

9th August 1966

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DR. A. C. SKERL
A.R.S.M., PH.D., P.ENG.
CONSULTING MINING GEOLOGIST

1758 WESTERN PARKWAY
VANCOUVER 8, B.C.

L I M E C R E E K M O L Y B D E N I T E
W I N D Y A R M , Y U K O N .

I N T R O D U C T I O N

I examined this prospect under the guidance of Mr. G. Wolanski on 3rd August 1966.

S I T U A T I O N

The property is 10 miles southeast of Carcross in the Yukon Territory and 2 miles up Lime Creek from Windy Arm of Tagish Lake.

It can be reached by boat from Carcross to the mouth of the creek or by float plane to a small lake at $\frac{1}{2}$ mile beyond the property. The lake has an elevation of approximately 2800 feet and the elevations on the property range from 2700 to 3350 feet.

C L A I M S

At present there are only four claims and they are under option to Mr. Wolanski and his partners. The claims were staked by Norman Jones on 25th June 1966.

The ground had been previously staked in 1963 but apparently not recorded. A still earlier staking for four claims has tags Nos 73777 to 80.

G E O L O G Y

The area is on the Whitehorse sheet (1 inch to 4 miles) of the Geological Survey of Canada.

There is a granitic intrusion that is 1 mile in diameter surrounded by overburden so that it could be 1.7 miles across. There is a northwest trending belt of limestone to the northeast and cherty Palaeozoic sediments to the southwest.

On the north side the granite was found to be in contact with a pyritic hornfels.

MINERALIZATION

Approximately through the centre of the granite there is a zone about 500 feet wide and striking N 65°E in which molybdenite can be found in quartz stringers and as disseminated crystals up to $\frac{1}{4}$ " across in the granite outcrops. The stringers strike at 10°, 65° or 90° east of north with dips of 70° to 90° to the east and south. The largest veinlet is 6 inches wide.

The zone can be traced for about 2500 feet from elevation 2900 feet up the hillside to elevation 3350 feet beyond which there is only overburden for about 1 mile.

There are apparently no outcrops where the zone would cross the creek and it could be present on the other side since granite has been mapped there.

The molybdenite is associated with streaks and patches of red iron stain that after a persistent search was found to be due, at least in part, to fine crystals of chalcopyrite.

Owing to the readiness with which molybdenite is removed by weathering there is a surprising amount present in the outcrops. Thus in one case I estimate that there is $\frac{1}{2}\%$ MoS₂ over a width of 4 feet.

I guess that not more than 5% of the area of the zone is exposed as outcrops. The zone almost certainly extends to the limits of the granite at either end where the conditions could have been conducive to more intense mineralization.

DISCUSSION

This could be an important deposit but everything depends on the average grade. This is best determined by diamond drilling so it is proposed that a few holes of 100 to 150 feet in length are drilled with a small machine to gain an idea of what might be expected.

Drill sites are limited by the scarcity of outcrops in which it is advisable to start with a small machine and by the height to which water can be pumped. One site

has been chosen at the first outcrop at elevation 2925 feet for a hole at -45° across part of the zone. Depending on the results obtained it may be decided to drill another hole ahead or behind this one. The site is 225 feet above the creek and will require about 1000 feet of plastic water line. Similar sites can be chosen at say 500 ft intervals up the hillside as far as pumping is practical.

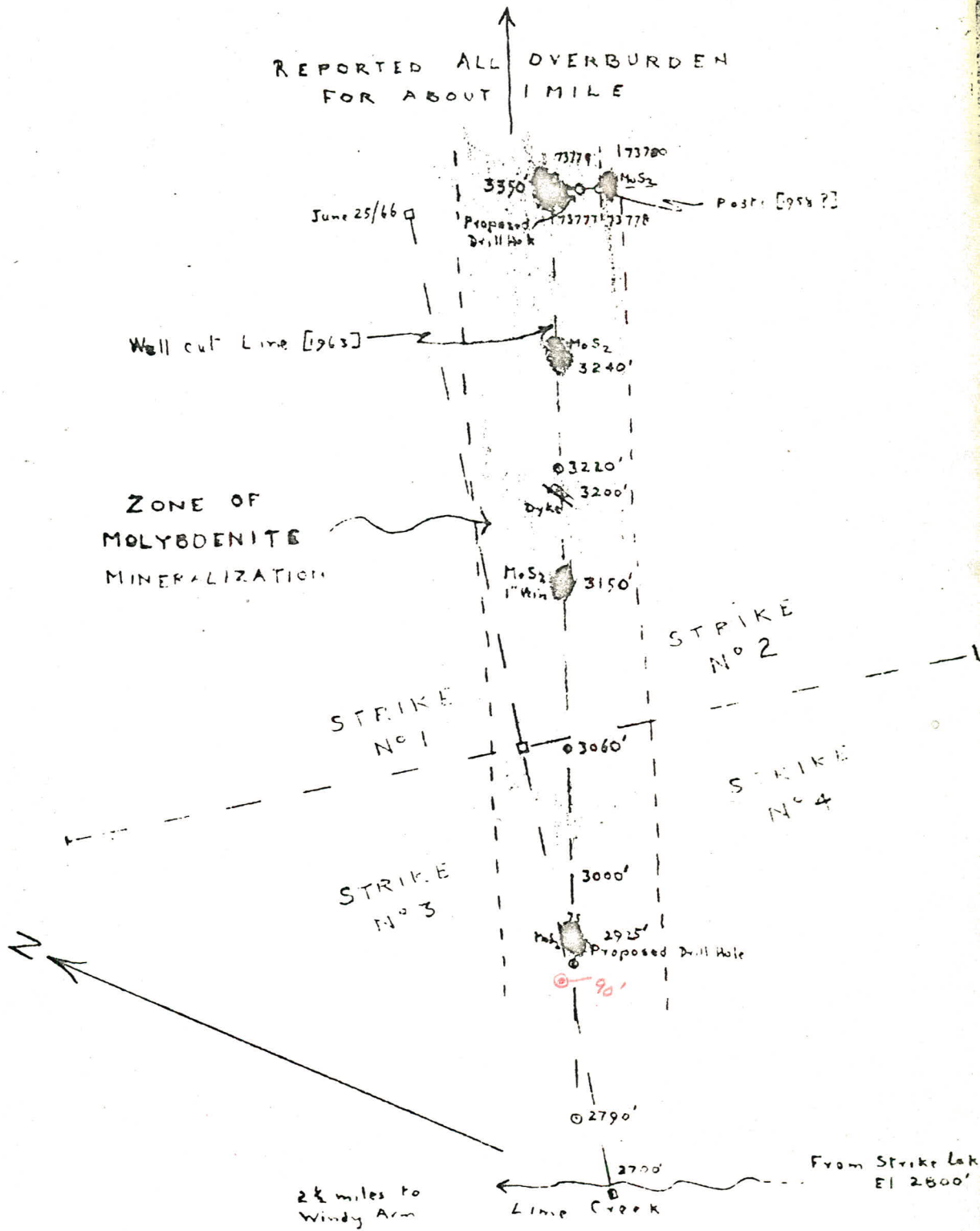
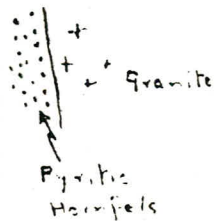
Before drilling however further claims should be staked to cover the possible extensions of the known zone and also any parallel zones. Thus the present location line should be extended to the east for at least 3 more claim lengths and to the west for 2 claim lengths to cover a total length of 2 miles. A parallel location line for 2 claim widths on either side should also be staked to give a total of 42 claims.

R E C O M M E N D A T I O N S

1. Stake the additional claims outlined above.
2. Drill about four E size core holes at -45° N for 100 to 150 feet into the zone from convenient sites.

A. C. Skerl

REPORTED ALL OVERBURDEN
FOR ABOUT 1 MILE



LIME CREEK MOLYBDENITE
WINDY ARM, YUKON
SKETCH PLAN
1 in to 500 ft
10th Aug. 1966 *D. L. Skerl*

1758 WESTERN PARKWAY
VANCOUVER 8, B.C.

1st December 1966

DR. A. C. SKERL
A.R.S.M., PH.D., P.ENG.
CONSULTING MINING GEOLOGIST

L I M E C R E E K M O L Y B D E N I T E
W I N D Y A R M , Y U K O N

I N T R O D U C T I O N

In August 1966 I recommended a limited diamond drilling programme to test this interesting area of molybdenite mineralization. This is a report on the results obtained and should be read in conjunction with the one dated 9th August 1966 as well as the logs of the holes that have already been submitted to the company.

D R I L L I N G R E S U L T S

A series of six diamond drill holes were put down during September 1966 to test the mineralization in the fresh rock. Because of the problem of pumping the drill water a long way up hill the drilling was restricted to an area about 400 by 300 feet.

The holes were directed at -45° and averaged only 80 feet long. They were irregularly spaced to take advantage of outcrops and were drilled on various azimuths.

The X-Ray core was shipped to me in Vancouver for logging and splitting.

The amount of molybdenite encountered was disappointing so that only # 1 hole was assayed. For the first 60 feet it averaged 0.027% MoS_2 and 0.05% Cu.

All the rock is mostly fresh granite with about 7% biotite. Iron stained slips are plentiful to the depths drilled, averaging one every three feet.

D I S C U S S I O N

The area drilled is quite limited compared with the zone as a whole since the mineralized outcrops are known as much as 1000 feet to the northeast and to the southwest. The quality of the mineralization however is apparently no better.

The rock outcrops probably amount to no more than 5% of the total area so that worthwhile mineralization may still be present in this zone or elsewhere in the intrusive.

It is therefore proposed that a soil sampling campaign is carried out next season. Lines should be run along the hillside at N 30° W across the claims at 500 feet apart with stations flagged every 200 feet. Soil samples should be taken at each station from below the surface material, usually at a depth of 6 to 12 inches. In addition, wherever a line crosses a creek or gully a sample should be taken of the silt that has been deposited by the water. A total of about 1000 samples would be collected. These should be shipped in batches of 100 to a laboratory that specializes in testing soil samples for molybdenite. At first however only the silt samples should be shipped and then only the soil samples from the areas of interest indicated by the silt samples.

A map should be built up (scale 1" to 200') showing the positions of all samples and the drainage gullies so that the results can be interpreted.

FURTHER DRILLING

Mr. Wollanski reports that the company has purchased the diamond drill and also that some new showings with molybdenite have been found. A hole should be drilled to test this discovery. It is on the side of a creek to the east of the original zone.

