SUB-RECORDER
RECEIVED
FEB 28 1990
M.R. # ..... $ .....
VANCOUVER, B.C.

LOG NO: 0305 RD.
ACTION:
FILE NO:

NTS 104 A/4 W
Lat: 56 02'
Long: 129 50'

LOG NO: 0620 RD. 5
ACTION: Date received back from amendment.
FILE NO: 16p

GEOLOGICAL REPORT

ON THE ROB 2

MINERAL CLAIM, BITTER CK.

Skeena Mining Division

FILMED

by
Andris Kikauka, B.Sc.(Hons.)

Jan. 15, 1990

GEOLOGICAL BRANCH
ASSESSMENT REPORT
10,725

SUMMARY

The Rob 2 claim consists of 12 units located 15 kilometres northeast of Stewart, B.C. The claims cover the lower portion of the Radio Creek drainage basin which flows into Bitter Creek.

The property is underlain by Middle Jurassic, fine-medium grained clastic sediments that have been intruded by Eocene (and older) dykes, sills, and plugs. The intrusive event has remobilized quartz-calcite-sulphide mineralization as it is related to sheared and faulted dyke contacts.

Geological structure and host rock of the Rob 2 claim is simular to the adjacent "Silver Tunnel Vein" and the "Morgan Vein-Fault".

A detailed follow up program of geological mapping, prospecting, and geophysics is recommended to further assess the mineral potential of the Rob 2 claim.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,725

ITEMIZED STATEMENT OF COST-ROB 2 CLAIM

Field Crew:

Geologist,$250/day X 2 days	$ 500.00	
Geotechnician,$125/day X 2 days	250.00	
		$ 750.00

Field Costs:

Food and accomodation $70/day X 4 mandays	$ 210.00	
Transportation, 4X4 Truck $50/day X 2	100.00	
		$ 310.00

Report:

Report writing;	$ 100.00	
Word processing, copying, binding	40.00	
		$ 140.00
	Total-	$ 1200.00

TABLE OF CONTENTS

	Page No.
Summary	i
Itemized Statement of cost	ii
1. Introduction	1
2. Location, Access, and Physiography	1
3. Property Status	1
4. Area History	1
5. Property History	2
6. General Geology	3
7. 1989 Field Program	5
8. Results	5
8.1 Geology and Mineralization	5
9. Conclusion	6
10. Recommendations	6
11. References	7
12. Statement of Qualifications	8

LIST OF FIGURES

Figure 1: Property Location Map

Figure 2: Claim Location Map

Figure 3: Rob 2, Claim Geology

1. INTRODUCTION

This report summarizes geological mapping and prospecting carried out Oct. 15,16, 1989. The author, Mr. Andris Kikauka planned and supervised the fieldwork on the Rob 2 claim.

2. LOCATION, ACCESS, AND PHYSIOGRAPHY

The Rob 2 claim is located 15 kilometres northeast of Stewart, B.C. The property lies within the Skeena Mining Division on NTS mapsheet 104 A/4 W (Fig.2).

Elevations range from 250-1000 metres. Slopes are steep on the west portion of the claim. The lower elevation east portion of the claim has a moderate slope. This part of the claim can be accessed by a rough road that follows the Bitter Ck. valley.

3. PROPERTY STATUS

The Rob 2 claim consists of a 12 unit claim located in the Skeena Mining Division. The claim was located and staked by the author,Andris Kikauka.

CLAIM NAME	# OF UNITS	RECORD #	RECORD DATE	EXPIRY DATE
Rob 2	12	7466	March, 15,89	March 15,90

The total area of the claim, allowing for overlap, is approximately 175 hectares.

4. AREA HISTORY

Exploration activity in the Stewart area continues to be one of the most active mineral exploration areas of North America, demonstrated by numerous projects being carried out by major and junior mining companies.

The Bitter Creek area has been staked and periodically prospected since 1899. In the early 1900's a small shipment of hand sorted ore from the Roosevelt #1 claim (located 1.5 km. east of the Rob 2 claim) returned values of 0.260 oz/t Au, 101.0 oz/t Ag, 34% Pb, and 8% Zn. In 1966 Crest Ventures Ltd. re-examined the Roosevelt #1 claim and optioned the property to Ardo Mines Ltd. who drifted the "Silver Tunnel Vein", and produced 5,000 tons of Au-Ag-Pb-Zn bearing ore. The north northwest trending "Silver Tunnel Vein" is parallel to a steeply dipping granodiorite dyke (Portland Canal dyke swarm type). Argillaceous sediments on either side of the dyke are sheared and crushed. The vein-fault, composed of calcite-quartz-sulphide stringers and lenses, ranges from 10-60 cm. in width, along a strike of 35 metres. The single stope is approximately 20 metres in height and approximately 4 metres in width.

At 1500 metres elevation approximately 600 metres north of the Rob 2 claim the Morgan Vein-Fault has been examined by underground workings. This vein-fault consists of sheared and crushed calcite-quartz-sulphide vein material that contains fragments of the argillaceous host rock. The vein averages 35 cm. in width and is traceable for a strike length of 100 metres. Select samples from this vein have assayed as high as 424.16 oz/t Ag, 0.070 oz/t Au, and 45% Pb. This vein-fault system is also parallel to a steeply dipping granodiorite dyke (Portland Canal dyke swarm type).

5. PROPERTY HISTORY

In 1979, Beaver Gold Resources Inc. outlined several anomalous Pb and Ag values in soil samples taken from the confluence of Radio Creek and Bitter Creek. In 1984, Maralgo MInes Ltd. flew an airborne geophysical survey over the north side of Bitter Creek including Radio Creek and the Rob 2 claim. Their results indicated two sets of magnetic linears (probably corresponding to the dykes) trended northwest accross the Rob 2 claim. Also a weak VLF-EM field strength increase occurs on the east and west side of Radio Creek which roughly corresponds to the magnetic linears.

6. GENERAL GEOLOGY

The Stewart Complex includes a thick sequence of mainly late Triassic to late Middle Jurassic volcanic, sedimentary, and metamorphic rocks. These have been intruded and cut by a mainly granitic to syenitic suite of Lower Jurassic through Tertiary plutons which together form part of the Coast Plutonic Complex. Deformation, in part related to intrusive activity has produced complex fold structures along the main intrusive contacts with simple open folds and warps dominant along the east side of the Complex. Cataclasis marked by strong north-south structures are prominent structural features that cut all the pre Lower Middle Jurassic units.

Country rocks in the general Stewart area comprise mainly Hazleton Group strata which include the Lower Jurassic Unuk River Formation and the Middle Jurassic Betty Creek and Salmon River Formation and the Upper Jurassic Nass Formation (Grove, 1971, 1986). In the general Stewart area the Unuk River strata include mainly fragmental andesitic volcanics, epiclastic volcanics and minor volcanic flows. Widespread Aalenian uplift and erosion was followed by deposition of the partly marine volcaniclastic Betty Creek Formation, the mixed Salmon River Formation, and the dominantly shallow marine Nass Formation.

Intrusive activity in the Stewart area has been marked by the Lower to Middle Jurassic Texas Creek granodiorite with which the Big Missouri, Silbak Premier and many small ore deposits are associated. Younger intrusions include the extensive Hyder Quartz Monzonite and the many Tertiary stocks and dike swarms which form a large part of the Coast Clutonic Complex. Mineral deposits such as the major B.C. Molybdenum mine at Alice Arm and a host of smaller deposists are localized in or related to these 48 to 52 m.y plutons which include dykes forming part of the regionally extensive Portland Canal Dike Swarm (Grove, 1986).

Stewart District Mineral Deposits

More than 700 mineral deposits and showings have now been discovered in a large variety of rocks and structural traps in the Stewart District. The famous Silbak Premier mine which has been reactivated as an open pit operation by Westmin Resources represents a telescoped epithermal gold-silver base metal deposit localized along a complex steep fracture system in Lower Jurassic volcaniclastics overlain by shallow dipping Middle Jurassic Salmon River Formation sedimentary rocks. In this example, the shallow lying younger rock units formed a dam, trapping bonanza type gold-silver mineralization at a relatively shallow depth. Mineralization at the Silbak Premier, Big Missouri and a number of other deposits in the area have been related to early Middle Jurassic regional plutonic-volcanic event (Grove 1971, 1986). Younger high grade mineralization found localized in various members of the Portland Canal Dike Swarm particularly in the Stewart area have also been related to Cretaceous and Tertiary plutonic-volcanic events. Overall at least four major episodes of mineralization involving gold-silver, base metals, molybdenum and tungsten dating from early Lower Middle Jurassic through to the Tertiary have been recorded throughout the Stewart Complex.

7. 1989 FIELD PROGRAM

From Oct. 15-16, 1989, one geologist and one geotechnician carried out geological mapping and prospecting at a scale of 1:12,500. This was concentrated on the exposures along the creeks.

8. RESULTS

8.1 GEOLOGY AND MINERALIZATION

Geological mapping on the Rob 2 claim indicated that the bedrock is mostly argillaceous siltstone and greywacke of the Middle Jurassic Salmon River Formation with minor amounts of diorite dyke material related to the Eocene or older Portland Canal dyke swarm.

The sediments are contorted and interbedded bands of sandstone and pebble conglomerate within the argillaceous siltstone outline traces of large scale open and closed style folds. The thick sequence of sediments is occaisonally but rarely interfingered with thin units of dark green, fine grained tuff. The 1-5 metre wide lenses of volcanic material represent a very small portion of the total volume of bedrock. Irregular lenses of milky white "bull quartz" is common and often forms up to 5% of the total volume of bedrock.

Diorite and granodiorite dykes, sills and plugs are of equigranular and porphyritic texture and are related to the Bitter Creek Pluton (2 km. west of the Rob 2 claim) which is responsible for the Portland Canal Dyke Swarm. Dykes and sills are 3-30 metres thick and generally trend northwest which roughly follows the regional trend of the bedding, which varies from north to northwest.

A large scale north trending fault follows Radio Ck. Small scale faults and localized fracturing is common exhibiting small kink folds and drag folds which are often sheared off in response to the brittle behaviour of the argillaceous siltstone.

Sulphide mineralization including pyrite, chalcopyrite, sphalerite, and galena is present in 1-5 cm. wide quartz stringers that occur near faults and localized shear zones, along the margins of dykes, and within the argilaceous siltstone. The observed mineralization occurs along dyke contacts in Radio Creek at approximately 300 and 700 metres elevation.

9. CONCLUSION

The author believes that the Rob 2 claim has potential to host an economic deposit of Ag-Pb-Zn with associated Au-Cu values. This is based on the following facts:

1) Mineralization is structurally controlled by faulting and shearing and is related to the Portland Canal type dykes. Geological mapping indicates two northwest trending dyke zones cross Radio Creek and a major north trending fault trends along Radio Creek.

2) Observed mineral occurrences are small (1-5 cm. width), however complex folding and the variable competance of the host rock may allow for favourable ground conditions to exist at depth for a large scale mineral deposit.

10. RECOMMENDATIONS

1) Detailed geological mapping, prospecting along dyke zones and major faults.

2) VLF-EM ground geophysics and a detailed geochemical survey.

REFERENCES

Grove, E.W. (1971), Geology and Mineral Deposits of the Stewart Area, BCDM Bulletin No. 58.

Grove E.W. (1986), Geology and Mineral Deposits of the Unuk River-Salmon-River-Anyox Area, Minister of Energy Mines and Petroleum Resources Bulletin No. 63.

Gigliotti, F.B. (1984), Assessment Report #13,352, Bitter Creek Property, Maralgo Mines Ltd.

Tully, D.W. (1979), Assessment Report #8095, Bitter Creek Property, Beaver Gold Resources Inc.

STATEMENT OF QUALIFICATIONS

I, Andris, Kikauka, of Box 370, Brackendale B.C., V0N 1H0, do hereby declare that:

- I graduated from Brock University, Faculty of Geological Sciences, St. Catharines, Ontario, 1979, receiving Honours B.Sc., First Class.
- From 1976 - 79, have been performing geological field work for Uranium targets on the Canadian Shield.
- From 1979 to 1989, have been performing geological field work, for precious metal, base metal targets on the western cordillera in B.C. and the Yukon Territory.
- Maintain a professional affiliation with the G.A.C. and M.E.G.
- Personally participated in the field work of this report, reviewed and assessed the data.

Sincerely,

Andris Kikauka

Andris Kikauka, B.Sc. (Hons.)
Geologist

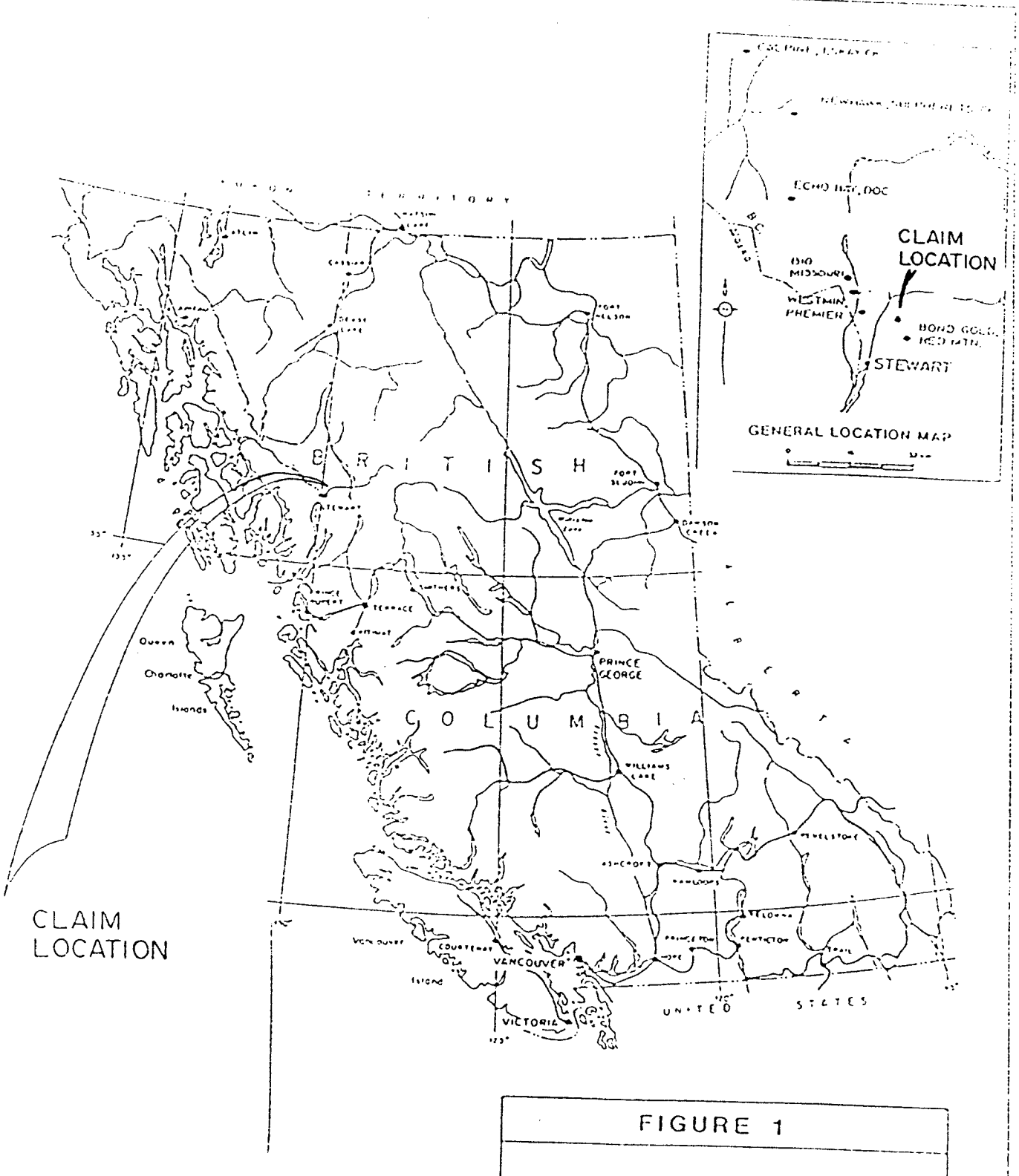

FIGURE 1

PROPERTY LOCATION MAP

DRAWN	PROJECT	DATE

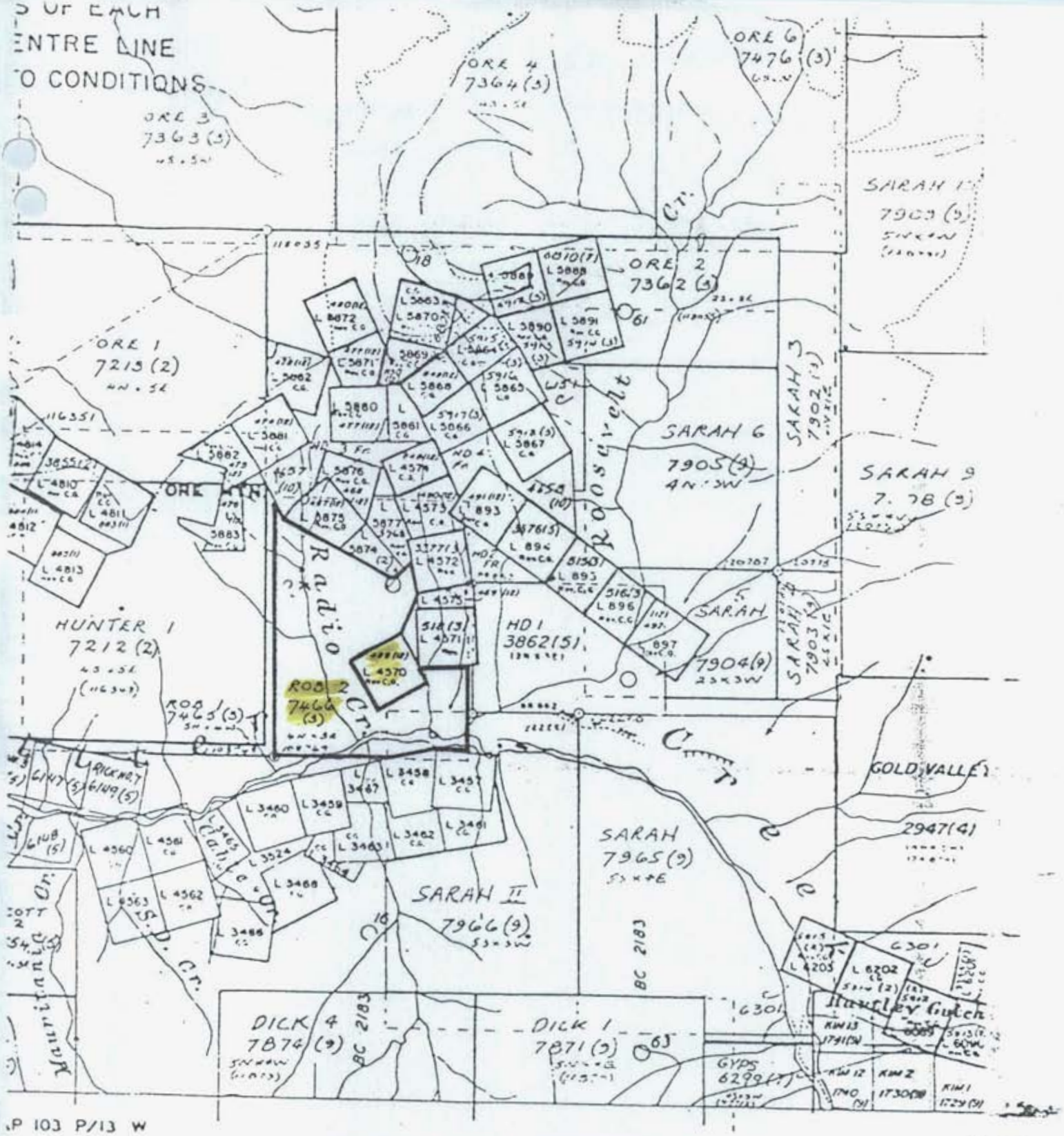

FIG. 2 CLAIM LOCATION MAP

ROB 2 NTS 104 A/4W

0 1 2 Km.

SCALE 1:40,000

N

FIG. 3 ROB 2, CLAIM GEOLOGY

LEGEND

MIDDLE JURASSIC

SALMON R. FM. - VOLCANICS, SEDIMENTS

16 Greywacke 16a,
Argillaceous siltstone 16b

EOCENE AND OLDER PLUTONIC ROCK

9 Diorite dyke 9a

outcrop

bedding

fault

sulphides

NTS 104 A/4 W

0 250 500 m.

scale 1:12,500

N