

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 90.02.24

ASSESSMENT REPORT 18447

MINING DIVISION: Liard

PROPERTY: Arc
LOCATION: LAT 57 08 00 LONG 130 53 00
UTM 09 6333589 386005
NTS 104G02W
CLAIM(S): Arc 1-5, M&M 2
OPERATOR(S): Kestrel Res.
AUTHOR(S): Cournoyer, R.D.
REPORT YEAR: 1989, 31 Pages
COMMODITIES
SEARCHED FOR: Gold, Silver
KEYWORDS: Metasediments, Shearing, Quartz veins, Pyrite, Chalcopyrite, Hematite
Bornite
WORK
DONE: Prospecting, Geochemical
PROS 1250.0 ha
Map(s) - 1; Scale(s) - 1:10 000
ROCK 33 sample(s) ;AU,AG

LOG NO: 0726	RD. 2
ACTION: Date received report back from amendments. 31 p.	
FILE NO:	

LOG NO: 0228	RD.
ACTION:	
FILE NO:	

REPORT ON THE
ARC 1-5 and M&M 2, 4
1988 PROSPECTING PROGRAM

FILMED

ISKUT RIVER AREA
Liard Mining Division
British Columbia

at

57° 08' North Latitude
130° 53' West Longitude

SUB-RECORDER
RECEIVED
FEB 24 1989
M.R. # _____ \$ _____
VANCOUVER, B.C.

For

KESTREL RESOURCES LTD.

By

RAYMOND D. COURNOYER, PROSPECTOR

February 16, 1989

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,447

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SUMMARY

A preliminary program of prospecting and sampling was completed on the Arc 1-5 and M&M 2,4 mineral claims during the summer of 1988 to evaluate the potential of 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 33 rock chip samples were collected.

The claims cover an area underlain by metasediments cut with quartz veins with zones of chloritic alteration in shear zones. Values of up to 230 ppb Au and 39 ppm Ag were noted in shear zones with chalcocite.

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

INTRODUCTION

The Arc 1-5 and M&M 2 and 4 mineral claims, a total of 98 units, were staked in February and July of 1988, respectively. The claims are situated 10 kilometres south of Arctic Lake (N.T.S. 104 G/2).

The claims cover favourable geology north of Gulf International Minerals' McLymont 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 160 km north of Stewart, B.C. centered at 57° 08' north latitude 130° 53' west longitude in the Liard Mining Division of British Columbia.

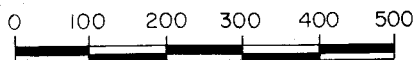
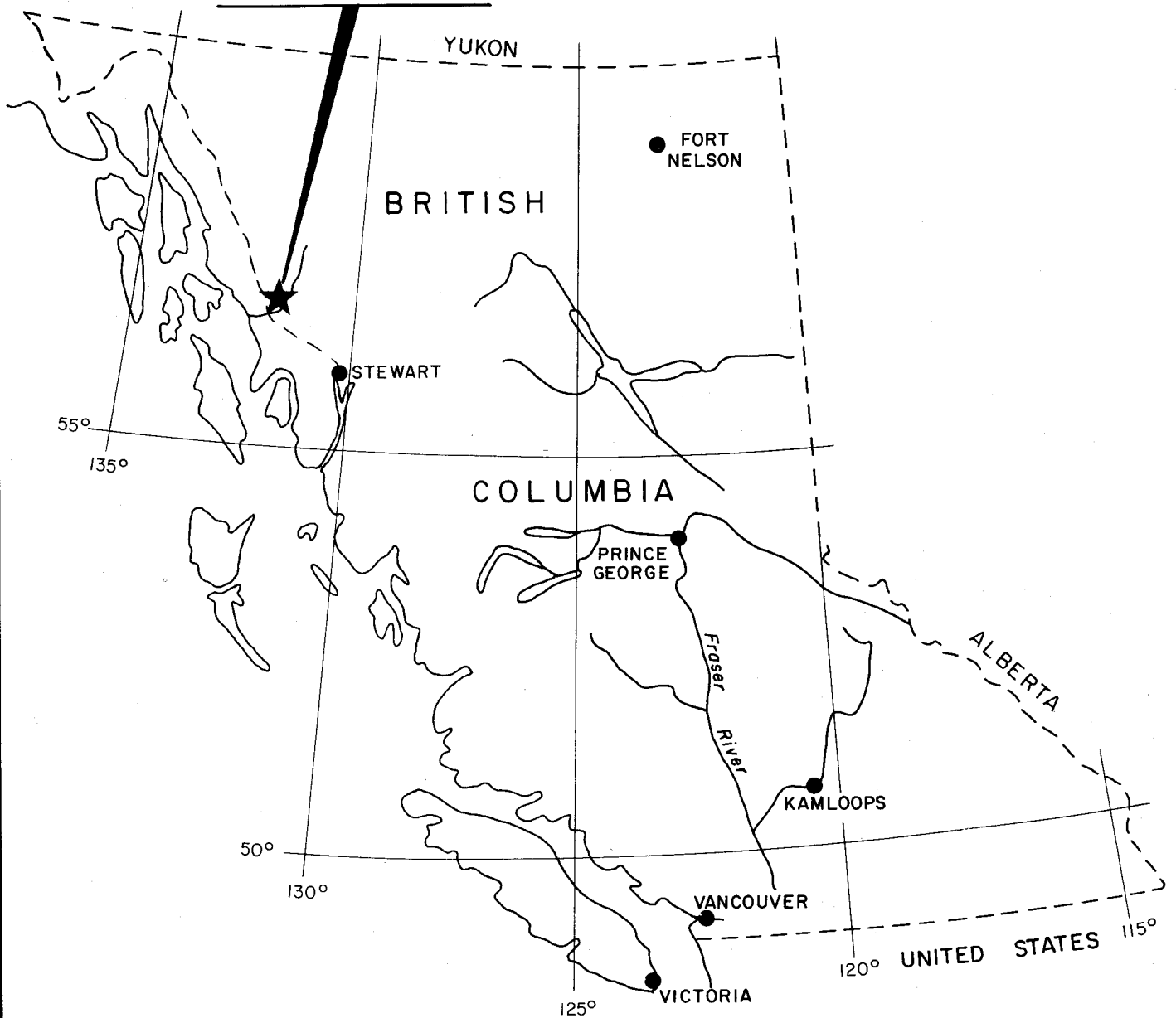
Access to the claims is via helicopter from a base camp at the headwaters of Forrest Kerr Creek, 56° 56' north longitude, 130° 48' west longitude. Regular fixed wing flights from Smithers, B.C. service the Forrest Kerr camp.

Topographically, the area is rugged, ranging in elevations from 900 metres to 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 Arc 1-5 and M&M 2 and 4 claims generally lie above treeline. Scrub, spruce and alder are encountered in the creek basins.

The area receives heavy precipitation, snow in excess of 20 feet being common during the winter. The field seasons extends from June to mid-October.

**ISKUT RIVER
MINERAL CLAIMS**



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

CLAIM INFORMATION

The Arc 1-5 and M&M 2 and 4 mineral claims consisting of 98 units are owned by Kestrel Resources Ltd.

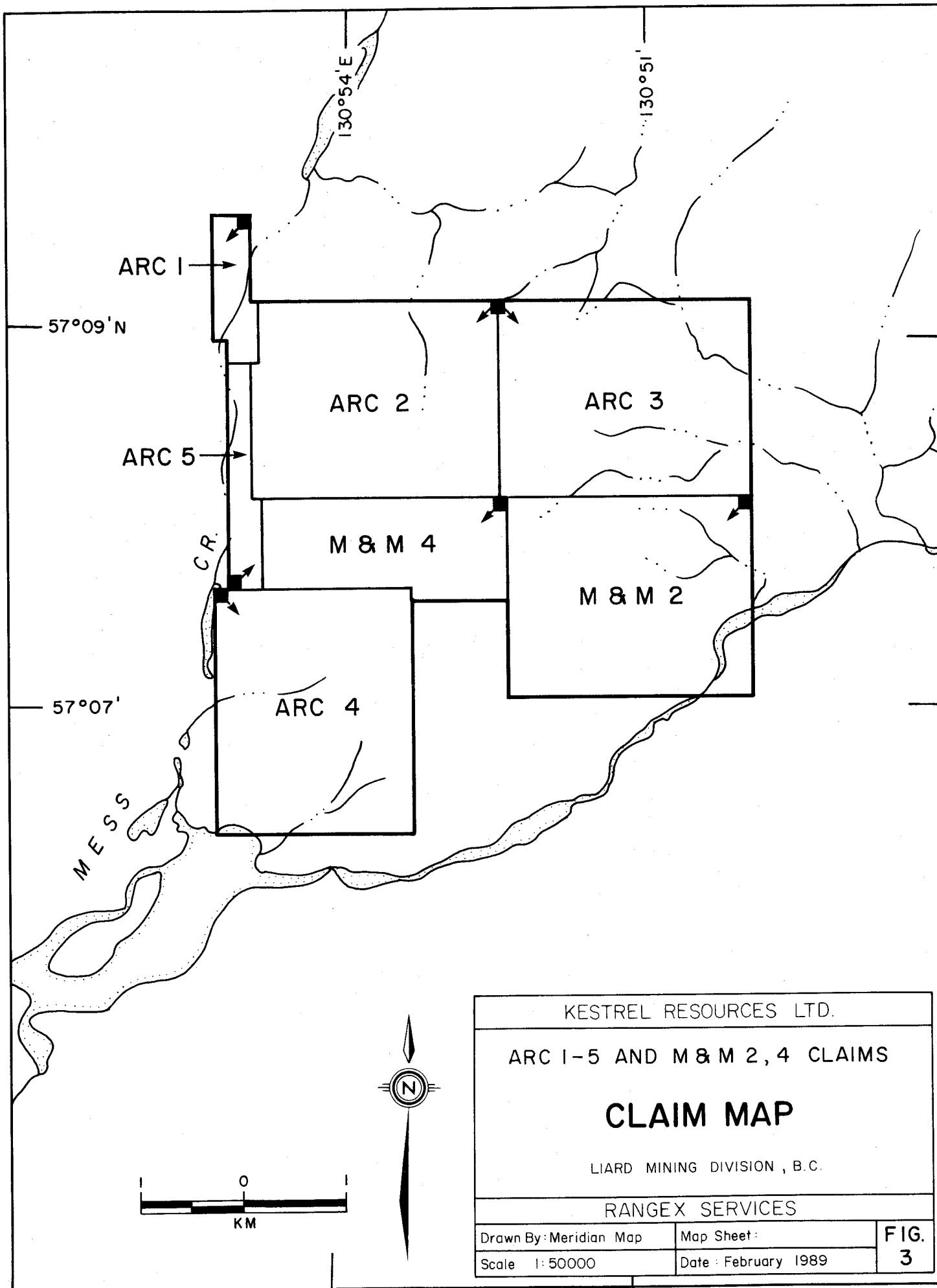
Claim data is as follows:

<u>Claim Name</u>	<u>Units</u>	<u>Record #</u>	<u>Record Date</u>
Arc 1	3	4490	February 24, 1988
Arc 2	20	4491	February 24, 1988
Arc 3	20	4492	February 24, 1988
Arc 4	20	4493	February 24, 1988
Arc 5	5	4494	February 24, 1988
M&M 2	20	5018	July 27, 1988
M&M 4	10	5020	July 27, 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.



KESTREL RESOURCES LTD.		
ARC 1-5 AND M & M 2, 4 CLAIMS		
CLAIM MAP		
LIARD MINING DIVISION, B.C.		
RANGEX SERVICES		
Drawn By: Meridian Map	Map Sheet:	FIG. 3
Scale 1:50000	Date: February 1989	

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.

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.

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 ?

PERMIAN AND/OR EARLIER

PRE MIDDLE PERMIAN

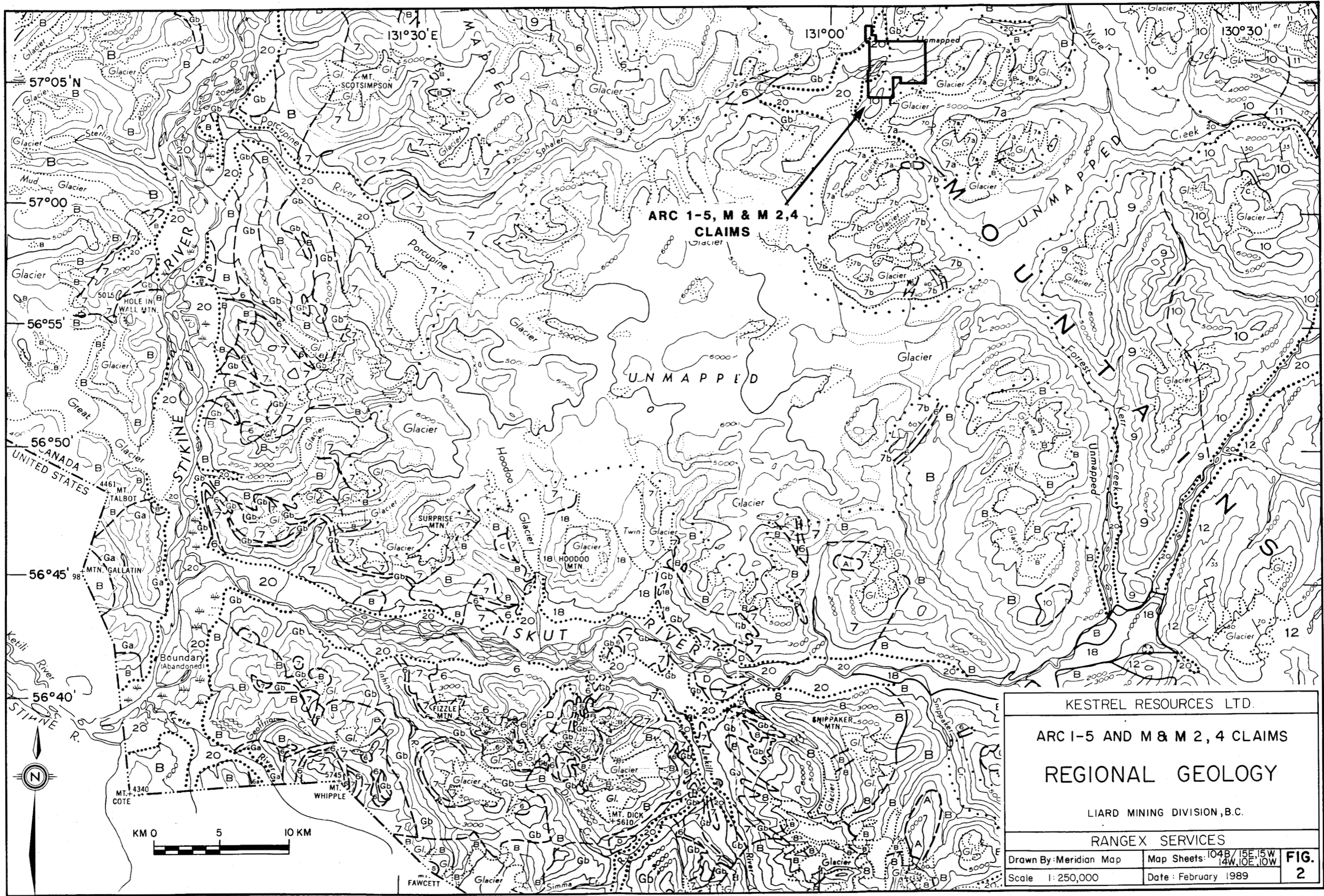
G Ga, Gneiss; Gb, phyllite, quartzite, minor crystalline limestone, highly altered and sheared greywacke and volcanic rock

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



ARC 1-5, M & M 2,4
CLAIMS

KESTREL RESOURCES LTD.		
ARC 1-5 AND M & M 2, 4 CLAIMS		
REGIONAL GEOLOGY		
LIARD MINING DIVISION, B.C.		
RANGEX SERVICES		
Drawn By: Meridian Map	Map Sheets: 104B/15E, 15W 14W, 10E, 10W	FIG. 2
Scale 1:250,000	Date: February 1989	

PROPERTY EXPLORATION

A crew of six people prospected and sampled the Arc 1-5 and M&M 2 and 4 mineral claims throughout the summer of 1988. Work was undertaken from Forrest Kerr Camp.

A total of 33 rock chip 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 and atomic absorption techniques. Five of these samples were re-assayed for copper, lead and zinc.

Sample locations and results of analytical data are plotted on Figure 4. Assay results are presented in Appendix IV.

PROSPECTOR'S REPORT

A small program was conducted on the Arc 1-5 and M&M 2 and 4 claim group. Prospecting and sampling was concentrated on the Arc 2, 3 and M&M 4 claims. The Arc 2 and 3 is made up of metasediments to the north cut by shear zones carrying massive amounts of quartz with zones of chloritic alteration.

There is a small skarn unit in evidence along the northern boundary of Arc 2. Mineralization present with the quartz is pyrite, chalcopyrite, hematite and bornite. A short traverse on M&M 4 noted a strong quartz stockwork carrying pyrite, chalcopyrite, and bornite mineralization.

Anomalous samples were as follows:

<u>Claim</u>	<u>Sample #</u>	<u>Au(ppb)</u>	<u>Ag(ppm)</u>	<u>Description</u>
Arc 2	32410	-	6.6	float rock, frothy-rusty quartz with pyrite
Arc 2	32802	-	4.7	float rock, quartz with chalcopryite and azurite
Arc 3	32128	230	39	shear zone 1'x30', chlorite and hematite beside chalcite vein
M&M 4	32416	40	-	pyrite in chlorite altered quartz

RECOMMENDATIONS

A program of continued prospecting and sampling is proposed for 1989. A soil geochemistry survey may be conducted on anomalous zones. A budget will be presented when required.

APPENDIX I

PROGRAM COST

PROGRAM COSTS

Wages (July 4 - October 9, 1988)

Ray Cournoyer	1.5 days @ \$225.00/day	\$ 337.50
Ron Riedel	2.5 days @ \$200.00/day	500.00
Dave Hagemoen	1.5 days @ \$175.00/day	262.50
John Buccholtz	2 days @ \$225.00/day	450.00
K. Kaye	1.5 days @ \$200.00/day	300.00
Ian Hagemoen	2 days @ \$250.00/day	<u>500.00</u>

Total Wages

\$ 2,350.00

Expenses

Room and board	1,214.90
Expendables	113.60
Rentals	40.20
Travel and accommodation	58.50
Freight	202.65
Expediting	44.60
Fixed wing	225.84
Helicopter	1,198.64
Assaying	459.50
Report costs	<u>750.00</u>

Total Expenses

4,308.43

TOTAL

\$ 6,658.43

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

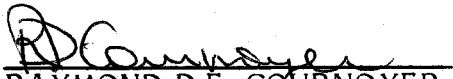
STATEMENT OF QUALIFICATIONS

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.

23 day of Feb ,


RAYMOND D.E. COURNOYER

APPENDIX IV

ASSAY CERTIFICATES

REPORT #: 881865 DA

RANGEX Project: ARC 2

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
32293	881294	--	--	--	--	<0.1	<5	--	--	--
32294	881294	--	--	--	--	0.2	<5	--	--	--
32295	881294	--	--	--	--	0.6	<5	--	--	--
32296	881294	--	--	--	--	<0.1	<5	--	--	--
32297	881294	--	--	--	--	<0.1	<5	--	--	--
32298	881294	--	--	--	--	<0.1	30	--	--	--
32409	881294	--	--	--	--	<0.1	<5	--	--	--
32410	881284	--	--	--	--	6.6	<5	--	--	--
32411	881294	--	--	--	--	<0.1	<5	--	--	--
32412	881294	--	--	--	--	<0.1	<5	--	--	--
32413	881294	--	--	--	--	<0.1	<5	--	--	--
32417	881294	--	--	--	--	<0.1	10	--	--	--
32551	881294	--	--	--	--	<0.1	<5	--	--	--
32796	881294	--	--	--	--	<0.1	15	--	--	--
32797	881294	--	--	--	--	<0.1	<5	--	--	--
32798	881294	--	--	--	--	<0.1	<5	--	--	--
32799	881294	--	--	--	--	<0.1	<5	--	--	--
32800	881294	--	--	--	--	<0.1	<5	--	--	--
32801	881294	--	--	--	--	<0.1	<5	--	--	--
32802	881294	--	--	--	--	4.7	<5	--	--	--
32803	881294	--	--	--	--	<0.1	<5	--	--	--
32804	881294	--	--	--	--	<0.1	<5	--	--	--
32805	881294	--	--	--	--	<0.1	<5	--	--	--
32806	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 100.00 10.000
 < = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum

REPORT #: 881865 DA

RANGEX Project: ARC 3

Page 1 of 1

Sample Number	Jobno	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Hg ppm	As oz/st	Sb oz/st
32123	880872	--	--	--	--	<0.1	<5	--	--	--
32124	880872	--	--	--	--	0.3	<5	--	--	--
32125	880872	--	--	--	--	0.8	<5	--	--	--
32126	880872	--	--	--	--	0.7	<5	--	--	--
32127	880872	--	--	--	--	1.0	<5	--	--	--
32128	880872	--	--	--	--	39.0	230	--	--	--

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

VGC 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

RANGE1 Project: M+M 4

Page 1 of 1

Sample Number	Jobno	Mo	Cu	Pb	Zn	Ag	Au	W	Ag	Au
		ppm	ppm	ppm	ppm	ppm	ppb	ppm	oz/st	oz/st
32414	881294	--	--	--	--	0.2	<5	--	--	--
32415	881294	--	--	--	--	0.8	<5	--	--	--
32416	881294	--	--	--	--	<0.1	40	--	--	--

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

2902

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1988 TRIUMPH STREET, VANCOUVER B.C. V5L 1K5 PH: (604)251-5656 TELFX: 04 252578
BRANCH OFFICE: 1630 PANDORA STREET, VANCOUVER B.C. V5L 1L6 PH: (604)251-7282 FAX: (604)251-5717

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 Sb, Mn, Fe, Ca, P, Cr, Mg, Ba, Pb, Al, Na, K, Ni, Pt AND Sr. Au AND Pd DETECTION IS 3 PPM.
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -- NOT ANALYZED

COMPANY: RANGEX SERVICES
ATTENTION: K. KAYE
PROJECT: KESTREL

REPORT#: 881588PA
JOB#: 881588
INVOICE#: 881588NA

DATE RECEIVED: 88/10/05
DATE COMPLETED: 88/10/29
COPY SENT TO:

ANALYST *V. Kaye*

PAGE 1 OF 5

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SH PPM	SR PPM	U PPM	W PPM	ZN PPM	
32628	6.1	.42	ND	ND	52	ND	.08	1.1	11	119	1384	1.50	.06	.37	248	2	.01	16	.01	16	ND	ND	ND	ND	1	4	ND	ND	110
32796	1.1	2.81	ND	ND	01	ND	1.91	1.1	22	37	54	5.69	.44	3.46	610	10	.01	13	.10	70	ND	ND	ND	ND	1	11	ND	ND	1
32797	1.1	1.55	ND	ND	21	ND	10.01	1.1	9	47	16	6.44	1.63	5.53	3952	5	.01	17	.04	24	ND	ND	ND	ND	1	27	ND	ND	1
32798	1.1	1.13	ND	ND	40	ND	1.20	1.1	2	151	8	.63	.05	.13	275	2	.02	4	.02	23	ND	ND	ND	ND	2	15	ND	ND	1
32799	1.1	1.13	ND	ND	60	ND	1.18	1.1	2	146	5	.84	.04	.04	423	4	.01	4	.02	22	ND	ND	ND	ND	1	9	40	SD	1
32800	1.1	1.13	ND	ND	113	ND	1.07	1.1	2	60	7	1.56	.06	.03	101	2	.02	15	.02	27	ND	ND	ND	ND	1	3	ND	ND	1

APPENDIX V

SAMPLE DESCRIPTIONS

SAMPLE DESCRIPTIONS - ARC 2

<u>Sample No.</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>
32293	Rock Chip	1 m	Hematite and chlorite in quartz
32294	"	1 m	Trace pyrite in siliceous schistose
32295	"	2 m	Trace pyrite in quartz block 6m x 3m
32296	"	1 m	Siliceous zone 1 m wide
32297	"	1 m	Siliceous altered schist with quartz stringers
32298	"	1 m	Iron carbonate, quartz, calcite in schistose
32409	"	50 cm	Vuggy quartz vein
32410	Float		Float rock - frothy - rusty quartz with pyrite
32411	Rock Chip	1 m	Quartz, chlorite, andesite breccia
32412	"	1.5 m	Multiple quartz veins, no sulphides
32413	"	50 cm	Pyrite in quartz vein
32417	"	50 cm	Quartz veins in chlorite altered andesite
32551	"	50 cm	Quartz fracture fillings in andesite
32796	"	1 m	Pyrite and quartz in schistose
32797	"	1 m	Same as 32796
32798	"	2 m	Wide quartz mass in siliceous schistose
32799	"	1 m	Hematite in quartz stringers
32800	"	1 m	Pyrite in quartz stringers in chlorite, quartz altered schistose
32801	Float		Quartz float
32802	Float		Float rock quartz with chalcopyrite and azurite
32803	Rock Chip	50 cm	Quartz carbonate vein 30 cm wide
32804	Float		Sample of quartz train
32805	Rock Chip	1 m	Quartz stringers, parallel tight shears
32806	"	2 m	Skarn zone (quartz-iron carbonate)

SAMPLE DESCRIPTIONS - ARC 3

<u>Sample No.</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>
32123	Rock Chip	1 m	Chloritic schist with pyrite
32124	"	1 m	Pyrite in chloritic, siliceous schist
32125	"	50 cm	Pyrite, malachite in chloritic, siliceous shear zone
32126	"	1 m	Siliceous shear zone with calcite and pyrite veins
32127	Float		Chalcopyrite in quartz float
32128	Rock Chip	50 cm	Shear zone 30 cm x 10 m chlorite and hematite beside calcite vein

SAMPLE DESCRIPTIONS - M & M 4

<u>Sample No.</u>	<u>Sample Type</u>	<u>Sample Width</u>	<u>Description</u>
32414	Float		Float boulder, pyrite in quartz veins
32415	Rock Chip	50 cm	Chalcopyrite, bornite in quartz veins
32416	"	1 m	Pyrite in chlorite altered quartz

ARC 1

ARC 2

ARC 3

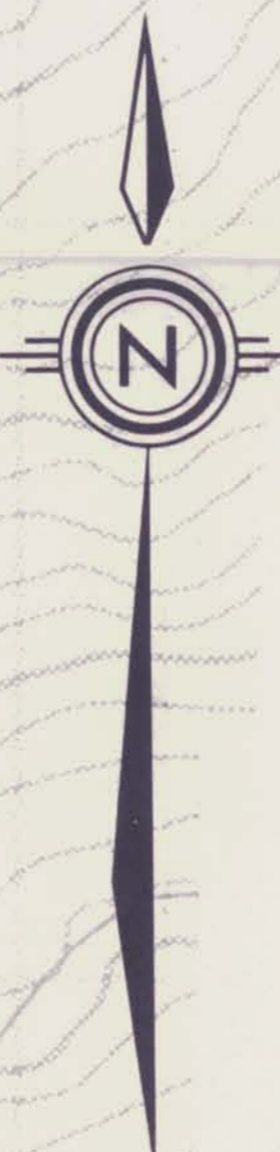
ARC 5

M & M 4

M & M 2

ARC 4

I.P. 2218 M.
5762



- 2 Volcanic - Andesite Breccia, Andesite Flows, Tuffs And Pyroclastic Rocks
- 3 Sediments - Argillites, Shales, Cherty Sediments, Calcareous Sediments
- Q.V. Quartz Vein
- Rock Sample Location and Number
Ag \geq 0.1 ppm, Au \geq 5ppb
- Silt Sample Location and Number
Ag \geq 0.1 ppm, Au \geq 5ppb
- Legal Corner Post (LCP)
- Contour Interval - 100 Feet
- Traverse
- Geological Boundary (Defined, Approximate)



GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,447

KESTREL RESOURCES LTD.

ARC 1-5, M & M 2, 4 CLAIMS

**SAMPLE LOCATION AND
GEOLOGY COMPILATION MAP**

LIARD MINING DIVISION, B.C.

RANGEX SERVICES

Drawn By: Meridian Map	Map Sheet: 1046/2W	FIG. 4
Scale: 1:10,000	Date: July 1989	

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