite float was noted. An anomalous low paralleling this anomaly might indicate a possible fault or carbonate zone. No evidence of this was noted in the field.

The second anomaly shows a rather broad zone of low intensity and a smaller zone, extending easterly about 1000 feet, of slightly higher intensity. It is most intense in an area with a bluff exposure of highly fractured

slickensided serpentinized peridotite, containing a horizontal two to ten foot wide "fish scale" shear. An occasional vein of minor cross fibre occurs along this bluff.

These two anomalous zones probably indicate a single intrusive body dipping southerly.

ECONOMIC GEOLOGY

Serpentinized peridotite is a possible host rock for a chrysotile asbestos deposit.

Minor amounts of chrysotile cross fibre occur on the R.G. 4 claim in close proximity to a small horizontal fish scale shear. This showing is insignificant and of no economic importance.

CONCLUSION

Magnetics and geology indicate the claim group is mainly underlain by a serpentinized peridotite intrusive favourable for a chrysolite asbestos deposit. However, surficial studies disclosed no such deposit.

Because the property is in close proximity to the Clinton Creek asbestos deposit,

and because the lack of outcrops prohibits a complete evaluation, future developments in the area could necessitate further work. This work would involve diamond drilling and bulldozing.

A.W. Dean J.F. Prochnau

APPENDIX "A"

Following are particulars of the men employed in the survey:

Name	Qualifications	Address
A.W. Dean	Geological Engineer Michigan College of Mining and Technology, 1958	Thetford Mines, P.Q.
J.F. Prochnau	Geological Engineer University of Washington, 1964	Vancouver B.C.
O. Bergman	Line Cutter	Dawson City, Y.T.

APPENDIX "E"

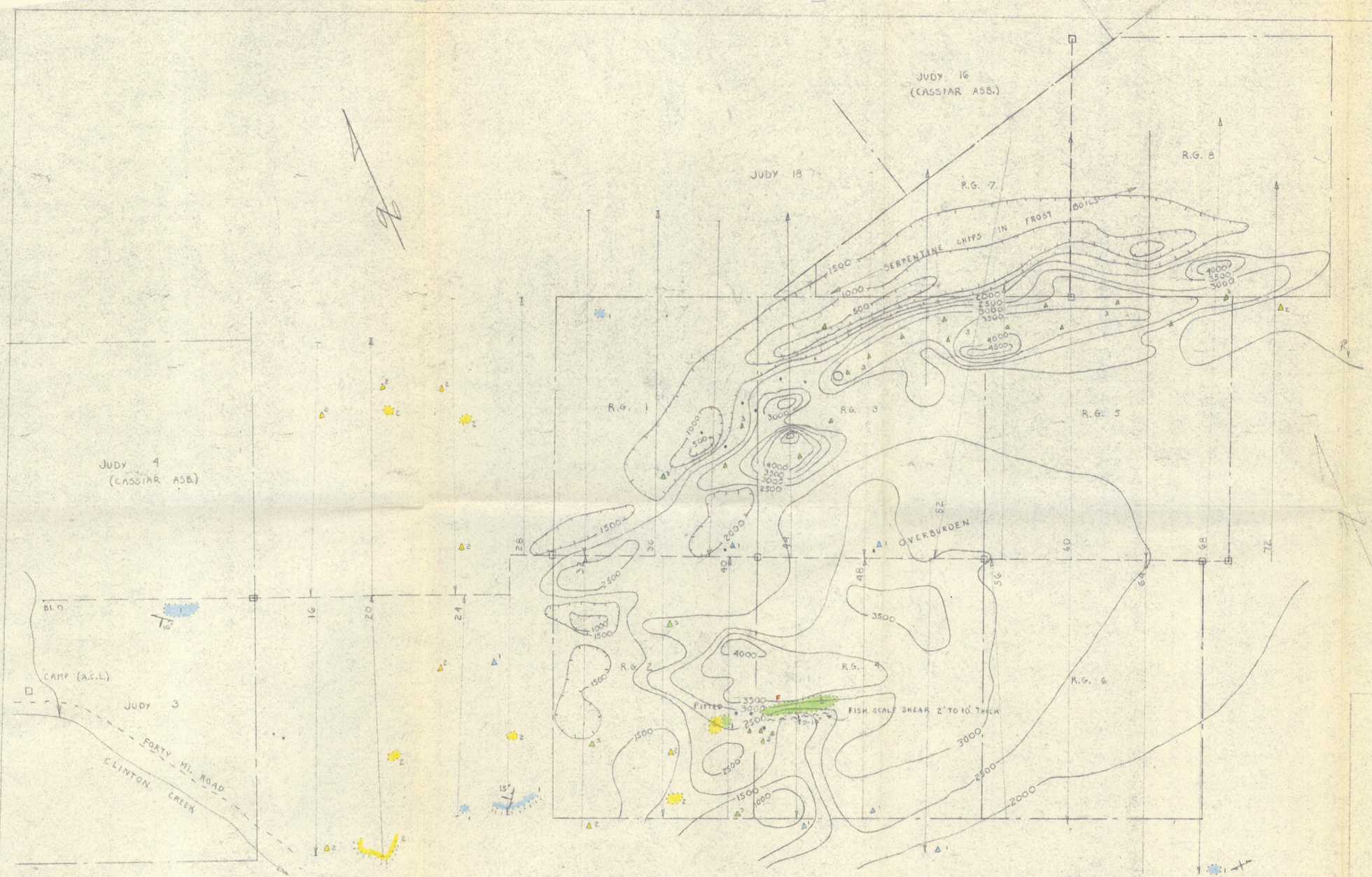
Following is a tabulation of costs incurred during the survey:

Salaries			
O. Bergman	10 days @$15.00 per day	$150.00	
J.F. Prochnau	12 days @550 per month	219.60	
A.W. Dean	5 days @$600 per month	100.00	
			$469.60
Groceries			140.79
Transportation (total of four Cessna trips)			232.00
	TOTAL		$842.39

APPENDIX "C"

Following is an example calculation for plotted gamma readings:

Survey Reading:	12433 gammas
Assumed Background Reading:	9150 gammas
Plotting Value plus	3283 gammas



LEGEND

- 1 — BLACK & GREEN SLATE
- 2 — QUARTZITE, QUARTZOSE SCHIST
- 3 — SERPENTINIZED PERIDOTITE
- OUTCROP
- RUBBLE AND/OR ROCK CHIPS
- BLUFF EXPOSURE
- FISH SCALE
- FOLIATION, INCLINED
- F — FIBER
- BLAZED CLAIM LINE (BASELINE)
- CLAIM BOUNDARY
- GRID LINE
- 3000 — MAGNETIC CONTOUR IN GAMMAS
- 1'-2' DEEP PITS
- HELIPORT

MAGCROMETER OPERATOR J. PROCHNAU
GEOLOGY by J. PROCHNAU & A.W. DEAN

MAGCROMETER SURVEY & GEOLOGY

RG CLAIM GROUP
CLINTON CREEK AREA
YUKON

SCALE 1" = 400'

CONTOUR INTERVAL = ±500 γ

GSP
AUG. 18, 1964