



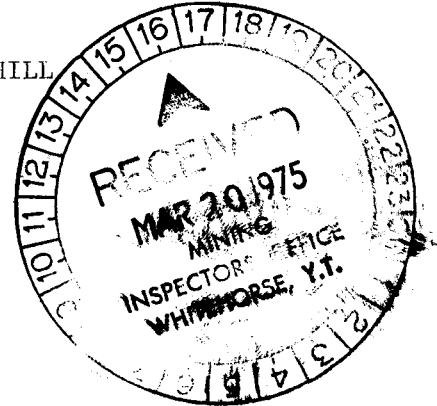
GEOLOGICAL  
AND  
GEOCHEMICAL REPORT

on the

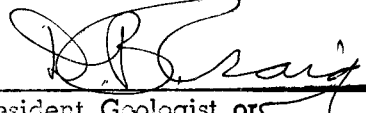


SNOWDRIFT No. 1-11 MINERAL CLAIMS, GALENA HILL

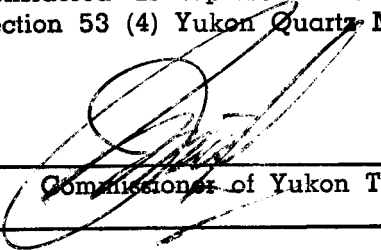
105-M-13



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 1000.00

  
Resident Geologist or  
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

  
Commissioner of Yukon Territory

Latitude: 63° 53' N.

Longitude: 135° 40' W.

Date: May 29 to June 2, 1974  
\$1000

Terry Levicki

Exploration Geologist

United Keno Hill Mines Ltd.

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Geological Mapping and Geochemical Sampling carried out by:

Randy Scott

Elsa, Yukon Territory

Robert Busch

43-Highwood Place N. W.

Calgary, Alberta

Bruce McClymont

5410-109th St.

Edmonton, Alberta

Keith Topinka

904-1st Street

Brandon, Manitoba

Geochemical Analysis by:

Fred Burgess

Chief Chemist

United Keno Hill Mines Ltd.

Supervised by:

Terry Levicki

Exploration Geologist

United Keno Hill Mines Ltd.

SNOWDRIFT-MINERAL CLAIMSSUMMARY

The Snowdrift No. 1-11 and Snowdrift Fr. were staked in the spring of 1974 and in May, a small exploration program consisting of geological mapping, prospecting, and some geochemical sampling was carried out. Sampling and mapping was greatly hampered by very limited bedrock exposures and a deep overburden cover. No evidence of mineralization was found on the claim group.

PROPERTY

The Snowdrift Group consists of 16 quartz mineral claims and 1 fractional claim. Snowdrift No. 1-11 inclusive were staked in March, 1974, and Snowdrift Fr. May, 1974; and these are the claims that were examined. Claims No. 12-16 inclusive were staked in December and are not considered in this report. The entire group is owned by United Keno Hill Mines Ltd.

<u>CLAIM</u>	<u>GRANT NO.</u>	<u>DATE STAKED</u>	<u>EXPIRY DATE</u>
SNOWDRIFT No. 1	87462	March 15, 1974	March 21, 1975
" No. 2	87463	March 15, 1974	March 21, 1975
" No. 3	87464	March 15, 1974	March 21, 1975
" No. 4	87465	March 18, 1974	March 21, 1975
" No. 5	87466	March 18, 1974	March 21, 1975
" No. 6	87467	March 18, 1974	March 21, 1975
" No. 7	87468	March 18, 1974	March 21, 1975
" No. 8	87469	March 18, 1974	March 21, 1975
" No. 9	87470	March 19, 1974	March 21, 1975
" No. 10	87471	March 19, 1974	March 21, 1975
" No. 11	87472	March 19, 1974	March 21, 1975
" No. 12	97219	Dec. 18, 1974	Dec. 23, 1975
" No. 13	97220	Dec. 18, 1974	Dec. 23, 1975
" No. 14	97221	Dec. 18, 1974	Dec. 23, 1975
" No. 15	97222	Dec. 18, 1974	Dec. 23, 1975
" No. 16	97223	Dec. 18, 1974	Dec. 23, 1975
" Fr.	88686	May 31, 1974	June 5, 1975

### LOCATION AND ACCESS

The Snowdrift claim group is located on the west end of Galena Hill, in the Mayo Mining District 105-M-13. The group adjoins the Wayne 2-6 and Don 3-8 claims owned by Gilbert Rich, the Alberta 13-17 claims owned by Silver Spring Mines and the KPO 23,25,27,29, owned by Cima Mines.

The South McQuestern Road provides access to the property.

### TOPOGRAPHY

The claim group has generally low to moderate relief; with elevations ranging from 2300 to 2500 feet. Most of the claim block is covered by a deep mantle of overburden, in some places believed to be in excess of 100 feet.

### GENERAL GEOLOGY

The rocks on the Snowdrift claims belong to the Yukon Group of sediments believed to be Pre-Cambrian in age. They consist of quartz-sericite, schist, graphite schist, and thin bedded quartzite. The regional strike of the bedding is east to northeast and the dip varies from 24° to 55° S.

### PREVIOUS WORK

The Snowdrift claims are a re-staking of the Alberta and Yukon Claims- originally held by J. Strebchuk. In 1967, Fort George Mining and Exploration optioned these claims, including the Wayne 2-6 owned by G. Rich; and did considerable bulldozer trenching. A quartz-siderite vein break carrying small pods of massive galena with minor pyrite and chalcopryrite was discovered on the Wayne 5 claim and investigated in the course of the 1967 work. The vein strikes about N15°E and cuts northeast trending, south-

east dipping quartz-sericite-schist-containing intercalated blue-grey quartzite bands.

Late in 1967, a limited short hole drilling program (200 ft.) was carried out to test the depth extension of the structure, but failed to prove a significant size to the sulphide pod.

Samples across the 1 foot width of the vein assayed:

Au. (1)	0.02 oz.	(2)	0.08 oz.	(3)	0.10 oz.
Ag.	140.2 oz.		170.8 oz.		153.5 oz.
Pb.	65.8%		70.9%		62.6%

During the work program, 6.5 tons of ore were hand cobbled and shipped to Trail for smelting. The ore assayed 0.059 oz. Au., 133.6 oz. Ag., and 55.9% Pb.

Silver Spring Mines acquired the Alberta and Yukon Claims, in 1969-70 and in 1971, carried out a geophysical and geochemical survey. Diamond drilling was attempted on a geophysical anomaly, but was abandoned due to excessive overburden.

#### GEOLOGICAL MAPPING

Geological mapping in the Snowdrift claims was restricted mainly to examining float, road cuts, and some small trenches. The adjoining Wayne No. 5 claim was mapped in some detail as it has been extensively trenched to bedrock, and thus provided valuable information by projecting its geology onto U.K.H.M. ground.

The greater part of the Snowdrift group was found to be in the Upper Schist formation with bedrock consisting mainly of sericite and graphite schist and thin-bedded quartzite. The rocks strike east to north-east and dip to the southwest at 24° to 55°.

Bed rock in a trench near the southern boundary of Snowdrift No. 3 was found to be dipping steeply north, indicating possibly some local folding.

No outcrops were found on the Snowdrift 9, 10 & 11 claims; however, some quartzite float did occur, possibly indicating that this area may be underlain by the Central Quartzite Formation. By projecting bedrock geology from the Leo claims, which were drilled in 1974, and from the Silver King Mine, it appears that the Snowdrift No. 9-11 claims to be in the favorable quartzite horizon with the Upper Schist-Central Quartzite contact running approximately through Snowdrift No. 6.

No indications of mineralization were found on the Snowdrift claims.

#### GEOCHEMICAL SURVEY

A very limited geochemical survey was carried out on the claim group, due to the deep overburden cover over most of the area. A total of 263 soil samples were taken at 100 foot intervals on 300 foot line spacing. Since the program was carried out in early spring, sampling was hampered by frozen ground conditions in some areas.

#### LAB PROCEDURE

All samples were processed by the Elsa Assay Lab. under the supervision of Mr. Fred Burgess, Chief Chemist.

The samples were dried and screened through a -80 mesh standard nylon screen. 1.00 grams of the minus 80 mesh material was allowed to digest in a solution of  $\text{HNO}_3$  &  $\text{HClO}_4$  for a minimum of 2.5 hours. After cooling, the samples were brought up to a 10 ml. volume with demineralized water and were analyzed for lead and silver by an atomic absorption spectrophotometer. Results were obtained in parts per million.

#### GEOCHEMICAL INTERPRETATION

Both silver and lead results were of very low order, 4.4 ppm silver and 70 ppm lead being the highest values. Silver was contoured at 2.0 ppm and lead at 40 ppm.

Lead Plot

Several very low order anomalous zones were found, mostly located on the Snowdrift No. 5 claim. Four of these zones correlate quite closely to the silver anomalies. However, normally these results would be considered as background values.

Silver Plot

Like lead, the silver plot shows several low order anomalies. The two zones striking northeast on the Snowdrift No. 5 may be a weak expression of an extension of the vein which lies on the Wayne No. 5 claim.

CONCLUSIONS

General mapping and a geochemical survey on the Snowdrift claims did not indicate any occurrences of mineralization, but did help to provide a better knowledge of the geology of the area. Since the vein on the Wayne No. 5 claim projects onto the Snowdrift claims, and massive quartzite does exist at depth it is recommended to drill several deep overburden holes in order to examine the vein at depth where it may be in quartzite. It is also recommended to drill some holes on Snowdrift No. 6, 12 and 11 to accurately establish the Upper Schist-Central Quartzite contact.

Respectfully submitted,



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Terry Levicki

Exploration Geologist

United Keno Hill Mines Ltd.

STATEMENT OF COSTSSummary of Work

Geological mapping, geochemical sampling, staking one claim--263 samples collected and analyzed, May 29, 30 31, June 1, June 2, 1974.

Cost

Three men at \$700.00 per month (23 working days) or \$30.00/man per day for five days=== \$450.00


Party chief at \$800.00 per month (23 working days or \$34.80 per day====  
====\$174.00

263 Samples (2 determinations @ \$0.75 per determination=====  
====\$394.50

Total cost ===== \$1018.50

Please apply this cost as assessment work on the Snowdrift No. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 for one year.

Payment in lieu will be made for Snowdrift No. 1 and Snowdrift Fr.



A F F I D A V I T

I, Terry Levicki, of Elsa, in the Yukon Territory, Exploration Geologist,  
do solemnly declare:

1. I have caused the above mentioned work to be performed to the best  
of my ability and have a personal knowledge of the facts and matters  
herein declared.
2. And I make this solemn declaration conscientiously believing it to  
be true and knowing that it is of the same force and effect as if  
made under oath and by virtue of the Canada Evidence Act.

Declared before me at

Elsa, in  
the Yukon Territory ,  
this 7<sup>th</sup> day of  
MARCH 19 75 .

*[Signature]*

Notary Public in and for  
the Yukon Territory.

*[Signature]*

The work on the Snowdrift No. 1 to 11 Mineral Claims, Galena Hill area, Mayo Mining District, was performed by and for United Keno Hill Mines Limited, under the general supervision of Dr. Alex Smith, P. Eng., Consulting Geologist, Falconbridge Nickel Mines Limited.




















Dr. Alex Smith, PhD, P. Eng.

Consulting Geologist

UNITED KENO HILL MINES LIMITED  
 ELSA YUKON  
 EXPLORATION DEPARTMENT

GEOLOGY MAP  
 OF THE  
 SNOWDRIFT MINERAL CLAIMS  
 1-16

SURFACE LEGEND

- Metamorphosed Sediments
-  Quartzite
  -  Graphitic Schist
  -  Quartz-sericite Schist
- Vein Material
-  Quartz Vein
  -  Mineralized Vein
- 
-  Outcrop, Float
  -  Trench
  -  Vein observed, assumed
  -  Bedding
  -  Schistosity
  -  Vein, Fracture
- 
-  Building
  -  Shaft
  -  Prospect Pit
  -  Main Road
  -  Other Roads
  -  Bulldozer Trails












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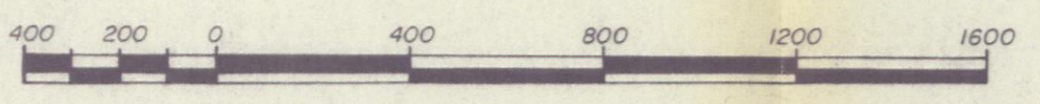


UNITED KENO HILL MINES LIMITED  
ELSA YUKON  
EXPLORATION DEPARTMENT

PLAN MAP  
OF THE  
SNOWDRIFT MINERAL CLAIMS  
1-16

LEGEND

-  Claim Group Boundary
-  Claim Post Location
-  Direction of Staking
-  Building
-  Old Airstrip
-  Main Road
-  Other Roads
-  Bulldozer Trails
-  Area of Bedrock Exposure



SCALE: 1 inch = 400 feet



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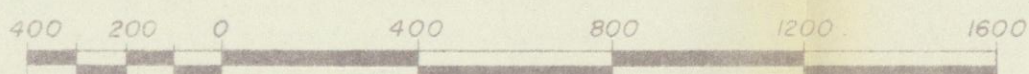
SOIL SAMPLING  
LEAD PLOT  
OF THE  
SNOWDRIFT MINERAL CLAIMS  
1-16

LEGEND

CONTOUR INTERVALS IN PARTS PER MILLION (PPM.)

□ 0 - 39  
■ 40 - 70

— — — Baseline  
••• Sample location  
/ Insufficient Sample (Organic)



SCALE: 1 inch = 400 feet



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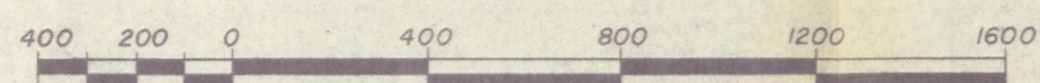
SOIL SAMPLING  
 SILVER PLOT  
 OF THE  
 SNOWDRIFT MINERAL CLAIMS  
 1-16

LEGEND

CONTOUR INTERVALS IN PARTS PER MILLION (PPM.)

- 0 - 1.9
- 1.9 - 4.9

- +— Baseline
- Sample location
- Insufficient Sample (Organic)



SCALE: 1 inch = 400 feet

