

87-305-15924

AIR PHOTOGRAPHY AND MAP GENERATION

JOCKY 1-5 MINERAL CLAIMS ^{5/88}
NTS 94E/2W ^{14.3'}
LATITUDE 57 deg. ^{23'} NORTH
LONGITUDE 126 deg. ^{50' WEST} ^{52.4'}
OMINECA MINING DIVISION
BRITISH COLUMBIA

FILMED

on behalf of

Owner/Operator: GOLDEN RULE RESOURCES LTD.
GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,924
by

RECEIVED

JUN 2 - 1987

GOVERNMENT AGENT
SMITHERS, B.C.

Bruce T. Evans, P. Geol.
May, 1987

TABLE OF CONTENTS

CERTIFICATE

SUMMARY

1.0 INTRODUCTION

- 1.1 Property and Ownership
- 1.2 Location and Access
- 1.3 Physiography and Glaciation
- 1.4 Previous Work

2.0 REGIONAL GEOLOGY

3.0 AIR PHOTOGRAPHY AND MAP GENERATION

BIBLIOGRAPHY

FIGURES

- 1. General Location Map
- 2. Claims Location Map

APPENDIX I SUMMARY OF EXPENDITURES

BACK POCKET

Map 1 Jocky Project Digital Map - Scale 1:5,000

CERTIFICATE

I. Bruce Thomas Evans, of #165, 78 Glaimisgreen, SW, in the City of Calgary, Province of Alberta, do hereby certify that:

1. I am a Senior Exploration Geologist with the firm of Golden Rule Resources Ltd. with offices at #410, 1122 - 4 Street, SW., Calgary, Alberta.

2. I am a graduate of Queen's University, B.Sc. (Hons.) Geology (1982) and have practiced my profession continuously since graduation.

3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

4. Work contained within this report was contracted by myself and performed under my supervision.

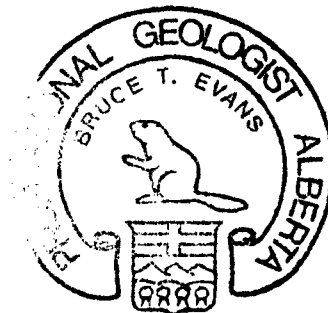
5. I do not own and do not expect to receive any interest (direct, indirect or contingent in the property described herein nor in the securities of Golden Rule Resources Ltd.

DATED at Calgary, Alberta this 13th day of May, 1987.

Respectfully submitted,



B. T. Evans, P. Geol.



SUMMARY

During September of 1986 Golden Rule Resources contracted the "Orthoshop" of Calgary to fly an air photographic mission over several claim blocks in the Toodoggone region of Northern British Columbia; one of the claim blocks being the Jocky 1-5.

The air photo scale shot was 1:20,000 and in select areas 1:10,000. Upon completing the photographic mission, the photo data was digitized and orthophotos created. In the Jocky 1-5 area, surveyed ground control points could not be established so in turn points from NTS sheet 94E/2 were used. After all data was digitized a 1:5,000 scale topographic map with 5 metre form lines was created.

1.0

INTRODUCTION1.1 PROPERTY AND OWNERSHIP

The Jocky 1-5 mineral claims form a contiguous block of claims in northern British Columbia (Figure 1). The claims are owned by Golden Rule Resources of Calgary, Alberta.

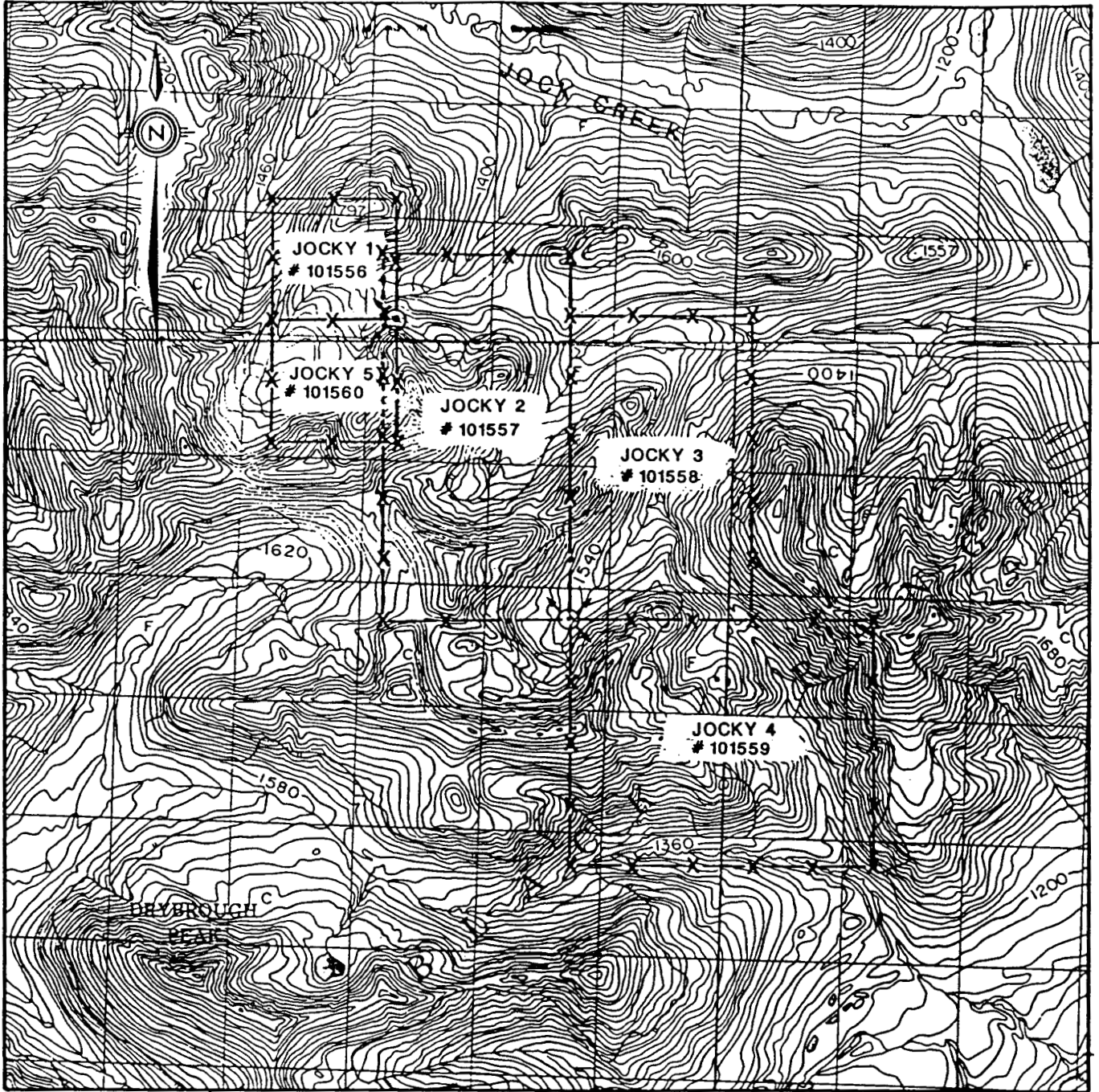
<u>CLAIM NAME</u>	<u>NO. OF UNITS</u>	<u>REC. NO.</u>	<u>DATE OF RECORD</u>
Jocky 1	4	7598	May 2, 1986
Jocky 2	18	7599	May 2, 1986
Jocky 3	15	7600	May 2, 1986
Jocky 4	20	7601	May 2, 1986
Jocky 5	4	7602	May 2, 1986

Exact location of Jocky 1-5 is illustrated in Figure 2.

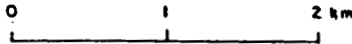
126° 55'

57° 15'

57° 15'



126° 55'



SCALE 1:50,000

ATTYCELLEY CREEK 94/E 2

LEGEND

- POSTS PLACED
- x POSTS NOT PLACED
- ⊗ LEGAL CORNER POST (LCP)

1.2 LOCATION AND ACCESS

The Jocky 1-5 mineral claims are located in NTS map-areas 94E/2W and 94E/7W, approximately 300 km north of Smithers. The approximate geographic coordinates of the claims are 57 deg. 13' North Latitude and 126 deg. 50' West Longitude.

The property encompasses an area between Jock Creek and Finlay River. Access to the property is via fix-wing aircraft to the Sturdee Airstrip and then by helicopter to the property.

1.3 PHYSIOGRAPHY AND GLACIATION

The claims lie within the Cassiar Mountains physiographic subdivision of the Interior Plateau. The region was entirely glaciated and is characterized by wide U-shaped drift-filled valleys and deeply-cut V-shaped upland valleys. Mountain peaks in the area average 1980 metres ASL, and rise fairly abruptly from the major valleys. The topographic expression of the Toodoggone Volcanics is considerably more subdued as compared to the rugged topography in areas underlain by Takla Group volcanic rocks.

On the Jocky claims, the maximum relief from the incised valley of Finlay River to the adjacent mountain peaks is in the order of 850 metres. The upland areas, where most of the claims are located, are dissected by tributaries to Finlay River. The original V-shaped profile of these valleys has been modified by valley glaciation to produce the current U-shaped profile. The headwalls of these valleys have been carved into cirques and aretes. This precipitous topography makes prospecting traverses difficult in these upland areas.

1.4 PREVIOUS WORK

Exploration for base and precious metals occurred during two periods (1968-1969, and 1980 to the present). During the initial phase of exploration, work was carried out in the area by Kennco Exploration, Cominco Mines, and Quebec Cartier Mines. This work consisted of geological mapping with soil, rock, and silt geochemical sampling, and was designed to evaluate both the base and precious metals potential of the area. Renewed exploration interest began in 1980 with the emphasis on precious metals. In 1980, the Jock claims were staked by Serem Ltd. and a program consisting of geological mapping and geochemical sampling was completed. Also in 1980, the Jock 1-5 claims were staked by Golden Rule Resources Ltd. In 1981, on behalf of Golden Rule, Taiga Consultants Ltd. carried out an exploration program consisting of airborne VLF-EM and magnetometer surveys followed by helicopter supported reconnaissance geological mapping, geochemical sampling and prospecting. Additional exploration was carried out by Taiga on behalf of Golden Rule in 1983. This work

consisted of limited follow-up work on previously delineated geochemical anomalies along with prospecting and mapping. In 1985, Golden Rule acquired the Jock 6-13 claims. All 13 claims constitute the property explored during the summer of 1985 by Taiga.

2.0

REGIONAL GEOLOGY

During 1971-75, the regional geology of the Toodoggone area was mapped by the Geological Survey of Canada at a scale of 1:250,000 under the direction of Dr. H. Gabrielse, with the results published in 1977 as GSC Open File 483. The B.C. Ministry of Energy, Mines and Petroleum Resources carried out a mapping program in the Toodoggone area from 1971 to 1984, with a compilation published in 1985 at a scale of 1:50,000 as Preliminary Map 61. This mapping, completed under the direction of T. G. Schroeter, details the units of the Toodoggone Volcanics which had become the focus of gold exploration in the district. The following description of the regional geology is excerpted from his 1982 report:

"The Toodoggone area lies within the eastern margin of the Intermontaine Belt. The oldest rock exposed are wedges of crystalline limestone more than 150 metres thick that have been correlated with the Asitka Group of Permian age. The next oldest rocks consist of andesitic flows and pyroclastic rocks including augite-tremolite andesite porphyries and crystal and lapilli tuffs that belong to the Takla Group of Late Triassic age. The Omineca intrusions of Jurassic and Cretaceous age (potassium-argon age of 186 to 20 Ma obtained by Geological Survey of Canada) range in composition from granodiorite to quartz monzonite. Some syenomonzonite bodies and quartz feldspar porphyry dykes may be feeders to the Toodoggone rocks which unconformably overlie the Takla Group. The "Toodoggone" volcanic rocks (named informally by Carter, 1971) are complexly intercalated volcanic and volcanic-sedimentary rocks of Early and Middle Jurassic age, 500 metres or more in thickness, along the west flank of a northwesterly trending belt of "basement" rocks at least 90 kilometres in length by 15 kilometres in width. A potassium-argon age of 186 plus or minus 6 Ma was obtained by Carter (1971) for a hornblende separate from a sample collected from a volcanic sequence 14 kilometres southeast of Drybrough Peak. Four principal subdivisions of "Toodoggone" rocks have been recognized:

- (1) Lower Volcanic Division -- dominantly pyroclastic assemblage including purple agglomerate and grey to grey to purple dacitic tuffs.
- (2) Middle Volcanic Division -- an acidic assemblage including rhyolites, dacites, "orange" crystal to lithic tuffs, and quartz feldspar porphyries; includes welded tuff. The "orange" color of the

tuffs resulted from oxidation of the fine-grained matrix while the rock was still hot. A coeval period of explosive volcanism included the formation of "laharic" units and intrusion of syenomonzonite bodies and dykes. This event was accompanied by explosive brecciation along zones of weakness, predominantly large-scale faults and attendant splays, followed by silicification and deposition of precious and base metals to varying degrees in the breccias. Rounded fragments of Omineca intrusive rocks are rare components in Toodoggone tuffs.

- (3) Upper Volcanic-Intrusive Division -- grey to green to maroon crystal tuffs and quartz-eye feldspar porphyries.
- (4) Upper Volcanic-Sedimentary Division -- lacustrine sedimentary rocks (sometimes varved), stream bed deposits, and possible local fanglomerate deposits and interbedded tuff beds.

Many Toodoggone rocks have a matrix clouded with fine hematite dust implying a subaerial origin, however, some varieties may have accumulated in shallow water. The host rock for mineralization (division 2) is an orange to chocolate brown colored crystal tuff with varying minor amounts of lithic and vitric ash. Broken crystals of plagioclase and quartz are set in a fine-grained "hematized" matrix of quartz and feldspar. The exact chemical composition(s) and rock name(s) await chemical analyses. Carter (1971) determined the composition of a suite of rocks collected from the Toodoggone area to range from latites to dacite.

To the west, Upper Cretaceous to Tertiary pebble conglomerates and sandstones of the Lower Tango Creek Formation of the Sustut Group unconformably overlie both Takla Group volcanic rocks and Toodoggone volcanic rocks.

The structural setting was probably the most significant factor in allowing mineralizing solutions and vapours to migrate through the thick volcanic pile in the Toodoggone area. The entire area has been subjected to repeated and extensive normal block faulting from Jurassic to Tertiary time. It is postulated that a north-westerly trending line of volcanic centres along a gold/silver-rich "province" marks major structural breaks, some extending for 60 kilometres or more (for example, McClair Creek system, Lawyers system). Prominent gossans are often

associated with structural zones but many contain only pyrite; sulphides occur as disseminations and fracture fillings in Toodoggone and Takla Group rocks. Thrusting of Asitka Group limestones over Takla Group rocks probably occurred during Middle Jurassic time.

Today Toodoggone rocks display broad open folds with dips less than 25 deg. The Sustut Group sedimentary rocks have relatively flat dips and do not appear to have any major structural disruptions."

3.0

AIR PHOTOGRAPHY AND MAP GENERATION

Black and white photographic coverage of the Jocky 1-5 was performed during September of 1986. A series of 1:20,000 scale photos were taken over the majority of the property. In addition to the Golden Rule photo series, Government issue black and white air photos were utilized.

Horizontal and vertical ground control was established by using existing ground control points from NTS sheet 94E/2. Photographic and ground control data was digitized by utilizing a Wild BC-1 stereoplotter. Once stereoplotting is completed, digitized data can be presented in a form line manner which results in creation of a digital topographic map (see Map 1). The Jocky 1-5 area map is at a scale of 1:5,000 with contour intervals of 5 metres.

BIBLIOGRAPHY

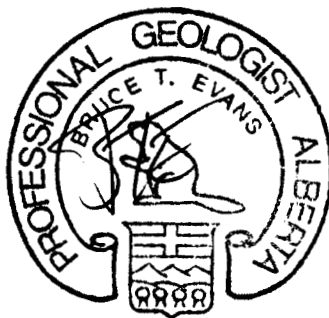
DAVIS, J.W. (Jan. 1986): Prospecting and Geological Report, Jock 1-13 Mineral Claims, NTS 94E/2W; for Golden Rule Resources Ltd.

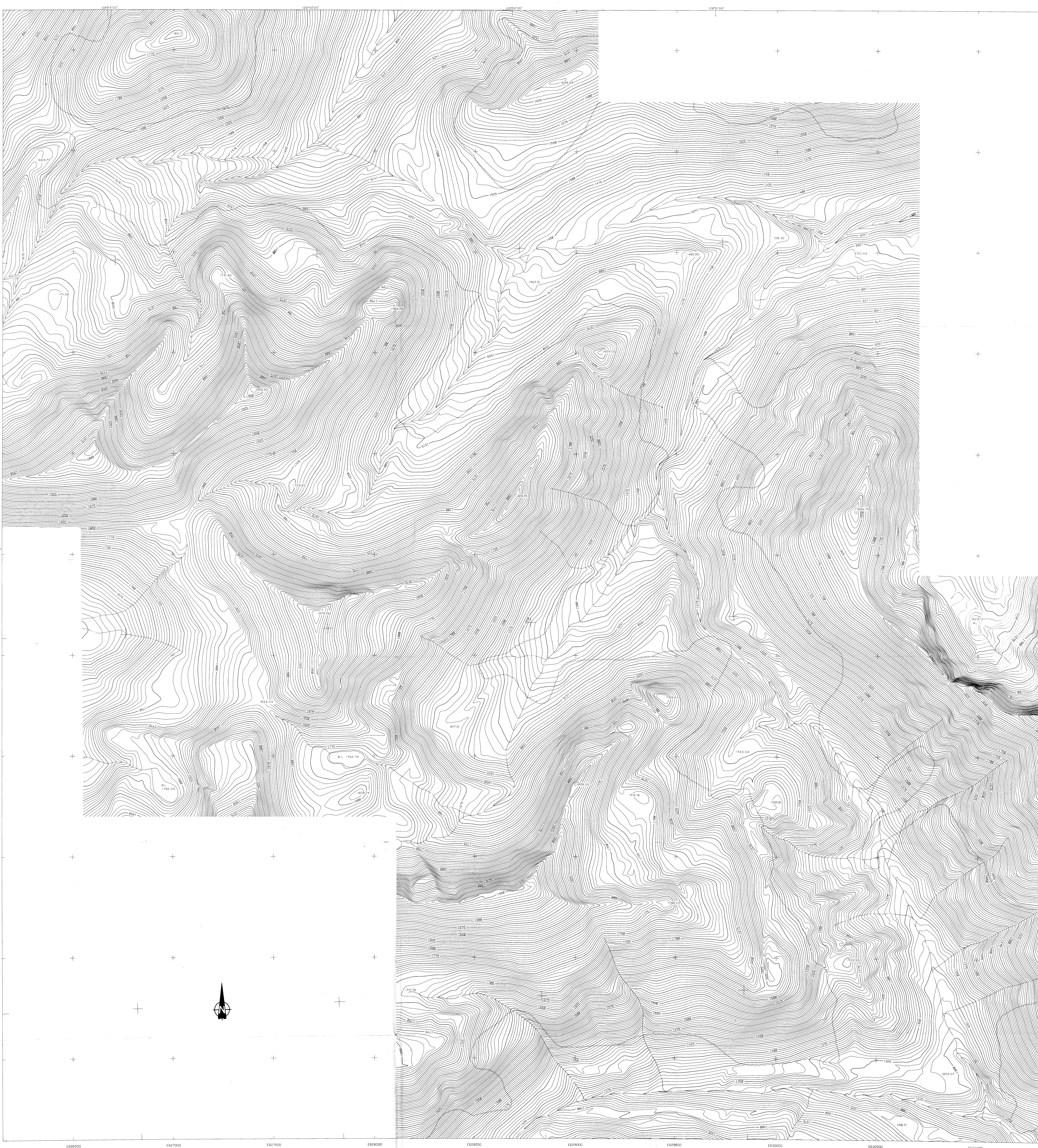
GABRIELSE, H. (1977): Geology of the Toodoggone and Were Map Areas, B.C.; Geological Survey of Canada, Open File 483.

APPENDIX I

SUMMARY OF EXPENDITURES

Supervision:		
B. Evans - 1.0 day @ \$250.00	\$	250.00
Air Photographic Mission:		
Orthoshop Management, Cameras, Aircraft		1,265.29
Map Generation:		
Orthoshop Digitizing and Plotting		<u>1,800.00</u>
		3,215.29
Portable Assessment Credits		<u>884.71</u>
	CREDITS	\$ 4,100.00
		=====





Control taken from NTS Map 94E/2
 UTM Zone 9
 Compiled by: THE ORTHOSHOP

JOCKY PROJECT
 British Columbia
GOLDEN RULE RESOURCES **ECOLOGICAL BRANCH**
ASSESSMENT REPORT

DIGITAL MAP
 Scale 1:5000
 Formline Interval 5m

15,924

Legend

Roof	—	Lake	—
Track	—	River	—
Chk Line	—	Stream	—
Treed Area	—	Intermittent Stream	—
Contours	—	Drill Hole	—
Spot Height	—	Trench	—