KERR ADDISON MINES LIMITED

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G. M. Hogg

From

822834 W. M. Sirola

APR - 9 1973

ADDENDUM TO THE DEWAR CREEK PROJECT REPORT (1972)

April 6, 1973

LD.B. H.D.R. LH.F.

A.D.S.

B.C.B.

Please append this additional tungsten information to Fred Chow's Dewar Creek report (1972).

The additional information provided in the addendum includes a cost estimate for 1973 follow-up work which totals \$14,642.10. The bulk of this cost is for bulldozer-stripping but there is provision for additional staking to protect the anomalous area.

For those who might be interested in geochemical statistics, Werner Gruenwald has written a brief accompanying report indicating that our concept of what is anomalous is based on statistical analysis amongst other things.

Apparently, Noranda Exploration did some silting in the same area last year and also located the tungsten area. They did no staking however when they realized that the existing claims were held by Kerr Addison Mines. They were sufficiently impressed with their own information that they were prepared to joint venture with us on this project. At this stage there is no reason for such a joint venture and we have politely declined.

WMS/ah

W. M. Sirola

ADDENDUM TO THE DEWAR CREEK PROJECT REPORT, 1972 NINE LAKE MINERAL CLAIMS TUNGSTEN PROSPECTS

The Dewar Creek Project Report by the writer dated February 1973 reported possible economic tungsten mineralization on the Nine Lake mineral claims based on this year's re-assaying of soil samples collected during the 1972 survey. Preliminary investigation of the tungsten prospect is now complete. Evaluation is based on soil geochemistry, occurrences of tungsten mineralization in the immediate area, and geological environment.

A total of 423 soil samples have been assayed for tungsten, of this number 284 samples were done this year. Eighty-eight silt (a few soil) samples were analyzed for tungsten for regional geochemistry, of this number 38 samples were tested during the 1971 programme. Fifty-one rock specimens collected during the 1971-72 season were tested for tungsten content.

To date, tungsten soil geochemistry has been applied to about 29 claims of the Nine Lake group, in which 12 claims were investigated during the 572 field season. The coverage area includes: Nine Lake Nos. 1, 3, 4, 30-34 inclusive, 37, 38, 41, 42, 44, 49, 50, 52, 57, 58, 60-68 inclusive, 71 and 72 mineral claims, which cover an area about 3,000 feet wide by 12,000 feet long NW-SE across Greenland Creek. Five of these claims namely Nos. 57, 58, 60, 71 and 72 were allowed to lapse in 1972 prior to our knowledge of the tungsten content of the rocks and soils. This ground will be re-staked.

At present, the area lying north of Greenland Creek is considered to have the greatest potential for en economic tungsten deposit.

Evaluation of Tungsten Soil, Silt and Rock Geochemistry

A separate report by Werner Gruenwald dated March 30, 1973 has been written on the evaluation of the tungsten prospect by statistical analysis and accompanies this report.

Geochemistry (Map 4D and 5D):

The geochemical plen (see Map # 4D) shows anomalous tungsten in the soils across the mouth of two cirques, between the 6,600 feet and 8,000 feet topographical contours. Moderately (100 - 150 ppm) to definitely (> 150 ppm) anomalous tungsten values are found in soils within an area of about 2,000 feet to 4,000 feet NE-SW by about 6,000 feet NW-SE. The anomalous area has a vertical relief of 1,400 feet in 6,000 feet N-S.

The geogramical dispersion downslope is about 600 feet, based on a few anomalous rock specimens at the following locations: 27R(150 ppm W), 28R(500 ppm W) on claim # 60, and 54R(100 ppm W) on claim # 69. On the assumption, tungsten mineralization is widespread, with the better grades along the NE-SW zone on the north and lower grades towards the south.

The average downhill slope in the cirques is about $12^{\circ}SE$ and about 30° down the cirque walls. The 200 – 300 ppm W contours on the most northerly section of the map (claims 57, 58, 61, 68 and 71) show a slight dispersion train downhill from the cirque walls but the overall trend of the plus 200 ppm W values is NE-SW across the cirques. This trend conforms to the ganeral strike of rock formations north of Greenland Creek, thus suggesting contact mineralization along the intrusive sills and sediments.

The southerly portion of the anomalous area (claims 62-66) also shows a northeasterly trend (see > 100 ppm W contour), with moderate geochemical dispersion at a small angle to the topographical contours. This appears to be caused by a separate zone of mineralization rather than a secondary geochemical dispersion from the northernanomaly.

There are relatively few publications or reports on case histories of tungsten geochemistry. In general, background values for soils are between 2 and 5 ppm W, and anomalous values over mineralized areas range from a few hundred (?) to > 1,000 ppm W. The Salau deposit in the French Pyrenees shows less than 5 ppm W background (regional) and over 1,200 ppm W over the deposit. The deposit is clearly defined by values > 500 ppm W.

The regional background for the Dewar Creek Project area is between 0-10 ppm W (see Map 5D). Within the Nine Lake claims the background range is about 0-25 ppm W. The area which contains moderately anomalous (100 - 150 ppm W) values or greater is extensive and covers about 50% of the surveyed area north of Greenland Creek. Tungsten values classified as definitely anomalous (\geq 150 ppm W) form five anomalies; the smallest measuring 400 feet x 1,400 feet and the largest averaging about 1,200 feet wide x 1,800 faet plus long (open east and west). Two of these anomalies contain values between 200 - 300 ppm W, and the other three contain values between 400 and 450 ppm W. The geochemical trend is NE-SW, parallel to the rock formations, but there is also a probable NW-SE trend at 90° to the one above.

Tungsten Occurrences:

There are four tungsten occurrences within 3 - 6 miles of the Nine Lake tungsten prospect; Cominco's Molly Group shows scheelite with molybdenum (and casserite?) associated with limestone skarn; Arrow Inter-America's Val Group is reported to have mineralization in three modes of occurrence (a) scheelite in a quartz rubble sheer zone (b) scheelite as selvages in quartz filled fractures in moyie diorite sills, and (c) cassiterite and scheelite in quartz veins; Cominco's Pico Group shows scheelite associated with skarn minerals in siltstone and argillite with diorite.

The mode of occurrence of the tungsten mineralization on the Nine Lake claims is not definitely known. The few rock specimens containing anomalous tungsten values are quartzites with or without skarn and metadiorite sills with quartz filled fractures. The quartzite specimens contained the highest values.

Geological Environment:

There are four known tungsten occurrences within the immediate area, all within the Lower Aldridge formation with accompanying diorite sills, and all bordering the contact of the White Creek Batholith. The geological setting appears to be favourable for tungsten, plus the possibility of associated tin mineralization.

Recommendations:

 $\underline{\text{Six}}$ additional claims should be staked and eight lapsed claims should be re-staked as soon as possible (see Proposed Staking Plan, Map # 6).

Bulldozer stripping should be used as the first step in the investigation, followed by diamond drilling if warranted. Seven geochemical targets have been selected for trenching (see Proposed Trenching Plan, Map # 7). Trenching on locations 1 - 4 should be completed and on locations 5 - 7 to proceed if warranted. The first four trenches total 1,800 lineal feet, the latter three trenches total 1,200 lineal feet.

FC/ah

F. Chow

Enclosures:

- 1. Map 4D Nine Lake M.C. Geochemical Plan, Tungsten
- 2. Map 5D " Regional Tungsten Geochem
- 3. Map 6 " Proposed Staking and Re-staking
- 4. Map 7 " Proposed Trenching 1973

Estimated Costs:

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Α.	Staking

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	 Airfare - Vancouver to Cranbrook and return, two men 	\$ 148.00	
	Helicopter - Cranbrook to property, four return trips	1560.00	
	3. Meals and accommodation	100.00	\$1808.00
В.	Trenching		
*	 Mobilization and demobilization of cat (including walking cat four miles from road to location) 	\$ 600.00	
	2. Bulldozing trenches # 1-4 inclusive 10 days @ \$240.00/day	2400.00	
	 Bulldozing trenches # 5-7 inclusive days @ \$240.00/day 	1680.00	
	4. Helicopter to ferry cat fuel 25 hours @ \$260.00/hour	650.00	
	5. Mobilization and demobilization:-		\$5330.00
	 a) Airfare, Vancouver to Cranbrook and return, two men 	\$ 148.00	
	b) Helicopter, Cranbrook to property and return	1300.00	
	c) Road vehicle	60.00	\$1508.00
	6. Camp supplies and maintenance :-		
	a) Food, 3 men @ \$8.00/day for 20 days	480.00	
	b) Helicopter, one supply trip	390.00	\$ 870.00
٤.	Wages		
	Two men for one month	\$ <u>2200.00</u>	\$2200.00
D.	Assaying		
	1. 300 rock samples for W @ \$3.00	\$ 900.00	
	2. 30 composites for 5n @ \$5.00	<u>150.00</u>	\$1050.00

E. Topographic Map

1. 1" = 400 feet, Topographical Contour Map, 50-foot contours

\$505.00

2. Photo Mosaic, 5 square miles, 1" = 400 feet scale

40.00

\$ 545.00

TOTAL

\$13311.00

Contingencies 10%

1331.10

GRAND TOTAL

\$14642.10

* Assuming road from Skookumchuck to Greenland Creek will be repaired. Mr. Dunc Hamilton, Ranger at Forestry Service Station at Canal Flats has advised that the road will be cleared and repaired by the end of April 1973.

Mr. Hamilton has also advised that temporary access road (4 miles along Greenland Creek) to property is not recommended, but permit may be granted after personal inspection.

Estimated costs for building 4 miles access road, suitable for 4-wheel drive vehicle is about \$1200. This amount can be offset by helicopter charges for mobilization and demobilization costs at \$1300 plus fuel and supply trips costs at \$1040.

De How



