

ACTIVITY REPORT
ON
THE YUKON TUNGSTEN CORPORATION LIMITED

The Yukon Tungsten Corporation Limited was about to go into production from its property near Mile 70I on the Alaska Highway, on July 6th., 1953. A gravity-type concentration plant with a capacity of thirty to forty tons per day has been constructed, and was undergoing trial runs at that time.

History and Geology

The property was formerly owned by the Consolidated Mining and Smelting Company of Canada, and the following account of it is given in Geological Survey Paper 44-25, Geological Reconnaissance along the Alaska Highway between Watson Lake and Teslin River, Yukon and British Columbia, by C.S. Lord, 1944: "Tungsten has been found on the Fidler group of claims, owned by the Consolidated Mining and Smelting Company of Canada. A trail leads to the claims from the highway near mile 105E. (now mile 70I). The group was staked early in July 1943 by Messrs. D.M. Baird, H.B. Denis, K.C. Fahrni, J.W. Forest, and D.R.E. Whitmore, and includes Back, Greig, Elgar, Handel, and Franck claims. The country rock is mostly grey, crystalline, micaceous limestone and soft grey sericite schist or phyllite. The attitude of the beds probably varies from place to place, but the dip is generally less than 15°. These rocks are cut by many barren stringers or groups of stringers of glassy to white, rhythmically banded, crystalline quartz with numerous open crystal-lined spaces. Elsewhere brecciated rock is cemented by similar quartz. Mineralized vein quartz outcrops at an elevation of about 5,100 feet on a rounded peak and on an adjacent cirque wall. The vein or veins trend northeasterly dip gently southeasterly, range in width from a fraction of an inch to 3½ feet, and in part lie at an angle to the bedding. The quartz is glassy to white, banded, and in crystals up to about 1½ inches by 3 inches. These project into long open spaces that parallel the banding and the vein walls. On the top of the peak the quartz probably ranges up to about one foot in width and has been traced for some 200 feet by several shallow pits. On the cirque wall, which forms one side of the peak, a quartz vein up to 3½ feet wide is reported to have been traced for about 400 feet. Some of the quartz on the peak contains abundant, glistening, dark brown wolframite in blades an inch or more long. Associated, less abundant minerals include galena, sphalerite, malachite, azurite, chalcopyrite, grey copper, (?) fluorite, scheelite(?), white carbonate, a soft, greenish, micaceous material, podery, greenish yellow material, and iron oxide. A specimen of the wolframite contained 12.6 percent MnO. A picked sample of quartz and wolframite contained 0.59 percent tin and 15 percent WO₃. The form in which the tin occurs is not known."

Apparently the Consolidated Mining Smelting Company dropped the claims, and the property remained idle until 1951, when it was restaked by Peter Rodstrom, Frank Schick, and Harry Weiland, as the Tungsten, S, and T groups, comprising 24 claims in all. In June of the same year, the 24 claims were acquired by the Yukon Tungsten Corporation Limited.

Personnel

Operations are at present under the direction of Mr. P. Peterson, Consulting Engineer for the Chile Copper Company, with head office in Toronto. As soon as the mine and mill are operating satisfactorily, Mr. Neil Forbes, the present Mine Manager, will take charge. About eight men are employed at the mine, and two men will be employed at the mill.

The Mine

The mine is located about four miles north of the Highway, and is reached by a road which climbs steeply from an elevation of 3000 feet at the highway to 5,100 feet at the top of the peak where the mine is situated. Only four-wheel drive vehicles can be depended upon to make

the trip, except under extraordinarily good conditions. Both Mr. Peterson and Mr. Forbes are new to the property this year, and were able to tell me very little about past operations. No maps were available. My description of development so far must therefore be rather sketchy, with figures given only approximate.

A winze, collared on the outcrop at the summit, follows the vein for about fifty feet at a dip of approximately 15 degrees. At the foot of this winze, drifting has progressed for about fifty feet each way, with ore still visible in the northeast branch, though it has pinched down to a few inches. Good ore is also visible in the winze over a width of 18 inches. There is evidence of considerable faulting, and so any estimate of ore reserves on the basis of showings in the winze and drift might be misleading. At the end of the northeast drift the dip of the vein has increased to 30 degrees. All production at present is from the drift. The ore is dumped down a raise which connects with an adit 180 feet below, from where it is trammed about three hundred feet to the outside storage bin. A four by four dump truck carries the ore from the mine to the mill.

The Mill

The mill consists essentially of a primary crusher (jaw), a set of rolls for secondary crushing, and a Denver jig and a Wilfley table for concentration of the ore. From the coarse-ore bin the ore passes over a shaking screen through an 8-inch x 15-inch jaw crusher into a fine-ore bin. The fines from the screen join the discharge from the crusher in the bin. An intermittent conveyor feeds the ore out of the second bin through a 14-inch x 28-inch set of rolls. A vibrating screen acts in closed circuit with the rolls to provide a uniform feed to a 12-inch x 18-inch Denver jig; this feed averages in size about 6-mesh, i.e., the particles will pass through a screen having 6 square openings to the inch. The concentrates from the jig pass into two 6-foot x 2½-foot tanks, and the tailings pass over the Wilfley table. The concentrates from the Wilfley table join those from the jig in the two concentrates tanks, the middlings from the table run into a third tank, 8-foot x 2½-foot, and the tailings run into a settling pond below the mill. The middling tank is cleaned out periodically and the material out of it is put through the circuit again. (See flow-sheet page 4) The water from the tailings pond is pumped back for re-use in the mill. Power is supplied by three Armstrong-Sidely 20HP diesel engines directly connected by flat belts to three line shafts, each of which in turn drives part of the milling machinery. A 5k.w. generator coupled to one of the diesel engines supplies the mill and camp with electric lights.

Commentary

While recovery of valuable minerals by gravity concentration alone is not expected to be high, (possibly 50 percent) it is probably the wisest course to follow in view of the present development of the mine, and the type of ore deposits. If subsequent development warrants a more efficient, but more expensive plant, no doubt the tailings from the present mill could be reclaimed. I gained the impression that present plans are to stay with, and produce, the ore, rather than to embark on a costly program of exploration.

Reference is made in my inspection report to the desirability of employing a first aid man at this property. While conditions at the mine are not bad, with little danger so far from loose ground, or other hazards common to mining, it must be borne in mind that the nearest doctor is 216 miles away at Whitehorse. I have searched the Mining Safety Ordinance, the Workmen's Compensation Ordinance, and the Sanitary Regulations

in vain for some reference to the necessity for a qualified first aid man in mining operations. Section 25, rule (32) of the Mining Safety Ordinance states merely that "there shall be provided and maintained at every mine for the treatment of anyone injured such first aid supplies as are required by the regulations of the Workmens Compensation Act of British Columbia and the Sanitary Control Ordinance of the Yukon Territory". I could find no mention of the necessity of employing someone who is qualified to use these supplies. I recommend that this point be considered, and that more definite rules concerning first aid be written into our Yukon ordinances.

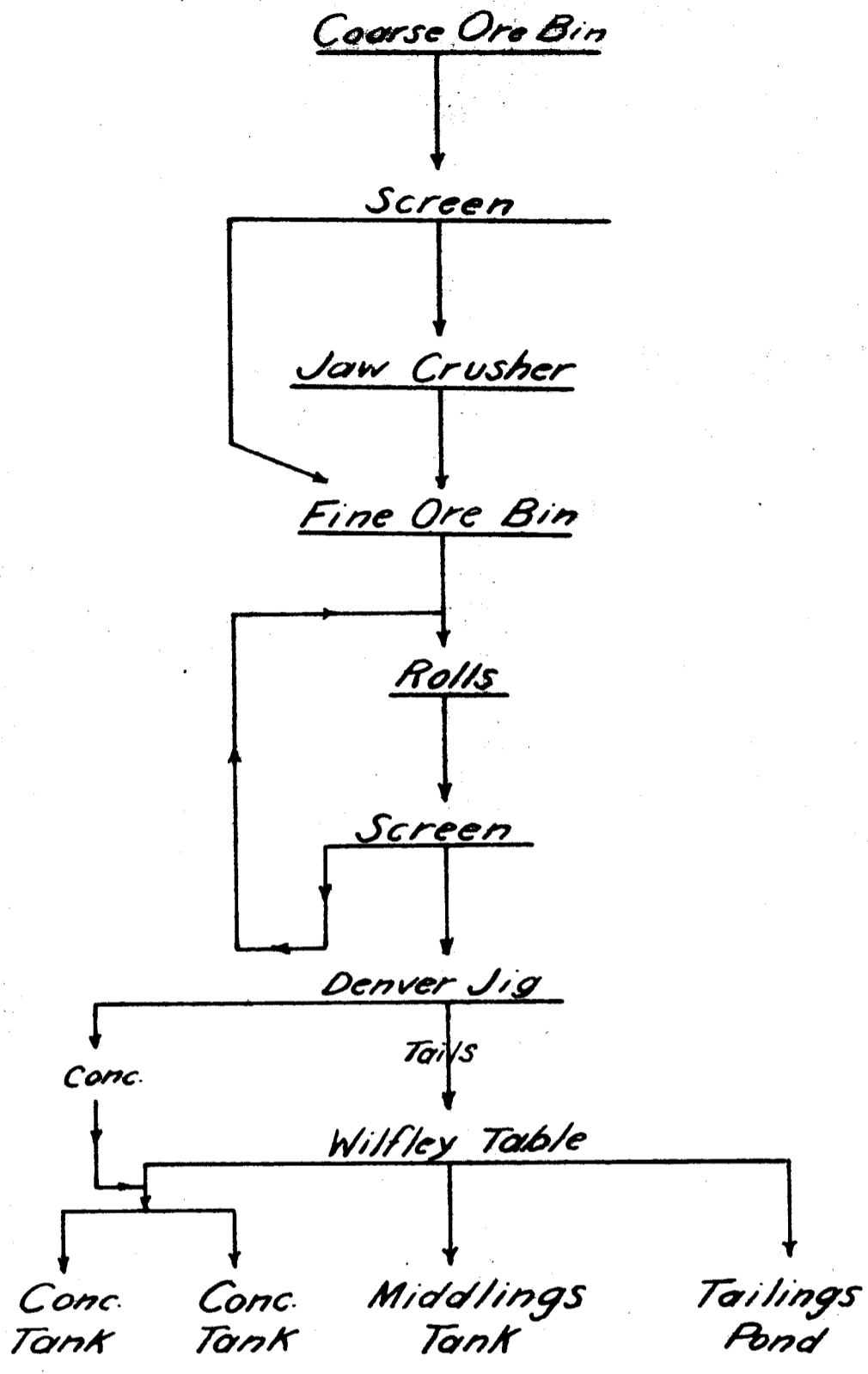
Respectfully submitted,



M.E. Almstrom,
Mining Inspector.

July 13, 1953.

c.c. F.G. Smith,
Administrator,
Yukon Territory,
Whitehorse, Y.T.



Flow-Sheet of Yukon Tungsten Mill

MINE PROGRESS REPORT FOR MONTH ENDING **MARCH. 1952**

Mine **YUKON TUNGSTEN CORPORATION LTD.**

TONNAGE HOISTED: ^{Trammat} Ore .. **NONE** Waste .. **4.55** Total ... **4.55**

TONS MILLED: Total **NONE** Average Daily

PRODUCTION: This Month Metal Content - Last Month

Silver

Tons Concentrate Shipped **NONE** Lead

Tons Crude Ore Shipped **NONE** Zinc

^{Tungsten}
Cadmium..... **NONE**

(W03)

MINE DEVELOPMENT				
	Shaft or Winze No.	Total Ftge. end Last Month	Total Ftge. end This Month	Advancement for Month
SINKING	—	—	—	—
LATERAL	Level No.			
	NO 1 Level (Elev 5000') X-CUT	0.0	118.5	118.5
TOTAL LATERAL				118.5'
RAISING	All Levels NONE.			
Mine	Days Operating	Days Shutdown		Employees
	10 days Preparation	—		Mine 5
Mill	14 " Mine operation	—		Mill 1
	—	—		Surface 3
				Total 8

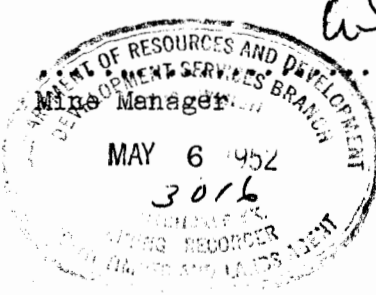
Man-Shifts worked **19.2**

Compensational accidents reported **NONE**

Remarks **ADIT STARTED MARCH 18/52**

This form to be completed in triplicate and forwarded to the Mining Recorder not later than the 7th day of the succeeding month.

Certified: **YUKON TUNGSTEN CORPORATION LTD**



W. Asselstine

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MINE PROGRESS REPORT FOR MONTH ENDING **April 30 1952**

Mine ... **YUKON TUNGSTEN CORPORATION LTD.**

TONNAGE ^{Tramway} HOISTED: Ore **NONE**..... Waste ... **668**..... Total **668**.....

TONS MILLED: Total Average Daily

PRODUCTION: This Month **NONE** Metal Content - Last Month
Silver

Tons Concentrate Shipped ... **NONE**..... Lead

Tons Crude Ore Shipped ... **NONE**..... Zinc
Cadmium **W03**

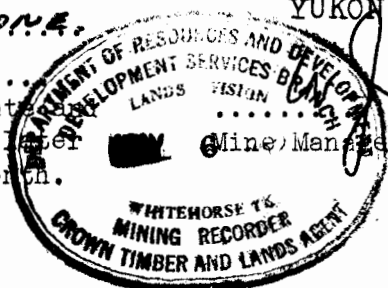
MINE DEVELOPMENT				
SINKING	Shaft or Winze No.	Total Ftge. end Last Month	Total Ftge. end This Month	Advancement for Month
	—			
LATERAL	Level No.			
	No 1 level x-cvt	118.5	341.0	222.5
TOTAL LATERAL				222.5
RAISING	All Levels			—
Mine	Days Operating	26	4	Mine 5
	Days Shutdown	—	—	Mill 1
Mill				Surface 3
				Total 8

Man-Shifts worked ... **208**.....

Compensational accidents reported **NONE**.

Remarks
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forwarded to the Mining Recorder not later
than the 7th day of the succeeding month.

Certified: **YUKON TUNGSTEN CORPORATION LTD.**



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*noted
zghw*

MINE PROGRESS REPORT FOR MONTH ENDING **April 30** 19**53**

MINE **Yukon Tungsten Corp. Ltd.**

TONN. & HOISTED: Ore **none** Waste **231** Total **231**

TONS MILLED: **none** Total **none** Average Daily **none**

PRODUCTION: This Month Metal Content Last Month

Silver.....

Tons Concentrate Shipped..... Lead.....

Tons Crude Ore Shipped..... Zinc.....

Cadmium.....

Other Production.....

MINE DEVELOPMENT				
SINKING	Shaft or Winze No.	Total Footage end Last Month	Total Footage end This Month	Advancement for Month
LATERAL	Level No.			
	No. 1	none	77ft	77ft
TOTAL LATERAL				77 ft
RAISING	All Levels			
		94 ft	94 ft	none
	DAYS OPERATING	DAYS SHUTDOWN	EMPLOYEES	
Mine.....	26	4	Mine.....	6
Mill.....			Mill.....	10
			Surface.....	4
			Mill Construction	
			4 mine	
			Total	20

Man-Shifts Worked **Mine 126 $\frac{1}{2}$ Mill Const. 150 $\frac{1}{2}$** Compensational Accidents reported..... **none**

DIAMOND DRILLING

SURFACE

UNDERGROUND

X-rayft.ft.

Standardft.ft.

REMARKS—

Started the construction of a small 30 ton pilot gravity concentrating mill.

Certified *Peter E. Peterson*
Mine Manager

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MINE PROGRESS REPORT FOR MONTH ENDING **May 31** 19 **53**

MINE **Yukon Tungsten Corp. Ltd.**

TONNAGE HOISTED: Ore **none** Waste **177** Total **177**

TONS MILLED: **none** Total **none** Average Daily **none**

PRODUCTION: This Month Metal Content Last Month
 Silver.....
 Tons Concentrate Shipped..... Lead.....
 Tons Crude Ore Shipped..... Zinc.....
 Cadmium.....
 Other Production.....

MINE DEVELOPMENT				
SINKING	Shaft or Winze No.	Total Footage end Last Month	Total Footage end This Month	Advancement for Month
LATERAL	Level No.			
	No.1	77	136	59
TOTAL LATERAL				
RAISING	All Levels	94		

	DAYS OPERATING	DAYS SHUTDOWN	EMPLOYEES
Mine.....	26	4	Mine 6
Mill.....			Mill Construction 7
			Surface 6 mine
			Total 19

Man-Shifts Worked: **223 Mine** **161 Mill Const.** Compensational Accidents reported: **none**
 DIAMOND DRILLING SURFACE UNDERGROUND
 X-rayft.ft.
 Standardft.ft.

REMARKS—

Certified *Peter E. Peterson*
 Mine Manager

MINE PROGRESS REPORT FOR MONTH ENDING June 30 1953

MINE Yukon Tungsten Corp. Ltd.

TONN. & HOISTED: Ore none Waste 195 Total 195

TONS MILLED: Total Average Daily

PRODUCTION: This Month Metal Content Last Month
 Silver.....
 Tons Concentrate Shipped..... Lead.....
 Tons Crude Ore Shipped..... Zinc.....
 Cadmium.....
 Other Production.....

MINE DEVELOPMENT				
SINKING	Shaft or Winze No.	Total Footage end Last Month	Total Footage end This Month	Advancement for Month
LATERAL	Level No.			
	No. 1	136'	201ft	65ft
TOTAL LATERAL				
RAISING	All Levels	94		

	DAYS OPERATING	DAYS SHUTDOWN	EMPLOYEES
Mine.....	26	4	Mine..... 4
Mill.....			Mill..... construction 12
			Surface..... 2
			Total 18

Man-Shifts Worked: Mine 133 Mill Const. 241 Compensational Accidents reported..... 1

DIAMOND DRILLING SURFACE UNDERGROUND

X-rayft.ft.

Standardft.ft.

REMARKS—

Certified Peter E. Peterson
 Mine Manager

This form to be completed in duplicate and forwarded to the Office of the Mining Recorder not later than the 7th day of the succeeding month.
 R 3740

MINE PROGRESS REPORT FOR MONTH ENDING July 31 1953

MINE Yukon Tungsten Corp. Ltd.

TONK. & HOISTED: Ore 80 Waste 124 Total 224

TONS MILLED: 80 Total 80 Average Daily 5 1/3

PRODUCTION: This Month 140 lbs Metal Content 58% WO3 Last Month none
Silver.....

Tons Concentrate Shipped none Lead.....

Tons Crude Ore Shipped..... Zinc.....

Cadmium.....

(Tungsten trioxide) Other Production 81 lbs WO3

MINE DEVELOPMENT					
SINKING		Shaft or Winze No.	Total Footage end Last Month	Total Footage end This Month	Advancement for Month
LATERAL		Level No.			
		1	201	13.5'	214.5'
		2		48.0'	48.0'
TOTAL LATERAL			201	61.5	262.5
RAISING		All Levels	94	134	49 134

	DAYS OPERATING	DAYS SHUTDOWN	EMPLOYEES
Mine.....	26	4	Mine..... 4
Mill.....	15	15	Mill..... construction 14
			Surface..... 4 mine
			Total 22

Man-Shifts Worked 165 mine 246 Mill Const. Compensational Accidents reported none

DIAMOND DRILLING

SURFACE

UNDERGROUND

X-rayft.ft.

Standardft.ft.

REMARKS—

Started tuning in the mill on low grade tungsten ore.

Certified Peter E. Peterson
Mine Manager

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MINE PROGRESS REPORT FOR MONTH ENDING **August 31** 19. **53**

MINE **Yukon Tungsten Corp. Ltd.**

TONNAGE HOISTED: Ore **124** Waste **156** Total **280**

TONS MILLED: **124** Total **124** Average Daily **8.3 tons**

PRODUCTION: This Month Metal Content Last Month

Silver.....

Tons Concentrate Shipped **none** Lead.....

Tons Crude Ore Shipped **none** Zinc.....

9080 lbs of 58% WO3 conc.

6000 lbs of 12% WO3 Midds

Cadmium.....

Other Production **5970 lbs WO3**

MINE DEVELOPMENT

SINKING	Shaft or Winze No.	Total Footage end Last Month	Total Footage end This Month	Advancement for Month
	LATERAL			
	Level No.			
	2-S	-	41.0	41.0
	2-N	-	18.2	18.2
	2-X-cut	48.0'	73.3'	25.3
	1	214.5'	214.5'	-
TOTAL LATERAL				
		262.5'	347.0'	84.5'
RAISING				
	All Levels	134	1168.6 34.6	34.6 168.6

	DAYS OPERATING	DAYS SHUTDOWN	EMPLOYEES
Mine.....	26	4	Mine..... 5
Mill.....	15	15	Mill..... 3 operation
			Surface..... 9 mill construction
			Total 17

Man-Shifts Worked **180 Mill operation**
185 Mine 131 Mill Const. Compensational Accidents reported **none**

DIAMOND DRILLING	SURFACE	UNDERGROUND
X-rayft.ft.
Standardft.ft.

REMARKS— **Mill & Mine closed. Tungsten concentrate had 13% Pb which must be removed to make concentrate saleable. It is proposed to install flotation to do this**

Certified *Peter E. Peterson*
 Mine Manager

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MINE **Yukon Tungsten Corp. Ltd.**

Work **Surface Trenching**

Waste **1500** Total **1500**

TONS MILLED: Total Average Daily

PRODUCTION: This Month **none** Metal Content Last Month

Silver

Tons Concentrate Shipped Lead

Tons Crude Ore Shipped Zinc

Cadmium

Other Production

MINE DEVELOPMENT				
SINKING	Shaft or Winze No.	Total Footage end Last Month	Total Footage end This Month	Advancement for Month
LATERAL	Level No.			
	2-S	41.0	41.0	none
	2-N	18.2	18.2	-
	2-X-out	73.3	73.3	-
	1	214.5	214.5	-
	Surface Trenching		500x12x3	500 ft
TOTAL LATERAL		347.0	347.0	none
RAISING	All Levels	168.6	168.6	none

	DAYS OPERATING	DAYS SHUTDOWN	EMPLOYEES
Mine	none		Mine
Mill	none		Mill
			Surface 16
			Total 16

Man-Shifts Worked **114** Compensational Accidents reported **1**

DIAMOND DRILLING	SURFACE	UNDERGROUND
X-ray	ft.	ft.
Standard	ft.	ft.

REMARKS—

Assembling all supplies, tools & equipment in the Mill building at 701 1/2 Alaska Highway

Certified *Peter E. Peterson*
Mine Manager

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Yukon Tungsten Corporation Ltd.

N. P. L.

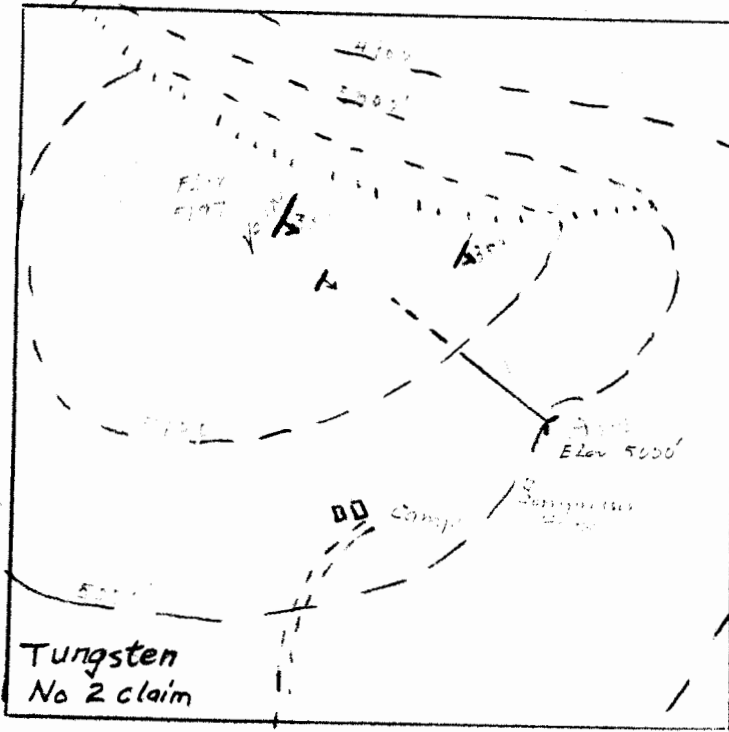
MINE OPERATIONS

MILE 701
ALASKA HIGHWAY

WHITEHORSE, Y.T.

MAILING ADDRESS

MILE 710
ALASKA HIGHWAY



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