

84-#584-12499  
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GEOLOGICAL AND PROSPECTING REPORT  
ON THE  
ARGOLD 2 CLAIM  
CASSIAR DISTRICT  
LIARD MINING DIVISION

Owner: Oliver Leckie  
Operator: Erickson Gold Mining Corp.  
Work Done On: Argold 2 (20 units)  
Work Performed: May 24 - June 15, 1984  
Located: NTS 104 P/5E  
Latitude 59° 16' N  
Longitude 129° 36' W

By: M. Ball, M. Sc., under the  
Supervision of R. Somerville,  
P. Eng.

Date: June 15, 1984

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

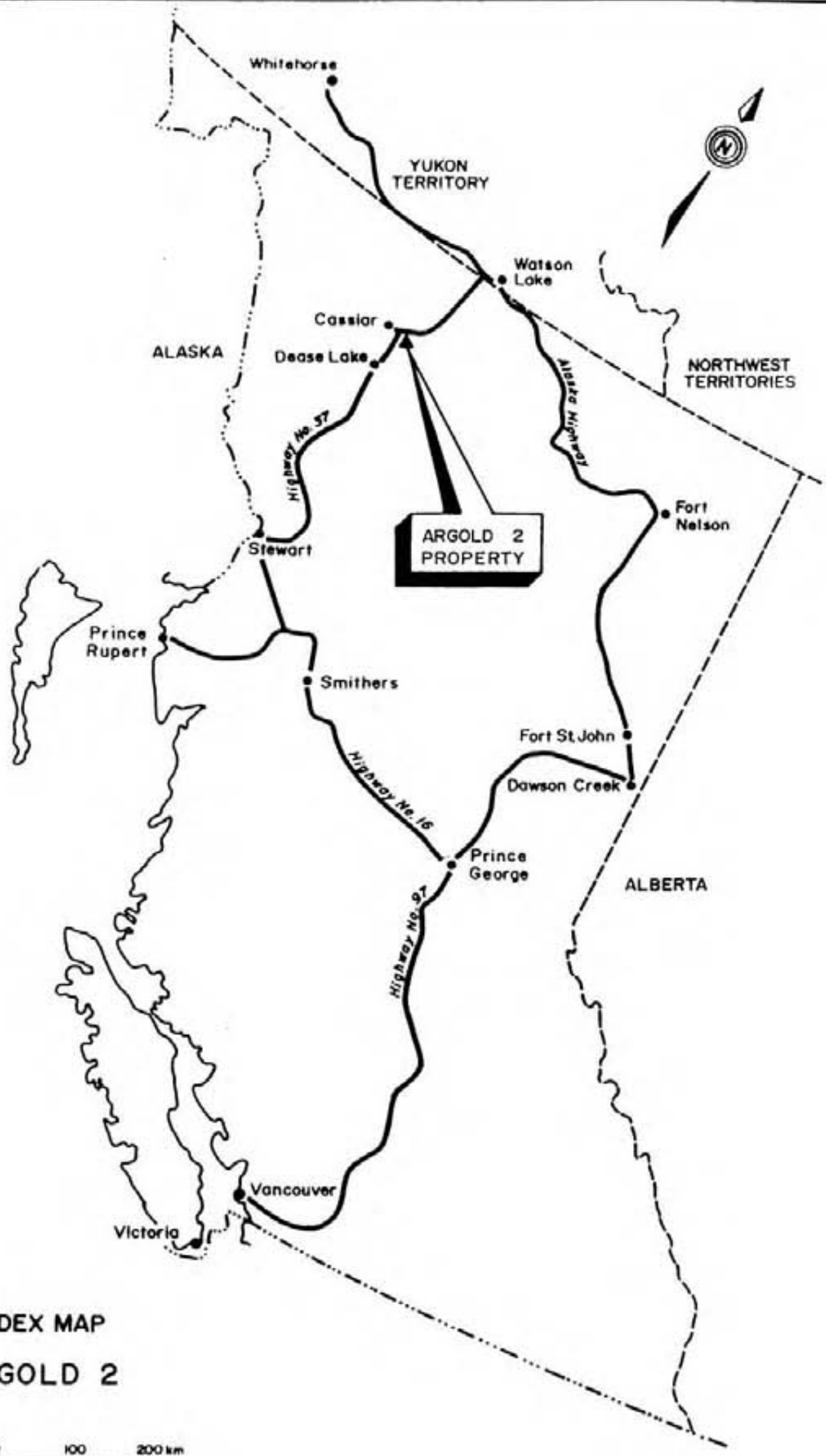
**12,499**

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Map 2	Sample Locations and Location of Physical work scale 1:10,000	in back pocket



INDEX MAP  
ARGOLD 2

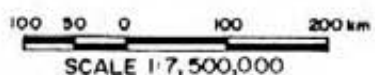
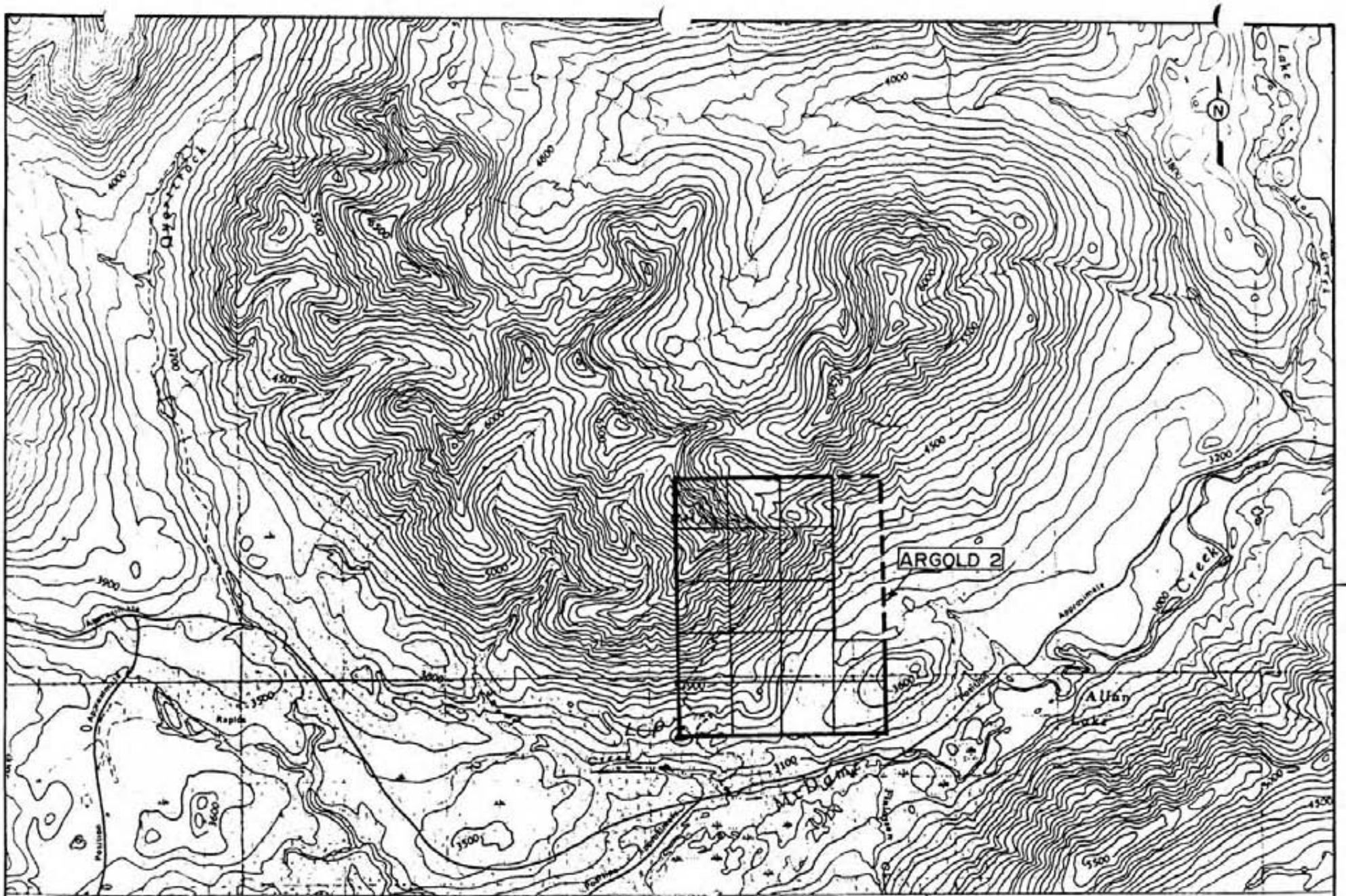


FIGURE 1



SCALE 1:50,000

### ARGOLD 2 CLAIM MAP

104 P5/E

FIGURE 2

0.0 Claim Record

<u>Name</u>	<u>No. of Units</u>	<u>Record Number</u>	<u>Record Date</u>	<u>Owner</u>	<u>FMC #</u>
Argold 2	20	821	19 June/79	O. Leckie	225992

## 1.0 Introduction

This report describes the results of a geologic survey, prospecting, trenching and road construction conducted on the Argold 2 claim block. Maps showing the property location, claims, geologic mapping and rock chip sample locations are included.

## 2.0 Location and Access

The property is located in northern British Columbia, 14 km east of the town of Cassiar, 1 km north of Highway No. 37, and north of the confluence of Snowy Creek and McDame Creek. The geographic coordinates are  $59^{\circ}16'N$ ,  $129^{\circ}36'W$ .

Access to the claim block is by four-wheel drive truck via a road which winds north from the point where Highway No. 37 crosses Snowy Creek. (see Figure 1 and 2).

## 3.0 History

Gold was initially discovered in placer deposits on McDame Creek in 1874. Since then, considerable prospecting and development has been conducted on numerous quartz veins which occur within the area.

The Argold 2 claim block was located in 1979 and optioned to Erickson Gold Mining Corp. in 1983. Work done prior to the option included construction of an access road and exposure of a significant vein in a shallow trench at elevation 1,390 meters above sea level.

A program of geologic mapping and prospecting was conducted by Erickson geologists during the 1984 field

season. Additional trenching was carried out on the original showing and the access road was extended.

#### 4.0 Summary of Work

Between May 24 and June 15, 1984, a geologic examination of the Argold 2 claim block was done by Erickson Gold Mining Corp. geologists. Geologic mapping at 1:5,000 scale and prospecting was done over the five square kilometer area of the claim. In addition, the access road was extended and one quartz vein was trenched.

#### 5.0 Purpose

The purpose of this exploration program was to:

- 1) Locate and sample potential gold-bearing quartz veins,
- 2) Outline the lithologies present and determine the geologic controls on mineralization, and
- 3) Improve the access route to the claim block.

#### 6.0 Geology

The Argold 2 claim is underlain by metasediments and metavolcanics belonging to the Lower Mississippian - Upper Pennsylvanian age Sylvester Group. Within the claim boundary the Sylvester Group is composed of interbedded greenstones and metasediments, intruded by dioritic stocks and sills, and locally mafic dikes. (see map 1)



The larger veins do not have a consistent orientation and do not appear to occupy a systematic structural site. Quartz up to 3.0 cm in thickness locally fills joints within fine to medium-grained diorite.

Quartz veins approximately 0.2-0.5 meters thick and 1.0-3.0 meters in length commonly occur in groups of 3-5. Locally these veins are crudely arranged en echelon within medium-grained diorite. The alteration associated with the veins typically consists of chlorite and minor epidote along vein selvages. Locally, a rusty-weathering, carbonate-rich alteration halo extends up to 0.5 meters from the veins.

#### 8.0 Sample Results

Au/Ag assays of quartz veins sampled are plotted on Map 1. No significant values have been obtained to date.

#### 9.0 Physical Work

A significant quartz vein exposed in a shallow trench at 1390 m elevation was trenched with a D-6 bulldozer. The new trench is approximately 50 meters long by 3.5 meters wide. This trench cuts into the side of the mountain and exposes the vein on the north wall. The vein is discontinuous, pinches out to the east and lies beneath considerable alluvium to the west.

In addition to the above work the access road to the claim block was extended 425 meters to the east, from elevation 1,375 m to 1,400 m (see Map 2). The road is cut into the



side hill and is 3.5 m wide. Unaltered, fine-grained diorite is exposed locally on the wall of this road.

#### 10.0 Conclusions

No potentially economic quartz-veins were found on the Argold 2 claim. Quartz veins examined appeared white and barren. They were not associated with any significant wall-rock alteration. As such, these veins appear to be local features which are not closely related to any hydro-thermal system and are not indicative of an orebody at depth.

#### 12.0 Statement of Qualifications

I Mathew Ball, of 1217 East Fourth Street, North Vancouver, BC, do hereby certify that:

1. I hold an M.S.C. degree in Mineral Exploration, obtained at Queen's University in Kingston, Ontario and have practised my profession for four (4) years.
2. I am a member of the Canadian Institute of Mining and Metallurgy.
3. I am author of this report, which is based upon work conducted under the supervision of R. Somerville (P. Eng.) during the 1984 field season on the Argold 2 property of Erickson Gold Mining Corp. near Cassiar, BC



M. Ball, M.Sc.

A handwritten signature in cursive script that reads "M. Ball".

The metasediments consist of black and green-coloured, thin bedded (2-5 cm) ribbon chert, and black and maroon-coloured argillite.

The greenstones are medium green-coloured and aphanitic, with mafic minerals altered to chlorite and minor epidote. The greenstones appear to grade into medium green-coloured, fine to medium-grained (locally coarse-grained) diorite. Constituent mafic minerals of this diorite are partially altered to chlorite. Dioritic phases were observed cross-cutting bedding in ribbon chert.

Bedding in the ribbon chert strikes predominantly NW-SE ( $130-170^{\circ}$ ) and dips moderately to the southwest ( $20-50^{\circ}$ ). Minor fold axes plunge at a shallow angle ( $9-20^{\circ}$ ) to the northwest ( $320^{\circ}$ ). Cleavage is present in both ribbon chert and argillite and varies from a well defined slaty cleavage to poorly defined, irregular spaced cleavage (0.5 cm). The cleavage generally strikes NW-SE ( $110-145^{\circ}$ ) and dips steeply SW ( $60-90^{\circ}$ ). Commonly the cleavage is refracted through thin argillaceous bands within ribbon chert. Joints are present in all lithologies and consistently strike NE-SW ( $020-040$ ) and dip steeply SE ( $80-90^{\circ}$ ).

## 7.0 Mineralization

Quartz veins which occur on the claim group consist of massive white quartz (with minor carbonate) and do not contain any visible mineralization. The veins vary in thickness from minute stringers to 1.5 meters. The maximum exposed lengths of the larger veins are approximately 30 meters. These veins are discontinuous and occur within restricted areas of strongly deformed or contorted strata. Gold and silver values from five assays of chip samples are shown on Map 1.

STATEMENT OF COST RE ARGOLD 2 M.C.

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Personnel and Wages

Date	Name	Time	Rate	Amount
May 24	R. Basnett	1/2 Day	\$250/day	\$125.00
May 24	M. Bull	1/2 Day	200/day	100.00
May 30	M. Bull	1 Day	200/day	200.00
June 2, 3	M. Bull	2 Day	200/day	400.00
June 7	M. Bull	1/2 Day	200/day	100.00
June 8	M. Bull	1/2 Day	200/day	100.00
June 9	M. Bull	1 Day	200/day	200.00
June 9	R. Basnett	1/2 Day	250/day	100.00
June 9	R. Somerville	1 Day	400/day	400.00
June 11	M. Bull	1/2 Day	200/day	100.00
June 12, 13	M. Bull	1 Day	200/day	400.00
June 12, 13	L. Westerveldt	1 1/2 Day	150/day	225.00
June 14	M. Bull	1 Day	200/day	200.00
June 18	R. Somerville	1 Day	400/day	400.00
May 30	R. Somerville	1 Day	400/day	400.00
Subtotal Wages				\$3,450.00

Room and Board

14 man days at \$50/day = \$ 700.00

Assays

4 assays @ \$15 each = \$ 60.00

Vehicle

4WD pickup for 12 days at \$50.00/day including fuel, insurance, etc. = \$ 600.00

D.6 Cat

June 12 - 15/84	16 hrs. @ \$65.00/hr. =	\$1,040.00
Operator,		
June 12 - 15/84	4 days @ \$175.00/day =	700.00
Room and Board	4 days @ \$50.00/day =	200.00
Subtotal D.6 Cat		\$1,940.00

Report Preparation

Drafting	2 days @ \$100.00/day =	\$ 200.00
Typing	1/2 day @ \$100.00/day =	50.00
Materials		50.00
Subtotal Preparation		\$ 300.00

TOTAL Cost May 24 - June 19/84 \$7,050.00

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# ERICKSON GOLD

## APPENDIX A

### MINE FIRE ASSAY METHOD FOR AU AND AG

The samples are crushed, pulverized and split to  $\frac{1}{2}$  assay ton (14.583 gram) subsamples. One subsample is assayed for regional samples and two subsamples are assayed for diamond drill core by the following procedures.

The subsample is placed in a crucible along with 1 scoop of standard flux,  $\frac{1}{2}$  tsp of flour, 1 inquartz, and 1 tsp of borax cover.

It is then heated for 45 minutes at 1060°C to fuse, poured off and left to cool before the glass is hammered off the button (bead).

The cupels are heated for 10 minutes in the furnace at 970°C until white before the lead bead is put in the cupels for 30 minutes.

After cupelation the beads are hammered flat and weighed in milligrams. If over 2.79 mg, inquartz is added in the appropriate amounts and recupelled.

The bead is placed in diluted (16%) nitric acid for 30 minutes. The acid is then removed and the bead is rinsed two times with de-ionized water before annealing to remove tarnish and weighing in milligrams.

All assays are then given in ounces per ton.





# ERICKSON GOLD

APPENDIX B

Bag 1500  
Cassiar, BC  
VOC 1E0

September 05, 1984

Chief Gold Commissioner  
Victoria, BC

Sir / Madam;

The Assay Lab at Erickson Gold Mining Corp. is under my direct supervision, and has been for the last 5 (five) years. Regular check assays are done by an outside source.

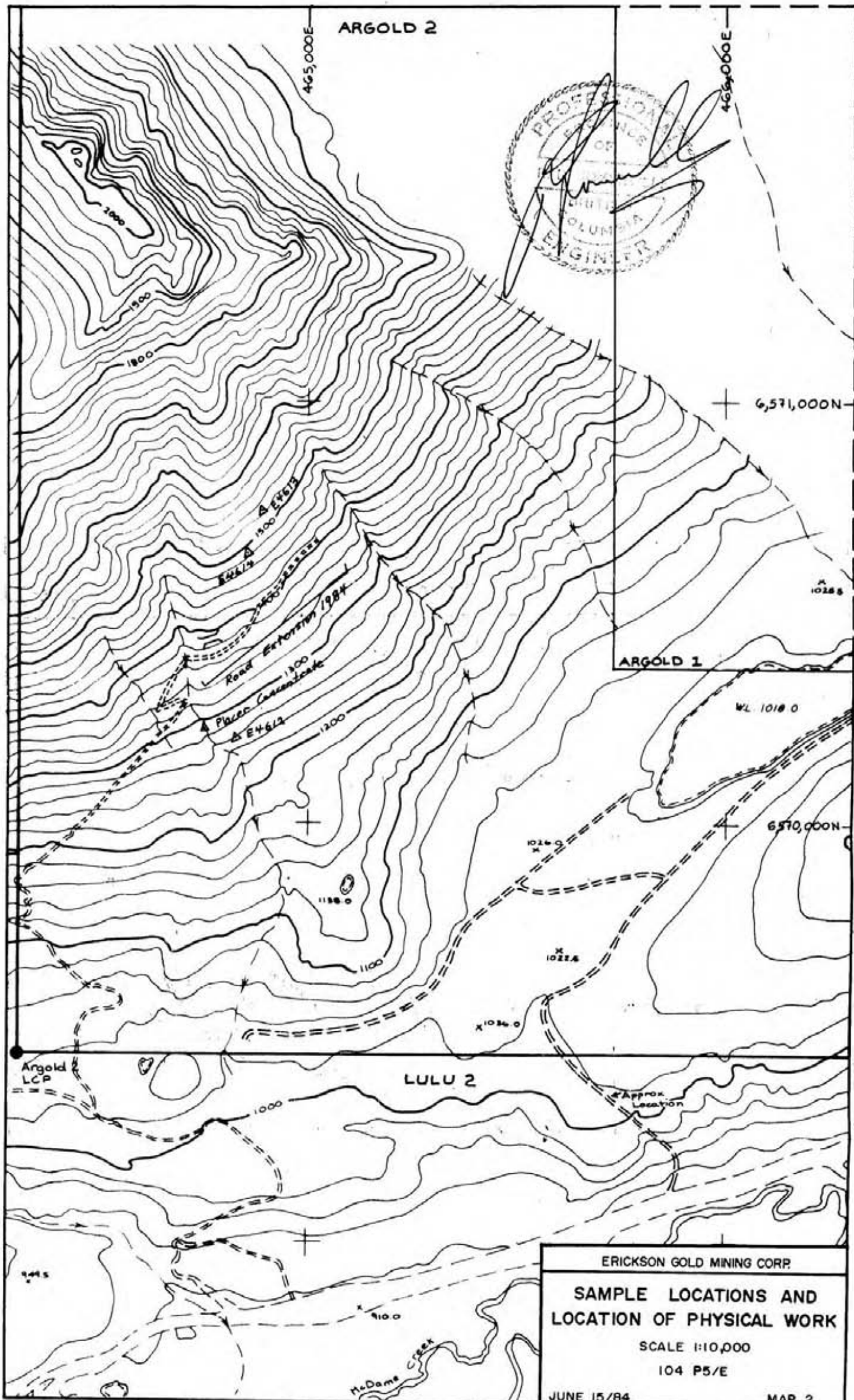
Yours truly,



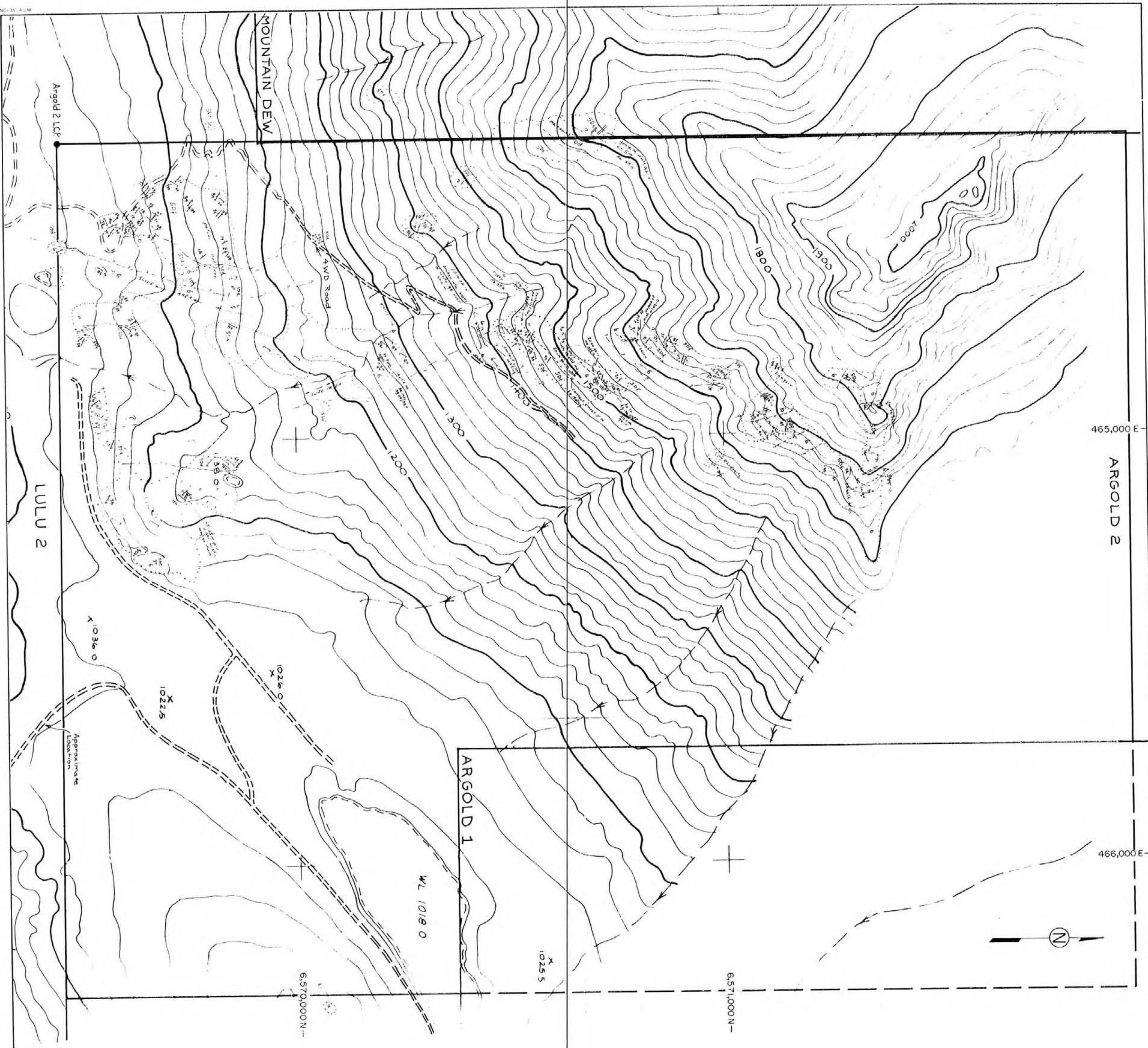
A. J. Beaton  
Mine Manager



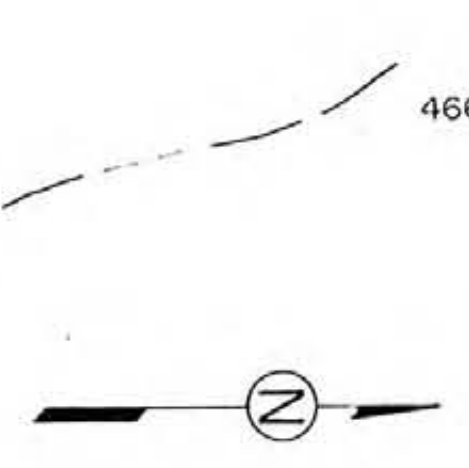








465,000 E  
ARGOLD 2  
466,000 E

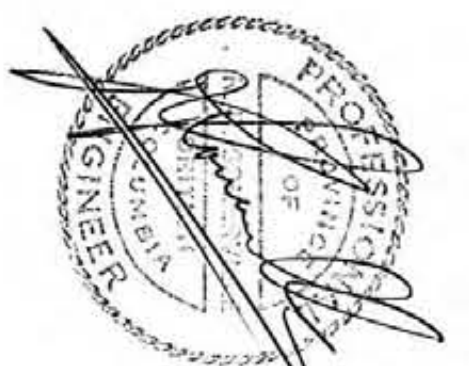


- LEGEND AND TYPICAL SYMBOLS**
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  - [14] Kalkine, sandstone, siltstone, calcareous, with blue clay.
  - [15] Kalkine, sandstone, siltstone, calcareous, with blue clay.
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  - [39] Kalkine, sandstone, siltstone, calcareous, with blue clay.
  - [40] Kalkine, sandstone, siltstone, calcareous, with blue clay.

**ACTIVATION SYMBOLS**

- [41] Geological boundary (dotted, approximate)
- [42] Quarried area (contour, vertical, dip indicated)
- [43] Zone of alteration

**GEOLOGICAL BRANCH  
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- SYMBOLS**
- Dotted area
  - Rock outcrop area of nature that...
  - Bedding, top known (horizontal, inclined, vertical, overturned, dip unknown)
  - Bedding, top unknown (horizontal, inclined, vertical, overturned, dip unknown)
  - Schistosity, direction, cleavage, foliation (horizontal, inclined, vertical, dip unknown)
  - Lamination, axes of minor folds (horizontal, inclined, vertical)
  - Overfold (arrow indicates plunge)
  - Fault (defined, approximate, interpreted)
  - Fault (defined, vertical)
  - Fault (defined, horizontal)
  - Fault (defined, unknown)
  - Zone of alteration
  - Stream or creek (lateral, intermittent)
  - Trail
  - Drainage ditch

**GEOLOGY**

Project No. 1003 Mining Division L1A8D

Latitude 29° 36' 33" Longitude 129° 36' 30"

M.S. 104 PSE

Scale 1:5,000

Map No.