

LOG NO: 0530	RD.
ACTION:	
FILE NO:	

**REPORT ON THE
SNO 1-2 and RAW 10-11 MINERAL CLAIMS
1990 PROSPECTING PROGRAM**

ISKUT RIVER AREA
LIARD MINING DIVISION
BRITISH COLUMBIA

LOG NO: NOV 22 1991	RD.
ACTION: <i>[Handwritten Signature]</i>	
FILE NO:	

57°01' NORTH LATITUDE
130°48' WEST LONGITUDE
N.T.S. 104 G/2, 104B/15

RECEIVED

MAY 24 1991

Gold Commissioner's Office
VANCOUVER, B.C.

Claim Name	Record No.	No. of Units	Record Date
SNO 1	7230	20	March 23, 1990
SNO 2	7231	20	March 23, 1990
RAW 10	6993	20	Feb. 24, 1990
RAW 11	6994	20	Feb. 24, 1990

Work Period: July 1, 1990 to September 30, 1990

Owner and Operator: KESTREL RESOURCES LTD.
506 - 675 West Hastings Street
Vancouver, B.C.
V6B 1N2
(604) 683-9177

By: S. J. Tennant

May 8, 1991

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,563

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INTRODUCTION

The SNO and RAW mineral claims are located approximately 18 kilometres north-northeast of Newmont Lake within the Liard Mining Division of northwestern British Columbia.

The claims are accessible by helicopter from a base camp at the Forrest Kerr airstrip, located 10 kilometres to the south.

A preliminary program of prospecting and sampling was carried out on the SNO and RAW mineral claims during the summer of 1990, to evaluate the mineral potential of the property.

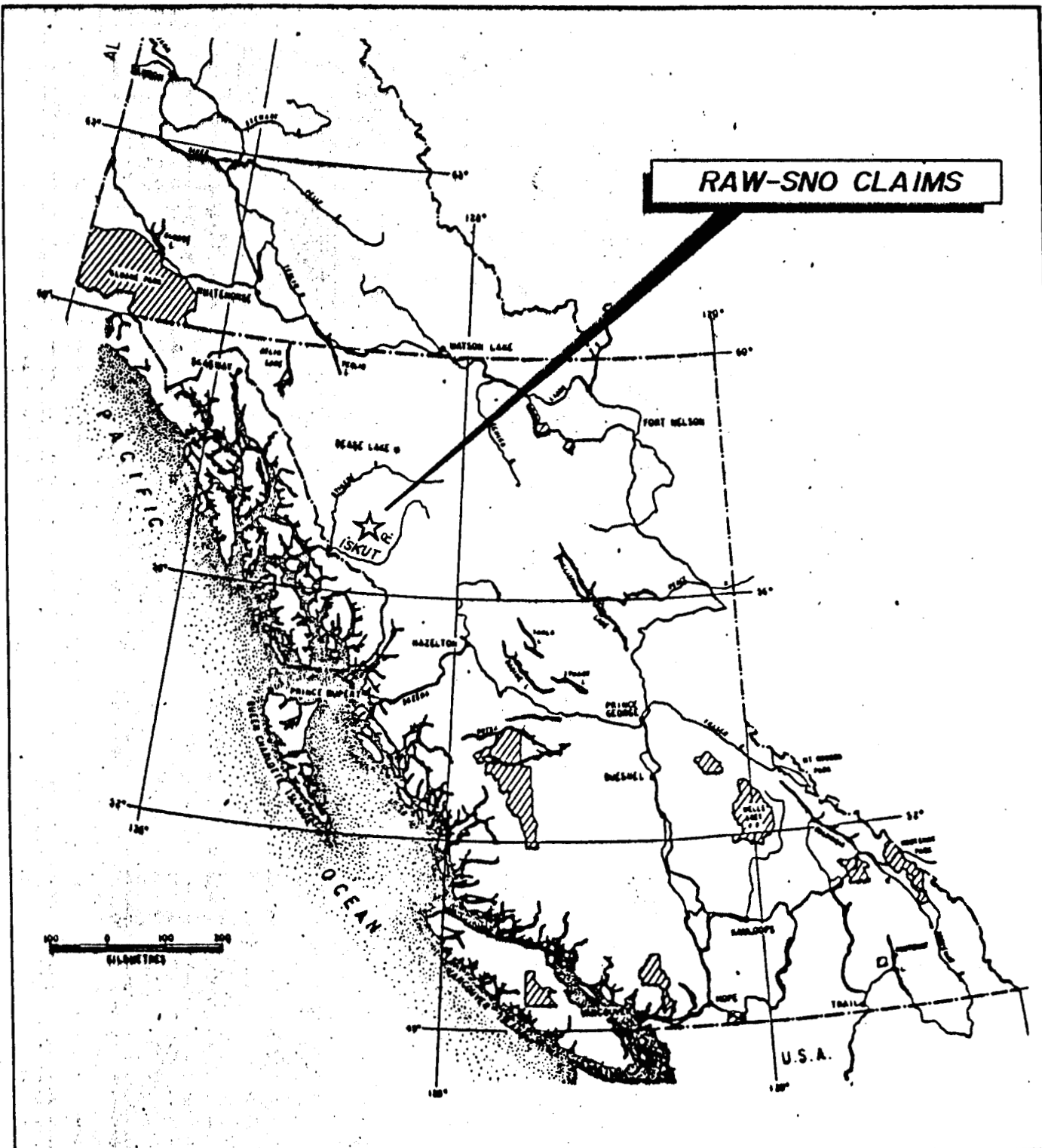
The claims are predominantly underlain by Jurassic intrusives in contact with undivided Paleozoic metavolcanics and metasediments particularly in the southwest portion of the RAW claims.

A total of 25 soil samples and 15 rock chip samples were collected and the results are discussed in the text of this report and the data are plotted on the accompanying map.

LOCATION, ACCESS AND TOPOGRAPHY

The claims are located approximately 18 kilometres north-northeast of Newmont Lake within the Liard Mining Division of Northwestern British Columbia. Access to the property is via fixed wing aircraft from Smithers or Terrace to Bronson, which is located 110 kilometres northwest of Stewart, or the Forrest Kerr airstrip located at the headwaters of the Forrest Kerr River. Access from Bronson or Forrest Kerr is via helicopter and via foot traverse within the claims.

Most of the property is accessible by foot or helicopter. Elevations range from 550 metres to 1820 metres A.S.L. Above 1,200 metres the claims are devoid of vegetation except grasses and shrubs, and exhibit abundant outcrop. Below 1,200 metres, the usual coast mountain evergreens, alder and devils club predominate. Precipitation exceeds 4,000 millimetres annually; temperatures range from -40°C to +25°C.



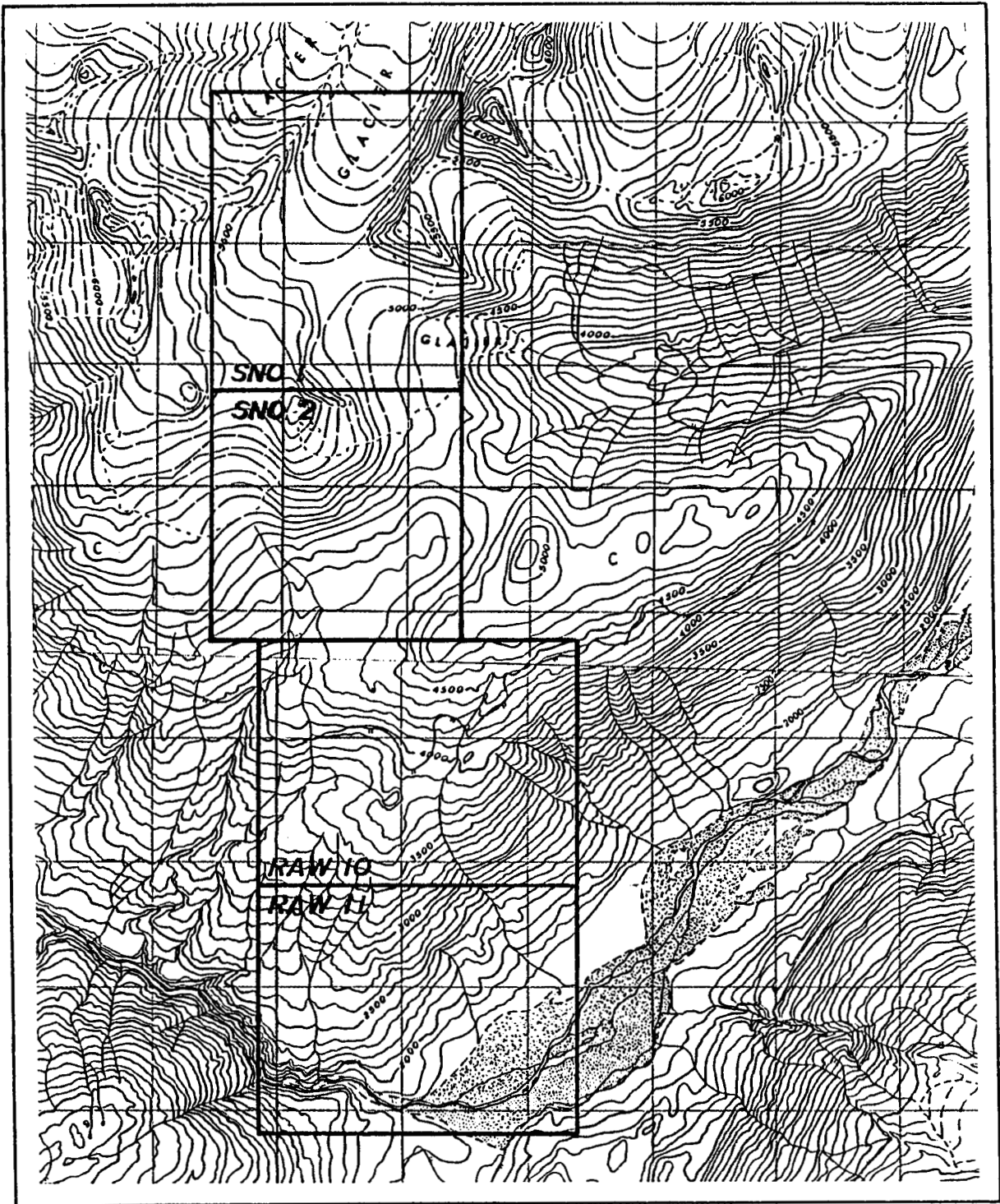
RAW-SNO CLAIMS

KESTREL RESOURCES LTD.

LOCATION MAP
LIARD MINING DIVISION, B.C.

STU TENNANT

SCALE: NOTED	DATE: APRIL 91	MAP: 1	N.T.S. 104B/15 104G/2
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KESTREL RESOURCES LTD.

SNO-RAW CLAIMS
LIARD MINING DIVISION, B.C.

CLAIM MAP

STU TENNANT

DATE : APRIL 1991

SCALE : 1 : 50000

NTS : 104 B/15

FIGURE : 2

PROPERTY AND LIST OF CLAIMS

The SNO and RAW prospect consists of the following modified grid claims wholly owned by Kestrel Resources Ltd.

<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Record Date</u>	<u>Expiry Date</u>
SNO 1	7230	20	March 23, 1990	March 23, 1991
SNO 2	7231	20	March 23, 1990	March 23, 1990
RAW 10	6693	20	Feb. 24, 1990	Feb. 24, 1991
RAW 11	6694	20	Feb. 24, 1990	Feb. 24, 1991

So far as the writer is aware, the claims were properly staked and recorded and are in good standing by the expiry dates.

AREA HISTORY

The first recorded work from the Iskut River region was in 1907 when a staking party from Wrangell, Alaska recorded nine mineral claims north of Johnny Mountain. The Iskut Mining Company worked the claims and in 1917 shipped a ton of high grade ore which reportedly assayed \$1.20 gold, 44.2 ounces silver and 12.45% copper (B.C.M.M.A.R., 1917).

In 1954 Hudson Bay Mining and Smelting Limited discovered high grade gold-silver-lead-zinc mineralization, known as the "Pickaxe" showing, on the slopes of Johnny Mountain.

Throughout the 1960's several major mining companies undertook reconnaissance prospecting and exploration programs in search for porphyry copper-molybdenum deposits resulting in the location of several claims on Johnny Mountain and on Sulphurets Creek.

Skyline Exploration Limited staked the Inel property in 1969 following the discovery of massive sulphide in float on the Bronson Creek glacier. In 1980 the company staked the Reg property. During the 1980's, Skyline has developed both these

properties discovering high grade veins and polymetallic massive sulphide mineralization on the Inel and Reg properties.

The joint venture partners of Cominco Ltd. and Prime Resources Corporation have developed their Snip property which is located immediately north of the Reg property on the northern slopes of Johnny Mountain. The combined geological reserve for the Snip property is 1,000,000 tons grading 0.80 opt gold.

Other advanced prospects currently undergoing intense exploration efforts in the area include Gulf International Mineral Ltd.'s Inel and McElymont properties, Placer Dome Ltd.'s Kerr porphyry copper-gold deposit and Calpine's Eskay Creek gold deposit, as well as the redevelopment of the Silback Premier/Big Missouri mines by Westmin.

The discovery of the Eskay Creek gold prospect in November 1988 has done much to stimulate exploration activity in the Iskut region. Drill hole intersections varying from 5 to 10 metres (16 to 33 feet) and grading to 100 grams gold per tonne (2.92 opt) with an average 1,000 grams or more of silver per tonne (29.2 opt), are not uncommon. The Eskay Creek deposit is probably the most significant precious metal deposit discovered in British Columbia.

Recently completed road access studies has resulted in a proposed shared cost road which would commence at the Stewart-Cassiar highway near Bob Quinn Lake and extend into the Iskut Valley.

REGIONAL GEOLOGY

Generally the area consists of a northerly trending succession of Upper Triassic and Jurassic volcanic and sedimentary rocks underlain in part by Paleozoic volcanic and sedimentary units. All of these units have been intruded by Mesozoic and Tertiary intrusive rocks and cut by extensive fault zones. These country rocks form the Stewart Complex bounded on the west by the main Coast Plutonic Complex, and on the east by the Bowser Basin sedimentary assemblage.

Since 1948, Government workers have attempted to clarify relationships and assign ages to various lithological units of the area. Work completed by Kerr, 1948, G.S.C. Memoir 246; G.S.C. maps 9-1957, 1481-1979-Iskut River, and Grove, E.W., 1986, Bulletin No. 58 B.C. Department of Mines, form the basis of earlier government mapping. Recently work completed by the G.S.C. - Open File o. 2094 (1989) and the B.C. Department of Mines Open File 1990-2 has greatly enhanced the geological data base.

The oldest known rock of the area are limestone, dolomite and low grade metamorphosed sediments (quartzite, slate, 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.

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

Cretaceous to Tertiary Coast Plutonic intrusions of granite, granodiorite and diorite occupy large portions 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.

The foliated rocks, present in the area, are not of great lateral extent and owe their origin to low grade 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 faulting system complicate the local geology, especially where folding of the strata, which is common, has occurred.

PROPERTY GEOLOGY

Open File Report No. 1990-2 - Geology, Geochemistry and Mineral Occurrences of the Forrest Kerr-Iskut River Area, Northwestern British Columbia, prepared by the British Columbia Department of Mines and released in the winter of 1990 describes the geology of the RAW claims at a scale of 1:50,000. The SNO claims lie north of the northern boundary of the Forrest Kerr-Iskut River map sheet.

Figure 4 shows that the majority of the SNO-RAW claims are underlain by Jurassic intrusives varying from a pink hornblende biotite granite to a quartz monzonite. Paleozoic undivided metavolcanics and metasediments outcrop in the southwestern part of the RAW II claim.

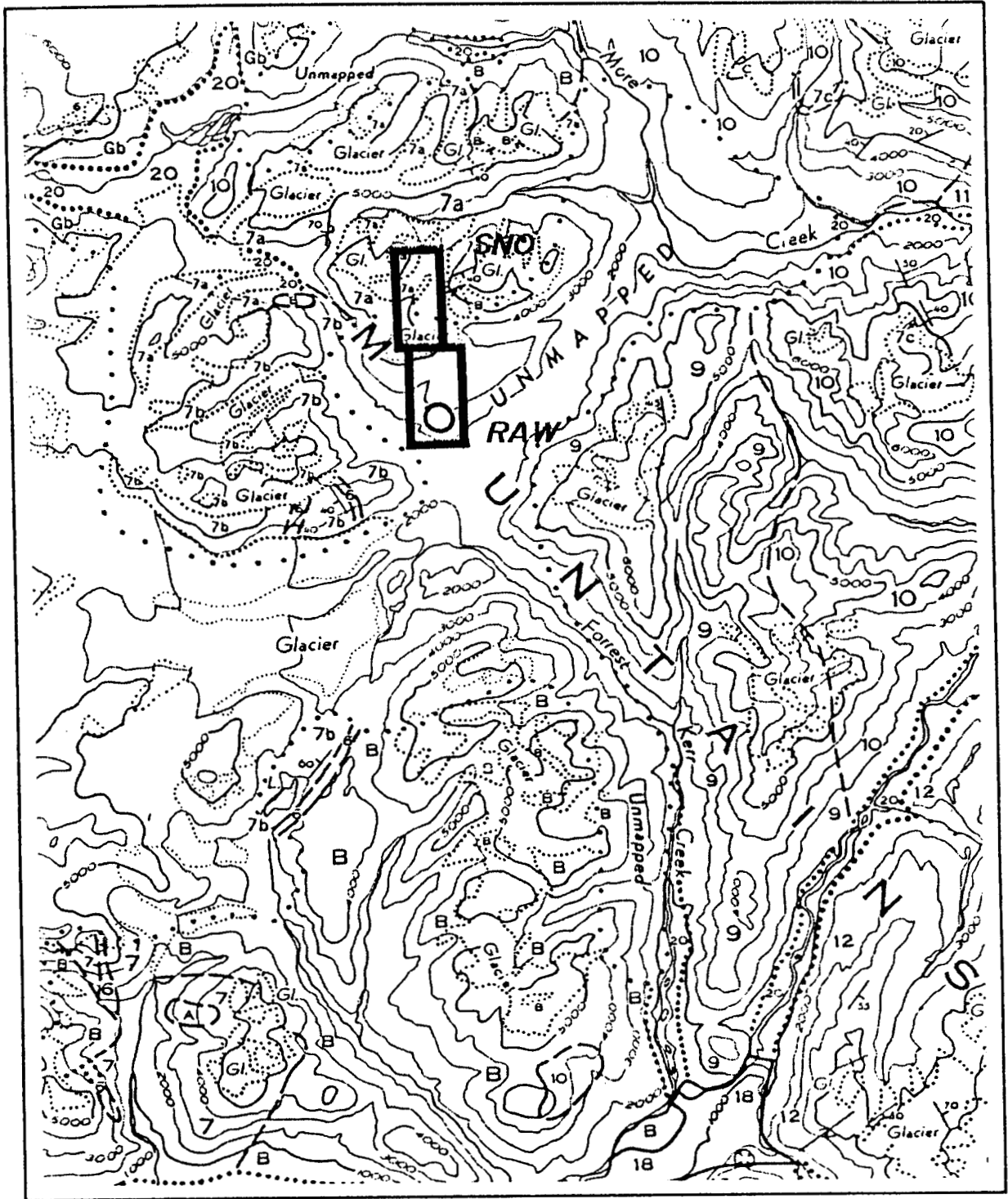
1990 EXPLORATION PROGRAM

The 1990 exploration program was undertaken to assess the exploration potential of the property. The field program was conducted during August-September.

Access was via helicopter (provided by Northern Mountain Helicopters), from a base camp at Forrest Kerr airstrip, some 10 kilometres to the south. Field work was conducted by employees of Kestrel Resources Ltd. under the supervision of the author. Some 15 rock samples and 25 soil samples were collected.

All samples were properly bagged, described and labelled in the field. Later they were shipped by air and ground freight to Vangeochem Lab Ltd. in Vancouver, B.C. for analysis under the supervision of professional assayers. All of the samples were analyzed for gold, using fire assay and atomic absorption procedures, and for a 25-element suite by inductively coupled argon plasma (ICAP), methods.

Prospecting traverses and all sample locations are shown on Figure 4 of this report. The analytical results and sample descriptions accompany this report as Appendices I and II respectively.



KESTREL RESOURCES LTD.

RAW-SNO CLAIMS
LIARD MINING DIVISION, B.C.

REGIONAL GEOLOGY

STU TENNANT

DATE: APRIL 1991

SCALE: 1:250000

NTS: 104B/15

FIGURE: 3

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 Limestones, 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

DISCUSSION OF RESULTS

A total of 11 man days were spent prospecting the SNO and RAW claims. Majority of the claims are underlain by a Jurassic composite plutonic body. The intrusive varies from quartz monzonite in the eastern half of RAW 10 and 11 to a pink hornblende biotite granite throughout the SNO 1 and 2. In the southwest corner of RAW II the rocks have been mapped as undivided Paleozoic metavolcanics and metasediments.

Assay results did not return significant values in base or precious metals. Pyrite was the only sulphide noted in the field and then only in a few minor shears. Alteration was limited to some sporadic epidote and calcite stringers.

Majority of the intrusive traversed appears barren of sulphides partly due to the lack of structural features.

The highest gold value obtained was 60 ppb in Sample 80807. Generally gold values were less than 5 ppb and the silver values less than 1 ppm.

RECOMMENDATIONS

Although the 1990 sampling did not show any strong mineralized zones, the RAW and SNO claims lie adjacent to Kestrel's GLA claims on the west side. Work on the GLA claims have had considerable encouragement in locating skarn and massive sulphide type mineralization.

Additional work, particularly on the western part of the RAW claims, should be carried out to correlate with both geology and mineralization found on the adjacent GLA claims.

BIBLIOGRAPHY

Logan, J.M.; Koyanagi, Victor M.; Drobe, John R. Geology, Geochemistry and Mineral Occurrences of the Forrest Kerr-Iskut River Area, Northwestern British Columbia, Open File 1990-2, Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch.

GSC Open File No. 2094 (1989).

Kerr, 1984: GSC Memoir 246; GSC Maps 9 - 1957; GSC Maps 1481-1979 "Iskut River".

STATEMENT OF QUALIFICATIONS

I, STUART J. TENNANT, of Kestrel Resources Ltd., do hereby certify that:

1. I am a Geologist employed by Kestrel Resources Ltd. during the period October 1989 to present.
2. I am a graduate of the University of British Columbia with a B.Sc. in Geology in 1959.
3. From 1959 until present, I have been engaged in exploration primarily in Western Canada.
4. I personally supervised and participated in the field work and have compiled, reviewed and assessed the data resulting from the work.



Stuart J. Tennant

DATED at Vancouver, British Columbia, this 8th day of May, 1991.

PROGRAM COSTS

S. Tennant Geologist	2 days @ \$325/day	\$ 650
J. Buchholz Geologist	1 day @ \$325/day	325
M. Bashford Prospector	1 day @ \$225/day	225
C. Bilquist Prospector	1 days @ \$200/day	200
W. Grier Prospector	1 day @ \$200/day	200
K. Forster Prospector	1 day @ \$200/day	200
M. Callaghan Prospector	2 days @ \$200/day	400
J. Elmore Prospector	2 day @ \$165/day	<u>330</u>
		\$ <u>2,530</u>
 <u>Field Expense</u>		
Room and Board	11 days @ \$125/day	1,375
Helicopter	3.5 hours @ \$800/hour	2,800
Drafting and Maps		140
Assaying (Vangeochem Labs) 40 samples @ \$18/samples		720
Report		<u>1,285</u>
 TOTAL COST		 \$ <u>8,850</u>

APPENDIX I
Sample Assay Results

To: KESTREL RESOURCES LTD.,
506, 675 W. Hastings Street,
Vancouver, B.C.

ATTN: John Buchholz



File No. 33743-SM
Date October 17, 1990
Samples Rock
Smithers Ref # 0033

Certificate of Assay LORING LABORATORIES LTD.

Page # 2

SAMPLE NO.

PPB
Au

PPM
Ag

Geochemical Analysis

80725	870	2.0
80803	5	0.1
80804	<5	<0.1
80805	10	0.6
80806	40	1.8
80807	60	0.9

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Refracts retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

GEOCHEMICAL ANALYSIS CERTIFICATE

Loring Laboratories Ltd. PROJECT 33743 File # 90-5001

629 Beaverdam Road N.E., Calgary AB T2K 4W7

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
80725	16	19474	91	383	2.0	23	41	545	6.52	4	5	ND	1	39	3.8	4	6	92	1.88	.125	3	31	1.25	50	.14	2	1.46	.05	.08	1
80803	152	112	22	72	.5	6	24	400	5.54	13	5	ND	1	116	2.4	4	2	65	1.64	.046	2	104	.71	22	.12	6	1.64	.05	.01	3
80804	5	142	33	86	.3	1	2	216	3.34	1183	5	ND	1	8	2.0	3	2	4	.21	.029	4	110	.25	60	.06	2	.72	.08	.04	1
80805	1	927	2	31	.9	3	53	1046	14.01	116	5	ND	1	6	.2	2	2	23	7.55	.040	2	91	.18	14	.04	2	.52	.01	.01	29
80806	1	2470	2	48	2.2	1921	1341	257	25.30	249	5	ND	1	11	.2	4	2	26	.39	.009	2	157	1.02	5	.03	11	1.60	.02	.04	1
80807	1	2099	8	46	1.2	1637	242	335	11.26	210	9	ND	1	18	.2	6	2	37	.85	.011	2	115	1.30	13	.05	4	1.84	.04	.04	1

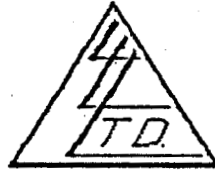
ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: PULP

KESTREL RESOURCES LTD.,

1, 675 W. Hastings Street,
Vancouver, B.C.

ATTN: John Buchholz



File No. 33688-SM

Date September 28, 1990

Samples Soil

Smithers Ref. # 0023

Certificate of Assay LORING LABORATORIES LTD.

Page # 4

SAMPLE NO.

PPB
Au

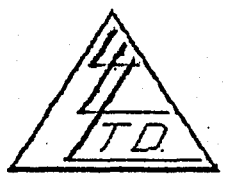
SNO L1	0+00SW	<5
	0+50SW	<5
	1+00SW	<5
	1+50SW	<5
	2+00SW	5
	2+50SW	10
	3+00SW	10
	3+50SW	5
	4+00SW	5
	4+50SW	5
	5+00SW	<5
	5+50SW	5
	6+00SW	5
	6+50SW	10
	7+00SW	<5
	7+50SW	10
	8+00SW	5
	8+50SW	<5
	9+00SW	<5
	9+50SW	10
	10+00SW	<5
	10+50SW	<5
	11+00SW	5

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Samples retained one month.
Assays retained one month
unless specific arrangements
are made in advance.


Assayer

KESTREL RESOURCES LTD.,
1, 675 W. Hastings Street,
Vancouver, B.C.
ATTN: John Buchholz



File No. 33688-SM
Date September 28, 1990
Samples Soil
Smithers Ref. # 0023

Certificate of Assay

LORING LABORATORIES LTD.

Page # 5

SAMPLE NO.	PPB Au
SNO L1 11+50SW 12+00SW	<5 <5

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

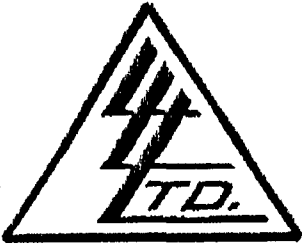
Refracts retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	M
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm

SNO L1 0+00SW	1	9	11	137	2	27	35	4008	16.53	2	5	ND	1	10	8	4	2	181	.39	.203	16	52	.66	68	.01	2	2.34	.01	.07	1
SNO L1 0+50SW	1	72	14	98	2	18	13	908	3.63	7	5	ND	3	20	7	2	2	58	.26	.054	28	37	.92	80	.10	4	1.97	.03	.04	1
SNO L1 1+00SW	1	68	56	173	1	11	10	988	2.44	5	5	ND	2	19	8	2	3	46	.86	.063	15	15	.52	53	.10	8	1.53	.02	.03	1
SNO L1 1+50SW	5	26	24	129	3	8	6	646	5.02	9	5	ND	9	7	10	2	2	43	.10	.070	36	13	.23	43	.20	5	3.22	.08	.09	2
SNO L1 2+00SW	3	57	14	135	2	10	10	691	3.87	9	5	ND	6	23	0	2	2	65	.30	.089	43	15	.54	107	.17	3	2.71	.06	.07	1
SNO L1 2+50SW	1	57	11	85	3	11	10	636	2.96	6	5	ND	2	24	6	2	2	66	.33	.073	15	18	.68	86	.11	11	1.80	.03	.05	1
SNO L1 3+00SW	1	51	5	58	1	10	9	545	2.57	6	5	ND	2	19	5	2	5	58	.28	.056	14	17	.56	116	.08	2	1.44	.02	.06	1
SNO L1 3+50SW	2	51	15	178	4	11	10	815	4.77	15	5	ND	7	21	5	2	4	63	.39	.073	56	20	.52	747	.18	6	2.56	.04	.07	1
SNO L1 4+00SW	1	51	15	142	2	10	8	659	3.70	22	5	ND	5	25	9	2	2	79	.35	.062	35	20	.54	587	.14	7	2.11	.04	.09	1
SNO L1 4+50SW	1	52	10	118	3	11	11	543	3.51	5	5	ND	3	21	1	2	2	62	.27	.090	20	21	.59	112	.23	2	2.38	.06	.08	1
SNO L1 5+00SW	1	39	16	87	2	9	7	372	2.65	6	5	ND	3	16	4	2	3	49	.22	.073	25	17	.48	106	.14	2	1.99	.04	.05	1
SNO L1 5+50SW	1	47	13	95	1	10	9	509	3.14	3	5	ND	3	23	3	2	3	58	.31	.073	23	16	.55	172	.12	3	1.89	.04	.06	1
STANDARD C	18	58	41	131	6.9	69	32	1060	3.97	39	18	7	37	52	18.4	15	21	55	.52	.093	36	60	.91	179	.07	34	1.91	.06	.14	17

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Hg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	Mg ppm	
SNO L1 6+00SM	2	35	11	94	14	9	7	647	4.16	14	5	NO	6	13	2	2	51	.15	.093		35	14	.34	77	19	2	2.42	.06	.06		
SNO L1 6+50SM	1	35	8	64	13	8	6	333	2.97	4	5	NO	3	16	2	2	43	.17	.058		19	13	.46	45	14	2	2.21	.04	.05		
SNO L1 7+00SM	1	30	7	55	13	8	6	315	2.62	2	5	NO	3	18	2	2	43	.20	.052		18	13	.43	67	12	4	1.73	.03	.05		
SNO L1 7+50SM	2	45	7	75	12	10	9	708	2.69	5	5	NO	3	21	2	2	49	.27	.074		19	15	.56	146	12	2	1.85	.05	.07		
SNO L1 8+00SM	1	44	10	75	13	10	8	479	2.88	11	5	NO	4	15	2	2	45	.17	.053		18	14	.51	68	12	2	1.85	.04	.06		
SNO L1 8+50SM	2	14	7	88	13	9	5	446	3.04	6	5	NO	6	11	2	2	26	.12	.026		27	11	.36	73	12	5	1.94	.06	.06		
SNO L1 9+00SM	3	31	12	102	14	6	4	426	3.85	6	5	NO	8	9	2	2	26	.10	.040		40	9	.24	97	14	3	2.65	.08	.08		
SNO L1 9+50SM	1	28	3	46	13	7	7	520	2.39	8	5	NO	2	19	2	2	41	.21	.046		13	12	.41	95	08	5	1.41	.02	.04		
SNO L1 10+00SM	2	17	11	77	13	7	5	800	3.79	9	5	NO	4	11	2	2	40	.10	.065		21	12	.26	58	14	2	2.54	.05	.06		
SNO L1 10+50SM	2	26	9	71	14	8	6	540	3.35	5	5	NO	4	12	2	2	41	.13	.058		23	15	.37	95	14	2	2.46	.04	.07		
SNO L1 11+00SM	1	26	5	47	11	7	5	286	2.32	7	5	NO	3	19	2	2	37	.22	.055		18	13	.42	158	08	3	1.42	.04	.05		
SNO L1 11+50SM	1	48	7	76	13	15	10	532	3.49	12	5	NO	1	23	2	2	66	.22	.058		14	30	.82	205	09	2	2.83	.02	.08		
SNO L1 12+00SM	1	37	5	57	12	12	8	363	2.64	12	5	NO	1	22	2	2	48	.22	.046		13	20	.63	76	09	2	1.89	.02	.05		



829 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2

LORING LABORATORIES LTD.

Phone 274-2777

Preparation Procedures for Geochemical Samples

1 - Soil And Silts:

- a) The soil sample bags are placed in dryer to dry at 105°C.
- b) Each sample is passed through an 80 mesh nylon seive. The +80 mesh material is discarded.
- c) The -80 mesh sample is placed into a coin envelope and delivered to the laboratory for analysis.

2 - Lake Sediments:

- a) The sediment sample bags are placed into the dryer at 105°C until dry.
- b) The dried material is transferred to a ring and puck pulverizer and ground to -200 mesh.
- c) The -200 mesh pulp is then rolled for mixing, placed into a coin envelope, and taken to the laboratory for analysis.

3 - Rocks and Cores:

- a) The samples are dried in aluminum disposable pans at 105°C.
- b) They are then crushed to 1/8" in jaw crusher.
- c) the 1/8" material is mixed and split to sample pulp size.
- d) The sample is then pulverized to 100 mesh, using a ring and puck pulverizer.
- e) The -100 mesh material is rolled on rolling mat and transferred to sample bag. The sample is then sent to the laboratory for analysis.



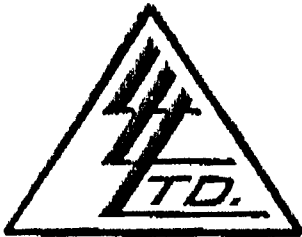
LORING LABORATORIES LTD.

629 Beavertdam Rd. N.E.
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Tel: (403) 274-2777
Fax: (403) 275-0541

ICP ANALYSES

- Weigh 0.5 g sample in 16 x 150 mm test tubes.
- Digest samples with 3 ml of 3-1-2 HCl-HNO₃-H₂O at 95°C for one hour.
- Cool sample and dilute to 10 ml with distilled water.
- Mix and allow to settle.
- Select the 30 element simultaneous program for ICP. Enter sample numbers into computer in proper sequence to which they will be analyzed, along with client name or project number.
- Transfer samples to sample cups on auto sampler.
- Analyze samples on ICP using auto sampler.
- Ensure control standards are within acceptable limits.
- Print out final report for client.



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629 Beavardam Rd. N.E.
Calgary, Alberta T2K 4W2

Au Geochems (Soils & Sediments)

1. Weigh 10 g sample to fire assay crucible (carry blank)
 2. Place crucibles in fire assay furnace at fusion temperature for 15 minutes.
 3. Allow crucibles to cool on steel table.
 4. Add 1 tablespoon flux and 1 inquart to each crucible.
 5. Fuse for $\frac{1}{2}$ hr. at fusion temperature.
 6. Pour pots, remove slag and cupel.
 7. Place beads into 50 ml flasks.
 8. Pipette stds. and blank into 50 ml flasks.
1 ml of 10 ppm = 1000 ppb
1 ml of 5 ppm = 500
1 ml of 1 ppm = 100
0 ml = 0
 9. Add 5 mls H₂O, 3 mls HNO₃ and place on 1 switch plate for 5 minutes. Take off plate. Add 5 mls HCl.
 10. Digest until total dissolution approximately $\frac{1}{2}$ hr.
 11. Bulk flasks to approximately 25 mls with distilled H₂O. Cool to room temperature.
 12. Add 5 mls MIBK. Stopper and shake each flask for exactly 1 minute.
 13. Allow MIBK to settle.
 14. Set 1100 AA unit as follows:
mu - 2428
slit - .5
lamp MA - 3
flame - air-acetylene - extremely lean
- Stds. 100 ppb - 10
1000 ppb - 100
500 ppb - reading

15. Report directly in ppb. Detection limit 5 ppb at reading of .5.

*-1 - for rock geochems steps 2 and 3 can be eliminated.

*-2 - it is important to maintain as closely as possible standard conditions for all samples and standards in a series.

Reagents & Material

- MIBK - 4-Methyl-2-Pentanone
- HCl - conc
- HNO3 - conc
- Flux - 2980 g PbO
777 g Na₂CO₃
68 g Na₂B₄O₇
68 g SiO₂
167 g Flour

NOTE:

With rocks or drill core the amount of sample can vary from 10 grams to 30 grams. The fluxes are all adjusted according to the clients requirements.

VGC VANGEOCHEM LAB LIMITED

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BRANCH OFFICES
BATHURST, N.B.
RENO, NEVADA, U.S.A.

April 30, 1991

TO: Mr. Stuart Tennant
KESTREL RESOURCES LTD.
506 - 675 W. Hastings St.
Vancouver, BC V6B 1N2

FROM: VANGEOCHEM LAB LIMITED
1650 Pandora Street
Vancouver, BC V5L 1L6

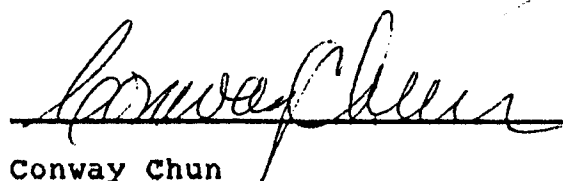
SUBJECT: Analytical procedure for soil samples preparations.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags.
- (b) Dried soil and silt samples were sifted by hands using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.

2. Analysts

The sample preparations were supervised or determined by Mr. Conway Chun or Mr. Raymond Chan and his laboratory staff.



Conway Chun
VANGEOCHEM LAB LIMITED

VANGEOCHEM SAMPLE ANALYSIS DESCRIPTION

The lithogeochemical samples were properly bagged, described and labelled in the field. Later, they were shipped by air and ground freight to Vangeochem Lab Ltd. in Vancouver, B.C. for analysis under the supervision of professional assayers. All of the samples were analyzed for gold, using fire assay and atomic absorption procedures, and for a 25-element suite by inductively coupled argon plasma (ICAP) methods.

At Vangeochem Lab Ltd., each rock sample was ground to -100 mesh and a 0.5 gram pulp was digested with 5 millilitres of 3:2:1 hydrochloric acid to nitric acid to water at 95°C for 90 minutes, and then diluted to 10 millilitres with water. The resulting precipitate was then analyzed by ICAP methods for: silver, aluminum, arsenic, barium, bismuth, calcium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, molybdenum, sodium, nickel, phosphorus, lead, antimony, tin, strontium, uranium, tungsten and zinc.

A 20.0 to 30.0 gram pulp was split from each of the ground samples, mixed with flux, fused at 1,900°F to form a button, and subsequently digested in an aqua regia solution. This solution was then analyzed for gold by a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp.

APPENDIX II
Sample Descriptions

Geochemical Data Sheet - ROCK SAMPLING

JASON Elmore

Sampler Mike Callaghan
 Date Aug 21 / 90

Project PROSPECTING
 Property SNO 2

NTS _____
 Location ISKUT
 M.D. LIARD

SAMPLE NO.	LOCATION STATION	B HORIZON SAMPLE TYPE	Sample 8" Width 12" Depth	DESCRIPTION			OBSERVATIONS	ASSAYS						
				Soil Rock Type	Alteration	Mineralization								
SNO L1-6+00	STN	SOIL												
6+50SW														
7+00SW	STN	Light Brown		ANGULAR			FLAT							
7+50SW	"	LBWN		"			gentle SE → NW slope							
8+00SW	"	"		"										
8+50SW	"	"		"										
9+00SW	"	"		"			gentle SE → NW slope							
9+50SW	"	"		Qtz MONZONITE	PORPHYRY		" " "							
10+00SW	"	"		"	"	"								
10+50	"	"		"	"	"								
11+00	"	"		"	"	"								
11+50	"	"												

