

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 90.03.10

ASSESSMENT REPORT 18552

MINING DIVISION: Liard

PROPERTY: Rest Ker B  
LOCATION: LAT 56 57 00 LONG 130 51 00  
UTM 09 6313130 387469  
NTS 104B15W  
CLAIM(S): B 1-2, Ker 8, Rest 3-4  
OPERATOR(S): Kestrel Res.  
AUTHOR(S): Cournoyer, R.D.  
REPORT YEAR: 1989, 41 Pages  
COMMODITIES  
SEARCHED FOR: Gold, Silver  
KEYWORDS: Limestone, Argillite, Chert, Andesite, Monzonite, Fractures  
Quartz veins, Pyrite, Chalcopyrite

WORK

DONE: Prospecting, Geochemical  
PROS 1850.0 ha  
Map(s) - 2; Scale(s) - 1:10 000, 1:250  
ROCK 177 sample(s) ;AU,AG  
SILT 4 sample(s) ;AU,AG

LOG NO: 0728	RD. 3
ACTION: Date received report back from amendments	
FILE NO:	

LOG NO: 0313	RD.
ACTION:	
FILE NO:	

REPORT ON THE

B1, B2, KER 8 AND REST 3 AND 4

1988 PROSPECTING PROGRAM

ISKUT RIVER AREA  
 Liard Mining Division  
 British Columbia

at

56° 58' North Latitude

130° 52' West Longitude

GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

For 18.552

KESTREL RESOURCES LTD.

By

RAYMOND D. COURNOYER, PROSPECTOR

February 21, 1989

FILMED

18.552  
 KESTREL RESOURCES LTD.  
 VANCOUVER, B.C.

**RECEIVED**  
 JUL 25 1989  
 Gold Commissioner's Office  
 VANCOUVER, B.C.

## TABLE OF CONTENTS

	<b>Page</b>
SUMMARY	1 /
INTRODUCTION	2 /
LOCATION, ACCESS AND GEOGRAPHY	2
CLAIM INFORMATION	3 /
AREA HISTORY	3 /
REGIONAL GEOLOGY	5 /
PROPERTY EXPLORATION	6 /
PROSPECTOR'S REPORT	7
RECOMMENDATIONS	9 /

### **List of Figures**

### **Following page**

Figure 1	Index Map	2 /
Figure 2	Claim Map	3 /
Figure 3	Regional Geology	6 /
Figure 4	Sample Location and Results	in pocket /
Figure 5	Property Geology	in pocket /

### **Appendices**

Appendix I	Program Cost /
Appendix II	Bibliography ✓
Appendix III	Statement of Qualifications ✓
Appendix IV	Assay Certificates ✓
Appendix V	Sample Descriptions ✓

## SUMMARY

A preliminary program of prospecting and sampling was completed on the B1, B2, Ker 8 and Rest 3,4 mineral claims during the summer of 1988 to evaluate the property for Kestrel Resources Ltd.

A base camp was established at the headwaters of Forrest Kerr Creek from which a helicopter was utilized to access the claims. A total of 177 rock chip samples and 4 silt samples were collected.

The claims cover an andesite unit to the north in contact with volcanics intruded with monzonite to the west and south. An assembly of andesite breccia with cherty sediments is also present. Assays returned values up to 0.163 opt gold.

Results of the 1988 program are discussed in the text of this report and data is plotted on the accompanying maps.

## **INTRODUCTION**

The Rest 3, 4, Ker 8 and B1, B2 mineral claims, a total of 74 units were staked March 10, 1987, June 28, 1988 and August 29, 1988 respectively. The claims are situated 12 km north-northeast of Newmont Lake in the Iskut River area (NTS 104 B/15W).

The claims cover favourable geology north of Gulf International Minerals' McLymont Creek claims where high grade veins of quartz-pyrite-chalcopyrite are presently being explored.

A program of preliminary prospecting and sampling was conducted by Rangex Services during the summer of 1988 to evaluate the potential of the property.

## **LOCATION, ACCESS AND GEOGRAPHY**

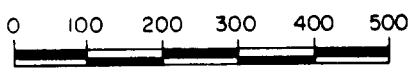
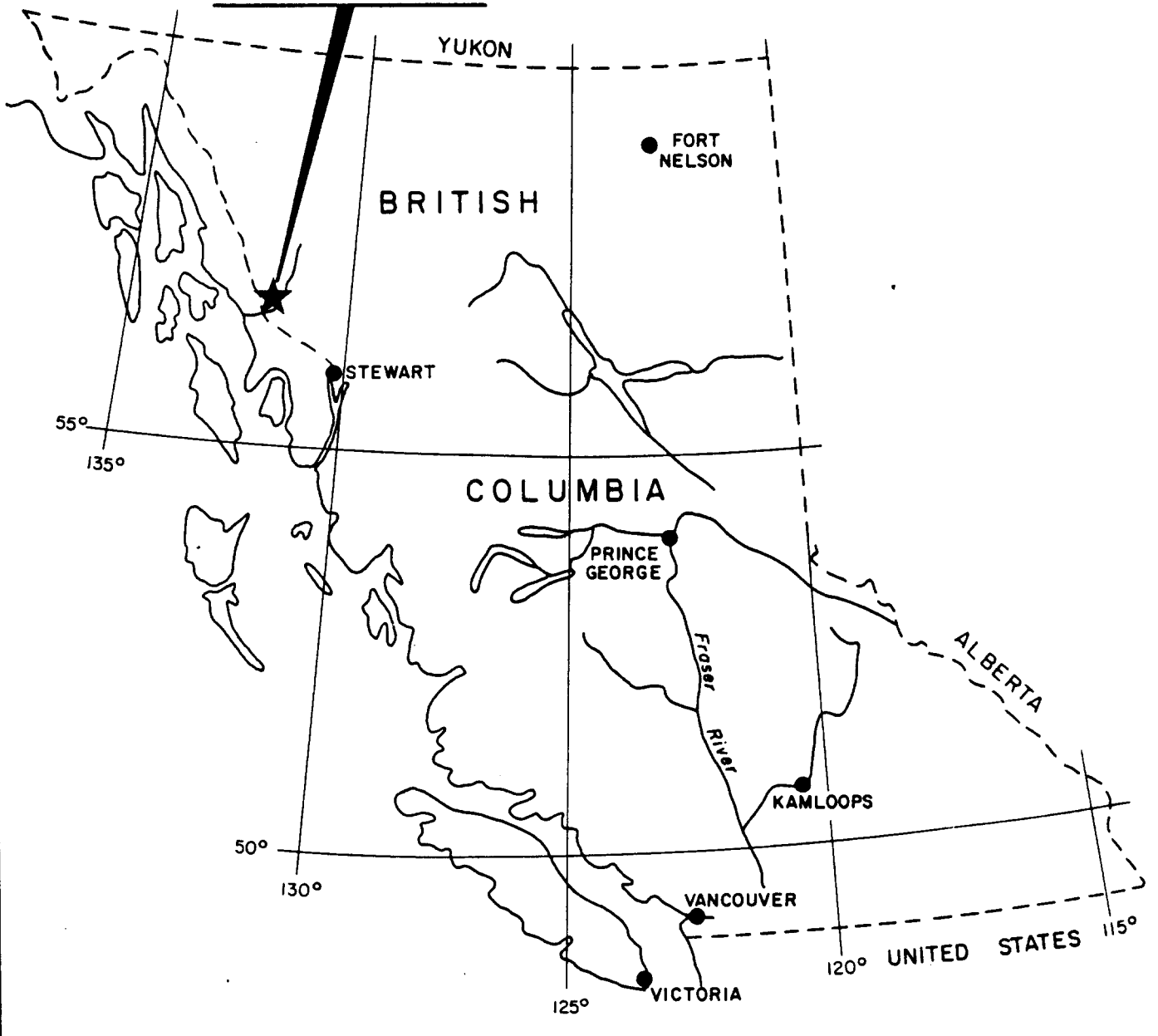
The claim group is situated approximately 135 km north of Stewart, B.C. centered at 56° 58' north latitude and 130° 52' west longitude in the Liard Mining Division of British Columbia.

Access to the claims is via helicopter or foot traverse from a base camp at the headwaters of Forrest Kerr Creek, 56° 56' north longitude, 130° 48' west longitude. Regular fixed wing flights from Smithers, B.C. service the Forrest Kerr camp.

Topographically, the Iskut area is extremely rugged, ranging in elevations from 100 metres to in excess of 2,000 metres. Spruce and alder represent the general vegetation while above treeline (900-1,000 m) alpine vegetation such as white and purple heather are present.

The Rest 3, 4, Ker 8, B1 and B2 mineral claims lie between 600 and 1,400 metres at the headwaters of Forrest Kerr Creek. The southern portion of the claims cover an island between the toes of the Forrest Kerr glacier and its associated moraine. The northern claims are heavily wooded with steep sided drainages with thick slide alder growth.

**ISKUT RIVER  
MINERAL CLAIMS**



KESTREL RESOURCES LTD.		
ISKUT RIVER MINERAL CLAIMS		
<b>INDEX MAP</b>		
LIARD MINING DIVISION, B.C.		
RANGEX SERVICES		
Drawn By: Meridian Map		<b>FIG.</b> 1
Scale 1:10,000,000	Date: March 1989	

The area receives heavy precipitation, snow in excess of 4 metres being common during the winter. The field season extends from June to mid-October.

### CLAIM INFORMATION

The Rest 3, 4, Ker 8, B1 and B2 mineral claims consisting of 74 units are owned by Kestrel Resources Ltd. All legal corner posts were located and appear to be in accordance with the British Columbia Mineral Act.

Claim information is as follows:

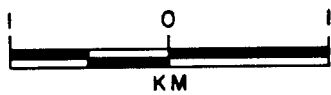
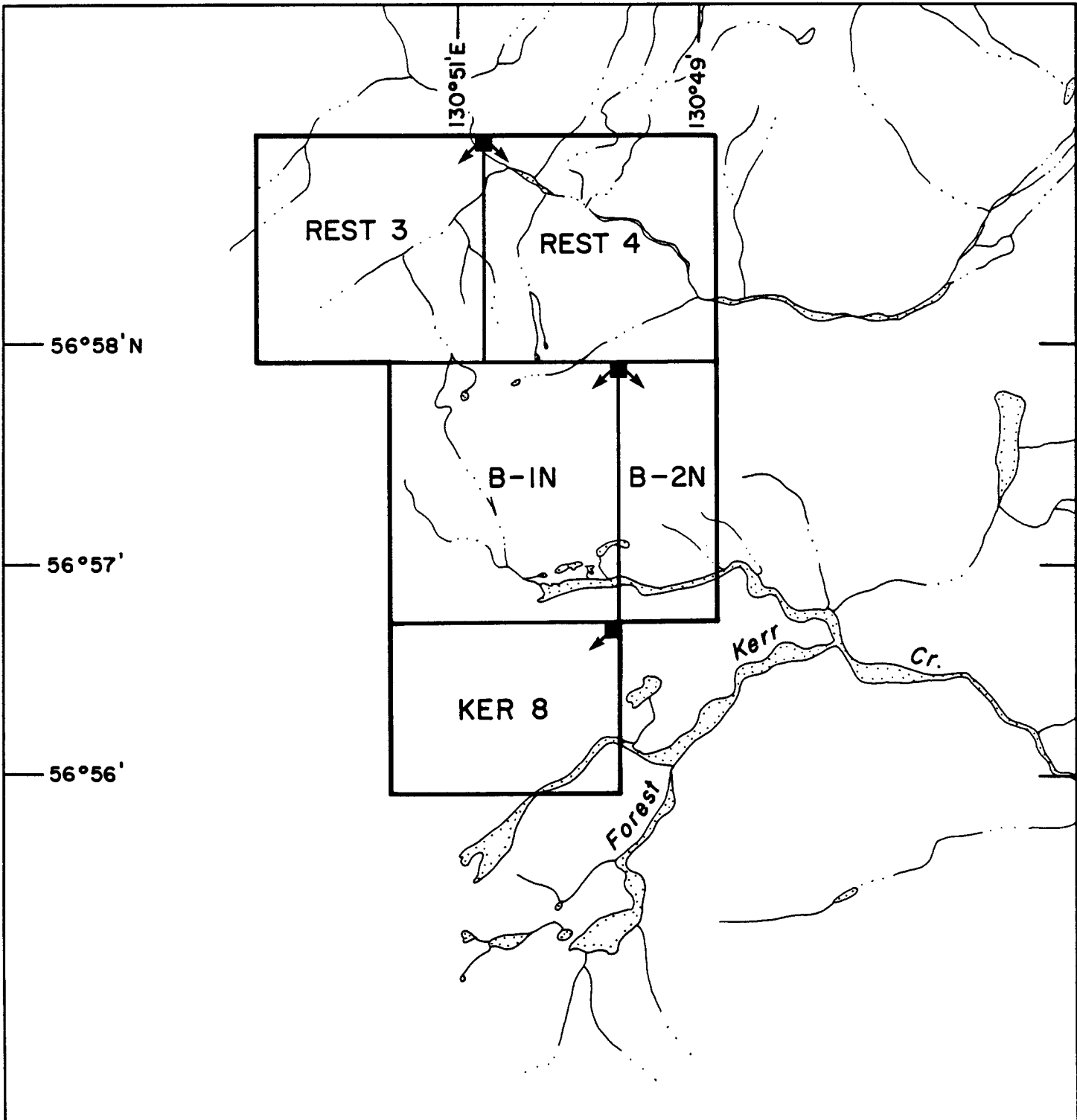
<u>Claim Name</u>	<u>Units</u>	<u>Record #</u>	<u>Record Date</u>
Rest 3	16	3983	March 10, 1987
Rest 4	16	3984	March 10, 1987
Ker 8	12	4751	June 28, 1988
B1	20	5165	August 29, 1988
B2	10	5166	August 29, 1988

### AREA HISTORY

There is no recorded work from the Iskut River region prior to 1907 when a staking party from Wrangell, Alaska, recorded nine mineral claims north of Johnny Mountain. Iskut Mining Company worked these crown granted claims undertaking trenching and drifting on veins yielding Galena, gold and silver. The 1917 Minister of Mines annual report states the Iskut Mining Company shipped a ton of ore which yielded, in 1917 currency, \$1.20 in gold, 44.2 ounces of silver and 12.45 percent copper.

Hudson Bay Mining & Smelting Ltd. located high grade gold, silver and lead in float during 1954. This was known as the Pick Axe showing and forms part of Skyline Explorations Stonehouse Gold deposit on Johnny Mountain.

Throughout the 1960's several major mining companies undertook exploration programs in the Johnny Mountain and Sulphurets Creek region. This work resulted in the discovery of several porphyry copper-molybdenum targets. Cominco completed several core holes on Johnny Mountain in 1965.



KESTREL RESOURCES LTD.		
REST 3-4 , B 1-2N AND KER 8 CLAIMS		
<b>CLAIM MAP</b>		
LIARD MINING DIVISION , B.C.		
RANGEX SERVICES		
Drawn By : Meridian Map	Map Sheet : 104B / 15W	<b>FIG.</b> 2
Scale : 1 : 50000	Date : March 1989	



Skyline staked and the Inel property in 1969 following the discovery of massive sulphide in float on the Bronson Glacier and later in 1980 restaked the Reg property. During the period of 1981 to present Skyline has developed both these properties discovering high grade veins and polymetallic massive sulphide mineralization on the Inel and Reg properties.

As of January, 1988, GROVE, E.W., reported reserves from the Stonehouse Gold Deposit of 851,170 tons grading 25.0 Au g/tonne 29.1 Ag g/tonne and 0.76% Cu.

Delaware Resources Ltd. completed 10,000 metres of diamond drilling on their Cominco Snip claims located directly north of the Stonehouse Gold Deposit. This exploration resulted in estimated reserves of 997,810 tonnes grading 24.0 Au g/tonne. During the 1988 season an underground program was initiated on this deposit.

Newmont Mining Corporation of Canada Ltd. staked 324 claims (Dirk Claim Group) west of Newmont Lake in 1962. An exploration program of geological mapping, airborne and ground magnetics survey, sampling and diamond drilling was conducted to explore the skarn type mineralization discovered on the Dirk and Ken showings. Intersections of 0.23% Cu and 3.4 Ag g/tonne over 15.85 metres were reported from the Ken showing while Hole 4 on the Dirk showing returned assays of 0.30% Cu over 1.83 metres.

Gulf International Minerals staked the McLymont claims south of Newmont Lake in 1986. These claims had been staked by Dupont Canada Explorations Ltd. in 1980 as the Warrior claims and optioned to Skyline Explorations Ltd. and Placer Development Ltd. Exploration has extended the existence of quartz - pyrite - chalcopyrite veins which retain values of up to 102.8 Au g/tonne. Gulf International Minerals has conducted extensive diamond drilling on the McLymont claims reporting in their 1987 Annual Report, drilling results of up to 55.0 Au g/tonne, 1,362.1 Ag g/tonne and 0.97% Cu over 11.12 metres.

A number of exploration companies examined claims in the Arctic Lake area approximately 75 kilometres north of the Skyline Cominco deposits.

Kennco Exploration conducted a program of geological mapping on the Bam Claim group in 1965. Mitsui Mining and Smelting Co. Ltd. undertook geological mapping and silt sampling in the Arctic and Big A Groups during 1968.

## REGIONAL GEOLOGY

The Iskut area lies within a complex geological setting of the Circum-Pacific orogenic belt of North America. Specifically it forms a part of the geological setting defined by Grove as the Stewart Complex. Grove E.W. (1986) states the following:

"The Stewart Complex lies along the contact between the Coast Plutonic Complex on the west, the Bowser Basin on the east, Alice Arm on the south and the Iskut River on the north."

Government workers have attempted, since 1948, to clarify relationships and assign ages to the various lithological units of the area, and to trace structural events affecting these units. This work has not been entirely successful, however, due to the extremely inaccessible terrain and difficult physical conditions confronting workers.

Mineral exploration studies carried out by private companies have added significantly to the geological knowledge of the area, but are not generally available publicly. Work completed by Kerr, 1948, G.S.C. Memoir 246; G.S.C maps 9-1957 and 1418-1979 - "Iskut River", form the basis of government mapping. Private companies active in the area since the early 60's include Newmont, Kennco, Cominco, Skyline and others too numerous to list.

The oldest known rocks of the area are limestone, dolomite and low grade metamorphosed sediments (quartzite, slates, phyllite) of lower Cambrian age that have been correlated with the Cache Creek Group prevalent in the southern half of the province. The limestone unit contains fossil crinoids and is unconformably overlain by upper Triassic Hazelton Volcanics and sediments. Bivalve fossils found west of Newmont Lake date these rocks as late Triassic and correlation of these rocks with both Stuhini volcanics and Unuk River formation has been attempted by various workers.

Overlying the Triassic Hazelton volcanic-sedimentary assemblage is a similar group of volcanic-sedimentary rocks of middle Jurassic age named the Betty Creek Formation.

Cretaceous to Tertiary Coast Plutonic intrusions of granite, granodiorite, and diorite occupy large plutons of the map area. In addition smaller bodies of monzonite or syenite as well as subvolcanic acidic porphyries are sparsely distributed.

Tufa, hot spring deposits and pyroclastic material of Pleistocene and Recent age occur at several localities within the area, notably at Hoodoo Mountain.

Schistose rocks, although present in the area are not of great lateral extent and owe their origin to deformation metamorphism, rather than high temperature regional metamorphism.

Structurally, the map area is bisected by a prominent thrust fault along the Iskut River from Forrest Kerr Creek to the Stikine River Junction. The thrust separates unconformably, Mississippian-Pennsylvanian rocks from middle Jurassic strata and is thought to override rock formations to the south. Regionally, a dominant northeast trending and a subdominant northwest trending fault system complicate the local geology, especially where folding of the strata, which is common, has occurred.

## **PROPERTY EXPLORATION**

A crew of six people prospected and sampled the B1, B2, Ker 8, Rest 3 and Rest 4 mineral claims throughout the summer of 1988. Work was undertaken from Forrest Kerr Camp.

A total of 177 rock chip samples and 4 silt samples were collected from the property. The samples were shipped to Van Geochem Lab Ltd. for analysis for gold (ppb) and silver (ppm) using fire assay, geochemical analysis, and atomic absorption techniques.

# LEGEND

## SEDIMENTARY AND VOLCANIC ROCKS

CENOZOIC

**QUATERNARY  
RECENT**

**20** Unconsolidated glacial and fluvial clay, silt, sand, gravel; till; peat, muskeg

**19** Tufa, hot spring deposits

**18** Olivine basalt, ash, cinders

**TERTIARY  
PLEISTOCENE AND (?) EARLIER**

**17** Basalt, rhyolite, ash, tuff, agglomerate; locally may include 16; 17a, rhyolite, pisolitic siliceous tuff, chalcidonic rhyolite breccia

**EOCENE**

**16** Basalt, rhyolite and associated volcanic rocks; minor conglomerate, sandstone, shale

**CRETACEOUS AND TERTIARY  
UPPER CRETACEOUS AND PALEOCENE**

**15** Conglomerate, sandstone, shale, minor coal

**CRETACEOUS  
POST LOWER CRETACEOUS**

**14** Volcanic rocks, breccia

**JURASSIC AND CRETACEOUS  
UPPER JURASSIC AND LOWER CRETACEOUS**

**12** Argillite, greywacke, conglomerate, coal; 12a, andesite, chert; tuff, conglomerate, shale, greywacke

**JURASSIC  
LOWER AND MIDDLE JURASSIC**

**11** Conglomerate, greywacke, grit, siltstone, shale; 11a, may include younger rocks

**TRIASSIC**

**8** Tuff, siltstone, limestone, conglomerate, breccia

**PERMIAN AND/OR TRIASSIC**

**7** 7, Volcanic and sedimentary rocks undivided; 7a, mainly andesitic and basaltic volcanic rocks; flows, breccia, tuff breccia, tuff; 7b, mainly greywacke, siltstone, conglomerate; 7c, mainly limestone

MESOZOIC

**CRETACEOUS AND /OR EARLIER  
PRE UPPER CRETACEOUS**

**13** Mainly volcanic rocks; minor conglomerate, greywacke; chert, argillite

**JURASSIC AND /OR EARLIER  
PRE UPPER JURASSIC**

**9 10** 9. Mainly volcanic rocks; minor conglomerate; greywacke, argillite  
10. Mainly sedimentary rocks

**PALAEZOIC**

**PERMIAN AND (?) EARLIER**

- 6** Limestone, greenstone, chert, argillite, phyllitic quartzite, greywacke; meta-andesite and meta-diorite locally abundant near ultramafic bodies. May include younger greenstone; 6a, Carboniferous or Permian, mainly andesitic flows, breccia, tuff; minor sedimentary rocks

**DEVONIAN AND MISSISSIPPIAN**

**UPPER DEVONIAN AND MISSISSIPPIAN**

- 5** Chert, argillaceous quartzite, argillite, greywacke, greenstone, conglomerate, limestone

**DEVONIAN**

**MIDDLE DEVONIAN**

- 4** Limestone, dolomite, quartzite

**ORDOVICIAN AND SILURIAN**

**UPPER ORDOVICIAN AND LOWER SILURIAN**

- 3** Limestone, cherty limestone, quartzite, red and green chert, shale

**CAMBRIAN AND ORDOVICIAN**

**MIDDLE AND (?) UPPER CAMBRIAN, LOWER AND MIDDLE ORDOVICIAN**

- 2** Shale, phyllite, slate, calcareous slate, limestone

**CAMBRIAN**

**LOWER CAMBRIAN**

- 1** Limestone, dolomite, quartzite, slate, phyllite

**INTRUSIVE ROCKS**

- A** Felsite, felsite porphyry
- B** Mainly quartz monzonite, granodiorite, granite
- C** Mainly diorite; minor gabbro
- D** Granite porphyry, granophyre, syenite and related rocks
- E** Serpentinite, peridotite; locally includes meta-andesite and meta-diorite

## METAMORPHIC ROCKS

### TRIASSIC OR EARLIER

**F** Phyllite, sericite schist, hornfels, granulite, fine-grained biotite-hornblende gneiss; Fa, may include or be equivalent to 9

### PERMIAN AND/OR EARLIER

#### PRE MIDDLE PERMIAN

**G** Ga, Gneiss; Gb, phyllite, quartzite, minor crystalline limestone, highly altered and sheared greywacke and volcanic rock

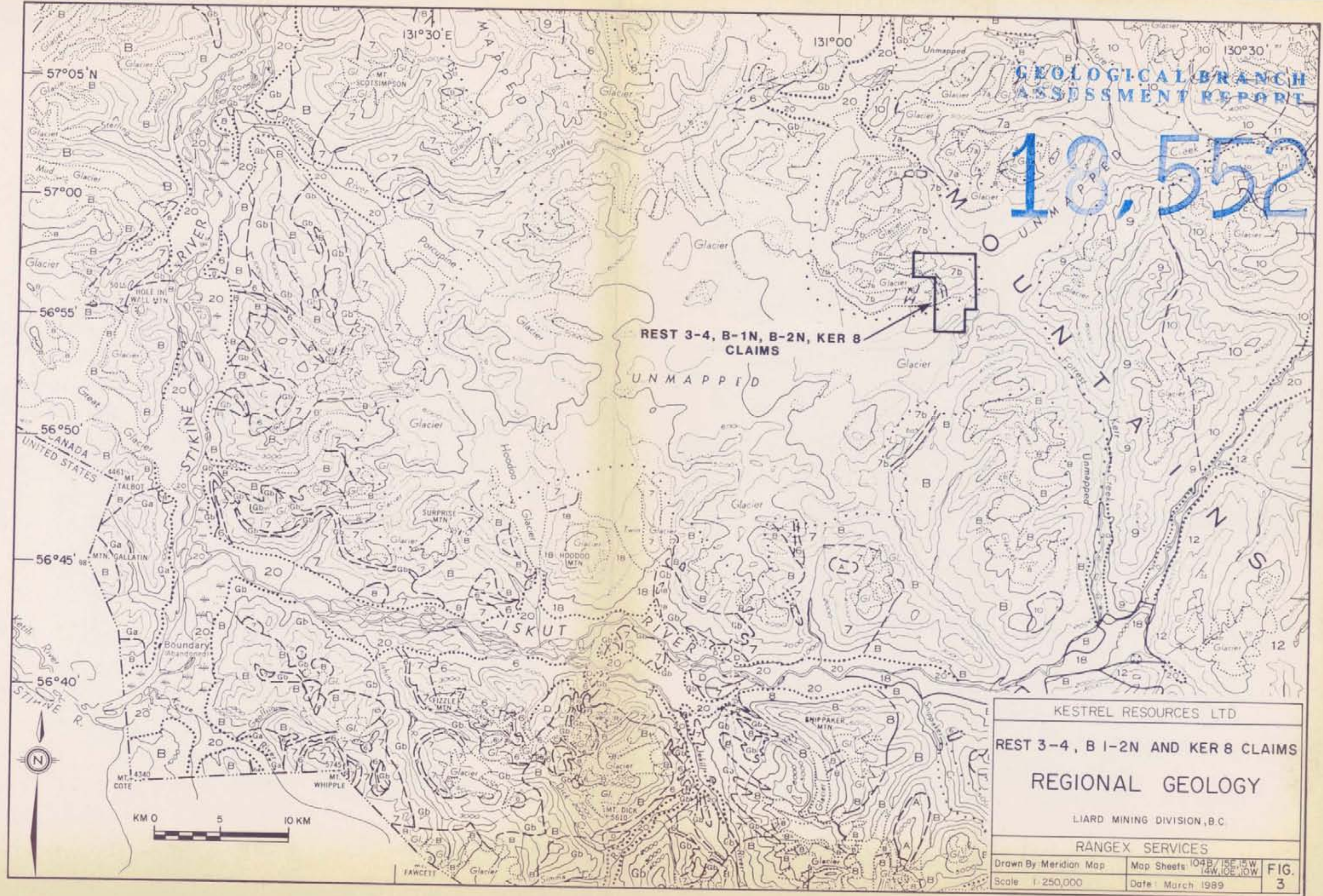
#### MAINLY CARBONIFEROUS AND PERMIAN

**H** Biotite-quartz-feldspar gneiss, biotite-muscovite schist, crystalline limestone, greenstone, quartzite, phyllite

#### MISSISSIPPIAN AND EARLIER

**J** Gneiss, schist, crystalline limestone, crystalline dolomite, quartzite

18,552



KESTREL RESOURCES LTD		
REST 3-4, B 1-2N AND KER 8 CLAIMS		
REGIONAL GEOLOGY		
LIARD MINING DIVISION, B.C.		
RANGEX SERVICES		
Drawn By: Meridian Map	Map Sheets: 104B/15E, 15W 14W, 10E, 10W	FIG. 3
Scale: 1:250,000	Date: March, 1989	

Sample locations and results of analytical data are plotted on Figures 4. Analytical data is presented in Appendix IV.

### PROSPECTOR'S REPORT

The B1, B2, Ker 8, Rest 3 and Rest 4 group is made up of an andesite unit in the southern part of Rest 3 that carries quartz veining, carbonate and chlorite alteration with areas of quartz breccia and epidote veins carrying up to 20% chalcopryrite and 10% pyrite. Slightly anomalous values to 90 ppb gold were noted. The B1, B2 and Ker 8 units are made up of volcanic rocks intruded by monzonite evident on the west side of the claim blocks. An assembly of andesite breccia with cherty sediments and dolomites is also present. Mineralization is carried along two weakly fractured systems trending between Az 000° - 040/90° and Az 130/50°. The north trending system appears to carry stronger mineralization with pyrite and chalcopryrite in quartz across an area of one kilometre.

Anomalous values were as follows:

<u>Claim</u>	<u>Sample #</u>	<u>Ag(ppm)</u>	<u>Au(ppb)</u>	<u>opt Au</u>	<u>Description</u>
Ker 8	32394		640		a 3 inch by 20 foot long quartz carbonate alteration vein carrying pyrite and up to 10% chalcopryrite and malachite
	32395		600		grab sample of 32394 vein
	32396		700		grab sample of 32394 vein
	32397	-	1090	0.035	grab sample 32394 vein
	32399	50	580		bornite vein ½ inch by 5 feet long in quartz porphyry with malachite
	32400	44			4 inch wide by 40 foot long shear carrying disseminated pyrite in quartz carbonate breccia with small stringers of bornite and malachite



<u>Claim</u>	<u>Sample #</u>	<u>Ag(ppm)</u>	<u>Au(ppb)</u>	<u>opt Au</u>	<u>Description</u>
	32535	-	4800	0.134	in 8-24 inch by 60 foot long quartz carbonate alteration vein
	32885	-	4400	0.146	grab sample of 32535
	32887	-	3100	0.117	grab sample of 32535
	32889	-	3500	0.114	grab sample of 32535
	32778	11.0	1520	0.043	½ inch by 25 foot quartz fracture filling with pyrite
	32867	-	1090	0.044	grab sample of 32778
	32872	-	1350	0.036	grab sample of 32778
	32788	-	880		2 inch by 120 foot long quartz-quartzite alteration carrying massive pyrite and chalcopyrite
B1	32875	-	850	-	grab sample 32788
	32790	-	2400	0.062	small quartz altered stringer carrying pyrite, chalcopyrite, pyrrhotite and chlorite along side of syenite contact
	32860	-	4200	0.148	grab sample 32790
	32863	-	2750	0.114	grab sample 32790
	32873	-	510	-	pyrite in quartz shear in andesite
	32875	-	850	-	2-12 inch wide by 120 foot quartz-quartzite alteration with massive pyrite and arsenopyrite
	32878	-	780	-	2-4 inch wide by 20 feet long quartz vein with quartz breccia carrying massive pyrite
	32881	-	1280	0.038	re-sample of 32394
	32882	-	510	-	frothy quartz in fracture carrying chalcopyrite and massive pyrite

<u>Claim</u>	<u>Sample #</u>	<u>Ag(ppm)</u>	<u>Au(ppb)</u>	<u>opt Au</u>	<u>Description</u>
B1	32883	17.5	-	-	re-sample of 32399
Ker 8	32006	7.6	5760	0.160	10 foot by 15 foot long quartz stringer zone carrying pyrite and chalcopyrite
	32049	-	1750	0.057	chip sample 32006
	32050	-	4400	0.163	grab sample 32006
	32201	-	2350	0.073	grab sample 32006
	32055	11.0	760	-	3 inch wide by 3 foot long fracture filling carrying pyrite and chalcopyrite
	32161	-	5000	0.158	grab sample 32006
	32162	-	1400	0.032	2 inch wide by 3 foot long quartz carbonate vein carrying pyrite
	32165	-	3100	0.098	1 foot by 15 foot long quartz calcite shear zone with 15% pyrite
	32168	-	920	0.027	1-2 inch wide quartz calcite fracture fillings with quartz
	32170	-	1810	0.054	2 inch wide pyrite vein in altered limestone
	32527	-	1280	-	quartz stringer in pyrite carrying chalcopyrite

#### RECOMMENDATIONS

- 1) Further prospecting and sampling;
- 2) Establish a grid with closely spaced lines and sampling stations at 25 metres intervals;
- 3) Channel sample anomalous zones;
- 4) Detailed geological mapping;

A budget will be submitted when required.

**APPENDIX I**

**PROGRAM COST**

**PROGRAM COSTS**  
**B1, B2, Ker 8, Rest 3 and Rest 4**

**Wages (July 2 - October 9, 1988)**

Ray Cournoyer	11 days @ \$225.00/day	\$ 2,475.00
Ron Riedel	7.5 days @ \$200.00/day	1,500.00
Dave Hagemoen	3.5 days @ \$175.00/day	612.50
Ian Hagemoen	6.5 days @ \$250.00/day	1,625.00
John Buccholtz	6 days @ \$225.00/day	1,350.00
Kelly Kaye	2.75 days @ \$200.00/day	<u>550.00</u>

**Total Wages**

**\$ 8,112.50**

**Expenses**

Room and board	4,192.66
Expendables	423.17
Rentals	149.75
Travel and accommodation	217.92
Freight	1,192.01
Expediting	166.14
Fixed wing	1,100.96
Helicopter	3,609.12
Assaying	2,423.00
Report costs	<u>1,000.00</u>

**Total Expenses**

**14,474.73**

**TOTAL**

**\$22,587.23**

APPENDIX II

BIBLIOGRAPHY

## **BIBLIOGRAPHY**

**Kerr, F.A. (1948): G.S.C. Memoir 246 Lower Stikine, Western Iskut River Areas, B.C.**

**Grove, E.W. (1986): Geological Report, Exploration and Development Proposal on the Skyline Exploration Ltd. Reg Property.**

**Castin, C.T. (1973): Report on Geological, Geophysical and Physical Work Dirk Claim Group Newmont Mines.**

**Assessment Report 4150 Province of B.C.**

**Davis R.E. (1987): Progress Report McLymont Claim Group - News Release for Gulf International Minerals Ltd.**

**APPENDIX III**

**STATEMENT OF QUALIFICATIONS**

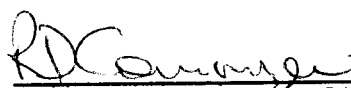
## STATEMENT OF QUALIFICATIONS

I, RAYMOND D.E. COURNOYER, of Site L, R.R. 1, Kispiox Valley Road, Hazelton, B.C. in the Province of British Columbia do hereby certify:

- 1) I am employed by Rangex Services with offices at 1124 - 470 Granville Street, Vancouver, B.C.
- 2) I am a graduate of the Ministry of Energy, Mines and Petroleum Resources' advanced prospecting course (1987).
- 3) I have practiced my profession of prospecting since 1980.
- 4) I have personally prospected the properties described within this report.
- 5) I have no interest in any of the properties described herein, nor do I expect to receive any such interest.
- 6) That I hereby authorize Kestrel Resources Ltd. to present this report or part thereof, in any prospectus or other documentation required by any regulatory body.

DATED at Vancouver, British Columbia, this  
1989.

22 day of Feb. ,

  
RAYMOND D.E. COURNOYER



APPENDIX IV

ASSAY CERTIFICATES

REPORT #: 881865 DA

RANGEX Project: B-1.N

Page 1 of 3

Sample Number	Jobno	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	W ppm	Ag oz/st	Au oz/st
02185	881503	--	--	--	--	0.9	60	--	--	--
02186	881503	--	--	--	--	0.6	515	--	--	--
02187	881503	--	--	--	--	0.2	<5	--	--	--
02188	881503	--	--	--	--	<0.1	60	--	--	--
02189	881503	--	--	--	--	3.6	420	--	--	--
02190	881503	--	--	--	--	0.6	50	--	--	--
02191	881503	--	--	--	--	2.3	620	--	--	--
02192	881503	--	--	--	--	1.9	150	--	--	--
02193	881503	--	--	--	--	5.5	600	--	--	--
32284	881240	--	--	--	--	2.2	100	--	--	--
32285	881240	--	--	--	--	<0.1	10	--	--	--
32286	881240	--	--	--	--	<0.1	10	--	--	--
32287	881240	--	--	--	--	<0.1	30	--	--	--
32288	881240	--	--	--	--	0.2	<5	--	--	--
32289	881240	--	--	--	--	0.2	30	--	--	--
32290	881240	--	--	--	--	1.2	20	--	--	--
32291	881240	--	--	--	--	1.8	80	--	--	--
32292	881240	--	--	--	--	<0.1	<5	--	--	--
32299	881284	--	--	--	--	0.9	<5	--	--	--
32392	881294	--	--	--	--	<0.1	<5	--	--	--
32393	881294	--	--	--	--	3.3	<5	--	--	--
32394	881294	--	--	--	--	<0.1	640	--	--	--
32395	881294	--	--	--	--	0.6	600	--	--	--
32396	881294	--	--	--	--	5.6	780	--	--	--
32397	881294	--	--	--	--	1.5	1090	--	--	0.035
32398	881294	--	--	--	--	0.8	20	--	--	--
32399	881294	--	--	--	--	>50.0	580	--	--	--
32400	881294	--	--	--	--	7.6	440	--	--	--
32401	881294	--	--	--	--	<0.1	10	--	--	--
32402	881294	--	--	--	--	19.3	20	--	--	--
32535	881240	--	--	--	--	7.4	4800	--	--	0.134
32536	881240	--	--	--	--	0.3	30	--	--	--
32537	881240	--	--	--	--	5.4	100	--	--	--
32538	881240	--	--	--	--	<0.1	<5	--	--	--
32539	881240	--	--	--	--	<0.1	10	--	--	--
32540	881240	--	--	--	--	<0.1	<5	--	--	--
32541	881240	--	--	--	--	0.1	20	--	--	--
32542	881240	--	--	--	--	1.0	270	--	--	--
32543	881294	--	--	--	--	<0.1	<5	--	--	--

Minimum Detection 650001 1 1 2 1 0.1 5 3 0.01 0.005  
 Maximum Detection 999999 1000 20000 20000 20000 50.0 10000 1000 999.00 10.000  
 < = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum



# VANGEOCHEM LAB LIMITED

**MAIN OFFICE**  
 1988 TRIUMPH ST.  
 VANCOUVER, B.C. V5L 1K5  
 ● (604) 251-5656  
 ● FAX (604) 254-5717

**BRANCH OFFICES**  
 PASADENA, NFLD.  
 BATHURST, N.B.  
 MISSISSAUGA, ONT  
 RENO, NEVADA, U.S.A

REPORT #: 881865 DA

RANGEX Project: B-1.N

Page 2 of 3

Sample Number	Jobno	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	H ppm	Ag oz/st	Au oz/st
32544	881294	--	--	--	--	<0.1	50	--	--	--
32545	881294	--	--	--	--	<0.1	<5	--	--	--
32546	881294	--	--	--	--	<0.1	70	--	--	--
32547	881294	--	--	--	--	<0.1	<5	--	--	--
32548	881294	--	--	--	--	0.9	10	--	--	--
32549	881294	--	--	--	--	<0.1	<5	--	--	--
32774	881240	--	--	--	--	<0.1	40	--	--	--
32775	881240	--	--	--	--	0.1	30	--	--	--
32776	881240	--	--	--	--	0.5	10	--	--	--
32777	881240	--	--	--	--	<0.1	<5	--	--	--
32778	881240	--	--	--	--	11.0	1520	--	--	0.043
32779	881240	--	--	--	--	<0.1	70	--	--	--
32780	881240	--	--	--	--	<0.1	<5	--	--	--
32781	881240	--	--	--	--	<0.1	<5	--	--	--
32782	881240	--	--	--	--	<0.1	30	--	--	--
32783	881240	--	--	--	--	0.1	10	--	--	--
32784	881240	--	--	--	--	0.2	30	--	--	--
32785	881240	--	--	--	--	0.6	400	--	--	--
32786	881240	--	--	--	--	<0.1	70	--	--	--
32787	881240	--	--	--	--	2.8	<5	--	--	--
32788	881240	--	--	--	--	0.6	880	--	--	--
32789	881240	--	--	--	--	0.2	90	--	--	--
32790	881294	--	--	--	--	1.1	2400	--	--	0.062
32791	881294	--	--	--	--	<0.1	50	--	--	--
32792	881294	--	--	--	--	<0.1	30	--	--	--
32793	881294	--	--	--	--	<0.1	20	--	--	--
32794	881294	--	--	--	--	<0.1	<5	--	--	--
32860	881503	--	--	--	--	2.9	4200	--	--	0.148
32861	881503	--	--	--	--	0.6	25	--	--	--
32862	881503	--	--	--	--	0.5	10	--	--	--
32863	881503	--	--	--	--	5.5	2750	--	--	0.114
32864	881503	--	--	--	--	0.6	<5	--	--	--
32865	881503	--	--	--	--	0.3	90	--	--	--
32866	881503	--	--	--	--	0.7	<5	--	--	--
32867	881503	--	--	--	--	7.0	1090	--	--	0.044
32868	881503	--	--	--	--	0.6	75	--	--	--
32869	881503	--	--	--	--	1.4	200	--	--	--
32870	881503	--	--	--	--	1.0	60	--	--	--
32871	881503	--	--	--	--	1.0	160	--	--	--

Minimum Detection 650001 1 1 2 1 0.1 5 3 0.01 0.005  
 Maximum Detection 999999 1000 20000 20000 20000 50.0 10000 1000 999.00 10.000  
 < = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum

Sample Number	Jobno	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	W ppm	Ag oz/st	Au oz/st
32872	881503	--	--	--	--	3.1	1350	--	--	0.036
32873	881503	--	--	--	--	1.7	510	--	--	--
32874	881503	--	--	--	--	0.7	10	--	--	--
32875	881503	--	--	--	--	1.4	850	--	--	--
32876	881503	--	--	--	--	0.5	20	--	--	--
32877	881503	--	--	--	--	1.6	480	--	--	--
32878	881503	--	--	--	--	1.4	780	--	--	--
32879	881503	--	--	--	--	1.1	100	--	--	--
32880	881503	--	--	--	--	1.1	440	--	--	--
32881	881503	--	--	--	--	1.9	1260	--	--	0.038
32882	881503	--	--	--	--	1.1	510	--	--	--
32883	881503	--	--	--	--	17.5	65	--	--	--
32884	881503	--	--	--	--	0.9	<5	--	--	--
32885	881503	--	--	--	--	6.1	4400	--	--	0.146
32886	881503	--	--	--	--	1.2	80	--	--	--
32887	881503	--	--	--	--	4.4	3100	--	--	0.117
32888	881503	--	--	--	--	1.2	120	--	--	--
32889	881503	--	--	--	--	5.2	3500	--	--	0.114
32890	881503	--	--	--	--	0.7	10	--	--	--
32891	881503	--	--	--	--	0.6	50	--	--	--
32892	881503	--	--	--	--	0.4	<5	--	--	--
32893	881503	--	--	--	--	0.5	90	--	--	--
32894	881503	--	--	--	--	0.5	80	--	--	--

Minimum Detection 650001 1 1 2 1 0.1 5 3 0.01 0.005  
 Maximum Detection 999999 1000 20000 20000 20000 50.0 10000 1000 999.00 10.000  
 < = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum

REPORT #: 881865 DA

RANGEX Project: B-2.M

Page 1 of 1

Sample Number	Jobno	Mo	Cu	Pb	Zn	Ag	Au	H	Ag	Au
		ppm	ppm	ppm	ppm	ppm	ppb	ppm	oz/st	oz/st
32550	881294	--	--	--	--	<0.1	40	--	--	--
32795	881294	--	--	--	--	<0.1	10	--	--	--

Minimum Detection	650001	1	1	2	1	0.1	5	3	0.01	0.005
Maximum Detection	999999	1000	20000	20000	20000	50.0	10000	1000	100.00	10.000

< = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum

REPORT #: 881865 DA

RANGEX Project: REST 3

Page 1 of 1

Sample Number	Jobno	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	W ppm	Ag oz/st	Au oz/st
32611	881364	--	--	--	--	0.2	<5	--	--	--
32612	881364	--	--	--	--	0.3	<5	--	--	--
32613	881364	--	--	--	--	0.4	<5	--	--	--
32614	881364	--	--	--	--	0.3	<5	--	--	--
32615	881364	--	--	--	--	1.0	<5	--	--	--
32616	881364	--	--	--	--	0.4	<5	--	--	--
32617	881364	--	--	--	--	1.5	90	--	--	--
32618	881364	--	--	--	--	1.4	70	--	--	--
32619	881364	--	--	--	--	0.3	40	--	--	--
32620	881364	--	--	--	--	0.3	<5	--	--	--
32621	881364	--	--	--	--	0.2	<5	--	--	--
32622	881364	--	--	--	--	3.1	<5	--	--	--
Minimum Detection	650001	1	1	2	1	0.1	5	3	0.01	0.005
Maximum Detection	999999	1000	20000	20000	20000	50.0	10000	1000	100.00	10.000
< = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum										

REPORT #: 881865 DA

RANGEX Project: KER 8

Page 1 of 2

Sample Number	Jobno	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	W ppm	Ag oz/st	Au oz/st
32002	880696	--	--	--	--	0.3	10	--	--	--
32003	880696	--	--	--	--	0.1	20	--	--	--
32004	880696	--	--	--	--	<0.1	<5	--	--	--
32005	880696	--	--	--	--	0.1	130	--	--	--
32006	880696	--	--	--	--	7.6	5760	--	--	0.160
32007	880696	--	--	--	--	<0.1	50	--	--	--
32049	880931	--	--	--	--	1.7	1750	--	--	0.057
32050	880931	--	--	--	--	4.7	4400	--	--	0.163
32053	880696	--	--	--	--	7.5	150	--	--	--
32054	880696	--	--	--	--	0.1	30	--	--	--
32055	880696	--	--	--	--	11.0	790	--	--	--
32056	880696	--	--	--	--	0.6	60	--	--	--
32109	880845	--	--	--	--	0.4	<5	--	--	--
32110	880845	--	--	--	--	<0.1	20	--	--	--
32161	880931	--	--	--	--	8.3	5000	--	--	0.158
32162	880931	--	--	--	--	2.1	1400	--	--	0.032
32163	880931	--	--	--	--	<0.1	90	--	--	--
32164	880931	--	--	--	--	<0.1	<5	--	--	--
32165	880931	--	--	--	--	7.3	3100	--	--	0.098
32166	880931	--	--	--	--	<0.1	25	--	--	--
32167	880931	--	--	--	--	0.3	40	--	--	--
32168	880931	--	--	--	--	9.5	920	--	--	0.027
32169	880931	--	--	--	--	0.3	40	--	--	--
32170	880931	--	--	--	--	6.9	1810	--	--	0.054
32171	880931	--	--	--	--	1.1	110	--	--	--
32172	880931	--	--	--	--	1.2	400	--	--	--
32201	880931	--	--	--	--	2.3	2350	--	--	0.073
32202	880931	--	--	--	--	0.1	480	--	--	--
32203	880931	--	--	--	--	<0.1	10	--	--	--
32204	880931	--	--	--	--	<0.1	20	--	--	--
32205	880931	--	--	--	--	<0.1	160	--	--	--
32206	880931	--	--	--	--	<0.1	<5	--	--	--
32207	880931	--	--	--	--	<0.1	10	--	--	--
32208	880931	--	--	--	--	<0.1	10	--	--	--
32209	880931	--	--	--	--	0.2	50	--	--	--
32210	880931	--	--	--	--	0.1	60	--	--	--
32300	881284	--	--	--	--	0.4	240	--	--	--
32526	881240	--	--	--	--	<0.1	85	--	--	--
32527	881240	--	--	--	--	3.1	1280	--	--	--

Minimum Detection      650001      1      1      2      1      0.1      5      3      0.01      0.005  
 Maximum Detection      999999      1000      20000      20000      20000      50.0      10000      1000      100.00      10.000  
 < = Less than Minimum    is = Insufficient Sample    ns = No sample    > = Greater than Maximum

REPORT #: 881865 DA

RANGEX Project: KER 8

Page 2 of 2

Sample Number	Jobno	Mo	Cu	Pb	Zn	Ag	Au	W	Ag	Au
		ppm	ppm	ppm	ppm	ppm	ppb	ppm	oz/st	oz/st
32528	881240	--	--	--	--	<0.1	<5	--	--	--
32529	881240	--	--	--	--	<0.1	<5	--	--	--
32530	881240	--	--	--	--	<0.1	<5	--	--	--
32531	881240	--	--	--	--	<0.1	<5	--	--	--
32532	881240	--	--	--	--	<0.1	<5	--	--	--
32533	881240	--	--	--	--	<0.1	<5	--	--	--
32534	881240	--	--	--	--	<0.1	<5	--	--	--
32633	881410	--	--	--	--	1.6	<5	--	--	--
32634	881410	--	--	--	--	1.4	<5	--	--	--
32635	881410	--	--	--	--	3.1	<5	--	--	--
32636	881410	--	--	--	--	1.4	<5	--	--	--
32765	881240	--	--	--	--	0.4	90	--	--	--
32766	881240	--	--	--	--	0.3	<5	--	--	--
32767	881240	--	--	--	--	0.1	30	--	--	--
32768	881240	--	--	--	--	<0.1	<5	--	--	--
32769	881240	--	--	--	--	0.1	60	--	--	--
32770	881240	--	--	--	--	0.1	<5	--	--	--
32771	881240	--	--	--	--	<0.1	<5	--	--	--
32772	881240	--	--	--	--	<0.1	<5	--	--	--
32773	881240	--	--	--	--	0.1	50	--	--	--
32807	881284	--	--	--	--	<0.1	<5	--	--	--
32895	881503	--	--	--	--	1.2	285	--	--	--
32901	881284	--	--	--	--	0.4	<5	--	--	--

Minimum Detection 650001 1 1 2 1 0.1 5 3 0.01 0.005  
 Maximum Detection 999999 1000 20000 20000 20000 50.0 10000 1000 100.00 10.000  
 < = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum





# VANGEOCHEM LAB LIMITED

MAIN OFFICE AND LABORATORY  
1988 Triumph Street  
Vancouver, B.C. V5L 1K5  
(604)251-5656 FAX:254-5717

BRANCH OFFICE  
1830 PANDORA ST.  
VANCOUVER, B.C. V5L 1L8  
(804) 251-6668

REPORT NUMBER: 880726 GA    JOB NUMBER: 880726    RANGEI SERVICES    KER B    PAGE 1 OF 1

SAMPLE #	Ag ppm	Au ppb
KB RRS - 4	.1	30
KRB RCS - 1	.2	30

DETECTION LIMIT                    0.1                    5  
nd = none detected                    -- = not analysed                    is = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE AND LABORATORY  
1988 Triumph Street  
Vancouver, B.C. V5L 1K5  
(604) 251-5656 FAX: 254-5717

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L8  
(604) 251-5656

REPORT NUMBER: 881341 GA

JOB NUMBER: 881341

RANGEI SERVICES LTD.

B-1

PAGE 1 OF 1

SAMPLE #	Ag ppm	Au ppb
B1-RCS-40	.1	10

DETECTION LIMIT            0.1        5  
nd = none detected        -- = not analysed        is = insufficient sample

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1988 TRIUMPH STREET, VANCOUVER B.C. V5L 1K5 PH: (604)251-5656 TELEX: 04-352578  
 BRANCH OFFICE: 1630 PANDORA STREET, VANCOUVER B.C. V5L 1L6 PH: (604)251-7282 FAX: (604)254-5717

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR SN,MM,FE,CA,P,CR,NG,BA,PB,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.  
 IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -- NOT ANALYZED

COMPANY: RANGEX  
 ATTENTION:  
 PROJECT: KER 8

REPORT#: B90023PA  
 JOB#: 890023  
 INVOICE#: 890023NA

DATE RECEIVED: 89/01/09  
 DATE COMPLETED: 89/01/13  
 COPY SENT TO:

ANALYST 

PAGE 1 OF 1

SAMPLE NAME	AG PPH	AL %	AS PPH	AU PPH	BA PPH	BI PPH	CA %	CD PPH	CO PPH	CR PPH	CU PPH	FE %	K %	MG %	MM PPH	MO PPH	NA %	NI PPH	P %	PB PPH	PD PPH	PT PPH	SB PPH	SM PPH	SR PPH	U PPH	W PPH	ZN PPH
880696 32006	7.3	.14	24	6	7	4	.43	4.1	17	51	1241	8.64	.33	.20	409	19	.01	27	.01	50	ND	ND	ND	3	6	ND	ND	342
880845 32110	.1	.31	20	ND	361	ND	11.00	.7	2	64	105	1.06	1.43	2.39	901	3	.01	9	.02	26	ND	ND	ND	1	549	ND	ND	125
880931 32162	2.4	.30	10	ND	54	ND	1.52	1.1	7	139	145	4.03	.34	.29	701	10	.01	10	.01	21	ND	ND	ND	2	45	ND	ND	70
880931 32168	10.2	.26	47	ND	21	4	2.09	3.9	6	69	702	7.42	.49	1.05	940	7	.01	8	.02	44	ND	ND	ND	3	22	ND	ND	204
881240 32284	3.5	1.01	17	ND	884	3	14.30	1.9	15	29	3499	5.10	1.00	3.99	2489	3	.01	9	.01	46	ND	ND	ND	2	159	ND	ND	121
881240 32533	.1	.04	ND	ND	202	ND	2.04	.6	8	64	325	2.99	.44	1.37	1121	3	.01	7	.07	20	ND	ND	ND	2	20	ND	ND	80
881240 32535	9.3	.33	60	5	92	5	6.02	2.1	14	49	6801	6.62	1.01	2.99	2198	6	.01	10	.02	46	ND	ND	ND	3	42	ND	ND	89
881240 32767	.4	.45	20	ND	146	4	6.65	1.7	20	21	457	6.43	1.00	3.41	2545	3	.01	10	.05	27	ND	ND	ND	2	37	ND	ND	65
881240 32774	.3	.10	216	ND	43	5	14.05	5.4	24	14	652	7.43	1.91	5.94	3921	3	.01	12	.01	50	ND	ND	3	2	70	ND	ND	499
881294 32393	4.7	.23	16	ND	920	4	8.00	1.5	13	24	7483	4.53	1.20	4.98	1937	2	.01	12	.03	41	ND	ND	ND	2	55	ND	ND	92
881294 32399	>60.0	.01	33	ND	222	ND	2.00	1.7	12	74	72073	3.74	.49	1.77	1512	4	.01	19	.04	131	ND	ND	ND	4	23	ND	ND	52
881294 32549	.1	.09	ND	ND	1309	ND	10.36	1.4	12	19	236	4.51	1.45	5.79	1814	1	.01	11	.01	23	ND	ND	ND	2	263	ND	ND	65
881294 32791	.1	.14	51	ND	100	3	15.33	1.5	14	5	275	5.77	2.10	7.95	2438	1	.01	8	.01	33	ND	ND	ND	2	54	ND	ND	136
881503 02105	.5	.22	10	ND	37	ND	3.32	1.2	10	27	1118	4.54	.56	1.96	972	4	.01	5	.03	26	ND	ND	ND	3	24	ND	ND	77
881503 02190	.5	.45	9	ND	62	ND	5.24	.8	10	38	721	4.21	.80	2.96	1659	2	.01	9	.03	27	ND	ND	ND	3	28	ND	ND	47
881503 32853	5.9	1.54	11	ND	35	ND	6.24	1.1	17	61	1024	4.10	.94	1.67	1157	4	.01	7	.02	34	ND	ND	ND	2	54	ND	ND	88
881503 32870	.5	2.05	27	ND	37	3	5.89	1.5	25	30	704	6.23	.96	2.76	2108	3	.01	8	.04	38	ND	ND	ND	3	51	ND	ND	132
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

APPENDIX V

SAMPLE DESCRIPTIONS

## B-1 N SAMPLE DESCRIPTIONS

<u>Sample #</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>	<u>Mineralization</u>
2185	Rock Chip	50 cm	carbonate int.	cpy., py., mal.
2186	Rock Chip	50 cm	carbonate vein	cpy.
2187	Rock Chip	50 cm	qtz. vein in volc.	py.
2188	Rock Chip	50 cm	qtz. vein in volc.	py., cpy.
2189	Rock Chip	1 m	qtz./carb. vein	cpy.
2190	Rock Chip	50 cm	qtz./carb. vein.	bionite
2191	Rock Chip	1.5 m	resample 32394-32397	area
2192	Rock Chip	50 cm	qtz. breccia	cpy.
2193	Rock Chip	1 m	resample of 32,400 area	
32284	Rock Chip	50 cm	calc.-silicate vein	cpy., mal.
32285	Rock Chip	1 m	calc.-silicate vein	py.
32286	Rock Chip	50 cm	qtz. vein	
32287	Float		qtz./calc./silicate float	py.
32288	Float		qtz.	py., gal.
32289	Rock Chip	50 cm	qtz., calc., silicate vein	mal., cpy., gal.
32290	Rock Chip	50 cm	qtz., calc., silicate vein	mal., cpy., gal
32291	Rock Chip	1 m	qtz., calc., silicate vein	mal., cpy., gal.
32292	Rock Chip	1.5 m	qtz., calc., silicate vein	mal., cpy., gal.
32299	Rock Chip	1 m	chert in monzonite	cpy.
32392	Rock Chip	50 cm	qtz. breccia	cpy.
32393	Rock Chip	1 m	carbonate vein	cal., mal.
32394	Rock Chip	50 cm	qtz. vein	cpy., mal.
32395	Rock Chip	50 cm	qtz./carb. vein	cpy., mal.
32396	Rock Chip	75 cm	qtz./carb. vein	cpy., py., mal.
32397	Rock Chip	75 cm	qtz./carb. vein	cpy., py., mal.
32398	Rock Chip	1 m	qtz./carb. vein	mal.
32399	Rock Chip	90 cm	qtz. vein	bor., mal.
32400	Rock Chip	70 cm	qtz./carb. shear zone	bor., mal., py.
32401	Rock Chip	80 cm	qtz./carb. vein	gal.
32402	Rock Chip	40 cm	qtz./carb. in shear zone	bor., mal.
35535	Rock Chip	40 cm	carbonate fracture filling in volcanics	cpy.
32536	Rock Chip	50 cm	qtz.-carb. vein	-
32537	Rock Chip	50 cm	andesite	cpy.

<u>Sample #</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>	<u>Mineralization</u>
32538	Rock Chip	60 cm	monzonite	
32539	Rock Chip	60 cm	monzonite	cpy., py.
32540	Rock Chip	70 cm	monzonite	py.
32541	Rock Chip	60 cm	fractures in andesite	
32542	Rock Chip	40 cm	shear in andesite	cpy., py.
32543	Rock Chip	90 cm	monzonite	py.
32544	Rock Chip	1.1 m	qtz. altered andesite	cpy.
32545	Rock Chip	1.2 m	monzonite	py.
32546	Rock Chip	90 cm	qtz./carb in monzonite	py.
32547	Rock Chip	80 cm	monzonite	py.
32548	Rock Chip	50 cm	qtz./carb. in monzonite	py.
32549	Rock Chip	50 cm	recrystallized/ms.	
32774	Rock Chip	60 cm	quartz in / ms	py.
32775	Rock Chip	40 cm	quartz breccia in shear	py., cpy.
32776	Rock Chip	40 cm	quartz breccia in shear	py., cpy.
32777	Rock Chip	70 cm	qtz. stringers in hms	py.
32778	Rock Chip	1.10 m	altered qtz. veinlet	py.
32779	Rock Chip	1.1 m	qtz. in fractures in siliceous andesite py.	aspy.
32780	Rock Chip	1.3 m	calc./chlrt altered andesite	py.
32781	Rock Chip	30 cm	syenite fracture filling	py.
32782	Rock Chip	50 cm	qtz. vein	py.
32783	Rock Chip	50 cm	qtz. stringers in syenite	py.
32784	Rock Chip	60 cm	fractures in qtz altered andesite	py., cpy.
32785	Rock Chip	40 cm	qtz. vein	py.
32786	Rock Chip	60 cm	syenite dyke on andesite contact	py.
32787	Rock Chip	70 cm	fractures in l ms.	py.
32788	Rock Chip	1 m	qtz. altered andesite	py. aspy.
32790	Rock Chip	60 cm	qtz. stringers	py., cpy., pyrr.
32791	Rock Chip	90 cm	qtz. vein	cpy., py.
32792	Rock Chip	1.1 m	fractures in qtz. carb.	py.
32793	Rock Chip	30 cm	carb. in chlrt. andesite	py.
32794	Rock Chip	40 cm	carb. in chlrt. andesite	py.
32860	Rock Chip	60 cm	resample 32790	
32861	Rock Chip	70 cm	qtz./calc. fracture filling	

<u>Sample #</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>	<u>Mineralization</u>
32862	Rock Chip	60 cm	qtz./carb. in volcanics	py.
32863	Rock Chip	60 cm	qtz./calc. vein	cpy., py.
32864	Rock Chip	1 m	calc. in volcanics	py.
32865	Rock Chip	1 m	qtz. vein	py.
32866	Rock Chip	1 m	lms	py.
32867	Rock Chip	1 m	resample 32778	
32868	Rock Chip	90 cm	resample 32779	py., mal.
32869	Rock Chip	60 cm	qtz. vein	mal.
32870	Rock Chip	30 cm	mass. py. in fracture	py.
32871	Rock Chip	1 m	mass. py. in monzonite	cpy., py.
32872	Rock Chip	1 m	qtz. fracture filling	py.
32873	Rock Chip	70 cm	qtz. fracture filling in andesite	py.
32874	Rock Chip	1 m	qtz. breccia	py.
32875	Rock Chip	1.2 m	resample 32788	
32876	Rock Chip	1.0 m	reconstituted qtz.	py.
32877	Rock Chip	60 cm	resample 32785 area	py.
32878	Rock Chip	70 cm	qtz. vein	py.
32879	Rock Chip	60 cm	qtz. vein in volcanics	py.
32880	Rock Chip	50 cm	frothy qtz. vein	py., cpy.
32881	Rock Chip	90 cm	resample 32397 area	
32882	Rock Chip	40 cm	frothy qtz. in fracture	cpy., py.
32883	Rock Chip	80 cm	resample 32399	bor.
32884	Rock Chip	30 cm	qtz. breccia	
32885	Rock Chip	50 cm	resample 32535	
32886	Rock Chip	1.2 m	resample 32535	
32887	Rock Chip	60 cm	qtz./carb. in volcanics	cpy.
32888	Rock Chip	1.5 m	qtz./carb. in volcanics	cpy., py.
32889	Rock Chip	80 cm	qtz./carb. in volcanics	cpy., py.
32890	Rock Chip	1.2 m	qtz. in volcanics	py.
32891	Rock Chip	70 cm	qtz. breccia	
32892	Rock Chip	30 cm	vuggy qtz. in shear	
32893	Rock Chip	40 cm	qtz. breccia	py.
32894	Rock Chip	60 cm	qtz. breccia	py.

## KER 8 SAMPLE DESCRIPTIONS

<u>Sample #</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>	<u>Mineralization</u>
32002	Rock Chip	80 cm	calc. veins in argillite	cpy., mal.
32003	Rock Chip	60 cm	calc. veins in argillite	cpy.
32004	Rock Chip	1 m	limonite alteration	
32005	Rock Chip	50 cm	qtz./calc. vein	py.
32006	Rock Chip	1.1 m	qtz./calc. in shear zone	
32049	Rock Chip	1.2 m	resample 32006 zone	
32050	Rock Chip	1 m	resample 32006	
32053	Rock Chip	50 cm	calcite vein	py., cpy., mal.
32054	Rock Chip	80 cm	qtz./calc. vein	fucsite
32055	Rock Chip	30 cm	fracture filling	py., mal.
32056	Rock Chip	50 cm	qtz. veins	cpy., py., mal., as.
32109	Float	-	chlrt volcanic	py.
32110	Rock Chip		chert sediment	
32161	Rock Chip	1 m	qtz. vein	cpy., py., mal.
32162	Rock Chip	40 cm	qtz./carb. vein	py.
32163	Rock Chip	40 cm	qtz./carb. vein	py.
32164	Rock Chip	1 m	qtz./calc. veins	
32165	Rock Chip	40 cm	qtz./calc. shear zone	py.
32166	Rock Chip	60 cm	qtz. vein	
32167	Rock Chip	90 cm	cherty sediment	py.
32168	Rock Chip	60 cm	resample 32055	py.
32169	Rock Chip	1 m	lms.	mass. py.
32170	Rock Chip	70 cm	lms.	py.
32171	Rock Chip	1.5 m	lms	py.
32172	Rock Chip	1.2 m	lms.	py.
32201	Rock Chip	1.2 m	resample 32006	
32202	Rock Chip	50 cm	qtz./calc. vein	cpy., py.
32203	Rock Chip	50 cm	chert band	py.
32204	Rock Chip	50 cm	chert band	py.
32205	Rock Chip	50 cm	andesite breccia	py.
32206	Rock Chip	50 cm	qtz stringers	
32207	Rock Chip	1 m	qtz vein	py.



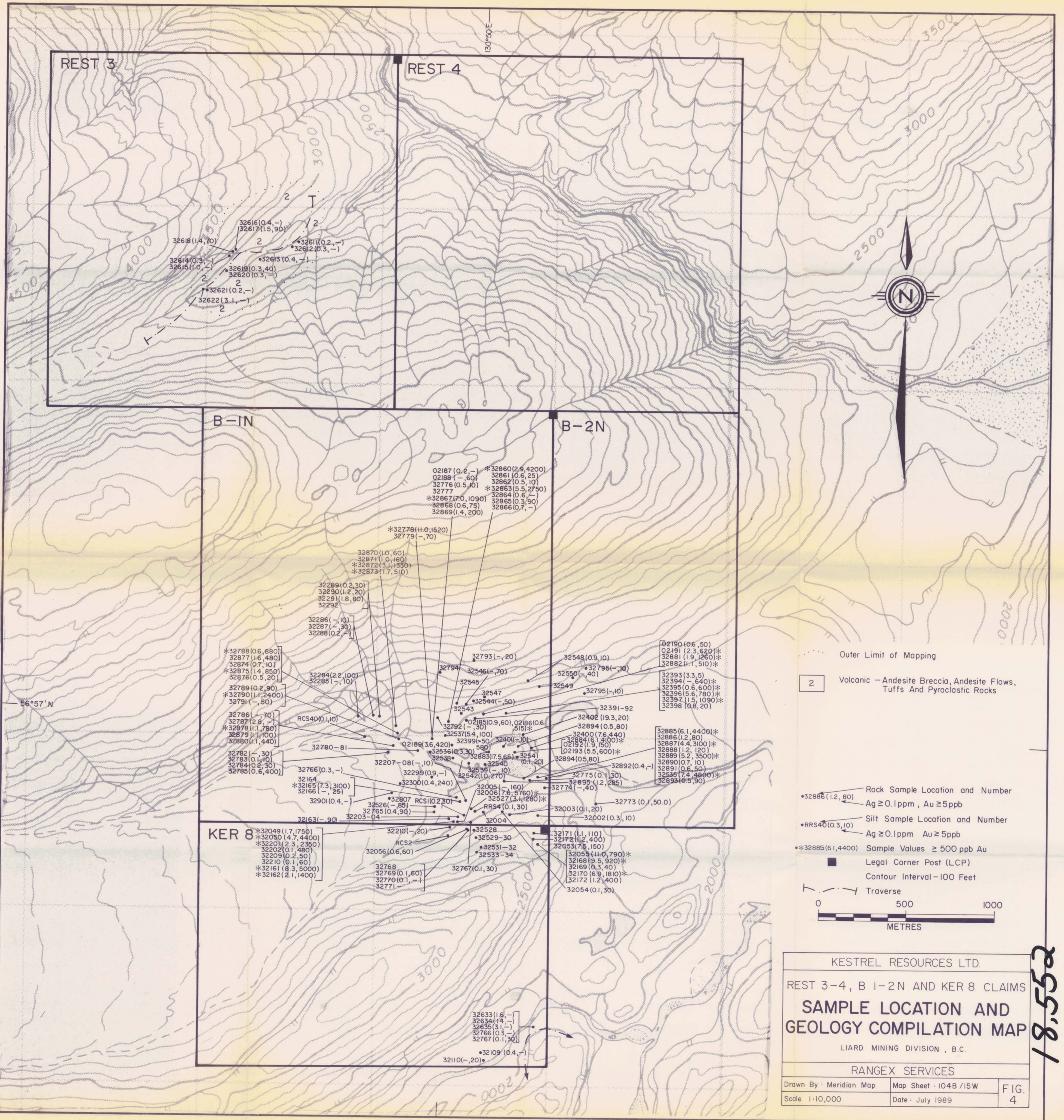
<u>Sample #</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>	<u>Mineralization</u>
32208	Rock Chip	1 m	qtz/calc.	py, cpy
32209	Rock Chip	1 m	qtz vein	
32210	Rock Chip	50 cm	chert band	py
32300	Rock Chip	1 m	fracture fillings	mass. py
32526	Rock Chip	1 m	qtz fracture fillings	cpy
32527	Rock Chip	1 m	qtz stringers in shear zone	cpy
32528	Rock Chip	1 m	qtz in shear	
32529	Rock Chip	50 cm	qtz vein	
32530	Rock Chip	50 cm	vuggy qtz vein	
32531	Rock Chip	50 cm	qtz/carb veins	
32532	Rock Chip	50 cm	qtz vein in volcanic	cpy
32533	Rock Chip	50 cm	qtz/carb vein	cpy
32534	Rock Chip	50 cm	qtz/carb vein	py
32633	Rock Chip	1 m	qtz/carb zone	py
32634	Rock Chip	1 m	qtz/carb zone	py
32635	Rock Chip	1 m	qtz vein	mass. py
32636	Rock Chip	1 m	qtz vein	py, gal
32765	Rock Chip	50 cm	qtz fracture fillings	cpy, py
32766	Rock Chip	50 cm	qtz/carb fracture fillings	
32767	Rock Chip	50 cm	qtz/carb in shear	
32768	Rock Chip	50 cm	qtz/carb in shear	cpy, py
32769	Rock Chip	50 cm	qtz in shear	
32770	Rock Chip	50 cm	qtz in stringers	
32771	Rock Chip	50 cm	qtz in shear	cpy, py
32772	Rock Chip	50 cm	qtz in shear	cpy, py
32773	Rock Chip	50 cm	qtz fracture filling	py
32807	Rock Chip	1 m	syenite body	
32895	Rock Chip	1 m	qtz breccia in shear	py
32901	Rock Chip	50 cm	fracture filling in volcanics	bol, cpy, py

### SAMPLE DESCRIPTIONS - B-2N

<u>Sample No.</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>
32550	Rock Chip	50 cm	Cpy in calcite vein
32795	"	50 cm	Py in qtz stringer

### SAMPLE DESCRIPTIONS - REST 3

<u>Sample No.</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>
32611	Rock Chip	50 cm	Py in qtz/cal vein in andesite
32612	Float		Py, epidote in siliceous andesite
32613	Rock Chip	1 m	Py, epidote in andesite
32614	"	50 cm	Py in rusty qtz vein
32615	"	50 cm	Py in qtz vein
32616	"	1.5 m	Py in qtz vein
32617	"	1 m	Cpy, mal in quartz high grade of 32616
32618	"	50 cm	Cpy, mal in andesite beside qtz vein
32619	"	5 m	Qtz/carb veins and stringers
32620	"	1 m	Cpy, mal in alt. andesite
32621	"	3 m	Chloritic qtz flow
32622	"	1 m	Py, cpy, mal in qtz/carb vein

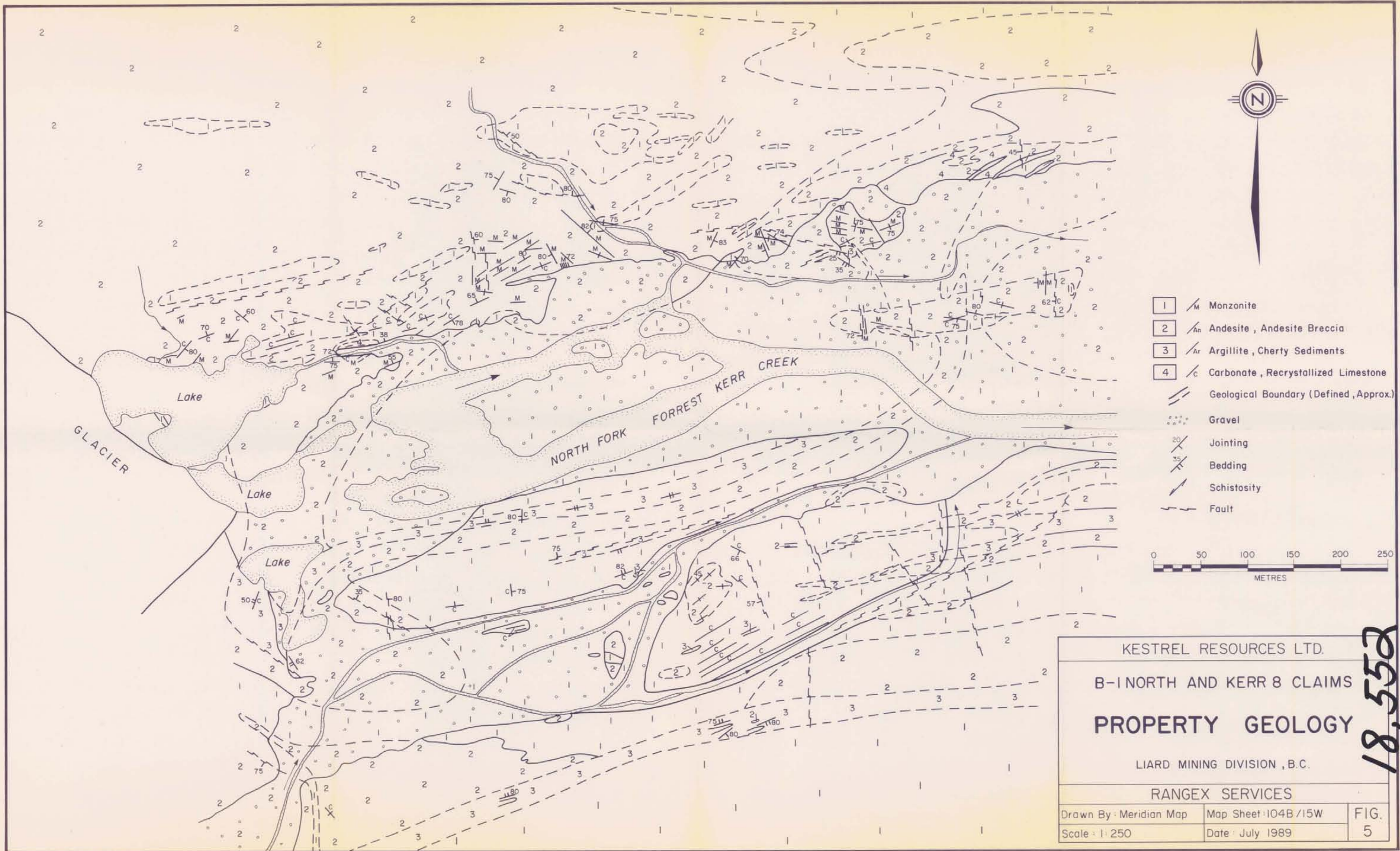


- Outer Limit of Mapping
  - 2 Volcanic - Andesite Breccia, Andesite Flows, Tuffs And Pyroclastic Rocks
  - Rock Sample Location and Number  
Ag ≥ 0.1ppm, Au ≥ 5ppb
  - Silt Sample Location and Number  
Ag ≥ 0.1ppm Au ≥ 5ppb
  - \*32885(6.1, 4400) Sample Values ≥ 500 ppb Au
  - Legal Corner Post (LCP)
  - Contour Interval - 100 Feet
  - Traverse
- 0 500 1000 METRES

KESTREL RESOURCES LTD.  
 REST 3-4, B 1-2N AND KER 8 CLAIMS  
**SAMPLE LOCATION AND GEOLOGY COMPILATION MAP**  
 LIARD MINING DIVISION, B.C.  
 RANGEX SERVICES

Drawn By: Meridian Map	Map Sheet: 104B/15W	FIG. 4
Scale: 1:10,000	Date: July 1989	

18,552



KESTREL RESOURCES LTD.

B-1 NORTH AND KERR 8 CLAIMS

**PROPERTY GEOLOGY**

LIARD MINING DIVISION, B.C.

RANGEX SERVICES

Drawn By: Meridian Map	Map Sheet: 104B/15W	FIG. 5
Scale: 1:250	Date: July 1989	

18,552