G E O L O G I C A L

A N D

G E O C H E M I C A L R E P O R T

on the

ERIN 1 to 28 and 31 to 189 Mineral Claims inclusive

by

Robert E. Van Tassell

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

$33,305.44

D B Craig

Resident Geologist or
Resident Mining Engineer

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

Commissioner of Yukon Territory

Sheet No. 106D

Latitude 64° 02' North
Longitude 135° 35' West
Date: June 4 to Aug 31, 1969

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SUMMARY

The Erin Mineral Claims (1 to 28 and 31 to 189 inclusive) were staked the first week in May, 1969. The area was felt to be a geologically favourable one, containing a northern limb of the Galena Hill - Keno Hill quartzites.

The main portion of the claim group lies on a hill which is heavily wooded and contains less then 3 % outcrop. It was felt that a pre - liminary soil sampling program would give indications of possible vein zones in the area and would possibly indicate areas for more detailed follow-up work.

In addition to the geochemical survey a preliminary geological reconnaissance was made to locate information which might aid inter - pretation of geochemical results and to try and locate the more favourable geological horizons e.g. massive quartzites and/or greenstones.

A five man crew, consisting of a Party Chief and four Soil Samplers commenced work on June 3rd, 1969. A total of 80 days were spent on the claim group. The crew was withdrawn from the field from June 15th to 19th inclusive when extreme hot weather made fire hazard conditions very high.

HISTORY

Probably the first prospecting in the area was for placer gold. There are indications throughout the grid area that previous work has been done e.g. old cabins, cat trails, old camping equipment, old food containers and shallow pits and trenches.

Most of the area was staked in the early 60's following activity in the Haggart Creek - Potato Hills region. The Bob Claims comprising some 120 claims were staked in 1963 and covered a large portion of the present Erin Group. Indications show that this Claim Group was soil sampled in 1963.

Following the release of results from a G.S.C. Geochemical Survey on March 31st, 1965, United Keno Hill Mines Limited staked two claim groups in the area. This staking was based on total heavy minerals in stream sediments.

The N Group of 8 claims covered the small northern granite stock shown on the Erin General Geology Map. The N Group was prospected and soil sampled with analysis for lead, zinc and copper; Lead gave a small low order anomaly around the granite stock. Nothing was found with prospecting.

The G Group of 34 claims was staked just south of Lynx Creek, just southwest of the present Erin Group. Soil sampling of a reconnaissance type was done with analysis for lead, zinc and copper. Both soil sampling and prospecting revealed silver, lead and antimony mineralization occurring in narrow bedding type veins in quartz mica schist and limestone. (see G.S.C. Paper 66 - 31, pages 16 and 17)

In 1966 the G.S.C. published Geochemical Maps for 13 individual elements. The area around the Erin Claim Group revealed isolated anomalous results for zinc, arsenic, antimony, tungsten, manganese and boron.

PROPERTY

The claim group was staked for and is held by United Keno Hill Mines Limited, Elsa, Yukon. The Group is made up of 187 claims as follows:

Claims			Grant Numbers
Erin	1	12	Y 32291 - Y 32302
Erin	13	28	Y 32129 - Y 32144
Erin	31	44	Y 32303 - Y 32316
Erin	45	50	Y 32661 - Y 32666
Erin	51	60	Y 32153 - Y 32162
Erin	61	70	Y 32317 - Y 32326
Erin	71	72	Y 32175 - Y 32176
Erin	73	84	Y 32163 - Y 32174
Erin	85	114	Y 32177 - Y 32206
Erin	115	118	Y 32213 - Y 32216
Erin	119	124	Y 32207 - Y 32212
Erin	125	176	Y 32218 - Y 32269
Erin	177	184	Y 32275 - Y 32282
Erin	185	189	Y 32270 - Y 32274

LOCATION AND ACCESS

The Erin Claim Group lies north of the South McQuesten River and east of Lynx Creek on Staking Sheet 106 D - 4, latitude 64° 02'N and longitude 135° 35' W. It is some 12 miles northwest of Elsa.

The area is accessible in part by helicopter. Following establishment of the base camp by helicopter a J - 5 Bombardier Muskeg Tractor was used for access between base camp and the road in to the South McQuesten River. The J - 5 was also used for travel within the claim group. Greater use could have been made of the J - 5 in the heavily wooded areas had a cat been used for a few days to doze rough tote roads.

TOPOGRAPHY

The topography of the area cannot be considered rugged except for the northern and western boundaries of the claim group. Elevatios range from 3100 feet to 4300 feet. The central to south eastern portion is relatively gentle in relief with muskeg cover. The claim group is 98 % covered by trees consisting mainly of spruce, willow, and buckbrush, the latter being most abundant in the lower muskeg regions.

GENERAL GEOLOGY

The general geology of the area has been described in part by Bostock, 1943 (Preliminary Map 43-9); Green and Roddick, 1962 (Paper 62-7); W.H. Poole, 1965 (Paper 65-1) and R.W. Boyle, 1965 (Bulletin 111).

The rocks underlying the Erin Claim Group belong to the Yukon Group and may be PreCambrain to Jurassic in age. They consist of thick and thin bedded quartzites, graphite schist, quartz sericite schist, greenstone, minor limestone and small stocks of granodiorite.

The exact relationship of these rocks to those on Galena Hill is not known. The heavy overburden cover on the southeast end of the claim group plus the heavy drift cover in the McQuesten Valley does not allow an easy acceptable interpretation.

The massive and thin bedded quartzites on the Erin Group closely resemble those on Galena and Keno Hill's.

The limb Strikes north westerly with gentle dips southwest but local variations occur which are considered minor.

I GEOLOGICAL SURVEY

A GENERAL

Enlarged aerial photographs on a scale of approximately 1 inch to 600 feet were used for locating claims and plotting geology. Film positives were used to reproduce field work sheets. As three enlarged photos were used and because of deviation in the aerial photo flight lines there is a slight variation in scale.

The maps accompanying this report have been prepared from considerable fixing of overlapping photographs. Due to relatively gentle topography and densely wooded sections orientation points were difficult to locate. The maps though not exactly accurate do allow a relative plotting of geologic and geochemical data.

B DETAILED GEOLOGY

Approximately 98 % of the claim group is drift covered and further hindered by a heavy moss and vegetation cover. This greatly hindered the plotting of actual contacts particular ly in the central to southeastern part of the claim group. Many contactshave been projected on data obtained from sporadic frost riven material.

As stated before the rocks strike in a north westerly - south easterly direction with local variations due to local folding and proximity to intrusive contacts. Dips vary from 9 degrees to 30 degrees southwest and locally one dip was as steep as 55 degrees.

Rocks occuring in the area are:

Unit A	Granodiorite - quartz diorite
Unit 1	Limestone
Units 2,2a & 3	Thin Bedded and Massive Quartzites
Unit 4a	Graphite Schist
Unit 5	Sericite Schist
Unit 6	Greenstone

(a) Unit A Granodiorite - quartz diorite - The granitic rocks are medium to fine grained, consisting of quartz, plagioclase, orthoclase, biotite and muscovite. They range in color from grey to dark grey fresh and weather light to dark grey to buff.

Geological mapping revealed six stocks within the claim group. A slightly differing composition is present inthe granitic rocks, however no age differences are envisioned. Alaskite, the most felsic is apparently related to the contacts and only occurs sporadically.

The largest stock has a pronounced northwest axis. Several lineaments are transverse to the axis and have associated minor milky white quartz as float. A few fragments revealed traces of tungsten (scheelite) under the mineral lamp. No tungsten was noted in a number of granite samples checked by the mineral light.

Varying degrees of weathering were noted from one stock to another.

(b) Unit 1 Limestone - The limestone noted occured as float and is a light grey in color, crystalline and contained minor amounts of sericite. Minor calcareous material occurs throughout in the schists.

(c) Units 2, 2a & 3 Thin Bedded and Thick Bedded Quartzites - The quartzites in general are thin bedded (units 2 and 2a) Quartzite interbedded with varying amounts of sericite appear quite competent. Thin bedded quartzites with interbedded graphite schist do not appear competent. They are usually marked by drag folds and complex contortions with an occasional thick band of quartzite.

The massive quartzite when encountered was for the most part frost riven blocks. In outcrop it is massive, blocky, jointed with random narrow cross cutting quartz stringers. A pale grey variety was most common but a pale siliceous dense variety is also present grading to a light brown color. Minor flecks of pyrite were noted with a few minor narrow graphite schist partings

(d) Unit 4a Graphite Schist - The graphite schist occurs as a dark grey to black phyllitic very thin bedded unit. It is dull to shiny on a wet surface. Irregular, very thin bands of quartzite occur in the unit. The graphite is well developed being soft and flaky. This unit displays high foliation and locally exhibits wrinkle lineations, drag folds and innumerable crenulations. Most contain abundant quartz as stringers, irregular masses, boudins in small fractures, between schist layers, in crenulated zones, and along bedding planes.

(e) Unit 5 Sericite Schist - A variable character is shown in this unit. The amount of sericite appears to increase towards the southwest with some areas reaching 75 % sericite and 25 % quartzite as very thin bands. This rock type displays much the same characteristics as the graphite schist with innumerable crenulations and irregular masses of quartz. The rock is from a greenish yellow color to a mottled grey green and has a silvery lustre when wet.

(f) Unit 6 Greenstone - Relatively large lenses of greenstone (altered diorite) occur in the area. It forms prominent knolls which are often flanked by talus slopes particularly at the northern end of the claim group. Texture and grain are variable grading from a gabbroic texture to a highly schistose variety. The latter is usually exhibited by smaller bodies. This rock is from grey green to dark green in color.

6 STRUCTURE

The strike of the rocks in the area is fairly consistent in a northwest-southeast direction with the exceptions of a few isolated areas particularly around granitic intrusives. Dips were found to vary from 9 degrees to 55 degrees southwest.

Due to the heavy overburden cover it is difficult to evalute any structural trends, either as faults or contacts.

Aerial lineations show a number of northeast trends, but nothing was found from detailed prospecting to suggest either faults or veins.

A number of possible northwest trending faults have been postulated but movement appears small and is also coincident with bedding direction. Minor evidence was noted for faults in greenstone areas.

Low angle thrust or bedding faults appear to be common along or nearly parallel to bedding planes particularly in the graphitic and sericitic units.

Near the headwaters of Skate Creek an outcrop of phyllitic graphitic quartzite appears to represent the limb of a minor anticline.

Numerous small drag folds and crenulations with attendant quartz boudins were noted, particularly in the schist units.

D MINERALIZATION

Geological mapping and prospecting revealed no mineralization of an economic nature.

Following are brief descriptions of showings found.

(a) PRIN 87 M.C. (south of baseline) - Manganese and iron stain, drag folded with quartz, carbonate, pyrrhotile and possibly arsenopyrite???

Assays Ag - 0.40 oz/ton
Pb - Tr
Zn - 0.13%

(b.) ERIN 109 M.C. (near Skate Creek) - Structure 2.5 feet wide and strikes North 20 degrees West, pinches out to the southeast. Minerals noted were calcite, arsenopyrite, quartz, tourmaline, stibnite, pyrite and pyrrhotite in a crushed gouge zone.

Assays Ag - nil
Pb - .07%
Au - nil

(c.) ERIN 113 M.C. (15 W, 10S) - Intersection of two faults showing heavy limonite stain with calcite, pyrite and quartz.

Assays Ag - nil
Pb - .02%

(d.) ERIN 130 M.C. (Baseline and 1300N) - Two locations on the claim showed a strong quartz - quartzite breccia in good massive quartzite. No mineral was visible.

Assays Ag - nil
Pb - nil

(e.) ERIN 157 M.C. - A brecciated phyllitic graphitic schist with one fleck of galena noted, minor quartz and limonite stain.

Assays Ag - nil
Pb - nil
Zn - nil

In addition some barren white smoky quartz was noted as float in proximity to lineations cutting a Northwest trending stock of granite. The mineral light revealed traces of tungsten as scheelite. It is felt that traces will be found in many of the small quartz stringers lying close to the granite stock. Many samples of granite were examined under the light but revealed no tungsten.

II GEOCHEMICAL SURVEY

A GENERAL

The claim baselines were used for grid control for soil sample collection. Each east-west claim line was chained and picketed at 300 feet intervals. Samples were then taken employing a pace and compass method every 100 feet on north-south lines. This gives a coverage of 75 samples per mineral claim.

Conditions of the available soil varied considerably within the claim group since a large area particularly in the central to southeastern and southern portions are low with wet muskeg conditions. All samples came from within 8 inches of the surface. Permafrost, extremely wet conditions and heavy moss cover prevented taking deeper samples. This accounts for a number of Insufficient Samples shown on the Geochemical Maps.

A total of 13,829 samples were taken of which 12,742 were analyzed for Lead and Silver. 1,872 samples were analyzed for Tungsten.

18 samples were taken by auger on the western edge of the claim group in early October. These were analyzed for Lead and Silver.

Considering the lapsed time, productivity of the soil samplers was 44 samples per man per day.

Samples of approximatedly ½ to 1 cup size were taken, using a mattock. All Samples were placed in prenumbered brown soil sample bags. The samples were shipped to Vancouver for analysis.

B LAB PROCEDURES

The initial laboratory techniques and methods of analysis were set up and supervised by Dr. Ivor L. Elliott, Chief Geochemist, Falconbridge Nickel Mines Limited, Vancouver, B.C. He is familar with the conditions of the Keno Hill - Galena Hill area through the analysis of previous samples.

LEAD - SILVER METHOD OF ANALYSIS

The sample is dried and screened through a 80 mesh standard nylon screens. 1.00 gram of miners 80 mesh material is boiled for one hour in 10 mls. of 10% Nitric Acid. After cooling, the solutions are made up to 10 mls. volume with demineralized water to make up for losses due to evaporations. The solution is then shaken and filtered through a Whatman No. 1 filter paper. The filtrate is aspirated into an P. E. I. 140 atomic absorption spectrophotometer and concentration read directly from the instrument.

TUNGSTEN ANALYSIS

The samples are dried in a gas fired hot air drier and hand screened through 80 mesh standard nylon screens.
The miners 80 mesh portion of the dried sample was analyzed for tungsten using a standard geochemical method.
250 m.g. of sample were decomposed by fusing with an alkaline flux. The fusion was leached with demineralized water and an aliquot of the leach solution in hydrochloric acid and 1% zinc dithiol solution. After shaking to develop the coloured tungsten complex the samples were compared with previously prepared standards to determine the tungsten concentration.

C INTERPRETATION OF RESULTS

All samples taken were analyzed for lead and silver. From seven years of previous work on Galena and Keno Hills soil sampling geochemistry has proved to be an effective tool in locating vein zones in areas of relatively shallow overburden e.g. less 10 feet. Zinc, copper, lead and silver analysis have been used but the results from the latter two have been the most effective. The mobility of both lead and silver are low, hence anomalous results should indicate a nearby source.

In contouring, lead values are cut at 25 parts per million (P.P.M.), silver at 1 p.p.m., and tungsten at 16 p.p.m.
Results on the Erin Group have been varied and interpretation is based primarily on the lead plot.

TUNGSTEN

As traces of tungsten were noted using the mineral light on milky white vein quartz float, it was decided to run a portion of the soil samples particularly in the north end for tungsten to see if any trends were apparent. (see Tungsten plot map)
A total of 1,872 samples were analyzed which revealed the following:

less than 4 p.p.m.	1,628 samples
8 p.p.m.	154 samples
greater than 16 p.p.m.	90 samples

Using 16 p.p.m. as a cutoff a few small isolated anomalies occur throughout the area. A few anomalies occur associated with suspected faults through the granite stock. These areas did show traces of tungsten in quartz float. The scattered results obtained could be expected if minor tungsten is associated with small quartz stringers. In no case do the tungsten results suggest a major tungsten area of interest.

SILVER

Of the 12,742 samples analyzed for silver, only 278 samples were 1 p.p.m. or greater which represents 2.2% of the total.
An attempt was made to drop the contour interval to 0.8 p.p.m. which represents some 368 samples. This did not contribute to any type of pattern but revealed isolated scattered anomalies throughout the grid area.
Silver gives a very erratic and puzzling picture in that it occasionally reflects lead anomalies on a very small scale and then there are small isolated anomalies where there are no corresponding lead anomalies.
In no area does silver reflect a pattern which seems to indicate a vein structure.
It may possibly be interpreted that many of the anomalous values indicated may be a result of organic material in the samples.

LEAD

Of the 12,742 samples analyzed for lead (see Lead plot map), only 232 samples were 50 P.P.M. or greater, which represents 1.8% of the total. The cutoff was dropped to 25 p.p.m. which represented 1,080 samples or 8.5% of the total. 11,430 samples were below 25 p.p.m. lead.
Normally on Galena Hill 50 p.p.m. lead is used as a cutoff. This shows scattered anomalies and a slight northeast trend in the center of the grid. This major trend becomes much more apparent when the contour interval is dropped to 25 p.p.m. It is also true that a large number of isolated anomalies occur which show no definite trends.

There is an apparent anomaly which trends northeast-southwest through the center of the claim group. The anomaly is present in all rock types. This anomaly may reflect a major fault zone. It may also be noted that a major portion of the anomaly is associated with a drainage pattern and low muskeg ground and may reflect an accumulation of lead values in this environment.
Further these anomalies overlie three granite stocks in the area. The lead does not have strong support from the silver, only isolated single peaks. Further samples will be taken employing an auger over some of the highly anomalous areas. Tests will be conducted at different horizons to see if the results are reproducable.

AUGER SAMPLES

Early in October when a few anomalous results were apparent on the Erin 86 and 87 Mineral Claims, some 18 samples were taken from 1.5 feet to 2.0 feet in depth using an auger. This was done to check soil sample results. These samples were shipped to Vancouver for analysis.
The results returned anomalous lead with more widespread and apparent silver values.
Though the sample results are for a limited area it shows that auger sampling would be a good cursory and economical approach for further testing of anomalies on the grid area.

CONCLUSIONS AND RECOMMENDATIONS

The Erin Claim group is heavily covered by vegetation and overburden. Less then 3% outcrop occurs on the claim group. These factors greatly hampered the geological and geochemical survey.

Prospecting and mapping did not locate any economic mineralization. Some barren breccia float was found which may indicate faults and/or vein zones.

Rock types are similar to those of Galena Hill and Keno hill with the addition of granodiorite. A favourable competent massive quartzite horizon was located. Fault traces and stratigraphic contacts are approximate owing to overburden cover and the contacts in particular have been extended in many cases on float material.

Traces of tungsten were detected using a mineral light on milky white quartz float associated close to possible faults in the granite stock.

Prospecting of the largest granite stock which has the most outcrop and frost heaved float did not reveal tungsten mineralization.

Geochemical analysis for tungsten gave no major trends for that element.

Silver analysis gave isolated and widespread anomalies which only reflect lead occasionally;

Lead analysis gave a major north-east southwest trending anomaly which cuts all rock types in the area. This anomaly may reflect a major fault trend or drainage pattern. It is very sporadically supported by weak silver results.

It is recommended that cursory auger sampling and detailed prospecting be carried out to check the major northeast-southwest trending lead anomaly. This work should be started with the higher anomalous peaks in the favourable massive quartzite horizon.
This work should either support further exploration or lapsing of the claim group.

SUMMARY OF WORK

1. GEOLOGICAL MAPPING JUNE 3rd - AUGUST 26th

One man prospected the 187 claim area on a reconnaissance basis using claim lines and aerial photos for a total of 80 man days.

2. GEOCHEMICAL SURVEY JUNE 3rd - AUGUST 24th

Four men collected 13,829 soil samples for a total of 312 man days. All samples were shipped to Falconbridge Nickel Mine's Geochem Lab for analysis.

COSTS

GEOLOGICAL MAPPING

1 Party Chief at $550.00 per month by 80 days	$1,419.20

GEOCHEMICAL SURVEY

4 Soil Samplers at $450.00 per month for a total of 312 man days.	$4,530.24
12,742 soil samples at 2.00 per sample for 2 analysis (Lead and Silver)	$25,484.00
1,872 soil samples at 1.00 per sample for Tungsten analysis.	$ 1,872.00

TOTAL

GEOLOGICAL MAPPING	$ 1,419.20
GEOCHEMICAL SURVEY	31,886.24
	$33,305.44

Note: These costs do not include transportation, camp overhead or preparation of maps.

AFFIDAVIT

I, Robert E. Van Tassell, of Whitehorse, in the Yukon Territory, Exploration Sunerintendent, do solemnly declare:

1.

That I am duly appointed agent of United Keno Hill Mines Limited, and except where otherwise stated have a personal knowledge of the facts and matters herein declared.

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 6 day of
May 1970.

Robert E Van Tassell

A Commissioner for Oaths
for Yukon Territory

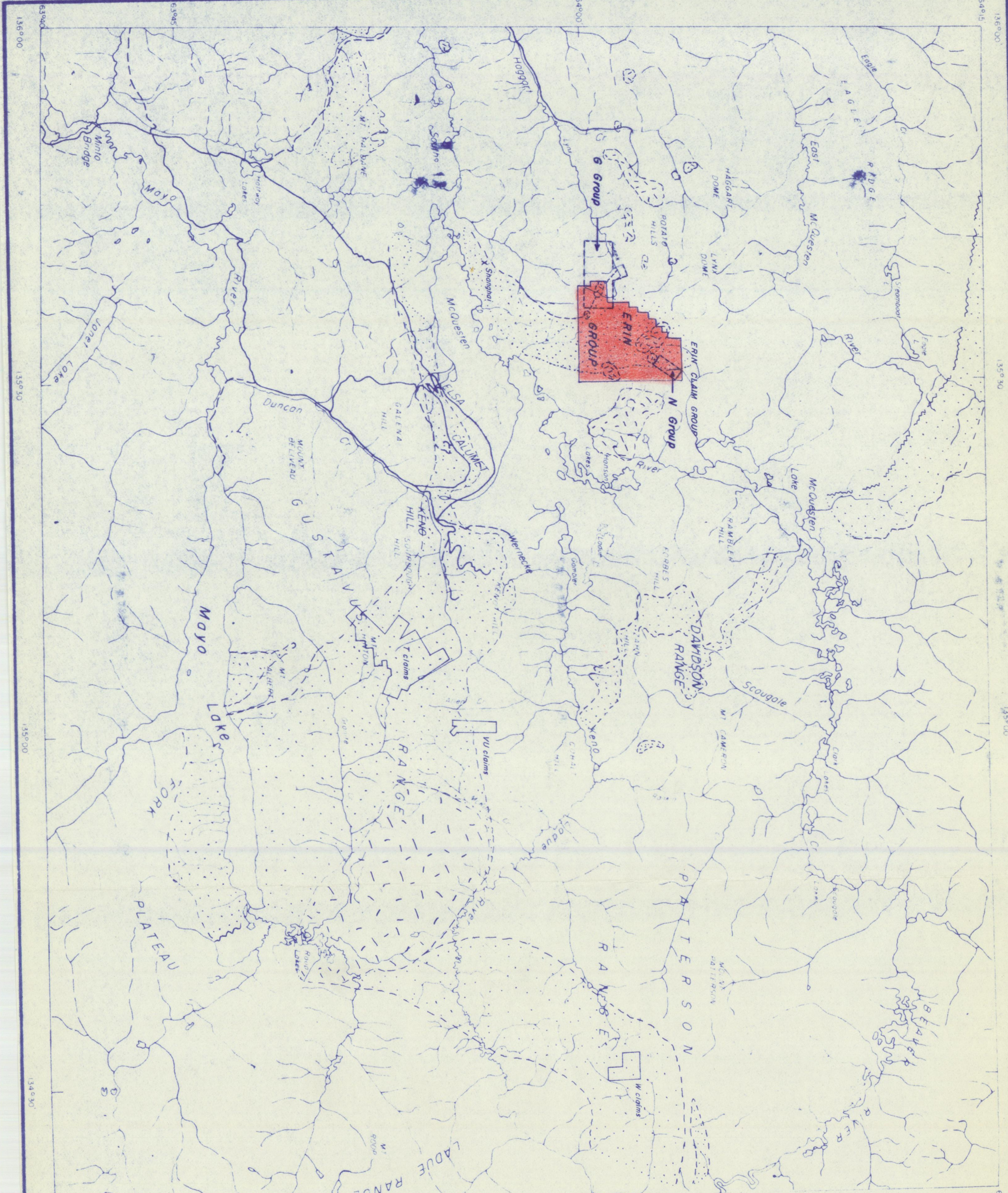


FIGURE - 1

UNITED KENO HILL MINES LTD.

ELSA YUKON

EXPLORATION DEPARTMENT

Granite

Quartzite

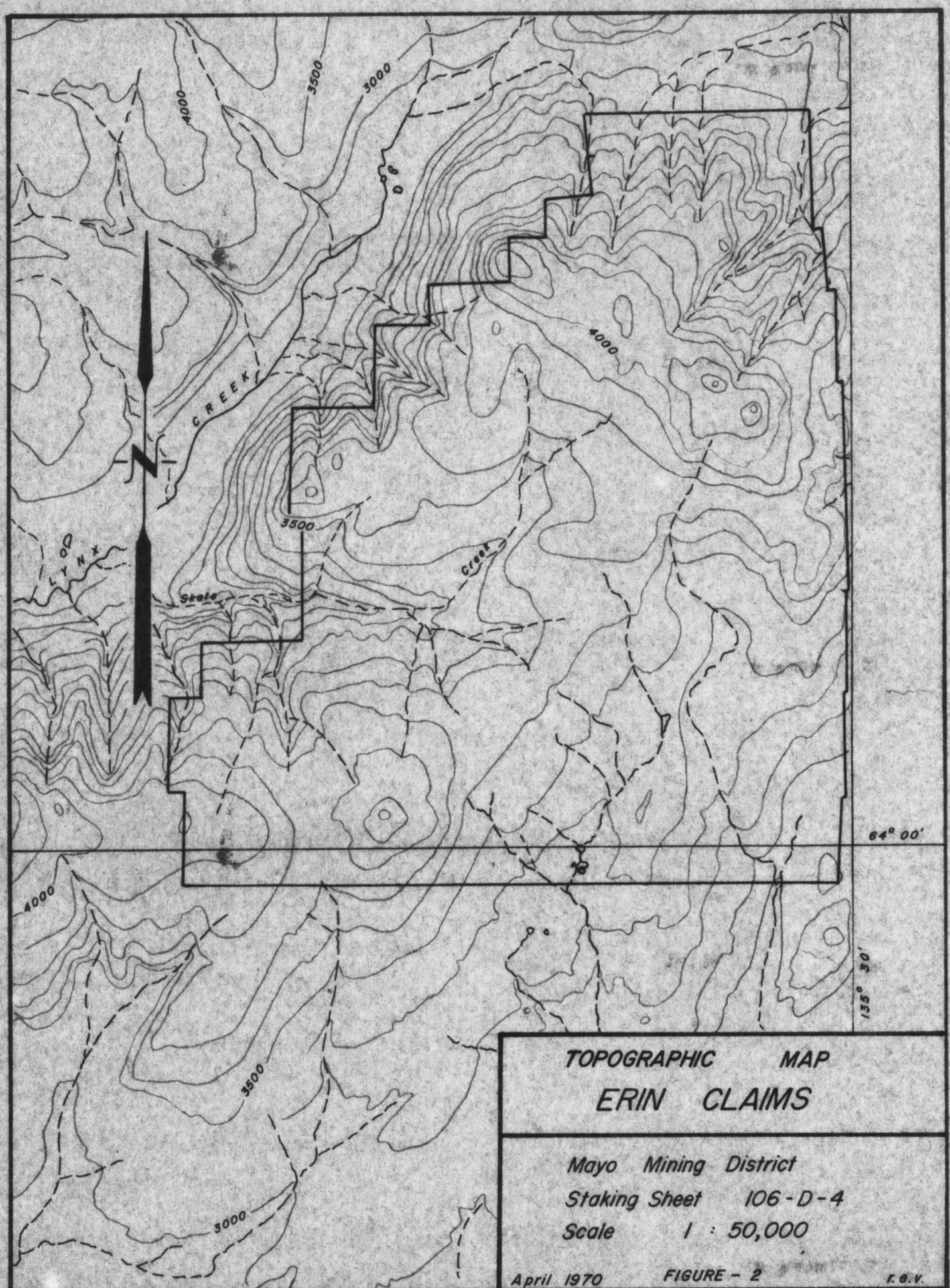
LOCATION OF ERIN MINERAL CLAIMS

4 2 0 4 8 12

Scale 1 inch = 4 miles

October 1969

R.E.V.



TOPOGRAPHIC MAP

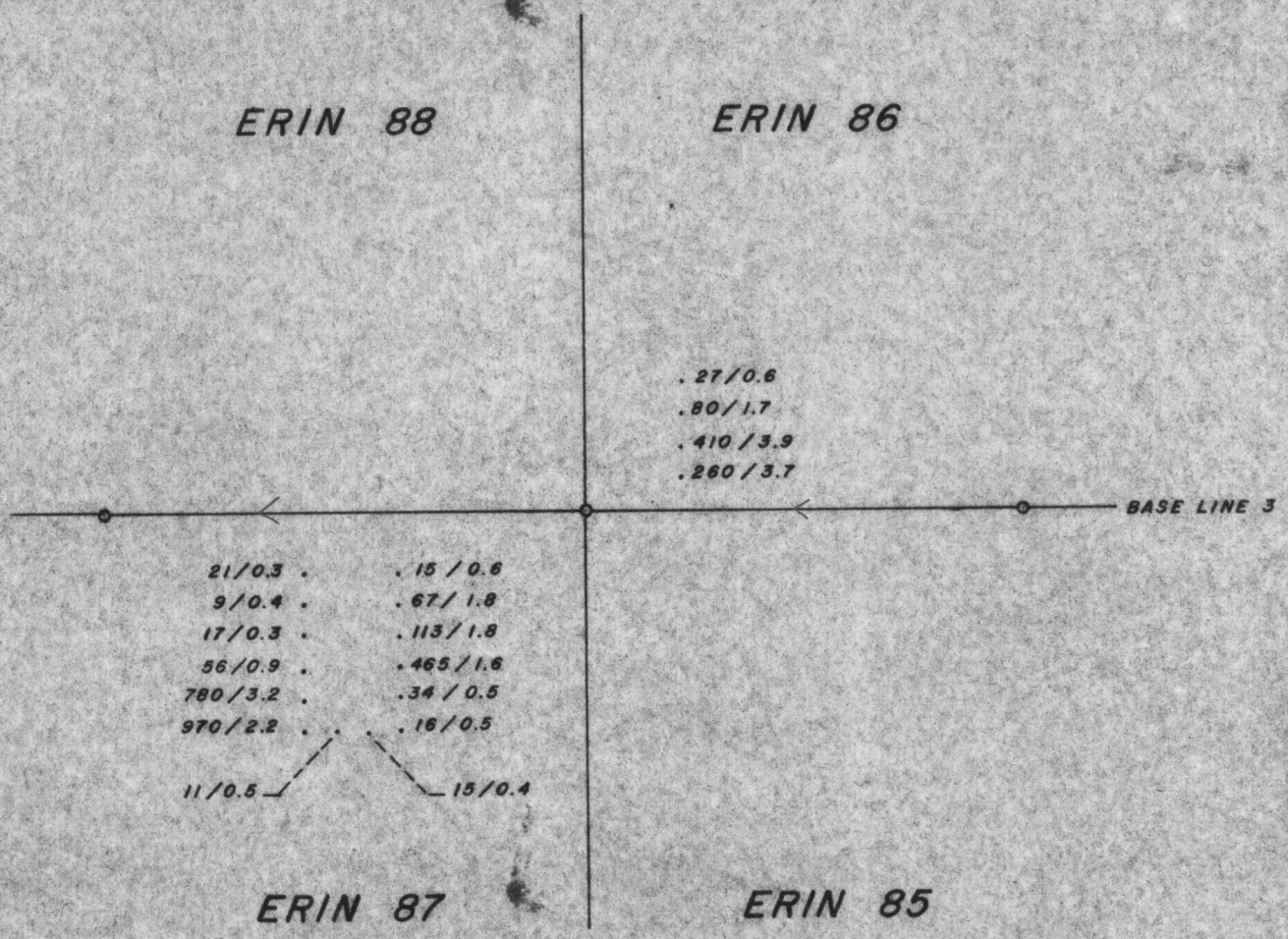
ERIN CLAIMS

Mayo Mining District

Staking Sheet 106-D-4

Scale 1 : 50,000

April 1970 FIGURE - 2 r.e.v.



Pb / Ag (p.p.m.)

AUGER SAMPLES

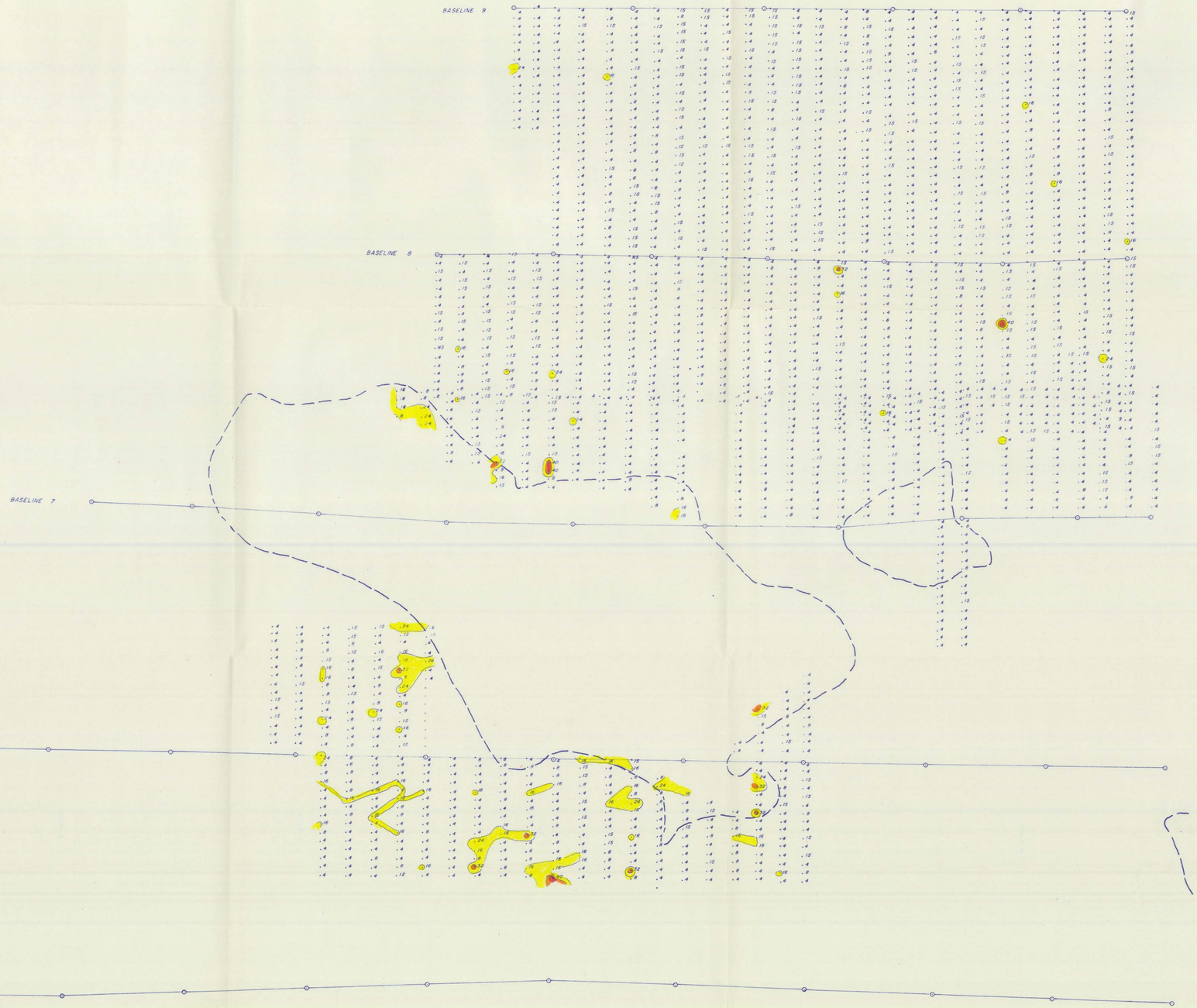
UNITED KENO HILL MINES LTD.

	BY	DATE	SCALE: 1" = 600'
DRAWN	G.W.G.	23 APR. 70	FIGURE – 3
CHECKED			DWG. NO.

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

SOIL SAMPLING TUNGSTEN PLOT OF THE ERIN MINERAL CLAIMS 139 - 189



CONTOUR INTERVALS IN PARTS PER MILLION (PPM)

0 - 16	
16 - 32	
32 - 40	
40 - 48	
.4 .4 .4 .4 .4 .4	Tungsten plot in parts per million
NS	No Sample
IS	Insufficient Sample
⊙	Claim post locations
— — —	Granite Contacts
NOTE	All 4's to be read less than

600 300 0 600 1200 1800 2400

Scale: 1 inch = app. 600 feet

March 1970

G.W. Gilbert - R.E. Van Tassell

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

SOIL SAMPLING SILVER PLOT

OF THE

ERIN MINERAL CLAIMS 1-189

CONTOUR INTERVALS IN PARTS PER MILLION (PPM)

	0 - 1
	1 - 2
	2 - 4
	4 - 8
.02 .06 / .03 .09 / .02 .10	Silver plot in parts per million
NS	No Sample
IS	Insufficient Sample
○	Claim post locations
— — —	Granite Contacts

600 300 0 600 1200 1800 2400

Scale: 1 inch = app. 600 feet

N

BASELINE 9

BASELINE 8

BASELINE 7

BASELINE 6

BASELINE 5

BASELINE 4

BASELINE 3

B.L. 2

BASELINE 1

January - March 1970

G.W. Gilbert - R.E. Van Tassell

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

SOIL SAMPLING LEAD PLOT

OF THE

ERIN MINERAL CLAIMS 1-189

CONTOUR INTERVALS IN PARTS PER MILLION (P.P.M.)

	0 - 25
	25 - 50
	50 - 100
	100 - 200
	200 - 400
	400 - 800
.17 .96 / .17 .36 / .11 .18	Lead plot in parts per million
NS	No Sample
IS	Insufficient Sample
○	Claim post locations
- - -	Granite contacts

600 300 0 600 1200 1800 2400

Scale: 1 inch = app. 600 feet

N

BASELINE 9
BASELINE 8
BASELINE 7
BASELINE 6
BASELINE 5
BASELINE 4
BASELINE 3
B.L. 2
BASELINE 1

Skate Creek

January - March 1970

G.W. Gilbert — R.E. Van Tassell

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

GENERAL GEOLOGY
OF THE
ERIN MINERAL CLAIMS 1-189

- A — Granodiorite – Quartz Monzonite
- 1 — Limestone
- 2 — Quartzite
- 2a — Quartzite with graphite schist
- 3 — Massive Quartzite (pale gray to light brown)
- 4a — Graphite schist with quartzite
- 5 — Quartz Sericite schist
- 6 — Greenstone

- Outcrop
- Bedding
- Fault (observed and assumed)
- Geological contact
- Old hand trenches
- J-5 access road
- Creek
- Meadow or dry swamp
- Swamp (wet with buckbrush)
- Slide rock
- Schistosity
- Aerial lineation and/or assumed fault
- x float location
- UKHM campsite
- Old campsite
- Claim posts on baseline

SYMBOLS —

lim	Limonite	carb	Carbonate
pyrr	Pyrrhotite	qtz	Quartz
Arseno	Arsenopyrite	Fe	Iron
py	Pyrite	Mn	Manganese
Pb	Lead	W	Tungsten (scheelite)
PbS	Galena	Ag	Silver
qtzite	Quartzite		

600 300 0 600 1200 1800 2400

Scale: 1 inch = app. 600 feet

Note – this map compiled from enlarged aerial photo's, so some distortion occurs.

BASELINE 9
BASELINE 8
BASELINE 7
BASELINE 6
BASELINE 5
BASELINE 4
BASELINE 3
BASELINE 2
BASELINE 1

HEAVY BUCK BRUSH
Qtz
Limonite depositing in creek
highly schistose
qtz veins drag folds
Contact Zone carb., qtz Fe/Mn stain Pb 0.13% Ag 0.40 oz/ton
drag folds 2a steep dips
HEAVY OVERBURDEN
LOW ANGLE THRUSTS 15° to 25°
LOW ANGLE THRUSTS
2 thin bedded
abundant float
highly jointed
sparse vegetation
narrow qtz veins pegmatitic
Limestone
Fe/Mn stain
MUSKEG
float Fe/Mn stain slight breccia
abundant float
milky qtz float W
milky qtz float Arseno & W
coarse lim stain
occ. graphitic partings
1963 Composite
breccia qtz cement
minor anticline phyllitic
evidence for bedding faults
vein material carb., lim., wad, qtz, tourmaline
0.02% Pb lim, carb., qtz, py
QUARTZ SERICITE SCHIST
generally 60% qtzite & 40% sericite
Vein, lim., carb., qtz., tourmaline 0.7% Pb
UKHM Campsite
drag folds
qtz veins
drag folds
drag folds qtz stringers
drag folds shear zone
lim. qtz Pyrr. Arseno
qtz, pyrrhotite in joint planes
Foliation
Gabbroic
Well weathered pegmatitic quartz
silicified
evidence for bedding faults
sericite predominates with 25% TBQ
fragments of 3
MUSKEG
OVERBURDEN
HEAVY
HEAVY OVERBURDEN
Ridge possibly due to bedrock high
frost riven Grnst dragged sheared schistose
BURNT OVER AREA
Glacial drift sand and gravel

January 1970

Geology mapped and original plotting by Barry C. Way

drafted by: R.E. Van Tassell

UNITED KENO HILL MINES LIMITED
ELSA YUKON

EXPLORATION DEPARTMENT

PLAN MAP
OF THE
ERIN MINERAL CLAIMS 1-189

⊙ Claim posts locations

Direction of staking

Y 32136 Grant Number

Meadow or dry swamp

Swamp wet with heavy buck brush

J- Road

Creek

Campsite

600 300 0 600 1200 1800 2400

Scale: 1 inch = app. 600 feet

Note - this map compiled from enlarged aerial photo's, so some distortion occurs.

N

ERIN 189 Y 32274 | ERIN 188 Y 32273 | ERIN 187 Y 32272 | ERIN 186 Y 32271 | ERIN 185 Y 32270

ERIN 182 Y 32280 | ERIN 180 Y 32278 | ERIN 178 Y 32276 | ERIN 176 Y 32269 | ERIN 174 Y 32267

ERIN 184 Y 32282 | ERIN 183 Y 32281 | ERIN 181 Y 32279 | ERIN 179 Y 32277 | ERIN 177 Y 32275 | ERIN 175 Y 32268

ERIN 170 Y 32263 | ERIN 168 Y 32261 | ERIN 166 Y 32259 | ERIN 164 Y 32257 | ERIN 162 Y 32255 | ERIN 160 Y 32253 | ERIN 158 Y 32251

ERIN 173 Y 32266 | ERIN 172 Y 32265 | ERIN 171 Y 32264 | ERIN 169 Y 32262 | ERIN 167 Y 32260 | ERIN 165 Y 32258 | ERIN 163 Y 32256 | ERIN 161 Y 32254 | ERIN 159 Y 32252

ERIN 156 Y 32249 | ERIN 154 Y 32247 | ERIN 152 Y 32245 | ERIN 150 Y 32243 | ERIN 148 Y 32241 | ERIN 146 Y 32239 | ERIN 144 Y 32237 | ERIN 142 Y 32235 | ERIN 140 Y 32233 | ERIN 138 Y 32231

ERIN 157 Y 32250 | ERIN 155 Y 32248 | ERIN 153 Y 32246 | ERIN 151 Y 32244 | ERIN 149 Y 32242 | ERIN 147 Y 32240 | ERIN 145 Y 32238 | ERIN 143 Y 32236 | ERIN 141 Y 32234 | ERIN 139 Y 32232

ERIN 138 Y 32231 | ERIN 136 Y 32229 | ERIN 134 Y 32227 | ERIN 132 Y 32225 | ERIN 130 Y 32223 | ERIN 128 Y 32221 | ERIN 126 Y 322219 | ERIN 124 Y 32212 | ERIN 122 Y 32210 | ERIN 120 Y 32208 | ERIN 118 Y 32216 | ERIN 116 Y 32214

ERIN 137 Y 32230 | ERIN 135 Y 32228 | ERIN 133 Y 32226 | ERIN 131 Y 32224 | ERIN 129 Y 32222 | ERIN 127 Y 32220 | ERIN 125 Y 32218 | ERIN 123 Y 32211 | ERIN 121 Y 32209 | ERIN 119 Y 32207 | ERIN 117 Y 32215 | ERIN 115 Y 32213

ERIN 114 Y 32206 | ERIN 112 Y 32204 | ERIN 110 Y 32202 | ERIN 108 Y 32200 | ERIN 106 Y 32198 | ERIN 104 Y 32196 | ERIN 102 Y 32194 | ERIN 100 Y 32192 | ERIN 98 Y 32190 | ERIN 96 Y 32188 | ERIN 94 Y 32186 | ERIN 92 Y 32184

ERIN 113 Y 32205 | ERIN 111 Y 32203 | ERIN 109 Y 32201 | ERIN 107 Y 32199 | ERIN 105 Y 32197 | ERIN 103 Y 32195 | ERIN 101 Y 32193 | ERIN 99 Y 32191 | ERIN 97 Y 32189 | ERIN 95 Y 32187 | ERIN 93 Y 32185 | ERIN 91 Y 32183

Creek

Skate

Camp

ERIN 90 Y 32182 | ERIN 88 Y 32180 | ERIN 86 Y 32178 | ERIN 84 Y 32174 | ERIN 82 Y 32172 | ERIN 80 Y 32170 | ERIN 78 Y 32168 | ERIN 76 Y 32166 | ERIN 74 Y 32164 | ERIN 72 Y 32176 | ERIN 70 Y 32326 | ERIN 68 Y 32324 | ERIN 66 Y 32322 | ERIN 64 Y 32320 | ERIN 62 Y 32318

ERIN 89 Y 32181 | ERIN 87 Y 32179 | ERIN 85 Y 32177 | ERIN 83 Y 32173 | ERIN 81 Y 32171 | ERIN 79 Y 32169 | ERIN 77 Y 32167 | ERIN 75 Y 32165 | ERIN 73 Y 32163 | ERIN 71 Y 32175 | ERIN 69 Y 32325 | ERIN 67 Y 32323 | ERIN 65 Y 32321 | ERIN 63 Y 32319 | ERIN 61 Y 32317

ERIN 60 Y 32162 | ERIN 58 Y 32160 | ERIN 56 Y 32158 | ERIN 54 Y 32156 | ERIN 52 Y 32154 | ERIN 50 Y 32666 | ERIN 48 Y 32664 | ERIN 46 Y 32662 | ERIN 44 Y 32316 | ERIN 42 Y 32314 | ERIN 40 Y 32312 | ERIN 38 Y 32310 | ERIN 36 Y 32308 | ERIN 34 Y 32306 | ERIN 32 Y 32304

ERIN 59 Y 32161 | ERIN 57 Y 32159 | ERIN 55 Y 32157 | ERIN 53 Y 32155 | ERIN 51 Y 32153 | ERIN 49 Y 32665 | ERIN 47 Y 32663 | ERIN 45 Y 32661 | ERIN 43 Y 32315 | ERIN 41 Y 32313 | ERIN 39 Y 32311 | ERIN 37 Y 32309 | ERIN 35 Y 32307 | ERIN 33 Y 32305 | ERIN 31 Y 32303

ERIN 30 not recorded | ERIN 28 Y 32144 | ERIN 26 Y 32142 | ERIN 24 Y 32140 | ERIN 22 Y 32138 | ERIN 20 Y 32136 | ERIN 18 Y 32134 | ERIN 16 Y 32132 | ERIN 14 Y 32130 | ERIN 12 Y 32302 | ERIN 10 Y 32300 | ERIN 8 Y 32298 | ERIN 6 Y 32296 | ERIN 4 Y 32294 | ERIN 2 Y 32292

ERIN 29 not recorded | ERIN 27 Y 32143 | ERIN 25 Y 32141 | ERIN 23 Y 32139 | ERIN 21 Y 32137 | ERIN 19 Y 32135 | ERIN 17 Y 32133 | ERIN 15 Y 32131 | ERIN 13 Y 32129 | ERIN 11 Y 32301 | ERIN 9 Y 32299 | ERIN 7 Y 32297 | ERIN 5 Y 32295 | ERIN 3 Y 32293 | ERIN 1 Y 32291

January - 1970

R. E. Van Tassell