85-397 14312

N N

GOLOGICAL AND GEOCHEMICAL REPORT

ON THE

ni ji

JIMMY GROUP

BANKS ISLAND AREA

SKEENA MINING DIVISION, B.C.

N.T.S.103H/5

BY

J.T. SHEARER, M.Sc.

OWNER: K.C.G. NEWTON 806 - 1550 Duchess Avenue West Vancouver, B.C. V7N 1P5

FIELD WORK COMPLETED BETWEEN SEPTEMBER 24 TO OCTOBER 14

FOR

TRM ENGINEERING LTD.

701 - 744 West Hastings Street

Vancouver, B.C.

GEOLOGICAL BR^{V&C}N^{1A5} ASSESSMENT REPORT

1.512

JUNE 8, 1985

VANCOUVER, B.C.

FILMED

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS AND TABLES	1
SUMMARY	11
INTRODUCTION	1
MINERAL CLAIMS	2
LOCATION, ACCESS AND TOPOGRAPHY	3
FIELD PROCEDURES	4
HISTORY AND DEVELOPMENT	4
REGIONAL GEOLOGY	5
LOCAL GEOLOGY	7
GEOCHEMISTRY	9
CONCLUSIONS	10
RECOMMENDATIONS	11
COST ESTIMATE FOR FUTURE WORK	12
REFERENCES	13

APPENDIX	I	STATEMENT OF COSTS JIMMY GROUP	16
APPENDIX	II	STATEMENT OF QUALIFICATIONS	18
APPENDIX	III	LIST OF PERSONNEL AND DATES WORKED	20
APPENDIX	IV	ANALYTICAL PROCEDURES	22
APPENDIX	V	CERTIFICATES OF ANALYSIS (CHEMEX)	23

LIST OF ILLUSTRATIONS AND TABLES

			Follows	Page
Figure 1	1	Property Location Map Scale 1:500,000		1
Figure 2	2	Claim Map Scale 1:50,000		2
Figure 3	3	General Geological Map of Bank Scale 1:300,000	S	3
Figure 4	4	Lineament - Metasedimentary Trend of Jimmy 3 and 4 Claims. Scale 1:50,000		6
Figure 5	5	Geology Map of Jimmy 3 and 4 Claims Scale 1:5,000	in po	cket
Figure 6	5	Sample Location Map Scale 1:5,000	in po	cket
Figure 7	7	Geochemistry Map Scale 1:5,000	in po	cket

TABLES

TABLE 1	List of Claim	s 2

SUMMARY

- (1) The Jimmy Group is located on southeast Banks Island, 53° 18'N -129° 50'W, N.T.S. 103H/5, approximately 118 km south-southeast of Prince Rupert, B.C.
- (2) The property consists of 40 units staked under the Modified Grid System and recorded on June 8, 1984.
- (3) The Jimmy Group is of interest because it encompasses a structurally complex environment wherein favourable "Yellow Giant" type (skarn deposits carrying high grade gold values) metasedimentary bands enclosed by granitic rocks appear severely folded as well as being disrupted by faulting.
- (4) "Yellow Giant" type mineral deposits are characterized by relatively high gold values over narrow to moderate widths and relatively short strike lengths. They are usually irregular in cross-section as a consequence of the skarn environment. A multidiscipline approach using detailed geological mapping, prospecting, soil geochemistry and close spaced geophysics will be required to fully assess the Jimmy Group.
- (5) In 1984 a preliminary program of soil smapling located several low order anomalies which require further investigation.
- (6) A phase II program is recommended and should consist of geological mapping, prospecting, soil sampling and geophysics, followed by phase III diamond drilling program.

INTRODUCTION

The Jimmy 3 apparently lies along the same geological horizon that hosts the Yellow Giant gold deposits to the northwest. The Yellow Giant deposits were discovered in the early 1960's by Falconbridge Nickel Mines Ltd. Close spaced diamond drilling and some underground work has indicated about 176,000 ounces of gold* to date within the four best explored deposits on the Yellow Giant Property.

The Jimmy 3 mineral claim area is of interest because it encompasses a structurally complex environment wherein favourable "Yellow Giant" type metasedimentary bands enclosed by granitic rocks appear severely folded as well as being disrupted by faulting. These structural features, believed necessary for the localization of gold on Banks Island, especially where intersections are involved, are reflected by vegetation changes evident through the study of air photographs, fortunate in this instance since most of the area is low lying and overburdened except for the enclosing granitic rocks.

From September 28 to October 13, 1984, R. Kidlark assisted by L. Demczuk conducted a phase I program consisting of geological mapping, prospecting and soil sampling over the Jimmy 3 claim. In addition, to establish intrusive lithology and relationships a one day geological traverse was carried out over the eastern half of the Jimmy 4 claim. The present report is taken largely from Kidlark 1984 and McDougall and Shearer 1984b.

The objective of the program was to assess the potential of the area for gold mineralization and to determine a second phase program.

*Trader Resource Corp., Report to Shareholders, June 11, 1984.



MINERAL CLAIMS

The Jimmy 3 and Jimmy 4 mineral claims are located in the Skeena Mining Division and are described as follows: (Fig.2).

TABLE 1

LIST OF CLAIMS

Jimmy 3

Name:	Jimmy 3, Record No. 4481(6)
Type:	Modified Grid System/Tag #95590
Units:	5N and 4E, total 20 units.
Location Date	e: May 19, 1984 by L. Tanguay as agent
	for TRM Engineering Ltd.
Date Recorded:	June 8, 1984
Work Due:	\$2,000 on or before June 8, 1985
Ownership:	Ownership in the name of Kenneth
	C.G. Newton in trust for Rainey
	River Resources.

Jimmy 4

Name:	Jimmy 4
Туре:	Modified Grid System T, Record No.
	4482 (D)
Units:	5N and 4W, total 20 units.
Location Date:	May 19, 1984 by L. Tanguay as
	agent for TRM Engineering Ltd.
Date Recorded:	June 8, 1984
Work Due:	\$2,000 on or before June 8, 1985
Ownership:	Ownership in the name of Kenneth
	C.G. Newton in trust for Rainey
	River Resources.



LOCATION, ACCESS AND TOPOGRAPHY

The Jimmy 3 is located on southeast Banks Island about 118 km near due south - southeast of Prince Rupert. B.C., Figure 1. It is about 15 km southeast of the currently active Yellow Giant gold property. The nearest communities are Hartley Bay on Douglas Channel 55 km to the east, and Trutch 34 km to the southeast.

Access is via helicopter direct from equi-distant Prince Rupert or Sandspit on the Queen Charlotte Islands, or via float plane from the same bases to Keecha Lake which is located on the west boundary of the claim. Keecha Lake is relatively debris free, and is over 8 km in length providing an excellent landing base for floatplanes. If requested, North Coast Air Services scheduled flight to Hartley Bay will divert to Keecha Lake. Additional access is via helicopter from Prince Rupert.

The terrain involved is lightly but extensively wooded and some muskeg is present. Elevations range from sea level to 150 metres. The property, on the east coast of km wide Banks Island, has a typical north coast climate 18 involving wet winters. Light snow would be expected for during the several weeks winter. However, such is insufficient to prevent year round work except prospecting. larger lakes seldom freeze-over completely and aircraft The still land on them year-round, but convenient bays may can contain ice for a few weeks. Water supply is no problem.

Outcrop is limited to 10 - 15% although soil cover is seldom more than 3-5 m deep. Most of the numerous creek cuts and lake shores contain some bedrock, and cliffs on the small hills are common. Almost continuous outcrop is exposed below the high tide mark, thus exposures required for generalized geological mapping appear adequate.

Areas underlain by intrusive rocks are characterized by mossy, sparsely vegetated ridges while those underlain by metasediments are swampy, low lying and heavily bushed with spruce and alder.

There are no established trails, save for claim-line blazes, nor established camp sites within the claim boundaries. A small, uninhabited Indian Reserve (IRII) is located at the mouth of the Keecha Creek and surveyed land lot #6 (possibly a timber limit (?) is shown immediately south of the Indian reservation.



FIELD PROCEDURES

Geological mapping and soil sampling was conducted from a grid established with a Silva compass and roughly measured for slope corrections by a Hipchain calibrated in meters for which the manufacturer claims a 0.1% accuracy. Soil samples were collected every 30 m along a flagged and chained grid. A total of 300 soil, 44 silt and 36 rock chip samples were collected and submitted to Chemex Labs Ltd., of Vancouver. All were analyzed for gold using the fire assay preconc. - AA method.

Soil development is generally incomplete and profiles consist of A plus C horizons over intrusive rocks and an A or A plus B horizon over metasedimentary rocks. Soil samples were taken with a grubhoe ranging from 15 cm to 45 cm in depth.

Samples consisted of as equal blend of A and C horizon material as was practical at each site. All results are plotted on a 1:5,000 photo enlargement of existing 1:50,000 mpa 103H/5. Standard soil data notes were compiled by L. Demczuk listing such items as sample number, location, depth, horizon, colour, particle size, slope, vegetation and additional remarks.

Rock samples were collected as continuous chips over short intervals or grabs. Results are plotted on Figures 5, 6 and 7 using Hipchain traverses between soil lines for control.

HISTORY AND DEVELOPMENT

The area covered by the Jimmy Group was examined in aerial reconnaissance fashion an by the Ventures-Frobisher (pre-Falconbridge) Group in the early 1960's as the sedimentary bands, believed to be favourable for mineralization, were traced from the Banks (Yellow Giant) deposits. No significant or systematic ground exploration program, such as would include definitive prospecting, geological surveys or soil sampling on grids, east side of the Island. Some prospecting evolved on the apparently conducted later by Westfield Minerals and was George Bleiler around the east end of Keecha Lake but it is not known whether such activity included any of the ground now held by the Jimmy 3 claim, nor is it known if any important aerial work contributions were made, but the presence of such appears doubtful. Follow-through of initial prospecting was apparently limited.

The succeeding is an excerpt from an earlier TRM Engineering Report by J. McDougall and J. Shearer (1984b).

"Regional gological features have been compiled by Roddick (1970), following field work conducted along coastal exposures by the Geological Survey of Canada in 1963 and by very wide spaced helicopter landings on interior sites in 1964 (Fig. 3, 4). The following discussion results in large part from this work.

Banks Island lies along the western edge of a narrow belt of plutonic and metamorphic relatively long, termed the "Coast Plutonic Complex". This forms one rocks of the major geological components of British Columbia, extending from Northern Washington through the Coast southeast Alaska and Yukon Mountains into Territory. General descriptions of the Complex have been given by and Hutchinson (1974) and Woodsworth and Roddick Roddick (1977). The Coast Plutonic Complex consists largely of intermediate and basic, discrete and coalescing granitoid bodies of gneiss - migmatite and pendants (septa) plutons, metasediments and volcanics. It is an asymmetric array, of having diorite and dioritic migmatites most plentiful on the west, flanking a central gneiss zone, with granodiorite and quartz monzonite being more abundant on the east. Metamorphic intensity increases from greenschist facies in the belt to amphibolite (locally the western part of granulite) facies in the central and east-central parts. and Roddick (1977) suggest that most of the Woodsworth plutons in the coast mountains have been emplaced as diapiric solids, analogous to glacier flow and salt domes. contacts betweeen plutons and pendants are faults or Many drag folds formed during formation of the igneous bodies. faults have been healed by recrystallization. The Some examples of movement of plutons in solid masses clearest several "tadpole" shaped intrusions that have are theto intricate contacts along their "tails". When gradational rock was more solid, movement could only take place by the and this could give rise to internal recrystallization, foliation within. Commonly thequartz diorite and granodiorite are rarely uniform over broad areas. Zones of migmatite and small, lensoid amphibolitic inclusions are ubiquitous but variable in abundance.

Roddick (1970) reports that contact relationships everywhere indicate the more acid plutonic rock to be younger than any more basic plutonic rock in contact with it, but isotopic ages are related to the polition of the plutons across the belt. Isotopic ages range from Early Cretaceous on the west to Late Cretaceous near the axis of the crystalline belt to Tertiary on the east side.

The central part of Banks Island is underlain by 10b, Figure 3, a biotite-hornblende quartz monzonite. Unit Surrounding rocks are hornblende-biotite granodiorite (units To the east and west are large bodies of 9c). hornblende-biotite quartz diorite (unit 8b). Basic. gneiss-diorite-migmatite complexes (unit 5b) flank the guartz diorite. This outward zoning from a felsic core to progressively more basic rocks supports a conclusion based on detailed petrographic work that intrusive rocks on Banks Island are inter-related and part of the same zoned pluton. The field observations, discussed under "Local Geology", simply reflect the complexities along the contacts of major phases.

Metasedimentary rocks are exposed over about 7% of Banks Island, mainly occupying long, narrow northwesterly trending belts. The longest continuous belt extending from Banks Lake to Keecha Lake is over 18 km in length. North of Waller Lake this Banks-Keecha belt splits into two arms, the probable result of large scale complex folding. It is this area of the Island togethr with the paralleling sedimentary belt between Foul Bay (Waller Bay) and the Bob Zone that attention has been focused on within the Yellow Giant Project.

The discovery of mineralization resulted from an aircraft assisted prospecting program designed to investigate north coast lineaments (McDougall 1972). Banks Island has an unusual density of faults, fractures and lineaments. The Island is bounded by deep seated, major faults that are assumed to have right-lateral displacement.

South of Keecha Lake the same metasedimentary band that hosts, or is near, the main "Banker" gold deposits is present. The metasedimentary rocks that underlie the Jimmy claim, although separated by granitic rocks, 3 appear lithologically correlatable with the main Yellow Giant it Septa. Limestone. favourable because allows the formation of skarn, which is important, is known along the Jimmy coast within the 3 claim. The same granitic rock appears to flank the metasediments. The main crosscutting E-W structural features are also present, including the lineament occupied by Keecha Lake, but the frequency of lineaments appears lower, perhaps masked in part by other more hilly topography and more soil and extensive tree cover than at the Yellow Giant Property.

A thorough study of lineaments has apparently not been made in the Jimmy 3 claim area (i.e. frequency, etc.) but it is obvious from airphoto observations that at least the main lineaments (east-west, northwest and northeast) do persist to this area. Fault offsets are not prominent.



the initial exploratory stage, prospecting In in on locales where the most east-west lineaments zeroed intersected the northwesterly ones which often contained the metasediments, particularly the calcareous bands where offsets were more readily recognizable on airphotos. A large percentage of the gold occurrences now known on Banks Island were discovered as a result, proof positive as far the writers are concerned that these features represent, as closely related to, aerial controls of most \mathbf{or} are immediate interest. Paralleling but nearby zones "sympathetic" to these main structural features now appear of equal or importance as a locus of gold more mineralization, however.

The source of the gold and other mineralization is not known. There are no volcanics on Banks Island (an interesting feature) and the writers favour as a mechanism the geochemically anomalous sedimentary bands being "leached" by hydrothermal agencies related to the granitic rocks, with redeposition and concentration in structurally - and in part chemically - favourable environments."

LOCAL GEOLOGY

Descriptions of the main rock types are taken from McDougall and Kidlark (1984). A metasedimentary unit of interbedded marble and metapellite strikes at 340° across the western portion of the claim area (Fig. 5). The sequence is persistent over a strike length of 2.5 km and a width of 700 m. The sediments are bounded to the west by the Juro-Cretaceous Coast Range intrusives which consist of Quartz monzonite and granodiorite.

Northwest trending dykes and sills of diorite and quartz diorite occur throughout the sedimentary package.

Metasediments

The marble unit is medium to coarse grained, massive to finely bedded and locally contains disseminated graphite and pyrite. The pelitic units consist of well bedded siltstones, schists and quartzite. All are pyriferous and contain varying amounts of graphite. Unit 2b, Figure 4, micaceous quartzite and marble, is found in a wide belt that appears to be an anomalously thicker part of the narrow metasedimentary septa which trends southeast and meets the coast south of Gale Point. A number of east-west airphoto lineaments are apparent on airphotographs of the area as summarized on Figure 4. The metasedimentary rocks are severely folded as well as being disrupted by several stages of major faulting. Structural intersections are believed to be necessary for the localization of gold on Banks Island. Roddick (1970), page 20, reports that:

> the east side of Banks Island, "0n in the vicinity of Keecha Point, the metasedimentary sequence consists mainly of interbedded argillaceous quartzite and limestone, all very thinly bedded. Isoclinal folding with plastic of carbonate flowage the 1s evident. The same rocks outcrop south of the Gale Point, where sinuous quartzite fragments are found 'floating' in the limestone. places, the limestone bedding, In of flowing around instead theguartzite fragments is curiously truncated against them. In this also, are skarn zones area, containing some molybdenite."

Local contact metamorphic and metasomatic effects include skarn in calcareous units and hornblende and biotite hornfels in more pelitic members.

Intrusives

Kim Granite

In hand speciment the Kim rocks consist of an equigranular, leucrocratic, medium grained biotite quartz monzonite with minor amounts of biotite granite. Biotite form about 15-20% of the rock and masses of pegmatite are locally developed.

Granodiorite

The granodiorite is equigranular, medium to coarse grained and contains biotite and hornblende. Generally the biotite is considered to be secondary after hornblende. Several secondary chlorite-sericite alteration zones were located near the metasedimentary contact.

Dykes and Sills

Fine grained to aphanitic diorite and quartz diorite dykes and sills with an equigranular to porphyritic texture crosscut the metasediments. They locally contain up to 10% disseminated pyrite and pyrrhotite along dry fractures. Inclusions of marble and skarn are common.

Structure and Mineralization

Prominent northwest trending linears parallel both the regional foliation and the bedding. Less prominent linears occur in two directions; $045^{\circ} - 055^{\circ}$ and 090° .

Sparse structural field data from the sediments indicate at least two periods of folding. The earliest is represented by rootless small scale isoclinal folds that have hinge lines trending parallel to the regional foliation. Plunges vary from $18^{\circ}-45^{\circ}$ northwest to 5° southwest.

A rusty molybdenite-bearing garnet actinolite skarn occurs along the northwest edge of the grid area where marble is in contact with granodiorite. A grab sample returned values of 170 ppm Mo and 4 ppm W. The unit is at least 8 m wide and is of undeterminable strike length.

Pyrrhotite and pyrite bearing sills and dykes returned values up to 5 ppb Au and 0.4 ppm Ag.

GEOCHEMISTRY

Soil and silt sample locations are presented in Figure 6 and the results are plotted on Figure 7.

The background for gold in soils underlain by metasediment is estimated to be in the order of 10 ppb. Four low order one point anomalies of 20 to 30 ppb gold occur near the marble - granodiorite contact. A slightly higher one point soil anomaly of 40 ppb Au is located in the northwest portion of the grid.

The significance of the values must be considered in the light of the fact that the overburden over the metasediments is thick and consists mostly of organic material.

CONCLUSIONS

The Jimmy 3 and 4 mineral claims are located in a geological environment similar to that hosting the known gold deposits on Banks Island.

The present geological mapping located several dykes and sills that are similar in composition to gold bearing units in the Foul Bay area on the west coast of Banks Island. On the claims these rocks did not return anomalous gold values, however, rock sample density was low.

A molybdenite bearing skarn was located at a granodiorite-marble contact. The contact is not well exposed and the skarn could have an extensive strike length.

The soil geochemical results turned up several low order, one point anomalies near the marble-granodiorite contact. However, the reconnaissance sample spacing of 30 m combined with the thickness and nature of the overburden precludes good anomaly definition. Earlier studies for TRM Engineering over known deposits discovered that the maximum significant sample spacing is 10 m (Shearer 1984b).

RECOMMENDATIONS

The following phase II program is recommended to investigate the following areas of interest:

1) Jimmy 4 Claim

a) Geological reconnaissance mapping to evaluate the claims for gold potential.

b) Reconnaissance soil and silt sampling to locate anomalous areas.

2) Potential of the Molybdenite Bearing Skarn

a) Detailed geological mapping of the marble - granodiorite contact.

b) Magnetometer survey to assist in locating the contact.

c) Detailed soil sampling over the contact.

3) Jimmy 3 Claim

a) Detailed geology over the grid.

b) Fill-in soil sampling at 10 m intervals over the anomalous areas.

c) Orientation S.P. and EM survey over the grid area.

d) Reconnaissance geology and geochemistry on the south side of Keecha Creek.

COST ESTIMATE FOR FUTURE WORK

PHASE II

The program calls for a crew of three for a 30-day period. An estimate of costs is as follows:

Personnel

Geologist - 1 @ \$250/day Sampler/Prospector - 2@ \$150/ day	\$	7,500 9,000
Geochemistry (includes assaying)		10,000
Geophysics (30 line km)		7,000
Transportation Fixed Wing Helicopter (10 hours))	2,000 5,000
Board @ \$40/man day		3,600
Report Writing/Drafting		5,000
		49,100
Contingency - 15%		7,365
TOTAL PHASE II PROGRAM	\$	56,465

PHASE III (Dependent on positive Phase II results)

1) Diamond Drilling (test)

Drill hole location is to be based on the preceding results. Locations are reasonably established for the skarn investigation.

Respectively Submitted, J.T. Shearer, M.Sc., F.G.A.C.

REFERENCES

- Blanchet, T., 1983; An Initial Photo Structural Analysis of a portion of the Yellow Giant Property, Private unpublished report, TRM Engineering Ltd.
- Charteris, S.N. 1964; Observation on the Gold Mineralization, Keecha Lake Area, Banks Island. Falconbridge Nickel Mines Ltd. Inter-Office Memorandum.

1965 - Report on the Geochemical Surveys at Banks Island, B.C. 1964. Private Falconbridge Nickel Mines Ltd. Report, 4pp., May 18, 1965.

Holland, S.S. 1963; Banks Island, B.C. Minister of Mines Annual Report, pp. 21-12

Hutchinson, W.W. 1982, Geology of the Prince Rupert-Skeena Map Area, B.C. Geological Survey of Canada, Memoir 394.

- Kidlark, R.G., 1984; Report on Geology, Yellow Giant Property. Private unpublished report, TRM Engineering Ltd., 7 pp.
- McDougall, J.J., 1972, The Relationship between Lineaments and Mineral Deposits on Banks Island, Programme and Abstracts, Geological Association of Canada Symposium of faults, fractures, lineaments and related mineralization in the Canadian Cordillera.

1983, Preliminary Report on Koor 1 Mineral Claim, Banks Island, B.C. 6 pp., August 27, 1984 for TRM Engineering Ltd.

- McDougall, J.J. and Kidlark, R.G. 1984; Jimmy Mineral Claims, Report on Geology and Geochemistry. Private Report for Rainey River Resources, November 6, 1984, 14 pp.
- McDougall, J.J. and Shearer, J.T. 1984a Report on VG and VG2 Mineral Claims, Private Report for Ararat Oil & Minerals Inc., July 15, 1984, 12 pp.

1984b Report on Jimmy 3 Mineral Claim, Private report for Rainey River Resources Ltd., August 15, 1984, 13 pp.

- Roddick, J.A. 1970, Douglas Channel Hecate Strait Map Area, B.C., Geological Survey of Canada, Paper 70-41.
 - 1983, Geophysical Review and Composition of the Coast Plutonic Complex, South of Latitutde 55[°]N Circum-Pacific Plutonic terraines. Geological Society of America, Memoir 159 pp. 91 - 108.
- Roddick, J.A. & Hutchinson,,, W.W. 1974, Setting of the Coast Plutonic Complex, B.C. Pacific Geology, V.8 pp. 91 - 108.
- Shearer, J.T. 1985a, Bob Deposit, Banks Island, TRM Engineering Ltd., January 15, 1985, 23 pp.
 - 1985b, Report on the Yellow Giant Project, Banks Island, February 15, 1985, 85 pp. plus 101 figures.
- Smith, P.A. 1984, Dighem III Survey of the Yellow Giant Property, Banks Island, B.C., 54 pp., May 11, 1984. Dighem Ltd.
- Woodsworth, G.J. and Roddick, J.A. 1977, Mineralization in the Coast Plutonic Complex of B.C., south of latitude $55^{\circ}N$, Geological Society of Malaysia, Bulletin 9 pp. 1 16.
- Yorath, C.J. and Chase, R.L. 1981, Tectonic history of the Queen Charlotte Islands and adjacent areas - a model. Canadian Journal of Earth Sciences, Volume 18, No. 1.

JIMMY GROUP

STATEMENT OF COSTS

APPENDIX I

- 16 -

COST STATEMENT

JIMMY GROUP

WAGES AND BENEFITS

R. Kidlark L. Demzuck	15 days Ø 15 days Ø	\$150 per day \$130 per day	= .	\$ 2,250.00 1,950.00
	Total Wages	s and Benefits	=	\$ 4,200.00
TRANSPORTATION				
Mobilization Be @ 2.20 per m	aver to Kee	echa Lake 170 miles		395.00
Demobilization 1 hour	helicopter	to hepler Lake		451.00
Vancouver to Pr	ince Rupert	t.		608.00
	Total Trans	sporation	=\$	1,454.00
CAMP COSTS				
Food \$20 per ma	n/day @ 30	man days	=\$	600.00
Rental of camp	gear \$35 pe	er day 015 days		525.00
Field gear expe	ndables			50.00
	Total Camp	Costs	=\$	1,175.00
ANALYTICAL				
Soil and Silt S	ampling	344 samples @8.25 for gold	=\$	2,838.00
Rock Sampling		36 samples @10.50 for gold		378.00
CP Freight				104.00
	Total Analy	tical	=\$	3,320.00
REPORT PREPARAT	ION			
Word Processing			=\$	250.00
Reproduction				60.00
Drafting 20 hour	rs @15 per	hour		300.00
ŗ	Total Repor	t Preparation	\$	610.00
(GRAND TOTAL		= \$ 1	0,759.00

APPENDIX II

STATEMENT OF QUALIFICATIONS

J.T. SHEARER, M.Sc., FGAC

.

APPENDIX II

I, J.T. Shearer of the City of Port Coquitlam in the Province of British Columbia, hereby certify that:

- 1) I am a graduate of the University of British Columbia (1973) B.Sc. in Honours Geology, and the University of London, Imperial College (1977) M.Sc., DIC.
- 2) I am a Fellow of the Geological Association of Canada.
- 3) I have worked continuously in Mineral Exploration since 1973 for McIntyre Mines Limited, J.C. Stephen Explorations Ltd., and Carolin Mines Ltd. I am presently employed by TRM Engineering Ltd.
- 4) I do not have any interest in the Jimmy Group or the securities of Rainey River Resources and its affilliated companies, nor do I expect to receive any interest in the future.
- 5) I have discussed the Jimmy Project with R. Kidlark and I am familiar with the quality of his work. I visited the Jimmy Project on September 30 and October 2, 1984. This report is based on interpretation of data collected.

Dated at Vancouver British Columbia

J/T/ SHEARER, M.Sc., F.G.A.C. JUNE 8, 1985

APPENDIX III

LIST OF PERSONNEL AND DATES WORKED

.

APPENDIX III

LIST OF PERSONNEL AND DATES WORKED

Name	Position	Address	Days Worked
R. Kidlark	Geologist	107 - 22427 North Ave., Maple Ridge,	Sept. 28, 29, 30, Oct. 1-13, 1984 Total 15 field days
n a n			

B.Sc. University of Toronto 1974, 10 years experience.

L.	Demczuk	Soil Sampler	1769 E. 12th Ave., Vanc.	Sept. 28, 29, 30, Oct. 1-13
			B.C. V5N 4A4	1984
				Total 15 field
				davs

Graduate Mining Engineer, Poland, 2 years experience soil sampling.

Both Mr. Kidlark and Mr. Demczuk worked under J. Shearer's supervision on the Yellow Giant Project in June to September 1984. I am very familiar with the excellent quality of work done by both workers. I also visited the Jimmy Group camp on September 30 and October 2, 1984, and discussed the progress of work on the claims with Mr. Kidlark.

Respectfully submitted,

Respectiuity summer Acarer J.T. Shearer, M.Sc., F.G.A.C.

APPENDIX IV

ANALYTICAL PROCEDURES

Chemex Labs 212 Brooksbank Avenue, North Vancouver, B.C.

.

Au

Gold is analysed by

1. Pire-assay - atomic absorption method. (Combo)

A 10.0 gram sample is fused in litharge carbonate and silicious flux with silver inquarts and cupelled. The bead is parted with nitric acid, any Gold is dissolved in aqua regia, and subsequent analysed by atomic absorption in dilute hydrochloric acid.

.

APPENDIX V

CERTIFICATES OF ANALYSIS

JIMMY GROUP

- 22 -

Chemex	Labs	Ltd.
--------	------	------

212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1

I

Analytical Chemists •

Geochemists • Registered Assayers

Telephone:(604) 984-0221 Telex: 043-52597

ALYSIS

**

	CERTIFICATE	OF	ANALYS	51
LTD.				

CERT. #	:	A8417592-001-A
INVOICE #	:	18417592
DATE	:	5-NOV-84
P.D. #	:	NONE
JIMMY		

701 - 744 W. HASTINGS ST. VANCOUVER, B.C.

V6C 1A5

TO : TRM ENGINEERING

CC: R. KIDLA	<u></u>		<u> </u>	 <u> </u>		
Sample	Prep	Ag ppm	Mo			
description	code	Aqua R	ppm	 		<u> </u>
RKJM84-001	214	0.1	1	 		
RKJM84-002	214	0.2	2	 		
RKJM84~003	214	0.1	1	 		
RKJM84-004	214	0.1	· 1	 		
RKJM84-005	214	0 • Z	1	 		~-
RKJM84-006	214	0.1	1	 		
RKJM84-007	214	0.2	1	 ·	_ _	
RKJM84~008	214	0.1	1	 		
RKJM84-009	214	0.1	1	 		
RKJM84~010	214	0.2	1	 		
RKJM84-011	214	0.1	1	 		→ -
RKJM84~012	Z14	0.1	1	 		
RKJM84~013	214	0.1	2	 ~ -		
RKJM84~014	214	0.1	3	 		
RKJM84~015	214	0 • Z	-3	 - -		
RKJM84-016	214	0 - 1	(420)	 		
RKJM84~017	214	0.1	1	 		~-
RKJM84-018	214	0+1	1	 		
RKJM84-019	214	0.1	1	 		
RKJM84-020	214	0+1	2	 		
RKJM84-021	214	0.2	1	 		~-
RKJH84-022	214	0 • Z	1	 		
	214	0.1	1	 		
	214	0.3	1	 		~-
RKJM84-025	214	0.4	2	 		
→ RKJM84-026	214	0 • Z	1	 	- -	
	214	0.3	1	 		~-
RKJM84-028	214	0•1	1	 		
RKJM84-029	214	0.3	1	 		
RKJM84-030	214	0+3	7	 		}
RKJM84-031	214	0.3	1	 		
RKJM84-032	214	0.3	$\overline{\mathbf{O}}$	 		~
RKJM84-033	214	0.2	2	 	=	~- (
RKJMB4-034	214	0.3	1	 		
RKJM84-035	214	0.1	1	 		
RKJM84-036	214	0•1	1	 <u>~</u> -		



212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1

Chemex Labs Ltd.

Analytical Chemists •

Geochemists Registered Assayers Telephone:(604) 984-0221 Telex: 043-52597

ALYSIS

\$\$

 CERT	IFICATE	OF AN	1/

TO : TRM ENGINEERING LTD.

701 - 744 W. HASTINGS ST. VANCOUVER. B.C. V6C 1A5

CC: R. KIDLARK

Samole	Prep	Mo	ÌW	Au ppb			
description	code		00 m	FA+AA	<u> </u>	~	
RKJM84-001	205			<5			~-
RKJM84-002	205			< 5			
RKJM84-003	205			< 5			~ −
RKJM84-004	205			< 5			÷
RKJM84-005	205			< 5			
RKJM84-006	205			< 5			
RKJM84-007	-205			< 5			
RKJM84-008	205			5			
RKJM84-009	205			< 5			~-
RKJM84-010	205			5			~-
RKJM84-011	205			< 5			
RKJM84-012	205			< 5			**
₹KJM84-013	205	~~		<5			~-
KKJM84-014	205			< 5			~-
RKJM84-015 -	- 205 -	→ 3_		< 5	. 		~-
RKJM84-016	205		0 4	<5			~-
RKJM84-017	205	-> /		<5		÷-	
RKJM84-018	205			<5			
RKJM84-019	205			< 5			
RKJM84-020	205			<5			
RKJM84-021	205			<5			
RKJ#84-022	205			< 5			
RKJM84-023	205			< 5			
RKJM84-024	205			< 5			
RKJM84-025	205			<5	0.4ppm		(
RKJM84-026	205			5			
RKJM84-027	205	-		< 5			
RKJM84-028	205			<5			
RKJM84-029	205	- -		< 5			
RKJM84-030	205			< 5			
RKJM84-031	205			< 5			
RKJM84-032	205			< 5			
RKJM84-033	205			< 5			(
RKJM84-034	205			< 5			
RKJM84-035	205			< 5			
RKJM84-036	205			<5		~-	

T. #		:	A8417210-001-A
OICE	#	:	18417210
ε		:	25-0CT-84
. #		:	NONE

P.C. # JIMMY

CER

INV DAT



I

ļ

Chemex Labs Ltd.

212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1

Analytical Chemists

Geochemists • Registered Assayers

CERT. #

DATE P.O. #

JIMMY

INVOICE # : 18417209

Telephone:(604) 984-0221 Telex: 043-52597

: A8417209-001-A

: 25-CCT-84

: NONE

٠

☆☆

ļ	

CERTIFICATE OF ANALYSIS

TO : TRM ENGINEERING LTD.

701 - 744 W. HASTINGS ST. VANCOUVER. B.C. V6C 1A5

CC: R. KIDLARD

Sample	Prep	Au ppb				
description	code	FA+AA				
SKJM84-001 📈	217	<10				
YDJM84-001 🗸	217	<10				
YDJM84-002 🖓	217	<10				
YDJM84-003	217	<10				
YDJM84-004 🗸	217	<10				
YDJM84-005 √	217	<10				
YDJM84-006 🧹	217	<10				 ~-
YDJM84-007	217	<10				
YDJM84-008	217	<10				
YDJM84-009	217	<10				
YDJM84-010	217	<10		<u> </u>		
YDJM84-0115	217	<10				
YDJM84-012 ⁴	217	<10				
/DJM84-013 ^V	217	<10				
YDJM84-014	217	<10				
YDJM84-015V	217	<10				
YDJM84-016	217	<10				
YDJM84-017	217	<10				
YDJM84-018	217	<10			~ -	
YDJM84-0191	217	<10]
YDJM84-020	217	<10				
YDJM84-021	217	<10				
YDJM84-022	217	<10				
YDJM84-023	217	<10			~-	
YDJM84-024	217	<10				 (
YDJM84-025v	217	<10			~ -	
YDJM84-026	217	<10			~ –	 (
YDJM84-027 V	217	<10			~-	
YDJM84-028 ⁵	217	<10				
YDJM84-029	217	<10				 - -
YDJM84-030	217	<10				 · (
YDJM84-031 呈	217	<10			~-	
YDJM84-032	217	<10				 (
YDJM84-033	217	<10				
YDJM84-034	217	<10			~ -	
Y0JM84-035	217	<10			~	
YDJM84-036	217	<10				
YDJM84-037	217	<10		- +		
(DJM84-038	217	<10				
YKJM84-001	217	<10		52		



tart Bichler



212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1

Analytical Chemists

Geochemists • Registered Assayers

##

Telephone: (604) 984-0221 043-52597 Telex:

l

l

í

5

CERTIFICATE OF ANALYSIS

TO : TRM ENGINEERING LTD.

701 - 744 W. HASTINGS ST. VANCOUVER. B.C. V6C 1A5

CERT. # : A8417209-002-A INVOICE # : 18417209 : 25-0CT-84 DATE P.O. # : NONE JIMMY

CC: R. KIDLARD

Sample description	Prep code	AU ppb FA+AA	_		
YKJM84-002 √	217	<10	 	 	
YKJM84-003.	217	<10	 	 	
YKJM84-004 🔧	217	<10	 	 	
YKJM84-005 ¹ /	217	<10	 	 	
YKJM84-006√	217	<10	 	 	* -



KEN NEW TO N

Chemex Labs Ltd.

212 Broaksbank Ave

o the ligns

North Vancouver, B.C. V7J 2C1 Canadu Telephone. (604) 984-0221 Registered Assayers Analytical Chemists Geochemists Telex 043-52597 CERTIFICATE OF ASSAY : A8417175-001-A CERT. # TO : KYAWATS MINING COMPANY LIMITED INVOICE # : 18417175 : 24-CCT-84 DATE 806 - 1550 DUCHESS AVENUE : NONE P.O. # WEST VANCOUVER, 3.C. V7V 1P5 AU FA Ag FA Ρb Zn 40 Сu Sample Prep oz/T oz/T z ጜ z z description code 1.43 1.48 -----0.06 SB ≠1 52001 C 207 - --1.00 ---1.66 0.06 58 #2 52002 C 207 --- -0.82 2.04 0.06 ---- -SB #3 52003 C 207 1-54 3-14 --0.07 207 --S8 #4 52004 C 0.008 SUNH 1.25 1.33 ----0.02 0.001 RR #1 52005 C 207 0.06 0.04 <0.003

<0.001

<0.01

207

_ _

Registeres Assayer. Province of British Columbia



RR #2 52006 C



•

•

•

.

. course grained, equigranular otite – Quartz Monzonite, Fine to medium 1, equigranular
iorite: Coarse argined - borghlands - hilling
erentiated Diorite, Quartz - Diorite, Granodiorite nd dykes; Fine grained to aphanitic, anular to slightly porphyritic
Fine to coarse grained, massive to thinly bedded Fine to medium argined agreet overses
erentiated Siltstone , shales , quartzites with schist and hornfels
outcrop
cal contact: defined , inferred
g attitude : inclined , vertical
g unmude : inclined , vertical
and plunge of minor isoclinal folds
Chip Sample Number (Means RKJM84-001) – Au – ppb
Chip Sample Number - For staining
R.G.KIDLARK – November 1984
SCALE 1:5000
50 0 100 200 500 METRES
RIVER RESOLIDAES ITO
TIVEN TIESUUNUES LID.
GEOLOGY
AND JIMMY 4 MINERAL CLAIMS
JIMMY PROJECT
ER 84-JM-5

-

•



-

-

•

•

SCALE 1:5000	
0 50 0 100 200 300 METRES	
' RIVER RESOURCES LTD.	
MPLE LOCATION	
AND JIMMY 4 MINERAL CLAIMS	
JIMMY PROJECT	
TRM ENGINEERING LTD.	
BER: 84-JM-6 FIG. 6	

• SD 001 Soil Sample Location (Means - SDJM84-001) • YD 003 Silt Sample Location (Means - YDJM84-003) To Accompany Report by R.G. KIDLARK - November 1984

LEGEND





50	U	100	5 00	300	METI	RES
RIV	/ER	RES	SOUR	CE	SI	_TD.
00	CH	ΕN	1IST	R	Y	
AND	JIMN	1Y 4	MINER	AL	CL	AIMS
	JIN	1MY	PRO	JEC	Т	
ΓRΜ	EN	GINE	ERING	LT	D.	
ER:	84-JM	- 7		FIG.	7	REV.

•	Au <10ppb
• 30	Au ppb
□ <10	Au ppb

SCALE 1:5000

LEGEND

