REPORT ON MINERAL CLAIMS

R&R Group, Nos. 339-354 incl.,

Lat. 50°2'; Long. 126°48'

ALBERNI MINING DIVISION

ZEBALLOS, B.C.

for

R. H. Lonsdale

Prepared by:
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INTRODUCTION

These claims were staked to protect preliminary investigation of a magnetite deposit. They are R&R 1 to 16 inclusive and lie along the Zeballos River at Lat 50° - 2'; Long. 126° - 48'. (see index map - fig. 1).

The writer visited the locality in September, 1979 and made a geological reconnaissance of the 16 claims and the vicinity.

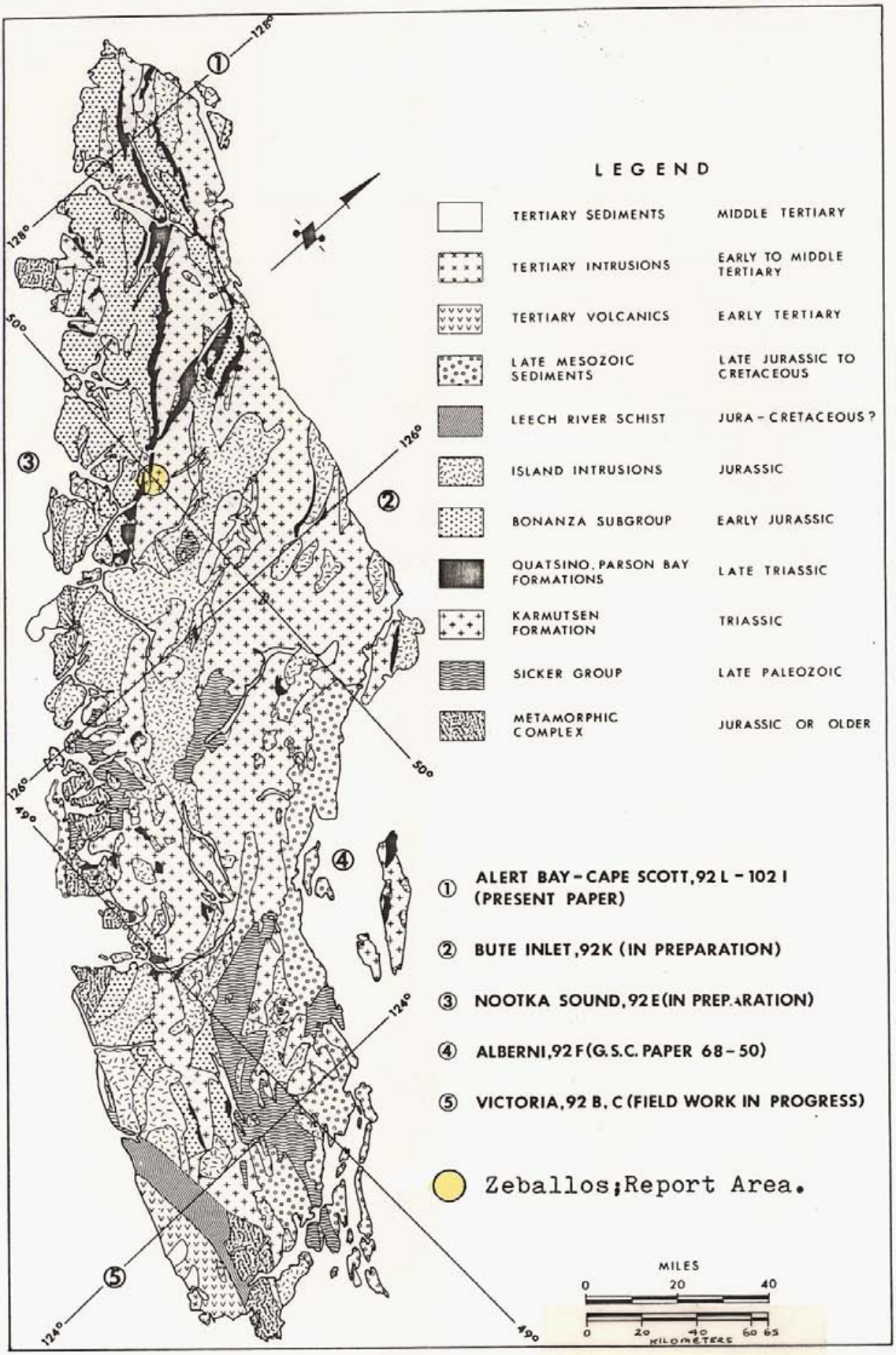

Figure 1. Geological sketch map and index of geological mapping on Vancouver Island.

HISTORY

The earliest serious geological examinations of the area were made by Dawson in 1898 and Clapp in 1912. Following this, and more specific to this discussion was Gunning's examination of the Zeballos area in 1932. This work established a more detailed shatigraphy and supplied the basis for subsequent studies. See Table 1, (Table of Formations). In the Zeballos area there are numerous mineral occurrences and localities recording production. Most notable of these was the Privateer gold mine at Zeballos (Fig.2).

Currently there is little or no activity in the area.

ACCESS

The area may be reached by road from Campbell River via Sayward and private road through the Nimkish Valley and down the Zeballos River; by sea through Esperanza and Zeballos Inlets and via a float plane to Zeballos.

Movement within the area is limited to the few logging roads generally suitable to 4 wheel drive vehicles only, limited use of helicopters and occassional use of float planes landing on lakes.

There are some facilities including docks at Zeballos.

GENERAL GEOLOGY

The predominant mineralization of potential economic interest in the area is gold in quartz veins, copper bearing veins associated with the volcanics of the Bonnanza Group and iron (magnetite) occurrings as skarn in granitic rocks of the Coast Range Intrusives.

The latter two types of mineralization seem to be most important to the R&R Group, although proximity to the Privateer mine suggests that gold may occur.

The magnetite, apparently the most important mineralization, occurs in a granodiorite which forms a ridge running generally from Lukwas Mountain north west toward the headwaters of the Kaouck River on a bearing of 320^0 (Fig.2).

There is some evidence that ridges such as this, and particularily the vertical faces associated with them are indicative of enriched magnetite occurrences. Note that along this trend and that of the Hiller Creek Fault there is an elevation on the map Fig.2 of 4041 feet (1325m). This area is the site of a drilling program undertaken by Falconbridge where values in excess of 50% magnetite were reported from cores.

This entire ridge, as described above may be a magnetite prospect.

The magnetite is apparently disseminated throughout the intrusive in varying concentrations. Further, its occurrence seems to be restricted to and expressed by the type of topography described above.

The copper bearing veins are associated with both plutonic and volcanic rocks particularly the latter. The veins may be numerous locally. Where economic deposits occur they are associated with a very complex fracture system and through the resulting system of profuse copper bearing veins an ore body may be present.

The gold quartz veins are generally well defined fracture systems trending north-easterly. The veins are infilled with quartz-sulphide and usually narrow. However, there are instances of some up to one foot wide.

Falconbridge Mines Limited has reported the occurrence of galena on Lime Creek, Fig.2. R. R. 12. The mineralization may be associated with the carbonate which gives the creek its name.

Nearby Blacksand Creek apparently derives its name from the prominent ferro-magnesium sands along its bed.

TABLE 1

TABLE of FORMATIONS

PERIOD		STAGES	GROUP OR FORMATION	MAP UNIT	LITHOLOGY	THICKNESS (Feet)
TERTIARY		Miocene?	Tertiary Volcanics, Sediments	Tv Ts	Basaltic to dacitic lava, tuff, breccia; conglomerate conglomerate	1,000
		Not in contact; disconformable?				
		Eocene?	Tertiary Intrusions	Tg	Quartzdiorite	
		Intrusive contact in Alberni map-area				
CRETACEOUS	UPPER	Maestrichtian? Campanian	Nanaimo Group (incl. Suquash Fm.)	uKN	Greywacke, siltstone, shale conglomerate, coal	400
		Disconformable contact?				
		Cenomanian Albian	Queen Charlotte Group	lKqc	Greywacke, conglomerate, siltstone, shale, coal	1,000-3,500
		Disconformable contact				
	LOWER	Barremian Hauterivian Valanginian	Longarm Formation	lK1	Greywacke, conglomerate, siltstone	200-1,300
		Equal age but diverse tectonic setting				
			Pacific Rim Sequence	JKs	Argillite, greywacke? conglomerate	
JURASSIC	MIDDLE	Unconformable contact				
			Island Intrusions	Jg	Quartz diorite, granodiorite, quartz monzonite, quartz-feldspar porphyry	
		Intrusive contact				
	LOWER	Pliensbachian Sinemurian	Vancouver Group (gradational contacts within group)			
			Bonanza Volcanics Harbledown Fm.	lJav JH	Andesitic to rhyodacitic lava, tuff, breccia; greywacke, argillite, tuff	1,000-18,500
TRIASSIC	UPPER	Norian	Parson Bay Fm.	uTRPB	Calcareous siltstone, shale, greywacke, cong'omerate, breccia	1,000-2,000
		Karnian	Quatsino Fm.	uTRQ	Limestone	100-2,500
			Karmutsen Fm. includes in upper part Intervolcanic Limestone	muTRK uTRQ2	Basaltic lava, pillow lava, breccia Limestone	10,000-20,000
	Mid.	Ladinian	Sediment - sill unit		Diabase, argillite	2,500
			Disconformable or unconformable contact			
PENNSYL-VANIAN?			Sicker Group	Ps	Limestone, siltstone	700
			Migmatic contact?			
		pre-Cretaceous	Westcoast Complex	PMdin	Quartz diorite, agmatite, amphibolite, gneiss	

From G.S.C. Paper 74-8

CONCLUSIONS AND RECOMMENDATIONS

The R&R claims lie across a definite magnetite trend of unknown value. The actual ground comprising these properties is mostly fluvial fill so that mapping of evaluation must be by extrapolation.

It is so far apparently a magnetite prospect only. Detailed mapping should be done on the claims themselves and on the magnetite trend.

The proximity to tidewater and hence world markets is a very important factor.

The project requires the detailed mapping, mentioned above, a diamond coring program and consideration should be given to expanding holdings particularly in a northwesterly direction along the magnetite bearing ridge. It is in this direction that the work by Falconbridge was done, and it is encouraging.

Respectfully submitted,

W. B. Gallup

W. B. Gallup, P. Geol.

ITEMIZED COST STATEMENT

Geological consulting, Zeballos and Calgary, 7 days @ $300.00		$2,100.00
Mileage, Calgary Zeballos and return 1740 miles @ 30¢		522.00
Hotel and Meals:		
Holiday Inn Vancouver 1/2 of $118.35 as per receipt	59.17	
Painter's Lodge, Campbell River B.C. 1/2 of $534.70 as per receipt	267.35	
Richter's Pass Inn, Osoyoos, B.C. as per receipt	21.00	347.52
Carter Mapping, maps, drafting, etc.		380.00
Air Photos		14.62
TOTAL		$3,364.14

APPENDIX (i)

Selected Bibliography

1933: Zeballos River area, Vancouver Island, British Columbia; Geol. Surv. Can, Sum. Rept. 1932, Pt. A2, p. 29-50.

Hoadley, J. W.

1953: Geology and mineral deposits of the Zeballos-Nimpkish area, Vancouver Island, British Columbia; Geol. Surv. Can, Mem. 272.

Lindeman, E.

1909: Iron ore deposits of Vancouver and Texada Islands, British Columbia; Can. Mines Br., publ. 47.

Stevenson, J. S.

1938: Lode-gold deposits of the Zeballos area; Brit. Col. Dept. Mines, Bulletin (not numbered).

1950: Geology and mineral deposits of the Zeballos Mining, British Columbia; Brit. Col. Dept. Mines, Bull. Not. 27.

Bancroft, M. F.

1937: Gold-bearing deposits on the west coast of Vancouver Island between Esperanza Inlet and Alberni Canal; Geol. Surv. Can., Mem. 204.

1940: Zeballos mining district and vicinity, British Columbia; Geol. Surv. Can, Paper 40-12.

Carson, David, J. F.,

1972: The Plutonic Rocks of Vancouver Island; Geol. Surv. Can. Paper 72-44.

Eastwood, G.E.P.

1962: Old Sport (Coast Copper Company, Limited); Brit. Col. Dept. Mines, Petrol. Resl, Ann. Rept. 1961, p. 97-100.

1965: Replacement magnetite on Vancouver Island, British Columbia; Econ. Geol., v. 60. p. 124-148.

Gunning, H.C.

1930: Geology and mineral deposits of the Quatsino-Ninkish area, Vancouver Island; Geol. Surv. Can., Sum. Sept. 1930, Pt. A. p. 56-78.

APPENDIX (ii)

Resume and Qualifications

RESUME AND QUALIFICATIONS

W. B. Gallup P.Geol.

Graduated from the University of Saskatchewan in 1938 with a B.Sc. in Geology having experienced five seasons field work with the Geological Survey of Canada and prospecting concerns, many in northern Saskatchewan.

Employed by Anglo Canadian Oil Company, Home Oil Company and the Alberta Petroleum and Natural Gas Conservation Board up to 1942. In that year, I joined Royalite Oil Company in Turner Valley as resident geologist and later became chief geologist for the company in Calgary where I remained until entering consulting in 1955.

I have been engaged in surface and subsurface geologic investigation in the Western Canada Sedimentary Basin, the North Western Pacific Coast (including the Gulf of Alaska, the Mackenzie Basin and Canadian Arctic.)

During the past 20 years, I have concentrated on the Oil Sands of the Fort McMurray area and the Arctic including the Mackenzie Basin. For a number of years prior to this, I specialized in Rocky Mountain and Foothills structure.

During my consulting career, I have had as clients most of the major oil companies in Western Canada.

While with the Royalite Oil Company, I was responsible for extensions of the Turner Valley field into isolated fault blocks, the acquisition of acreage in Saskatchewan in the Williston Basin which later became productive and the acreage at Fort McMurray which is now the site of the Syncrude project. In 1944, I recommended drilling as a follow-up to a dry hole that is now the Wildcat Hills gas field northwest of Calgary.

In the Arctic, I was the first oil industry geologist to enter the Islands in 1959, on an economic assignment. I did pioneer Mesozoic Microfaunal collecting and mapping in the Mackenzie Delta region, and discovered Ordo-Silurian Niagran reef outcrops, 280 miles east of Inuvik, and thus established, correctly for the first time, the eastern limit of sediments in the onlap onto the shield in that area.

From 1956 to 1975, I was actively engaged in Oil Sands exploration and evaluation in the Fort McMurray area. This work has consisted of complete exploratory expediting and evaluation, reserve estimates and recommendations, mapping, recommendations regarding acquisition of acreage, economic appraisals and regional geologic studies on the deposit. During this time, I have kept up a set of maps and other data and kept in touch with all phases of development. I have personally been actively engaged, at least in some degree, in the exploration of most of the leases on the deposit and in areas now unleased, when they were held under Permit.

I am now engaged in general consulting and wellsite geology in the Alberta Syncline and Foothills.

Memberships: Association of Professional Engineers, Alberta
American Association of Petroleum Geologists
Canadian Society of Petroleum Geologists
Geological Association of Canada
Past President of A.S.P.G.

Attached is a list of publications.

W. B. Gallup P.Geol.
Gallup Exploration & Services Ltd.,
43 Westview Drive S.W.,
Calgary, Alberta

R.H. LONSDALE MAGNETITE-COPPER PROSPECT

ZEBALLOS, B.C.

480m

SCALE 1" = 2000'
1 cm. = 240 meters

GEOLOGY AND MINING PROPERTIES

LEGEND

MESOZOIC

JURASSIC AND/OR CRETACEOUS
UPPER JURASSIC AND/OR LOWER CRETACEOUS
COAST INTRUSIONS

4 — *Quartz monzonite, granodiorite, quartz diorite, diorite, gabbro; minor aplite and micropegmatite*

TRIASSIC AND (?) JURASSIC
UPPER TRIASSIC AND (?) LATER
BONANZA GROUP

3 — *Andesitic lavas, agglomerates, tuffs, and breccias; basaltic, trachytic, and dacitic lavas; minor intercalated limestone; 400 to 500 feet composed of thin-bedded argillite, tuffaceous argillite, impure limestone, and quartzite at base; numerous thin, intercalated andesitic lavas and associated pyroclastic rocks*

TRIASSIC
UPPER TRIASSIC

2 — *QUATSINO FORMATION: crystalline limestone; minor volcanic rocks*

UPPER TRIASSIC AND (?) EARLIER
KARMUTSEN GROUP

1 — *Basaltic and andesitic lavas, agglomerates, breccias, and tuffs; minor intercalated limestone*

INDEX TO MINING PROPERTIES

32 Answer (gold)
6 Barnacle (gold)
34 Beano group (gold)
29 Big Star (gold)
11 Boden (gold)
22 Britannia (gold)
26 Central Zeballos (gold)
24 C.D. (Rey Oro) (gold)
2 Churchill (iron, copper, lead, zinc)
7 Cordova (gold)
8 Ford Magnetite (iron)
35 Friend group (gold)
23 Gold Creek (gold)
31 Gold Gate (gold)
5 Gold Spring (gold)
36 Harlow group (gold)
39 Head Bay magnetite group (iron)
28 I.X.L (gold)
4 King Midas (gold)
1 Lucky Strike (gold
28 Homeward (gold)
12 Maquinna (gold)
37 Mohawk group (gold)
27 Monitor (gold)
3 North Fork Exploration (gold)
9 Omega (gold)
13 Pandora (gold)
10 Peerless (gold)
16 Prident (gold)
15 Privateer (gold)
30 Prosperity (gold)
25 Rimy (gold)
21 Spud Valley (gold)
33 Tagore (gold)
40 Ubell Creek showings
41 Ubell showings
14 Van Isle (gold)
38 Vivian group (gold)
17 White Star (gold)
19 Zeballos (Pacific) (gold)
20 Mount Zeballos (gold)

Geology mainly by H.C. Gunning, 1931, 1932
Descriptive notes by J.W. Hoadley, 1952

KAOUK RIVER
Rowland Creek
Espinosa Creek
KAOUK MOUNTAIN
4295
MAMAT MOUNTAIN
OCLUCJE I.R. 7
Mamat Creek
Hilker Creek
Fault
Pandora Cr.
Jackstand Cr.
Lime Cr.
Fault Creek
ZEBALLOS PEAK
4353
3945
4041
Zeballos River Fault
R.H.V.E.R.
ZEBALLOS LAKE
ZEBALLOS RIVER
NOMASH RIVER
LUKWA MOUNTAIN
BEANO MOUNTAIN
EHATIS I.R. 11
ZEBALLOS
Bingo Creek
Friend Creek
LITTLE ZEBALLOS RIVER
RR1 339
RR2 340
RR3 341
RR4 342
RR5 343
RR6 344
RR7 345
RR8 346
RR9 347
RR10 348
RR11 349
RR12 350
RR13 351
RR15 353

127°00' 55' 50' 45'
05' 50°00'

Fig. 2.

W. B. GALLUP P. Geol.