82-282-10345

GEOLOGICAL, GEOCHEMICAL
and
GEOPHYSICAL REPORT

JOCK 1-5 MINERAL CLAIMS
LAT. 57°15' North LONG. 126°52' West
N.T.S. 94-E-2W and 7W
OMINECA MINING DIVISION
BRITISH COLUMBIA

for
GOLDEN RULE RESOURCES LTD.
Calgary, Alberta

by
Michael Fox, P.Geol.
TAIGA CONSULTANTS LTD.
Calgary, Alberta

JANUARY 1982

CERTIFICATE

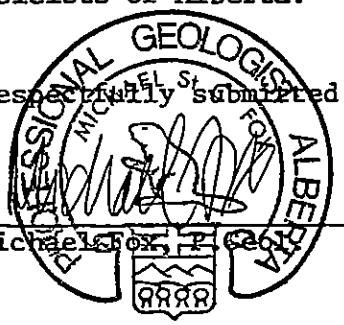
I, the undersigned, of the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a Consulting Geologist with an office at #100, 1300 - 8th St. S.W., Calgary, Alberta;

2. I am a graduate of the University of British Columbia with a B.Sc. in Geology (1974);

3. I have worked in the field of mineral exploration since 1965;

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



Respectfully submitted

November 1981

Michael Fox, P.Geol.

SUMMARY

"First pass" reconnaissance prospecting, mapping, and rock, soil, and silt geochemical sampling (carried out in August 1981) have located a number of Au and/or Ag anomalies requiring further detailing.

A series of major easterly trending fracture zones transect the property and have acted as controls for the emplacement of quartz-feldspar porphyry dykes and the development of associated "porphyry-type" potassic alteration.

The sources of the Au and/or Ag anomalies are presently thought to be more subtle northeast or northwest trending structures at the property which require further evaluation by reconnaissance prospecting, sampling, and mapping.

INTRODUCTION

Location and Access

The Jock 1 to 5 mineral claims form a contiguous block of claims located in N.T.S. map-areas 94-E-2W and 7W, approximately 475 km northwesterly from Prince George, British Columbia. The claims are situated over a number of northerly flowing tributaries of Jock Creek, approximately 12 km north of the confluence of the Finlay and Firesteel Rivers (Figure 1). The approximate geographic coordinates of the claims are 57°15' North latitude and 126°52' West longitude (Figure 2). The claims are normally accessible only by helicopter.

Property and Ownership

The Jock 1 to 5 mineral claims are located in the Omineca Mining Division and are entirely owned by Golden Rule Resources Ltd. of Calgary, Alberta. The claims are described more specifically as follows:

Claim Name	No.of Units	Record Number	Date of Record
Jock 1	4	2699	April 8, 1980
Jock 2	18	2700	April 8, 1980
Jock 3	15	2701	April 8, 1980
Jock 4	20	2702	April 8, 1980
Jock 5	4	2703	April 8, 1980

Physiography and Glaciation

The claims lie within the Cassiar Mountains physiographic subdivision of the Interior Plateau. The region is entirely glaciated and is characterized by wide U-shaped, drift-filled major valleys and deeply cut, V-shaped upland valleys. Mountain peaks in the area average 1980 metres ASL in elevation, and rise fairly abruptly from the major valleys.

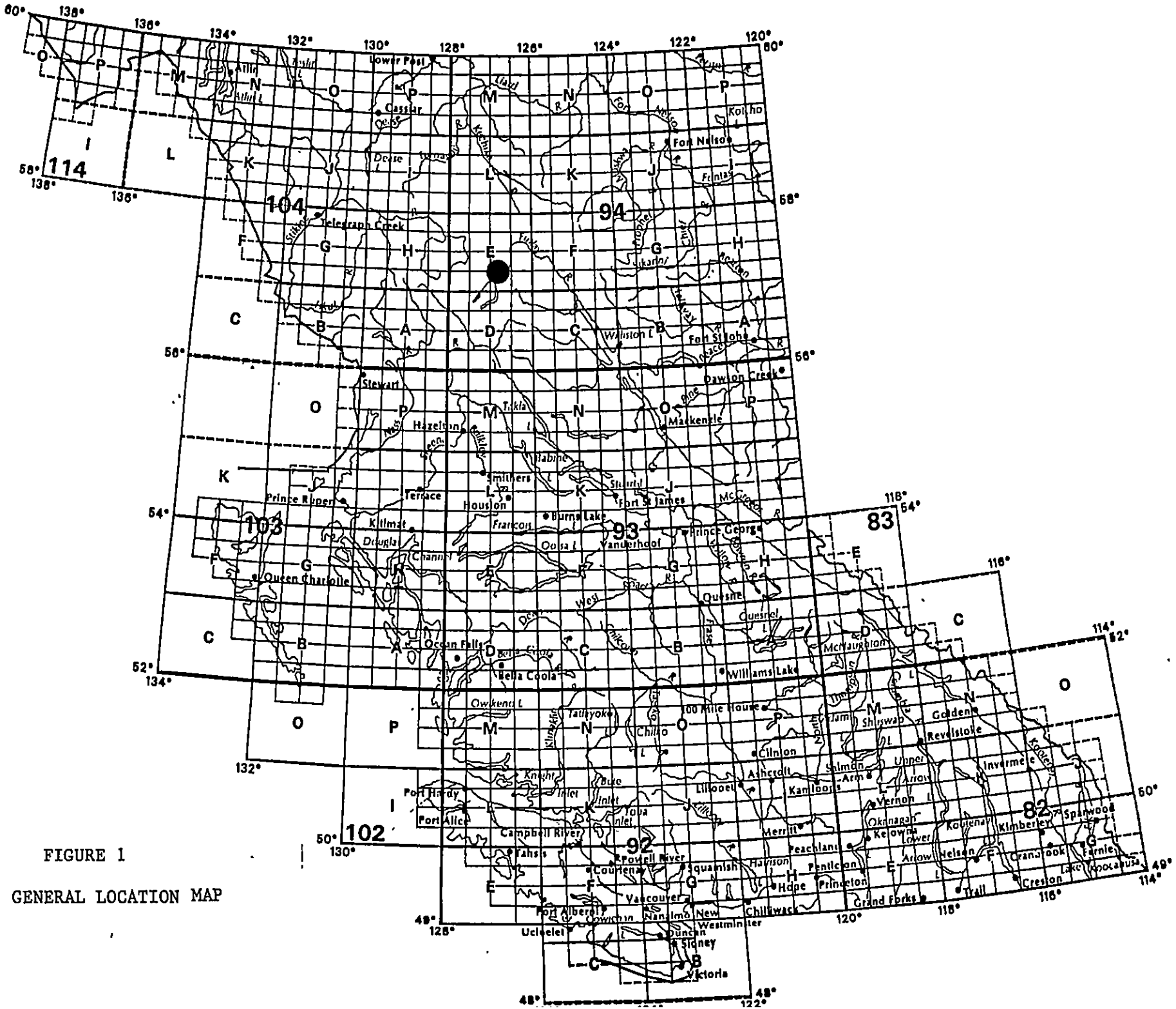
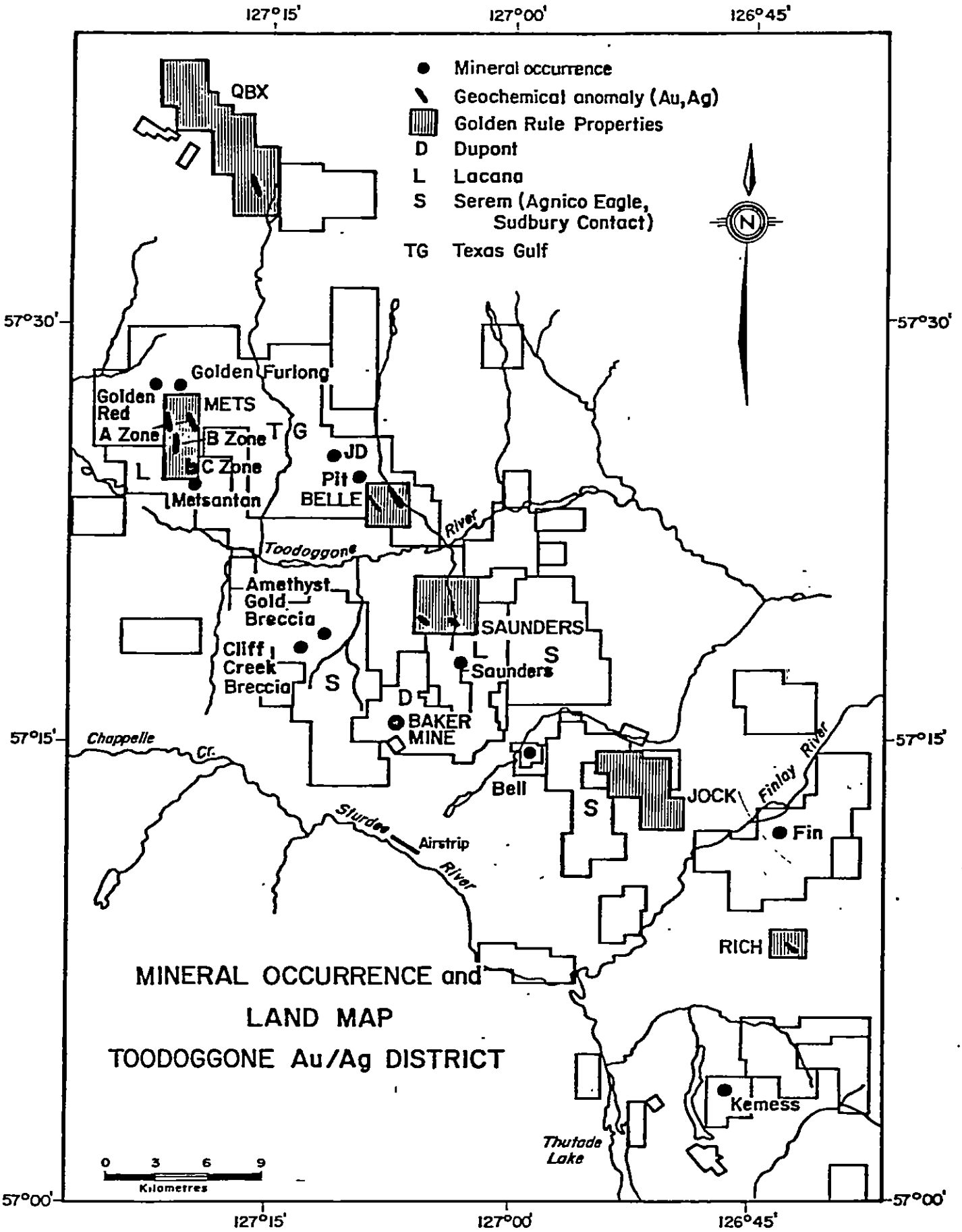
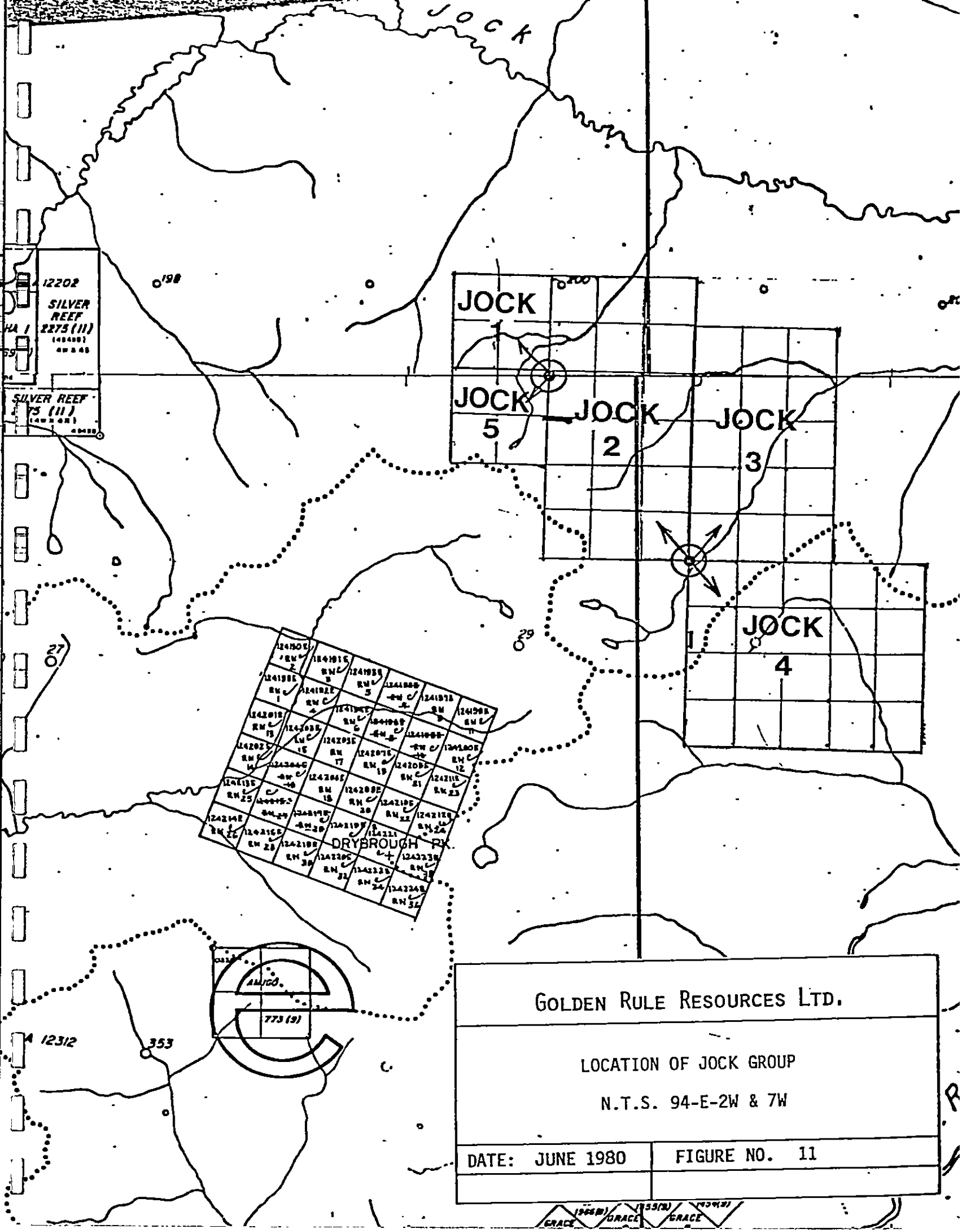


FIGURE 1

GENERAL LOCATION MAP


127°15'
127°00'
126°45'
57°30'
57°15'
57°00'
Mineral occurrence
Geochemical anomaly (Au,Ag)
Golden Rule Properties
D Dupont
L Lacana
S Serem (Agnico Eagle, Sudbury Contact)
TG Texas Gulf
N
QBX
Golden Furlong
Golden Red
METS
A Zone
B Zone
C Zone
T G
L
Metsantan
JD
Pit
BELLE
Toodoggone River
Amethyst Gold Breccia
Cliff Creek Breccia
S
SAUNDERS
L
S
Saunders
D
BAKER MINE
Chappelle Cr.
Bell
S
JOCK
Finlay River
Fin
Sturdee Airstrip River
RICH
MINERAL OCCURRENCE and
LAND MAP
TOODOGGONE Au/Ag DISTRICT
Kemess
Thutade Lake
0 3 6 9
Kilometres



GOLDEN RULE RESOURCES LTD.

LOCATION OF JOCK GROUP

N.T.S. 94-E-2W & 7W

DATE: JUNE 1980	FIGURE NO. 11

The claim group is situated over three prominent, northeasterly-trending ridges that separate northeasterly-flowing tributaries of Jock Creek. Elevations at the property range from 1300m to 1800m ASL. Topographic relief is extreme, and the area is characterized by cirques, razor-crested ridges, extensive talus, and alpine moraines. Streams commence flowing from tarns at a number of locations in the area of the claims.

1981 Exploration

Work carried out in 1981 consisted of approximately 74.5 line km of airborne VLF-EM and magnetic surveying, followed by helicopter-supported reconnaissance geological mapping, geochemical sampling, and prospecting. The airborne geophysical surveying was carried out in April 1981. The results of this work are presented as a separate report in Appendix III.

During August 1981, a total of 73 stream silt samples, 53 rock samples, and 81 soil samples (talus fines) were collected from the claims area and submitted for geochemical analysis. Prospecting and geological mapping have located a number of zones of interest described elsewhere in this report.

REGIONAL GEOLOGY

The claims are underlain by intermediate to acidic volcanic rocks of the Lower Jurassic Toodoggone Formation. The Toodoggone volcanics form a belt 5 - 20 km wide and 100+ km long which is currently the focus of intense precious metals exploration. The belt hosts the Baker deposit, currently being mined by DuPont of Canada Ltd., and another potentially economic deposit known as the Gold-Amethyst Breccia Zone, currently being explored by Serem Ltd.

Four principal subdivissions of the Toodoggone Formation are now recognized. The following descriptions of these subdivisions are excerpted from B.C. Ministry of Mines Paper 1981-1, p.125, by T. G. Schroeter.

Lower Volcanic Division. This is dominantly a pyroclastic assemblage including purple agglomerate and grey to purple dacitic tuffs.

Middle Volcanic Division. This is an acidic assemblage including rhyolites, dacites, 'orange' crystal to lithic tuffs, and quartz feldspar porphyries. It includes welded tuff. The 'orange' colour 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 syeno-monzonite 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.

Upper Volcanic - Intrusive Division. This division consists of grey to green to maroon crystal tuffs and quartz-eye feldspar porphyries.

Upper Volcanic - Sedimentary Division. This division consists of lacustrine sedimentary rocks (sometimes varved), stream bed deposits, and possible local fanglomerate deposits and interbedded tuff beds.

PROPERTY GEOLOGY

Geological mapping of the Jock claim group was carried out in selected areas utilizing a 1:10,000 scale topographic base. The results of this work are presented on a map accompanying this report. Mapping was of a semi-reconnaissance nature and was restricted to major bedrock exposures.

Partial mapping of the claims area indicates that it is underlain primarily by porphyritic green and purple feldspar and feldspar-hornblende andesitic to dacitic flows and tuffs corresponding to Divisions 1 and 2 of the Toodoggone Formation. In two areas, large blocks of Upper Triassic Takla Group volcanic and volcanisedimentary rocks are in fault contact with the Toodoggone Formation.

A number of pink quartz-feldspar porphyry dykes cut the Toodoggone volcanics and are enclosed by envelopes of strong fracturing, epidotization, and silicification. Most of the property is characterized by the presence of strong, easterly striking fracture zones marked by wide zones of epidotization, silicification, and the development of potassium feldspar alteration. Pyritization occurs in the most intensely shattered and silicified (or rhyolitized) zones. The general style of alteration combines characteristics of epithermal vein-type mineralization and stockwork-type, deep-seated, mesothermal, 'porphyry' alteration. The property is evidently situated over a porphyry-type alteration centre, exposed at a fairly high level in the system. The claims appear to have greater potential for hosting a fissure-vein type deposit such as the Baker Mine, rather than a high-level quartz stringer stockwork — quartz breccia zone similar to the Gold-Amethyst Breccia Zone being developed by Serem Ltd.

GEOCHEMISTRY

Sampling and Analytical Procedures

A total of 81 soil (talus fines) samples and 73 silt samples were collected along reconnaissance traverses. No grid-controlled sampling was carried out. Talus fines samples consisted mainly of oxidized, coarse, poorly developed soil constituents, and minor organic material. In addition, a total of 53 rock samples were collected during reconnaissance property mapping. Of these, 30 were submitted for analyses.

Soil and silt samples were partially air-dried and submitted to Acme Analytical Labs Ltd. of Vancouver, B.C. for analyses. Rock samples were submitted to TerraMin Research Labs Ltd. of Calgary, Alberta for analyses.

All samples were analyzed for Au and Ag. Au-in-rock analyses were carried out by a combined fire assay and atomic absorption technique. Au- and Ag-in-silts and soils analyses were performed by standard (wet) atomic absorption procedures.

Statistical Analysis

Due to the small sample populations, no statistical analysis of data sets was done. Instead, thresholds derived from sampling carried out at other Toodoggone district properties were used. These are as follows:

	Threshold	Anomalous
Au-in-Rock	30 ppb	50 ppb
Ag-in-Rock	1400 ppb	1800 ppb
Au-in-Soil	40 ppb	60 ppb
Ag-in-Soil	1.0 ppm	2.0 ppm
Au-in-Silt	40 ppb	75 ppb
Ag-in-Silt	1.2 ppm	2.0 ppm

Results

Soils (Talus Fines)

Above-threshold Ag-in-soils values occur at sample sites of the following samples:

J-DT-S-1	(1.4 ppm)
J-DT-S-6	(1.6 ppm)
J-TN-S-32	(1.2 ppm)
J-TN-S-48	(1.2 ppm)
J-RD-S-10	(1.1 ppm)
J-RD-S-20	(1.1 ppm)
J-RD-S-21	(1.4 ppm)
J-RD-S-22	(1.2 ppm)

Anomalous Au-in-soils values occur at sample sites of the following samples:

J-DT-S-6	(205 ppb)
J-DT-S-8	(85 ppb)
J-DT-S-14	(175 ppb)
J-DT-S-17	(110 ppb)
J-TN-S-22	(65 ppb)
J-RD-S-18	(740 ppb)
J-RD-S-20	(90 ppb)

None of the Ag-in-soils values, taken by themselves, warrant follow-up. Sample J-DT-S-6 is of interest, however, due to the associated anomalous Au-in-soil value. Anomalous soils results are described in detail below:

1. Sample J-DT-S-6 was collected in the vicinity of a float trend of granular quartz and strongly epidotized feldspar porphyry. The anomalous Au-in-soil value (205 ppb) indicates that the quartz-bearing structure is enriched in gold. The source of the float trend is a 1 - 2m wide zone of strong silicification and recrystallization striking 310°Az. A sample of the quartz zone, J-DT-41, returned values of only 50 ppb Au and 1280 ppb Ag.

Other high Au-in-soil values in this area occurred at J-DT-S-8, 14, and 17. A number of silicified, pyritized fracture zones were noted by samplers on this traverse in the same general area as these samples. Follow-up work consisting of more detailed prospecting and sampling is warranted.

2. Samples J-RD-S-18 and 20 returned values of 740 ppb and 90 ppb Au, respectively. The two samples were collected in the vicinity of the southwest and northeast contacts of a northwesterly striking 75m wide, pink quartz-feldspar porphyry dyke. Rocks on either side of the dyke have been altered from typical Division 2 Toodoggone dacitic/trachytic porphyry to a quartz-albite-epidote-pyrite assemblage. Approximately 100m north of the dyke, a 30m wide breccia is exposed. The breccia is comprised of rounded to subangular, completely epidotized fragments of Toodoggone(?) volcanic rocks (originally dacite[?] or trachyte[?] porphyry) in a quartz-albite matrix. Further prospecting and sampling of this area will be required to correlate the high Au-in-soils values with a particular bedrock feature.

Silts

Above-threshold Ag-in-silt values occur at J-JS-St-2 (1.7 ppm), J-JS-St-5 (1.2 ppm), and J-RD-St-16 (1.2 ppm). Only one anomalous Ag-in-silt value is present, at J-JS-St-1 (2.4 ppm).

Above-threshold Au-in-silt values occur at J-JS-St-21 (40 ppb), J-JS-St-35 (65 ppb), J-JS-St-43 (40 ppb), and J-RD-St-9 (60 ppb). Anomalous Au-in-silt values occur at J-JS-St-38 (100 ppb), J-JS-St-42 (320 ppb), J-RD-St-10 (1300 ppb), and J-RD-St-13 (2350 ppb).

Further prospecting is required to determine the cause of the high Ag-in-silt values.

The most significant Au-in-silt values (J-RD-St-10 and 13) occur downslope from exposures along a ridge to the east of strong alteration zones cutting Toodoggone porphyritic trachyte flows. The alteration zones consist of easterly striking, steeply northerly dipping ($097^{\circ}/77^{\circ}N$) quartz-

epidote-potassium feldspar assemblages and more strongly silicified zones composed of quartz-epidote-pyrite assemblages. Rock sampling of the zones has, to date, failted to disclose the source of the high Au-in-silt values.

Samples J-JS-St-35 and 38 define a short above-threshold and anomalous trend of Au-in-silts in an area that has yet to be prospected. A little further down this stream drainage, an anomalous value (320 ppb) occurs in silt at J-JS-St-42 in another unprospected area.

Rocks

The results of rock sampling carried out to date have been disappointing, with only low Au and Ag values returned from a number of promising-looking strongly altered fracture zones. Further prospecting, mapping, and sampling will be required to evaluate the silt and soil anomalies described above.

GEOPHYSICS

In April 1981, a total of approximately 74.5 line km of airborne VLF-EM and magnetic surveying were flown over the Jock claims. Instrumentation, survey techniques, and the results of this work are described in a separate report included in Appendix III.

CONCLUSIONS AND RECOMMENDATIONS

"First pass" reconnaissance exploration of the Jock claims has identified a number of Au and/or Ag soil and stream silt anomalies that warrant more detailed follow-up work. Reconnaissance mapping of the claims has identified a number of zones of strong fracturing and alteration, apparently related to the emplacement of easterly striking quartz-feldspar porphyry dykes cutting Toodoggone volcanics. No significant Au/Ag values have been obtained from rock sampling to date.

Major structures at the Jock claims are oriented approximately east-west, in contrast to the northeasterly and northwesterly trending structural features which acted as important controls of mineralization at known precious metals deposits in the Toodoggone district. This may be the key to the lack of encouraging rock analyses in 1981 sampling, and future work should concentrate on evaluating the perhaps less obvious northeasterly and northwesterly trending structural zones at the claims.

The type of alteration associated with the easterly trending zones is more characteristic of 'porphyry-type' mesothermal alteration systems than the epithermal alteration systems associated with precious metals deposits elsewhere in the Toodoggone district. The presence of strong potassium feldspar alteration envelopes adjacent to the pink quartz-feldspar porphyry dykes or, in the absence of these dykes, its occurrence adjacent to easterly trending fracture zones, suggests a late-stage potassic overprinting of the earlier quartz + albite + epidote $\pm$ pyrite propylitic assemblages. The widespread presence of deep-seated porphyry-type hydrothermal alteration at the Jock claims does not rule out the possibility of finding epithermal precious metals deposits. The Toodoggone model calls for repeated movement and intrusive activity along large-scale fault zones. It would not be inconsistent to find widely disparate alteration regimes superimposed on one another.

Further work at the property should consist of reconnaissance checks of the anomalous zones so far identified. Additional prospecting and talus fines sampling traverses should also be carried out to obtain more complete reconnaissance coverage of the claims.

SUMMARY OF EXPENDITURES

Jock 1 - 5 claims
Chappelle Project

for "Pro Rata charges", see Schedule A

PERSONNEL - FIELD TIME

M. Fox	Aug. 12,½11,½13		
	2 days @ $250.00/diem	500.00	
R. Davies	Aug. 12,29		
	2 days @ $141.88/diem	283.76	
D. Thompson	Aug. 12,29		
	2 days @ $141.88/diem	283.76	
T. Nelson	Aug. 12,29		
	2 days @ $156.25/diem	312.50	
J. Selwyn	Aug. 12 1 day @ $120.31/diem	120.31	
B. Moffatt	Aug. ½12, ½29		
	1 days @ $120.31/diem	120.31	
		1,620.64	
Pro Rata labour charges	10 man days @ $29.53	295.30	1,915.94

HELICOPTER Bell 206

Aug. 11	1.0 hours		
12	3.8		
13	0.7		
29	1.0		
	6.5 hours @ $375.00	2,437.50	
Fuel	6.5 hours x 100L/hr @ $1.25/L	812.50	
Oil	6.5 hours @ $1.95	12.68	3,262.68

CAMP & ACCOMMODATION

Taiga crew	10 man days		
Heli crew	3 man days		
	13 man days		
Camp Food	13 man days @ $18/diem	234.00	
Camp Equipment	13 man days @ $12/diem	156.00	
Pro Rata Camp/Food	13 man days @ $6.06	78.78	468.78

TRANSPORTATION

3/4-ton 4x4 truck
Pro Rata 13 man days @ $4.88 63.44

EQUIPMENT RENTALS

2 SBX-11 transceiver radios
Pro Rata 13 man days @ $2.02 26.26

FUEL Pro Rata	13 man days @ $1.27			16.51
EXPEDITING SERVICES				
Pro Rata	13 man days @ $4.88			63.44
FIXED-WING SUPPORT				
Pro Rata	13 man days @ $22.77			296.01
DISPOSABLE SUPPLIES				
Pro Rata	13 man days @ $2.36		30.68	
Sample bags, flagging, notebooks, etc.			60.66	91.34
FREIGHT & COURIER				
Pro Rata	13 man days @ $6.17			80.21
MISCELLANEOUS				
Telephone, photocopying, maps, etc.				
Pro Rata	13 man days @ $2.48			32.24
TRAVEL EXPENSES				
Pro Rata	13 man days @ $14.06			182.78
HANDLING CHARGES on third-party invoices (12%)				
Pro Rata	13 man days @ $3.53			45.89
GEOCHEMICAL ANALYSES				
Soil + Silt Samples	Au/Ag analyses	154 @ $5.40	831.60	
Rock Samples	Au/Ag analyses	20 @ $9.00	180.00	1,011.60
AIRBORNE GEOPHYSICAL SURVEY				
VLF-EM and magnetic surveys				
74.5 line km @ $84.56/km				6,299.72
POST-FIELD EXPENSES				
Report preparation, data plotting, etc.			1,500.00	
Drafting			300.00	
Secretarial			100.00	
Photocopying, reproductions			250.00	2,150.00
			TOTAL	$ 16,006.84

CHAPPELLE PROJECT EXPENSES - SCHEDULE A

Schedule of Expenditures, General Labor Costs, Travel Expenses, Crew Mobilization Costs, General Project Expenses - to be applied on a pro rate basis to various claim blocks as per man-day formula (total of 297 man days on the project).

PERSONNEL

M. Fox	Aug. 1,2,3,6,31	1,145.00
R. Davies	Aug. 4(½),5,6,16,28,31	780.34
D. Thompson	Aug. 5,6,16,28,31	709.40
T. Nelson	Aug. 4(½),5,6,16,28,31,Sep.1	1,015.63
D. Newman	Aug. 5,6,30,31	481.24
J. Selwyn	Aug. 1,2,3,4,5,6,16,25	962.48
H. Larsen	Aug. 1,2,3,4,5,6,16,24	732.48
M. Plumbtree	Aug. 5,6,7,16,28,31, Sep.1	549.36
B. Moffatt	Aug. 4,5,6,16,28,31	721.86
B. Coffey	Aug. 19,24,28,30,31	759.15
R. Netolitzky	July;Aug.22,25	912.50
		8,769.44 ÷ 297 = 29.53/man day

CAMP & ACCOMMODATION

Taiga crew	48 man days @ $30	1,440.00
Heli crew	Aug.5,6,10,11,12,28 12 man days @ $30	360.00
		1,880.00 ÷ 297 = 6.06/man day

TRAVEL EXPENSES — 4,175.03 ÷ 297 = 14.06/man day

FUEL (gasoline) — 378.40 ÷ 297 = 1.27/man day

EXPEDITING — 1,450.00 ÷ 297 = 4.88/man day

FREIGHT & COURIER — 1,831.63 ÷ 297 = 6.17/man day

DISPOSABLE SUPPLIES — 701.71 ÷ 297 = 2.36/man day

MISC. EXPENSES

Telephone, photocopying, maps, contract drafting (land update) — 735.41 ÷ 297 = 2.48/man day

HANDLING CHARGES on third-party expenses — $8,729.65 x 12% — 1,047.56 ÷ 297 = 3.53/man day

TRANSPORTATION

3/4-ton 4x4 — 1,450.00 ÷ 297 = 4.88/man day

RADIO RENTAL

SBX-11 (two) radios — 600.00 ÷ 297 = 2.02/man day

FIXED-WING SUPPORT		Service	Fuel Mob
Aug. 2	Caribou		2,267.00
5	"	2,039.00	
7	"		2,067.00
11	Cessna 185	449.00	
19	"	497.00	
20	"	491.00	
22	"	491.00	
25	"	491.00	
27	DC-3		2,235.00
31	"	2,306.00	
		6,764.00	6,569.00 = 13,333.00

Service flights: apply to various claim groups on a pro rata per man day basis — 6,764.00 ÷ 297 = 22.77/man day

Fuel Mob flights: apply to various claim groups according to heli hours and average cost per litre for transport:

Aug.2 $2267 ÷ (18 x 205L drums = 3690L) = $.6144 + $.6101
= $1.2245/L x 3690 = $ 4,518.40

Aug.7 $2067 ÷ (18 x 205L drums = 3690L) = $.5602 + $.6101
= $1.17/L x 3690 = $ 4,317.30

Aug.27 $2235 ÷ (14 x 205L drums = 2870L) = $.7788 + $.6096
= $1.3884/L x 2870 = $ 3,984.71

10250L — $12,820.41

$1.251/L average cost
$125.10 fuel cost per heli hour

A P P E N D I X I

Analytical Techniques

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone : 253 - 3158

GEOCHEMICAL LABORATORY METHODOLOGY - 1981

SAMPLE PREPARATION

1. Soil samples are dried at 60°C and sieved to -80 mesh.
2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis for Ag*, Bi*, Cd*, Co, Cu, Fe, Mn, Mo, Ni, Pb, Sb*, V, Zn

0.5 gram samples are digested hot dilute aqua regia in a boiling water bath and diluted to 10 ml with dimineralized water.

All the above elements are determined in the acid solution by Atomic Absorption.

* demotes background correction.

Geochemical Analysis for Au

10.0 gram samples that have been ignited overnite at 600°C are digested with hot dilute aqua regia, and the clear solution obtained is extracted with Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 5 ppb direct AA and 1 ppb graphite AA.)

Geochemical Analysis for Au, Pd, Pt, Rh

10.0 - 30.0 gram samples are subjected to Fire assay preconcentration techniques to produce silver beads.

The silver beads are dissolved and Au, Pd, Pt, and Rh are determined in the solution by Atomic Absorption.

Geochemical Analysis for As

0.5 gram samples are digested with hot dilute aqua regia and diluted to 10 ml.

As is determined in the solution by Graphite Furnace Atomic Absorption.

TERRAMIN RESEARCH LABS LTD.
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

GOLDEN RULE RESOURCES

SAMPLE PREPARATION

Soil and sediment samples are dried and sieved to -80 mesh (approx. 200 micron).

Rock Samples:

The entire sample is crushed to approx. 1/8" maximum, and split divided to obtain a representative protion which is pulverized to -200 mesh (approx 90 micron).

TERRAMIN RESEARCH LABS LTD.
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

GOLDEN RULE RESOURCES

ANALYTICAL METHOD FOR GOLD AND SILVER

Approximately 1 assay ton of prepared sample is fused with a litharge/flux charge to obtain a lead button. The lead button is cupelled to obtain a prill. The prill is dissolved in nitric/hydrochloric acids (aqua regia), and the resulting solution is analysed by atomic absorption spectroscopy.

A P P E N D I X I I

Geochemical Analyses

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-286 Date January 25, 1982

Client Project GR-BC-7 Page 15/21

Sample No.		Au ppb	Ag ppb
JDT	28	<2	90
	33	4	130
	35	6	60
	36	102	1560
	41	50	1280
	42	6	260
	44	<2	290
	45	4	270
J	2	<2	280
	4	<2	300
	5	4	430
	6	12	2070
	7	<2	530
	8	<2	110
	9	16	190
	10	2	400
JTN RS	1	4	310
	2	8	220
	3	<2	100
	4	4	190

14, 2235 - 30th Avenue N.E., Calgary, Alberta T2E 7C7
(403) 276-8668 Telex 03-821172 CGY

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253-3158

To: Golden Rule Resources Ltd.,
150 - 1300, 8th S.W.
Calgary, Alberta,
T2R 1P2

c.c. Taiga Consultants Ltd.,

File No. 81-1435

Type of Samples Silts

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Jock Claims (J)

SAMPLE No.	Ag	Au	
J-JS-ST 1	2.4	.005	1
2	1.7	.005	2
3	1.0	.005	3
4	.8	.005	4
5	1.2	.005	5
6	.6	.005	6
7	.6	.005	7
8	.8	.005	8
9	1.1	.005	9
10	1.0	.005	10
11	.9	.005	11
12	.3	.005	12
13	.6	.005	13
14	.5	.005	14
15	.6	.005	15
16	.5	.005	16
17	.5	.005	17
18	.5	.005	18
19	.5	.005	19
20	.5	.005	20
21	.5	.040	21
22	.5	.005	22
23	.6	.005	23
24	.5	.005	24
25	.7	.035	25
26	.5	.005	26
27	.5	.005	27
28	.5	.030	28
29	.3	.005	29
30	.9	.005	30
31	.5	.005	31
32	.6	.005	32
33	.5	.005	33
34	.7	.005	34
35	.9	.065	35
36	.5	.025	36
J-JS-ST 37	.5	.005	37
			38
			39
			40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Sept. 24, 1981

DATE REPORTS MAILED Oct. 2, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253-3158

To: Golden Rule Resources Ltd.,

File No. 81-1435
Type of Samples Silts
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Jock Claims (J)

SAMPLE No.	Ag	Au	
J-JS-ST 38	.8	.100	1
39	.7	.005	2
40	.5	.005	3
41	.5	.005	4
42	.7	.320	5
43	.8	.040	6
44	.7	.005	7
45	.7	.020	8
46	.7	.005	9
47	.8	.005	10
J-JS-ST 48	.8	.005	11
			12
J-RD-ST 1	.7	.020	13
2	.8	.005	14
3	1.0	.005	15
4	.6	.005	16
5	.2	.005	17
6	.3	.005	18
7	.1	.005	19
8	.5	.005	20
9	.2	.060	21
10	.1	1.300	22
11	.1	.020	23
12	.2	.010	24
13	.2	2.350	25
14	.2	.005	26
15	.1	.005	27
16	1.2	.025	28
17	.3	.035	29
18	.1	.005	30
19	.3	.130	31
20	.1	.005	32
21	.2	.005	33
22	.5	.005	34
23	.1	.005	35
25	.1	.005	36
J-RD-ST 26	.2	.010	37
			38
			39
			40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Sept. 24, 1981
DATE REPORTS MAILED Oct. 2, 1981

ASSAYER JKO

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Golden Rule Resources Ltd.,

File No. 81-1435
Type of Samples soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Jock Claims (J)

SAMPLE No.	Ag	Au	
J-DT- S 1	1.4	.005	1
2	.4	.005	2
3	.5	.005	3
4	.3	.005	4
5	.6	.005	5
6	1.6	.205	6
7	.5	.005	7
8	.4	.085	8
9	.4	.005	9
10	.3	.005	10
11	.4	.005	11
12	.1	.005	12
13	.4	.005	13
14	.4	.175	14
15	.5	.005	15
16	.5	.005	16
J-DT- S 17	.7	.110	17
			18
J-TN- S 22	.4	.065	19
23	.5	.005	20
24	.2	.005	21
25	.3	.005	22
26	.3	.025	23
27	.5	.015	24
28	.3	.005	25
29	.3	.005	26
30	.4	.005	27
31	.2	.005	28
32	1.2	.010	29
33	.5	.005	30
34	.3	.005	31
35	1.0	.005	32
36	.7	.005	33
37	.3	.005	34
38	.4	.005	35
39	.7	.005	36
J-TN- S 40	.3	.020	37
			38
			39
			40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Sept. 24, 1981

DATE REPORTS MAILED Oct. 2, 1981

ASSAYER DKJ.

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Golden Rule Resources Ltd.,

File No. 81-1435
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Jock Claims (J)

SAMPLE No.	Ag	Au	
J-TN-S 41	.8	.005	1
42	.4	.005	2
43	.8	.005	3
44	.8	.020	4
45	.5	.005	5
46	.5	.005	6
47	.8	.005	7
48	1.2	.005	8
49	1.0	.005	9
50	1.0	.005	10
51	.3	.005	11
52	.2	.005	12
53	.3	.005	13
54	.5	.005	14
J-TN-S 55	.5	.005	15
			16
J-RD-S 1	.2	.005	17
2	.2	.005	18
3	.7	.005	19
4	.6	.020	20
5	.3	.005	21
6	.4	.005	22
7	.5	.005	23
8	.4	.005	24
9	.4	.005	25
10	1.1	.005	26
11	.8	.015	27
12	.7	.020	28
13	.4	.005	29
14	.8	.005	30
15	.4	.015	31
16	.8	.005	32
17	.6	.005	33
18	.5	.740	34
19	.8	.035	35
20	1.1	.090	36
21	1.4	.020	37
J-RD-S22	1.2	.030	38
			39
			40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Sept. 24, 1981

DATE REPORTS MAILED Oct. 2, 1981

ASSAYER JKG

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Golden Rule Resources Ltd.,

File No. 81-1435

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Joc Claims (J)

SAMPLE No.	Ag	Au	
J-RD-S 23	.6	.035	1
24	.5	.005	2
25	.4	.005	3
26	.5	.010	4
27	.5	.025	5
28	.7	.005	6
29	.5	.005	7
J-RD-S 30	.4	.005	8
			9
			10
			11
			12
			13
			14
			15
			16
			17
			18
			19
			20
			21
			22
			23
			24
			25
			26
			27
			28
			29
			30
			31
			32
			33
			34
			35
			36
			37
			38
			39
			40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Sept. 24, 1981

DATE REPORTS MAILED Oct. 2, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

A P P E N D I X I I I

Geophysical Report

REPORT ON A

HELICOPTER VLF-E.M. AND MAGNETOMETER SURVEY

ON TEN PROJECTS IN THE

TOODOGGONE RIVER AREA

OMINECA MINING DIVISION

BRITISH COLUMBIA

FOR

GOLDEN RULE RESOURCES LTD.
Suite 115 - 1300 - 8th Street S.W.
Calgary, Alberta
T2R 1B2

SURVEY DATES: April 1 to May 1, 1981

July 3, 1981
Vancouver, B.C.

Apex Airborne Surveys Ltd.
Ronald F. Sheldrake, B.Sc.

TABLE OF CONTENTS

PLATE 10 - MAGNETIC CONTOUR MAP - SUS GROUP

APPENDIX I - INSTRUMENTATION

APPENDIX II - IN-FLIGHT RECORD AND FLIGHT PATH RECOVERY

CERTIFICATION

1. SUMMARY

The geophysical data have provided a useful overview of magnetic character of the rocks underlying the claim groups. An electromagnetic target has been identified in the Saunders Claim Group that warrants investigation.

Recommendations for follow-up have been made.

SURVEY & CLAIM LOCATION MAP

SCALE 1:500,000

metres 10000 0 5 0

GOLDEN RULE RESOURCES LTD.

TOODOGGONE RIVER AREA PROJECT

OMINICA MINING DIVISION

figure 1

10,345

N.T.S. 94 E/W

PRODUCED FROM NATIONAL N.T.S. SERIES

SURVEY AREA

STEWART
PRINCE RUPERT
SMITHERS
FT ST JOHN
PRINCE GEORGE
KAMLOOPS
VANCOUVER

BRITISH COLUMBIA

METS
BELLE
SAUNDERS
JOCK
RICH
JC
MC
MCCONNELL
NIKA
INGE
SUS
WILDERNESS
PARK
TATLATUI PROVINCIAL PARK
SPATSIZI
RANGE

2. INTRODUCTION

This report describes the results of 420 linear kilometres of combined VLF and Magnetic Helicopter Survey undertaken over 11 claim blocks in the TOODOGGONE RIVER AREA, B.C.

The claim blocks are located near or along regional strike to the Chappelle and Sawyer gold deposits within the Intermontane Belt. A description of the Chappelle deposit and environs is available in a publication by Mr. D.A. Barr of Dupont of Canada Exploration Ltd.*

The purpose of the helicopter magnetic and electromagnetic surveys was to provide targets for ground exploration and to assess in a general sense, if similar environments as those present at the Chappelle and Sawyer properties could be recognized.

The survey was flown using an Aerospatiale Gazelle Helicopter as a platform for the geophysical system.

---

* D.A. Barr, "Chappelle Gold Silver Deposit, British Columbia". Geology and Exploration, pp. 66-79.

The survey conditions were difficult for the most part because of inclement weather conditions and steep terrain.

The electromagnetometer used on this survey was a Herz TOTEM 1-A VLF device. It utilizes the primary fields emitted by the military communication transmitters. The E.M. fields from the stations (Cutler, Maine and Jim Creek, Washington) are essentially perpendicular to the direction to the station and horizontal.

The E.M. sensor is suspended five metres below the helicopter (to minimize helicopter interference) and comprises of three coils, whose axis are orthogonal. The electromagnetometer senses the change in total field and quadrature values. These are the two measurements recorded on the analogue chart and magnetic tape.

The VLF electromagnetometer, although described as a very low frequency radio signal, (15-25 khrz) is rather a high frequency signal for geophysical purposes. This means that the system senses rather large, low conductance targets that are within a few tens of metres from the surface.

The magnetometer used on this survey was a Geometrics G803 total field instrument which measures the field strength with a sensitivity of one gamma. The sensor is suspended below the electromagnetometer 15 metres.

Appendix I gives the details of the geophysical equipment used for this survey. Appendix II describes the in-flight record and flight path recovery process.

GEOLOGY

The geology of the Chappelle Deposit and environs is described by Mr. D.A. Barr of Dupont of Canada Exploration Limited.*

He reports that "The Chappelle property lies near the eastern margin of the Intermontane Belt. The (quartz) vein systems which contain the gold-silver mineralization occur within a small window of Takla Group volcanic rocks of Upper Triassic age, which are intruded by granitic stocks of the Omineca Intrusions and overlain unconformably by Jurassic and younger volcanic and sedimentary rocks.

Rocks in the property area have been subject to extensive normal block faulting from Jurassic to Tertiary time and by thrusting of the Asitka Group rocks over the Takla Group rocks during Middle Jurassic time".

No detailed geology of the ten survey blocks described in this report is available to the writer at this time.

---

* Ibid.

CLAIMS

CLAIM NAME		RECORD NO.	NO. OF UNITS	DATE OF RECORDING
METS	1	1253	20	April 3, 1980
	2	1254	20	April 3, 1980
BELLE	1	2680	18	April 3, 1980
	2	2681	18	April 3, 1980
SAUNDERS	1	2682	12	April 3, 1980
	2	2683	12	April 3, 1980
	3	2684	20	April 3, 1980
	4	2685	20	April 3, 1980
JOCK	1	2699	4	April 8, 1980
	2	2700	18	April 8, 1980
	3	2701	15	April 8, 1980
	4	2702	20	April 8, 1980
	5	2703	4	April 8, 1980
RICH	1	2709	16	April 8, 1980
MC	1	2688	20	April 3, 1980
JC	1	2697	12	April 8, 1980
NIKA	1	2698	16	April 8, 1980
INGE	1	2708	16	April 8, 1980
SUS	1	2704	4	April 8, 1980
	2	2705	16	April 8, 1980
	3	2706	3	April 8, 1980
	4	2707	12	April 8, 1980

LOCATION AND ACCESS

The claim blocks are all located in the Omineca Mountain Range. The easiest access to the properties is by helicopter from either McKenzie or Smithers, B.C.

The location to the centre of each claim group is as follows:

CLAIM GROUP	LATITUDE	LONGITUDE	N.T.S.
METS	59° 24'N	127° 17'W	94 S.W.
BELLE	57° 24'N	127° 10'W	94 S.W.
SAUNDERS	57° 18'N	127° 02'W	
JOCK	57° 15'N	126° 52'W	94 S.W.
RICH	57° 15'N	126° 40'W	94 S.W.
MC	56° 52'N	126° 30'W	94 S.W.
JC	56° 50'N	126° 28'W	94 S.W.
NIKA	56° 49'N	126° 22'W	94 S.W.
INGE	56° 37'N	126° 13'W	94 S.W.
SUS	56° 30'N	126° 46'W	94 S.W.

3. DATA PRESENTATION

The data have been presented as plan maps of aeromagnetic contours at a scale of 1:10,000. The location of VLF-E.M. anomalies, interpreted lineaments and photo lineaments have been plotted on these plan maps. The maps display sufficient drainage to key them to the photo mosaics that were supplied to fly the survey.

4. DISCUSSION OF RESULTS

Twelve test lines of survey were flown over the Chappelle and Sawyer Gold properties in order to identify any characteristic geophysical responses that could be recognizable on any of the ten present survey areas.

For the most part no specific feature is correlatable with surety, however, it is apparent from the records that the magnetic environment of the ten present survey areas are similar to that of the Chappelle and Sawyer areas.

No VLF-E.M. responses were recorded on the Chappelle and Sawyer test lines.

The Golden Rule survey blocks are small in areal extent for an airborne reconnaissance survey and therefore limit the effectiveness of their interpretation, however, in general, many of the specific features reported by Mr. Barr* may be interpreted from the data, namely fracture zones, contact areas and possibly block faulting.

---

* Ibid.

Any attempt to identify quartz veins from the aeromagnetics, however, is probably not justifiable for the following reasons:

1. Ground magnetic surveys over the Chappelle have not been reliable in extending quartz veins*.

2. The magnetic character of the survey areas is very complex.

3. The quartz veins are probably too small to be identified from an airborne survey.

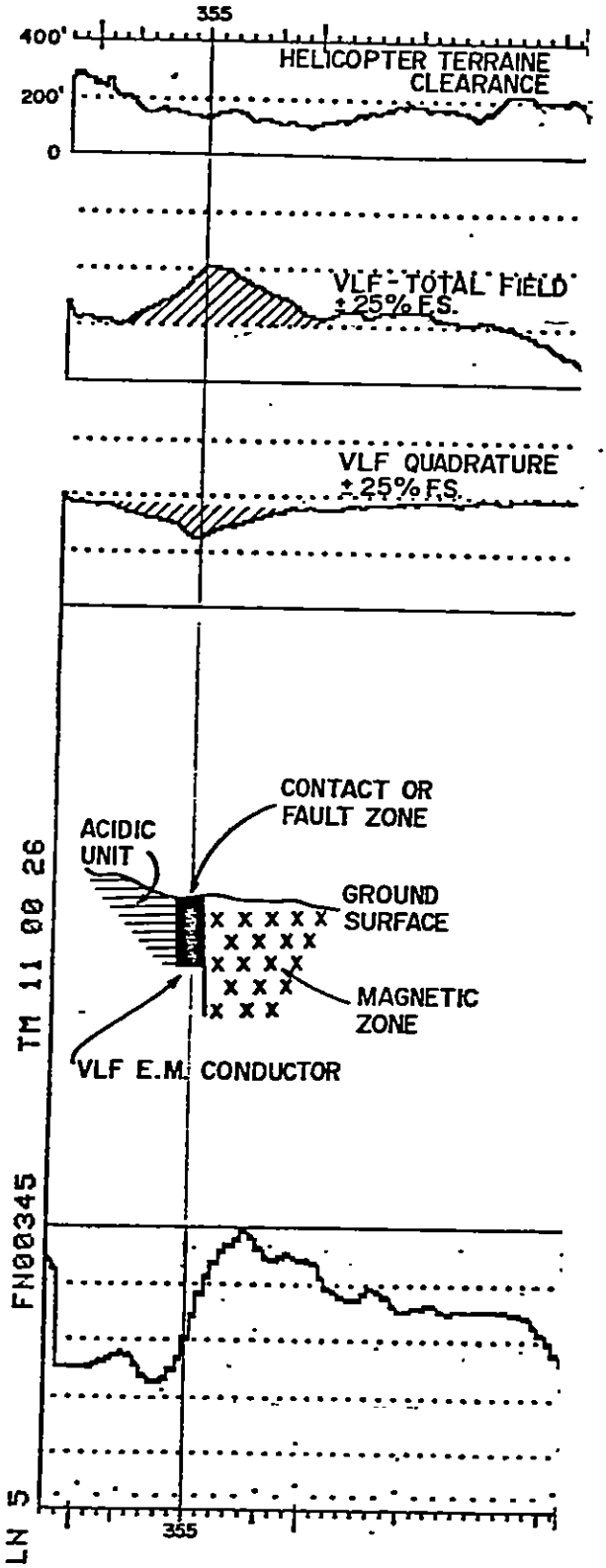
A brief interpretation has been made of the magnetic contour map for each claim block. The geophysical lineaments that were interpreted may be either contact or fault lineaments. Predominant photo-lineaments have also been plotted where they are informative - very often because of their contradition to the geophysical map rather than their coincidence.

It should be noted that the contouring process tends to filter the data and that the in-flight recording indicates greater detail than the contour maps. As ground evaluation proceeds detailed study of the smaller (and numerous) responses on the recording may be useful.

---

* Ibid. Page 77 (Geophysical Investigations).

The VLF-E.M. technique over some of the survey areas (and the test lines) has not been successful as a survey tool. A combination of steep terrain and inclement weather conditions made it difficult to maintain a constant sensor orientation in the fixed VLF-E.M. transmitted field. However, useable VLF-E.M. recordings were collected over the Belle, Mets and Saunders Projects, and one VLF anomaly on LN5 on the Saunders project warrants immediate ground investigation. See Figure 2 for a detail of that record. (A schematic diagram has been provided that is meant to indicate the relative location and attitudes of the targets and will not reflect the true complexity of the geological situation.)



NOTES

1 Coincident With Inferred Magnetic Contact

2 Possibly Extends to LN 6 and LN 7

FIGURE 2

DETAIL ANOMALY - SAUNDERS CLAIMS LINE 5 NORTH

CONCLUSIONS AND RECOMMENDATIONS

The geophysical survey has provided useful information that will serve to guide the upcoming exploration program.

Further, one VLF-E.M. target appears quite substantial and warrants investigation.

It is recommended that each of the areas be mapped geologically and stream samples taken wherever possible.

For the anomalous response on LN5 in the Saunders Area several traverses of ground VLF-E.M. ought to be undertaken to assess its validity and conductive response.

Respectfully Submitted

Ronald F. Sheldrake

Ronald F. Sheldrake
Apex Airborne Surveys Ltd.

BIBLIOGRAPHY

D.A. Barr - "Chappelle Gold Silver Deposit, British Columbia GEOLOGY AND EXPLORATION CIM Bulletin, February 1978

APPENDIX I

APPENDIX I

INSTRUMENTATION

VLF - Electromagnetic Instrument

Type: Helicopter mounted total field - quadrature instrument manufactured by Herz Industries Ltd., Toronto, Ontario.

Frequencies: Cutler, Maine 17.8 kHz. (NAA)
Jim Creek, Washington, 18.6 kHz (NLK).

Magnetometer

Type: Proton precession model G803 manufactured by Geometrics Corporation, Toronto.

Cycling Time: 1.0 second.

Sending Head Design: 5 inch diameter Toroid.

Ancillary Equipment:

UDAS Digital Acquisition System with recorder.

Geocam 35 mm Flight Path Camera
Bonzer Radio Altimeter

Geometrics G806 Magnetic Base Station and recorder.

APPENDIX II

APPENDIX II

THE "ANALOGUE" CHART AND FLIGHT PATH RECOVERY

The flight tape is a roll of chart paper which moves through the digital printer at a speed of 5.48 cm per minute.

The digital printer chart facilitates the use of a full alpha-numeric system. All "header" sensitivity and fiducial information is printed automatically.

The chart is 520 dots wide as follows:

DOTS:

0 - 100	magnetometer coarse - 2000 gammas full scale.
100 - 320	magnetometer fine - 440 gammas full scale.
320 - 400	total field 25% full scale.
400 - 480	quadrature 25% full scale.
480 - 520	altimeter 0-400'

The helicopter flight path is recovered from 35 mm film, which is exposed at 2.0 second intervals during the flight traverses. After processing and anotating, recognizable fiducials are pin-pointed on the photomosaic map.

CERTIFICATION

I, RONALD F. SHELDRAKE, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am President of Apex Airborne Surveys Ltd. a company incorporated under the laws of the Province of British Columbia.

2. The Vancouver Office of Apex Airborne Surveys Ltd. is located at Suite 512 -625 Howe Street, Vancouver, British Columbia.

3. I received my B.Sc., in Geophysics from the University of British Columbia in May 1974.

4. I have practised my profession since that date.

5. I did not examine the claims area, but I am not aware of any claim conflict and believe that the data presented herein is reliable.

6. I have no interest, direct or indirect, in GOLDEN RULE RESOURCES LTD. or its affiliates, nor do I expect to receive any.

7. I consent to the use of this report in or in connection with a Prospectus or in a Statement of Material Facts.

Ronald F. Sheldrake

Ronald F. Sheldrake

July 3, 1981

Apex Airborne Surveys Ltd.

July 3, 1981

STATEMENT OF COSTS

Type of Survey:	Combined VLF and Magnetic Helicopter Survey
Date(s) of Fieldwork:	April 1 to May 1, 1981
Survey Kilometres:	420 kilometres
Cost per linear Kilometre:	$84.56
Additional Charges:	
Total cost of Survey:	420 km x $84.56 = $35,514.55

A P P E N D I X I I I

Geophysical Report

REPORT ON A

HELICOPTER VLF- E.M. AND MAGNETOMETER SURVEY

ON TEN PROJECTS IN THE

TOODOGGONE RIVER AREA

OMINECA MINING DIVISION

BRITISH COLUMBIA

FOR

GOLDEN RULE RESOURCES LTD.
Suite 115 - 1300 - 8th Street S.W.
Calgary, Alberta
T2R 1B2

SURVEY DATES: April 1 to May 1, 1981

July 3, 1981
Vancouver, B.C.

Apex Airborne Surveys Ltd.
Ronald F. Sheldrake, B.Sc.

TABLE OF CONTENTS

PLATE 10 - MAGNETIC CONTOUR MAP - SUS GROUP

APPENDIX I - INSTRUMENTATION

APPENDIX II - IN-FLIGHT RECORD AND FLIGHT PATH RECOVERY

CERTIFICATION

1. SUMMARY

The geophysical data have provided a useful overview of magnetic character of the rocks underlying the claim groups. An electromagnetic target has been identified in the Saunders Claim Group that warrants investigation.

Recommendations for follow-up have been made.

2. INTRODUCTION

This report describes the results of 420 linear kilometres of combined VLF and Magnetic Helicopter Survey undertaken over 11 claim blocks in the TOODOGGONE RIVER AREA, B.C.

The claim blocks are located near or along regional strike to the Chappelle and Sawyer gold deposits within the Intermontane Belt. A description of the Chappelle deposit and environs is available in a publication by Mr. D.A. Barr of Dupont of Canada Exploration Ltd.*

The purpose of the helicopter magnetic and electromagnetic surveys was to provide targets for ground exploration and to assess in a general sense, if similar environments as those present at the Chappelle and Sawyer properties could be recognized.

The survey was flown using an Aerospatiale Gazelle Helicopter as a platform for the geophysical system.

---

* D.A. Barr, "Chappelle Gold Silver Deposit, British Columbia". Geology and Exploration, pp. 66-79.

The survey conditions were difficult for the most part because of inclement weather conditions and steep terrain.

The electromagnetometer used on this survey was a Herz TOTEM 1-A VLF device. It utilizes the primary fields emitted by the military communication transmitters. The E.M. fields from the stations (Cutler, Maine and Jim Creek, Washington) are essentially perpendicular to the direction to the station and horizontal.

The E.M. sensor is suspended five metres below the helicopter (to minimize helicopter interference) and comprises of three coils, whose axis are orthogonal. The electromagnetometer senses the change in total field and quadrature values. These are the two measurements recorded on the analogue chart and magnetic tape.

The VLF electromagnetometer, although described as a very low frequency radio signal, (15-25 khrz) is rather a high frequency signal for geophysical purposes. This means that the system senses rather large, low conductance targets that are within a few tens of metres from the surface.

The magnetometer used on this survey was a Geometrics G803 total field instrument which measures the field strength with a sensitivity of one gamma. The sensor is suspended below the electromagnetometer 15 metres.

Appendix I gives the details of the geophysical equipment used for this survey. Appendix II describes the in-flight record and flight path recovery process.

GEOLOGY

The geology of the Chappelle Deposit and environs is described by Mr. D.A. Barr of Dupont of Canada Exploration Limited.*

He reports that "The Chappelle property lies near the eastern margin of the Intermontane Belt. The (quartz) vein systems which contain the gold-silver mineralization occur within a small window of Takla Group volcanic rocks of Upper Triassic age, which are intruded by granitic stocks of the Omineca Intrusions and overlain unconformably by Jurassic and younger volcanic and sedimentary rocks.

Rocks in the property area have been subject to extensive normal block faulting from Jurassic to Tertiary time and by thrusting of the Asitka Group rocks over the Takla Group rocks during Middle Jurassic time".

No detailed geology of the ten survey blocks described in this report is available to the writer at this time.

---

* Ibid.

CLAIMS

CLAIM NAME		RECORD NO.	NO. OF UNITS	DATE OF RECORDING
METS	1	1253	20	April 3, 1980
	2	1254	20	April 3, 1980
BELLE	1	2680	18	April 3, 1980
	2	2681	18	April 3, 1980
SAUNDERS	1	2682	12	April 3, 1980
	2	2683	12	April 3, 1980
	3	2684	20	April 3, 1980
	4	2685	20	April 3, 1980
JOCK	1	2699	4	April 8, 1980
	2	2700	18	April 8, 1980
	3	2701	15	April 8, 1980
	4	2702	20	April 8, 1980
	5	2703	4	April 8, 1980
RICH	1	2709	16	April 8, 1980
MC	1	2688	20	April 3, 1980
JC	1	2697	12	April 8, 1980
NIKA	1	2698	16	April 8, 1980
INGE	1	2708	16	April 8, 1980
SUS	1	2704	4	April 8, 1980
	2	2705	16	April 8, 1980
	3	2706	3	April 8, 1980
	4	2707	12	April 8, 1980

LOCATION AND ACCESS

The claim blocks are all located in the Omineca Mountain Range. The easiest access to the properties is by helicopter from either McKenzie or Smithers, B.C.

The location to the centre of each claim group is as follows:

CLAIM GROUP	LATITUDE	LONGITUDE	N.T.S.
METS	59° 24'N	127° 17'W	94 S.W.
BELLE	57° 24'N	127° 10'W	94 S.W.
SAUNDERS	57° 18'N	127° 02'W	
JOCK	57° 15'N	126° 52'W	94 S.W.
RICH	57° 15'N	126° 40'W	94 S.W.
MC	56° 52'N	126° 30'W	94 S.W.
JC	56° 50'N	126° 28'W	94 S.W.
NIKA	56° 49'N	126° 22'W	94 S.W.
INGE	56° 37'N	126° 13'W	94 S.W.
SUS	56° 30'N	126° 46'W	94 S.W.

3. DATA PRESENTATION

The data have been presented as plan maps of aeromagnetic contours at a scale of 1:10,000. The location of VLF-E.M. anomalies, interpreted lineaments and photo lineaments have been plotted on these plan maps. The maps display sufficient drainage to key them to the photo mosaics that were supplied to fly the survey.

4. DISCUSSION OF RESULTS

Twelve test lines of survey were flown over the Chappelle and Sawyer Gold properties in order to identify any characteristic geophysical responses that could be recognizable on any of the ten present survey areas.

For the most part no specific feature is correlatable with surety, however, it is apparent from the records that the magnetic environment of the ten present survey areas are similar to that of the Chappelle and Sawyer areas.

No VLF-E.M. responses were recorded on the Chappelle and Sawyer test lines.

The Golden Rule survey blocks are small in areal extent for an airborne reconnaissance survey and therefore limit the effectiveness of their interpretation, however, in general, many of the specific features reported by Mr. Barr* may be interpreted from the data, namely fracture zones, contact areas and possibly block faulting.

---

* Ibid.

Any attempt to identify quartz veins from the aeromagnetics, however, is probably not justifiable for the following reasons:

1. Ground magnetic surveys over the Chappelle have not been reliable in extending quartz veins*.

2. The magnetic character of the survey areas is very complex.

3. The quartz veins are probably too small to be identified from an airborne survey.

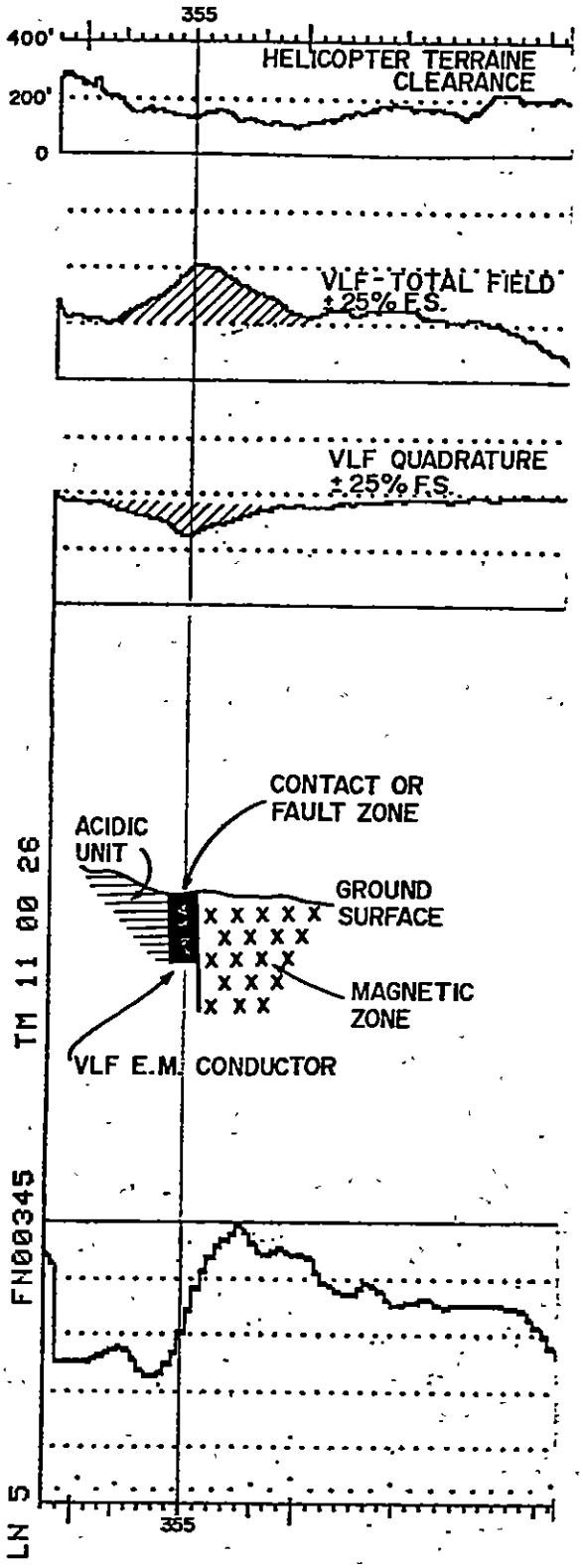
A brief interpretation has been made of the magnetic contour map for each claim block. The geophysical lineaments that were interpreted may be either contact or fault lineaments. Predominant photo-lineaments have also been plotted where they are informative - very often because of their contradition to the geophysical map rather than their coincidence.

It should be noted that the contouring process tends to filter the data and that the in-flight recording indicates greater detail than the contour maps. As ground evaluation proceeds detailed study of the smaller (and numerous) responses on the recording may be useful.

---

* Ibid. Page 77 (Geophysical Investigations).

The VLF-E.M. technique over some of the survey areas (and the test lines) has not been successful as a survey tool. A combination of steep terrain and inclement weather conditions made it difficult to maintain a constant sensor orientation in the fixed VLF-E.M. transmitted field. However, useable VLF-E.M. recordings were collected over the Belle, Mets and Saunders Projects, and one VLF anomaly on LN5 on the Saunders project warrants immediate ground investigation. See Figure 2 for a detail of that record. (A schematic diagram has been provided that is meant to indicate the relative location and attitudes of the targets and will not reflect the true complexity of the geological situation.)



NOTES

1 Coincident With Inferred Magnetic Contact

2 Possibly Extends to LN 6 and LN 7

FIGURE 2

DETAIL ANOMALY - SAUNDERS CLAIMS LINE 5 NORTH

CONCLUSIONS AND RECOMMENDATIONS

The geophysical survey has provided useful information that will serve to guide the upcoming exploration program.

Further, one VLF-E.M. target appears quite substantial and warrants investigation.

It is recommended that each of the areas be mapped geologically and stream samples taken wherever possible.

For the anomalous response on LN5 in the Saunders Area several traverses of ground VLF-E.M. ought to be undertaken to assess its validity and conductive response.

Respectfully Submitted

Ronald F. Sheldrake

Ronald F. Sheldrake
Apex Airborne Surveys Ltd.

BIBLIOGRAPHY

D.A. Barr - "Chappelle Gold Silver Deposit, British Columbia GEOLOGY AND EXPLORATION CIM Bulletin, February 1978

APPENDIX I

APPENDIX I

INSTRUMENTATION

VLF - Electromagnetic Instrument

Type: Helicopter mounted total field - quadrature instrument manufactured by Herz Industries Ltd., Toronto, Ontario.

Frequencies: Cutler, Maine 17.8 kHz. (NAA)
Jim Creek, Washington, 18.6 kHz (NLK).

Magnetometer

Type: Proton precession model G803 manufactured by Geometrics Corporation, Toronto.

Cycling Time: 1.0 second.

Sending Head Design: 5 inch diameter Toroid.

Ancillary Equipment:

UDAS Digital Acquisition System with recorder.

Geocam 35 mm Flight Path Camera
Bonzer Radio Altimeter

Geometrics G806 Magnetic Base Station and recorder.

APPENDIX II

APPENDIX II

THE "ANALOGUE" CHART AND FLIGHT PATH RECOVERY

The flight tape is a roll of chart paper which moves through the digital printer at a speed of 5.48 cm per minute.

The digital printer chart facilitates the use of a full alpha-numeric system. All "header" sensitivity and fiducial information is printed automatically.

The chart is 520 dots wide as follows:

DOTS:

0 - 100	magnetometer coarse - 2000 gammas full scale.
100 - 320	magnetometer fine - 440 gammas full scale.
320 - 400	total field 25% full scale.
400 - 480	quadrature 25% full scale.
480 - 520	altimeter 0-400'

The helicopter flight path is recovered from 35 mm film, which is exposed at 2.0 second intervals during the flight traverses. After processing and anotating, recognizable fiducials are pin-pointed on the photomosaic map.

CERTIFICATION

I, RONALD F. SHELDRAKE, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am President of Apex Airborne Surveys Ltd. a company incorporated under the laws of the Province of British Columbia.

2. The Vancouver Office of Apex Airborne Surveys Ltd. is located at Suite 512 -625 Howe Street, Vancouver, British Columbia.

3. I received my B.Sc., in Geophysics from the University of British Columbia in May 1974.

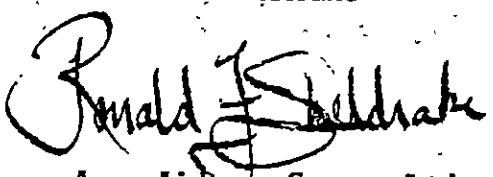
4. I have practised my profession since that date.

5. I did not examine the claims area, but I am not aware of any claim conflict and believe that the data presented herein is reliable.

6. I have no interest, direct or indirect, in GOLDEN RULE RESOURCES LTD. or its affiliates, nor do I expect to receive any.

7. I consent to the use of this report in or in connection with a Prospectus or in a Statement of Material Facts.

Ronald F. Sheldrake



Apex Airborne Surveys Ltd.

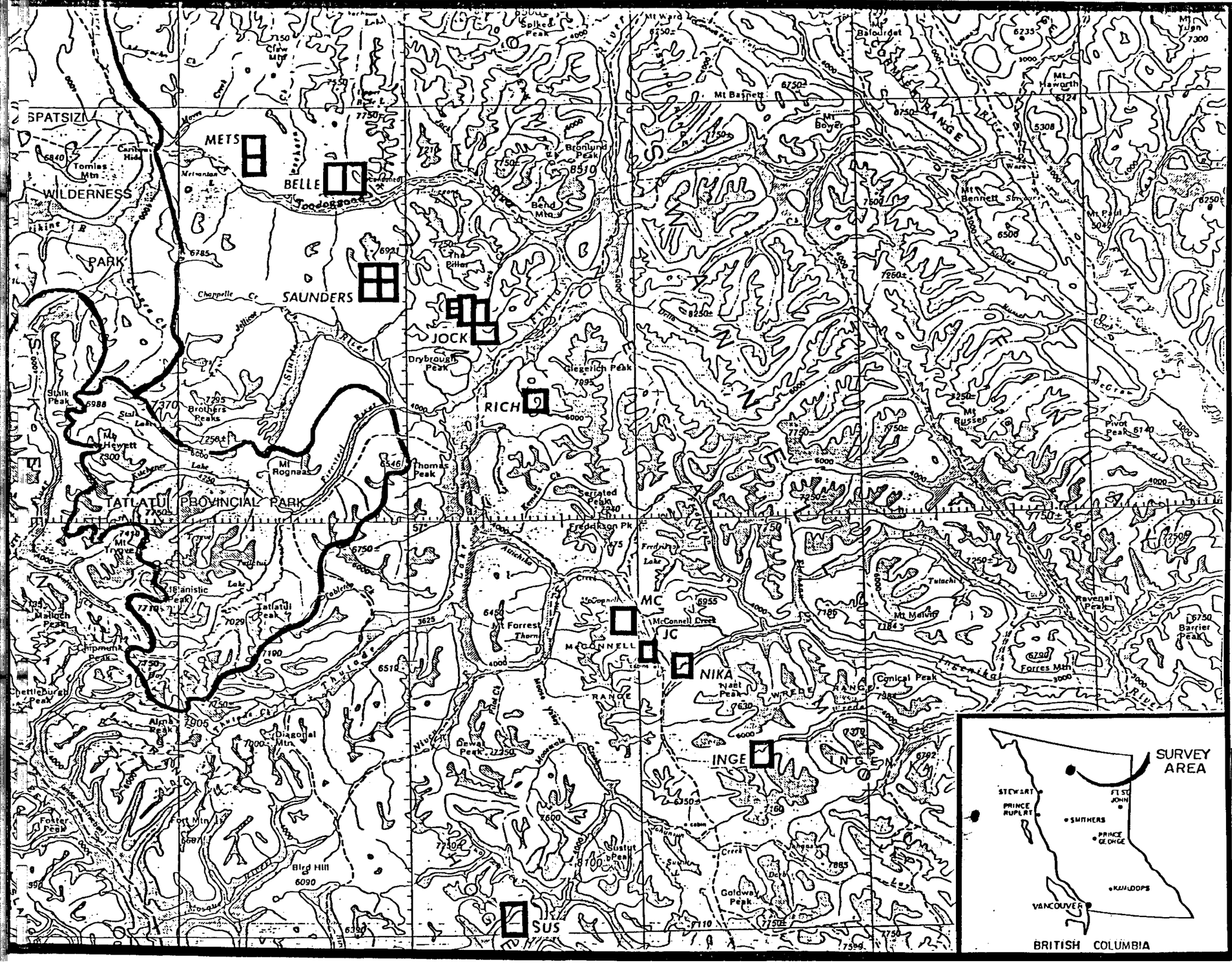
July 3, 1981

July 3, 1981

STATEMENT OF COSTS

Type of Survey:	Combined VLF and Magnetic Helicopter Survey
Date(s) of Fieldwork:	April 1 to May 1, 1981
Survey Kilometres:	420 kilometres
Cost per linear Kilometre:	$84.56
Additional Charges:	
Total cost of Survey:	420 km x $84.56 = $35,514.55

SURVEY & CLAIM LOCATION MAP



SCALE 1:500,000

metres 10000 0 5 0

GOLDEN RULE RESOURCES LTD.

TOODOGGONE RIVER AREA PROJECT

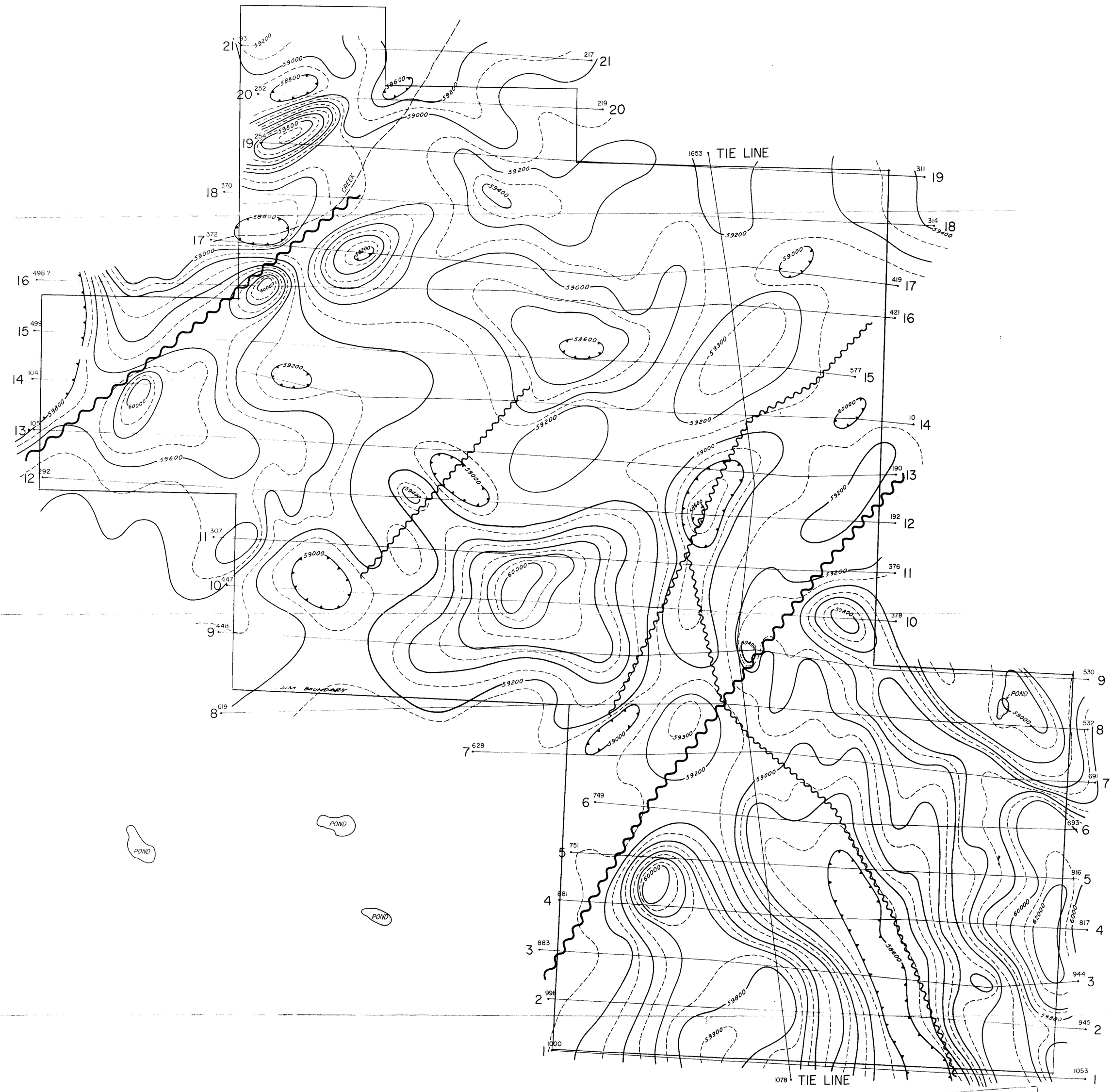
OMINECA MINING DIVISION

figure 1

10,345

NTS 94 SW

PRODUCED FROM NATIONAL N.T.S. SERIES



NOTES

MAGN. DEC.: 30°E MAGN. INCL.: 74°N
SENSOR HEIGHT: MAG 20 M, VLF 30 M
VERTICAL CONTROL: RADAR ALT.
HORIZ. CONTROL: PHOTOMOSAIC
CONTOUR INTERVAL: 100 GAMMAS
VLF STATION: JIM CREEK, WASHINGTON
VLF STATION (TIE LINE): CUTLER, MAINE

LEGEND

- GEOPHYSICAL LINEAMENT
- PHOTO LINEAMENT
- VLF RESPONSE
- 200 GAMMA CONTOUR
- 100 GAMMA CONTOUR
- MAGNETIC DEPRESSION

GOLDEN RULE RESOURCES LTD.
JOCK CLAIMS
TODOGGONE RIVER AREA, B.C.

TOTAL FIELD MAGNETIC MAP

N.T.S.: 94 S.W. MINING DIVISION: OMINECA

LATITUDE: 57° 15' N LONGITUDE: 126° 52' W

SCALE: 1:10,000 PLATE 4

INSTRUMENTATION: MAGNETOMETER - G803
ELECTROMAGNETOMETER - TOTEM IA - VLF

BY Ronald F. Sutherland DATE June 2, 1981

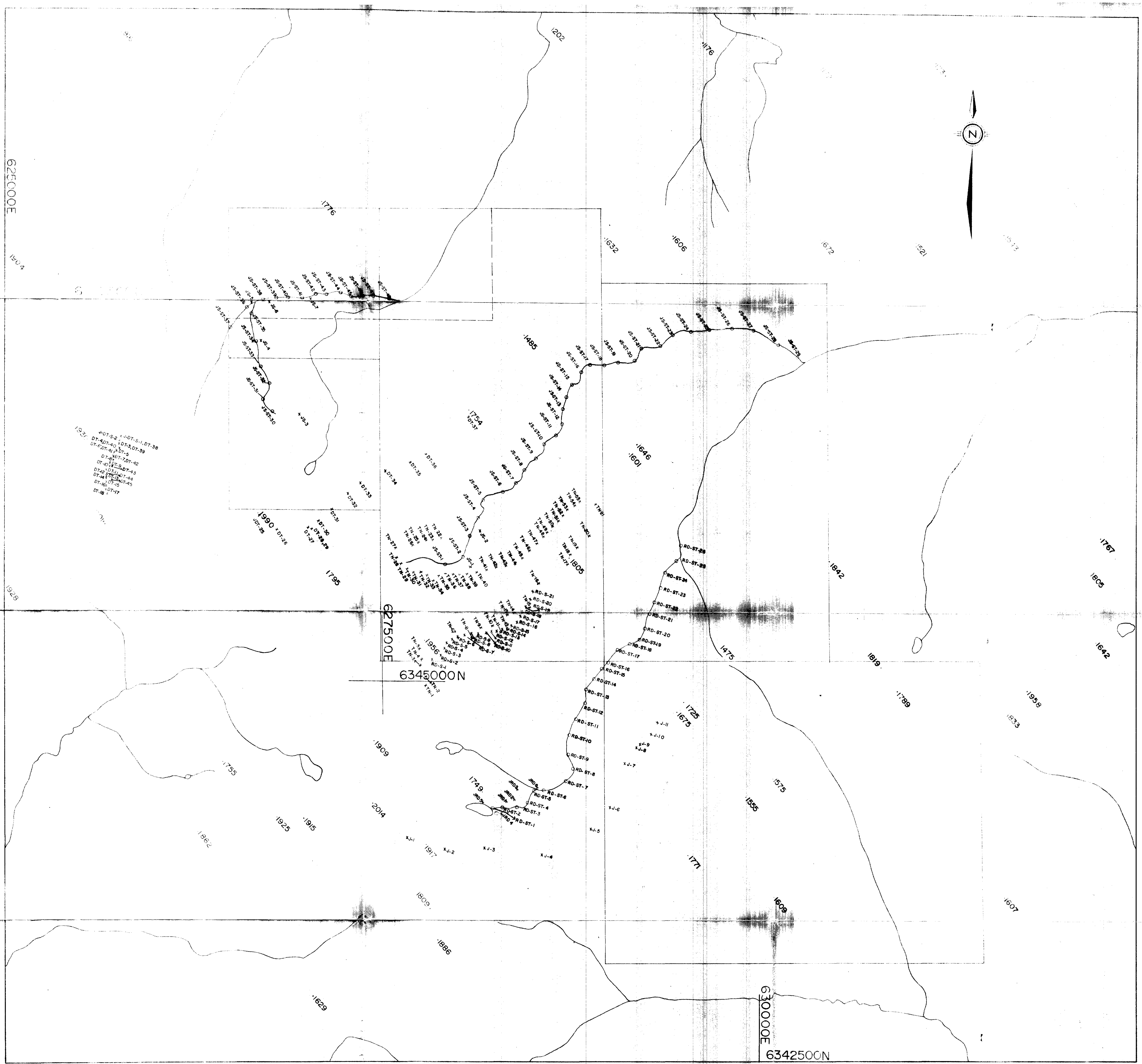
APEX AIRBORNE SURVEYS LTD.


625000E
6347500N
627500E
6345000N
630000E
6342500N
N
qtz-py frac zone
ep fp
py-ep fp
ep hbfp
and dyke
py frac hbfp
qtz-py frac zone
hbfp
strongly sheared hb fspar ppy
andesite dyke
py frac fp
qtz-py frac zone
py-qtz ppy
qtz-albite-ep-mag
albite ep qtz
highly sheared, pyritized hb fp
andesite dykes
qtz-py frac zones
shear 117/075NE
qtz-py frac zone
qtz-ep alt fp
hb ppy
albite-ep-qtz
weak ep alt
dacite
intrusive (?) breccia ep frags, qtz-albite matrix
pink kspar qtz ppy dyke
qtz-albite ep-py
unaltered fspar ppy
ep-kspar-qtz alt fp
qtz-ep alt fp
1m wide qtz frac zone
ep alt fp
qtz-py alt fp (frac)
unaltered fp
andesite
pink qtz kspar ppy dyke
green fp
fspar ppy qtz-ep alt
qtz-ep alt
fppy 2% py
pink qtz-kspar ppy dyke
strong ep-qtz alt
purple tuff
equigranular fspar ppy
green andesite
green and purple andesitic flows, tuffs, agglomerate
dyke aplitic qtz kspar
fgr qtz-ep-ser alt
kspar-ep-py
qtz-fspar ppy (Div 2)
qtz-ep-kspar alt
purple andesite ppy
qtz-fspar ppy (Div 2) ep-qtz-kspar alt
purple and. tuff
Div 2: ep-qtz-kspar alt
qtz-ep-kspar-mag
andesite, dk green
ep-kspar shear

ABBREVIATIONS

q, qtz	quartz
f, fspar	feldspar
kspar	potassium feldspar
fp, fspar ppy	feldspar porphyry
hb	hornblende
ser	sericite
py	pyrite
ep	epidote, epidotized

GOLDEN RULE RESOURCES LTD.	
CHAPPELLE PROJECT	
MAP 1 GEOLOGY	JOCK CLAIMS
PROJECT GR-BC-7	NTS N4E-2W and 7W
SCALE 1:10,000	0 100 200 300 400 500 METRES
TAIGA CONSULTANTS LTD.	



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
[redacted]

GOLDEN RULE RESOURCES LTD.

CHAPPELLE PROJECT

MAP 3 Au and Ag Analyses – Rock, Talus Fines, and Stream Silt Samples

CLAIMS

BC-7

NTS N4E-2W and 7W

SCALE 1:10,000

625000E

6347500N

6345000N

6342500N

630000E

GOLDEN RULE RESOURCES LTD.

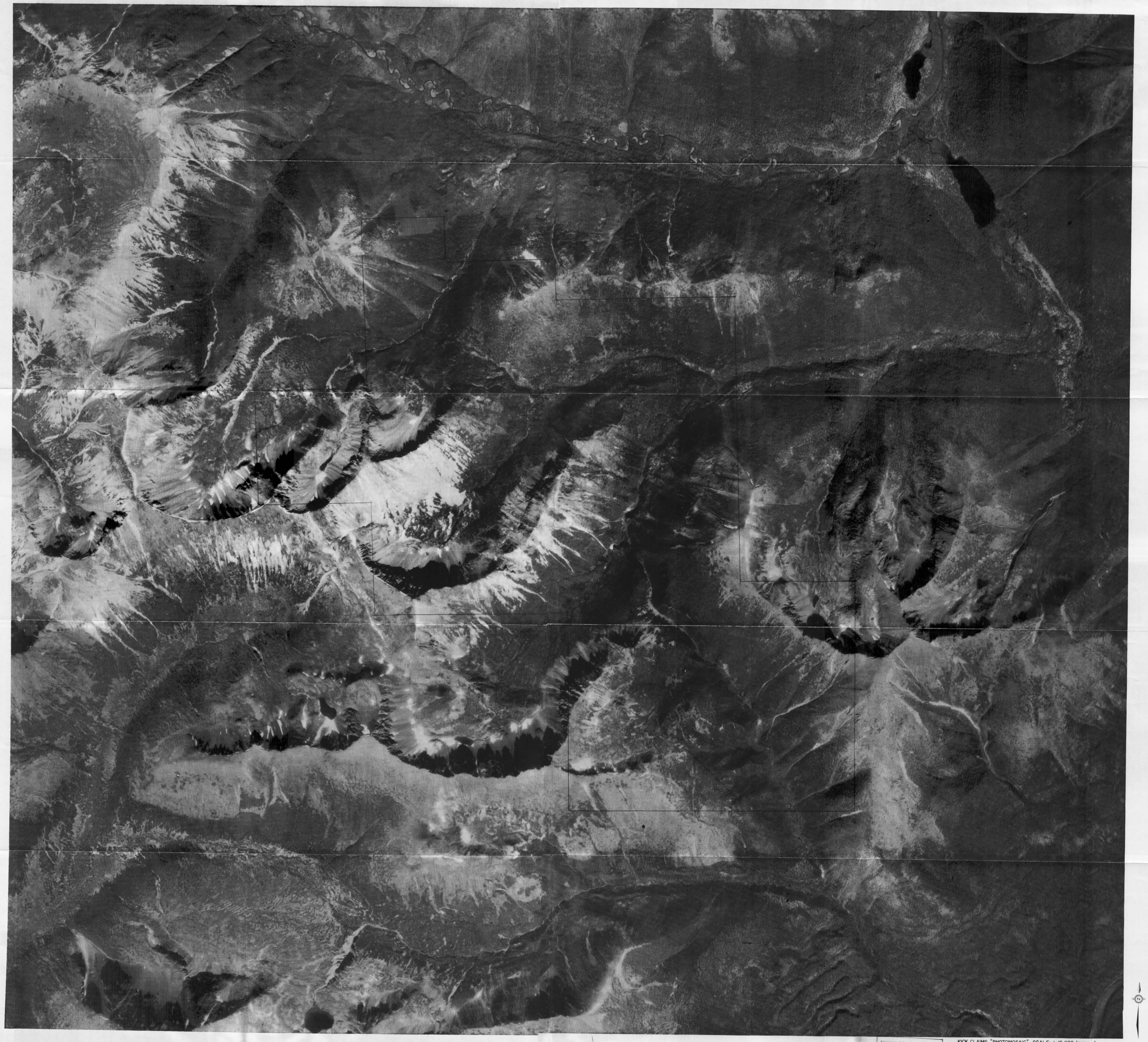
CHAPPELLE PROJECT

MAP 2 Rock, Talus Fines, and Stream Silt Sample Locations

LOCK CLAIMS

NTS N4E-2W and 7W

[redacted]



JOCK CLAIMS "PHOTOMOSAIC" SCALE: 1:10,000 (approx.)