File #3/74w

PRELIMINARY REPORT ON QUILL CREEK CLAIMS 1955

006854
1412

A party of six men left Whitehorse, Y. T. in two vehicles and arrived August 8, 1955, spending 30 days on the property. Work was rather slow for the first week due to bad weather and the lack of line cutters. The latter arrived from Whitehorse with Mr. F. A. Campbell, field geologist and party chief, on August 16, 1955.

A total of 8.6 miles of line was cut over which a magnetometer survey and E.M. survey were conducted by Mr. R. P. Bouverie. A geological map was made by Mr. F. Campbell.

The Magnetometer survey was run primarily to trace the peridotite Sill.

One 1600 foot conductor was picked up by the E. M. survey. This conductor however, cannot be seen anywhere on the surface.

A total of 150 feet of diamond drilling was done around the showing. Soil samples were also taken from around this area.

Additional drilling was done on claim 63068 and 63169 totalling 300 feet for assessment work.

MAGNETOMETER SURVEY QUILL CREEK August, 1955

The Magnetometer survey was conducted on lines 400 feet apart over part of claims Nos: 63286, 83285, 83284, 83283, 83069, 63077, 63068, 63076, 63070, 63078, 63080, 63087, 63081 and 63088. The instrument used was a small "Ascania" reading 20.1 gammas per scale division.

The survey confirmed the anomaly obtained in 1952 and extended it thirty-two hundred feet in a S.E.E. direction. It is believed that the anomaly is caused by a peridotite sill. It is apparent that the sill dips northwards and plunges in a South South Easterly direction and that some displacement has been caused around line 16+00E and 20+00E. Topographically this is the East slope of the Arch Creek Gully.

The Sulphide showing at 8+00N at approximately 1+00W had negligeable magnetic qualities and the same can be assumed with regards to Sulphide-rich Gabbro float found near the base line on line 48+00E.

The map is contoured at 200 gamma intervals.

The normal reading is around 450 - 500 gammas.

ELECTROMAGNETIC SURVEY QUILL CREEK August, 1955 Y 48

With regards to the E. M. Survey carried out over part of claims Nos: 63284, 63283, 63282, 63281, 63070, 63078, 63069, 63077, 63068, 63076, 63080, 63087, 63081 and 63088, the instrument used was a Sharpe's Model S.E. 100 and the survey was conducted over lines 400 feet apart except for where an extra line at 200 feet interval was run for purposes of confirmation.

From the first it was apparent that "receiving blind", that is to say, out of sight of the transmitter was going to produce some very peculiar readings. It was noticed that a difference of some 5° in the angle of dip accompanied an aiming error of only 2° - 3° and a similar difference was caused if the transmitter coil varied more than 2° - 3° from the perpendicular.

Therefore, to eliminate possible errors in aiming and slope chaining a large number of "set ups" were used to ensure that each line could be read by "sight" only. Only two lines, 8+00E and 12+00E were read "blind" on the North portion of the survey although most of the lines to the South, in the valley, where the terrain was flat, were of necessity read "blind" due to the brush.

Disappointing results were obtained in the immediate area of the showing at 8+00N at approximately 1+00W. The dip angles were definite and clear but no definite "cross over" point was reached. However, in view of the results of a short line run directly over the body of sulphides it is possible that these "incompleted cross-overs" denote a probable though weak, conductor. It is possible that some sort of interference is caused by the magnetics of that area.

After running the valley it was decided to set up approximately 300 feet North on line 48+00E immediately above the place where sulphide-rich Gabbro float had been found. As far as was possible a "Box" was run round this transmitting station. "Cross Overs", definite but with weak end points were obtained in lines 44+00E and 50+00E. Readings taken on the base line and line 6+50N served to confirm this. Thereafter the survey was run with the purpose in mind of tracing out the length of the conductor. Towards the West the "cross over points" became increasingly well defined but

on lines 32+00E and 28+00E strong angles of dip were received but no cross-overs. These two lines were checked from Transmitter Location T12 and similar, though weaker angles of dip were obtained. Again it is suggested that the magnetics of the immediate area are causing interferrence. Bearing this in mind, over lines 52+00E, 48+00E, 44+00E, 40+00E and 36+00E there is a conductor 1600 feet long with a possible length, over lines 32+00E, 28+00E and 24+00E, of 2800 feet. The cross over points to the East were very much less distinct than those to the west which could mean that the conductor plunges S.E.E.

It seems possible that the conductor is caused by sulphides disseminated in a Gabbro type rock such as is found in float in the Gully near the base line on line 48+00E although apart from this float there is nothing to confirm it. There is no similar float in any of the other gullies in that area.

The following is a guide to the lines read from respective transmitter stations.

Transmitter Station	Lines Read
T1	8E, 12E, 0+00, 2W, 4W (North End) Showing
T2	8W, 12W, 4E (North End)
T3	8E, 12E, 20E (South End)
T4	16E (South End)
T5	36E, 40E, 48E, 52E (South End)
T6	44E (South End)
T7	44E, 50E (North End)
T8	48E, 40E (North End)
T9	36E, 32E, 28E (North End)
T10	24E (North End)
T11	20E (North End)
T12	32E, 28E (Check)
T13	52E, 56E (North End)

DIAMOND DRILLING

Y 4/2

In all, six holes were collared to test the attitude of the sulphide showing at 8+00N on line 0+00 and 100 feet west; on claim 63281. A total footage of 150 feet was drilled here. The drilling was very slow due to the blockiness of the ground and the inadequacy of the machine. Core recovery was fair.

Four forty-foot holes were drilled on line 30+00W & 0+00N for assessment work on claim 63169 and four forty-foot holes on line 12+00E & 10+00N on claim 63068.

GEOCHEMICAL SURVEY

Soil samples were taken at ten foot intervals bracketing down to five foot intervals over the showing. They were taken on line 0+30W, 8+00N to 9+00N, line 0+55W, 5+60N to 9+00N, line 0+80W, 5+60N to 9+00N and line 1+0SW, 8+00N to 9+00N.

Soil samples were also taken over H.B.E.D one and one half showing at ten foot intervals NE - SW for 320 feet. These are for comparison with the former.

Regretably most of the samples were coarse talus, for no soil was obtainable.

TRENCHING

A trench was put down at 40+70E, 4+70N in an attempt to reach bed rock and ascertain the cause of the E.M. crossover at that point. A depth of approximately twelve feet was reached without encountering anything but talus.

A limited amount of rusty material in the talus was noticed but the samples were too badly weathered to say definitely whether any sulphides were present or not.

The volume of the trench was 10.4 cubic yards.

PROSPECTING

In all two days prospecting was done. No further sulphides were found other than disseminated nickeliferous pyrrhotite in a gabbroic rock, found near the base line, in a gully, on line 48+00E. It was quite evident that this float did not come from very far away. A sample of this float assayed: 0.26% Nickel and 0.52% Copper. A similar specimen of float encountered on line 16+00W and approximately 4+00N assayed: 0.64 Nickel and 0.71 copper.

Y 4/2

DIAMOND DRILL HOLES CLAIM 63281

QUILL CREEK

Hole No.	Dip	Azim.	Length	Easting	Northing
1	45°	049°	22.3'	-58.1'	816.1'
2	90°	---	27.3'	-58.4'	831.3'
3	47°	246°	29.0'	-61.9'	835.8'
4	35°	280°	10.0'	-76.3'	845.4'
5	35°	253°	55.4'	-89.4'	844.4'
6	40°	245°	6.0' casing	-95.4'	846.2'
		Total	150.0'		

Note: Line 0+00 used as base for eastings
Base Line " " " " northings

DIAMOND DRILL HOLES CLAIM 63169

Hole No.	Dip	Azim.	Length	Approx. Location
7	90	---	40	Line 30+00N, 3+00N
8	90	---	40	
9	90	---	40	
10	90	---	40	
		Total	160 Ft.	

DIAMOND DRILL HOLES CLAIM 63068

Hole No.	Dip	Azim.	Length	Approx. Location
11	90°	---	40	12+00E, 10+00N.
12	90°	---	40	
13	90°	---	40	
14	90°	---	40	
			160 Ft.	

LOG OF D. D. H. #Q.5

1412

Footage	Rock Type	Mineralization	Remarks
0' -0.1'	Mass Sulphides	Mass Sulphides	) 1') Recovery
0.1'-4.0'	Argillite	Sli. Py - Cp	Badly Broken)
4.0'-5.5'	Argillite	---	Badly Broken
5.5'-6.2'	"	---	" "
6.2'-7.4'	Argillite + Calcite Str.		7.3'-7.4' --Fine brecia?
7.4'-7.7'	Argillite		
7.7'-8.9'	Argillite	Tr. Cp.	
8.9'-9.9'	"	9.3' Str. Sulphides Mainly Cp.	
9.9'-11.7'	" + Calcite Str.		
11.7'-12.2'	"		
12.2'-12.5'	"		
12.5'-13.0'	"		
13.0'-14.0'	"	Tr. Cp. Py.	0.8' recovered
14.0'-14.5'	" + Sand		
14.5'-14.9'	"		Broken
14.9'-15.5'	"	Sli. Cp. Py.	
15.5'-16.0'	"	Sli. Cp.	Getting Darker
16.0'-17.0'	" + mud + Perid		Contact 16.5'
17.0'-18.0'	Perid	Str. of Sulphides	
18.0'-18.9'	" + Sand		
18.9'-55.4'	Sand		