# REPORT ON THE KER 1-7 MINERAL CLAIMS 1990 LITHOGEOCHEMICAL SAMPLING PROGRAM



ISKUT RIVER AREA
LIARD MINING DIVISION
BRITISH COLUMBIA

56°55' NORTH LATITUDE
130°55' WEST LONGITUDE
N.T.S. 104B/15

*Work Period*: June 10, 1990 to September 10, 1990

*Owner and Operator:*
KESTREL RESOURCES LTD.
507 - 675 West Hastings Street
Vancouver, B.C.
V6B 1N2
(604) 683-9177

*By:* S. J. Tennant

September 15, 1991

## TABLE OF CONTENTS


| | Page |
|---|---|
| INTRODUCTION | 1 |
| LOCATION, ACCESS AND TOPOGRAPHY | 1 |
| PROPERTY AND LIST OF CLAIMS | 2 |
| AREA HISTORY | 2 |
| REGIONAL GEOLOGY | 3 |
| PROPERTY GEOLOGY | 5 |
| 1990 EXPLORATION PROGRAM | 5 |
| DISCUSSION OF RESULTS | 6 |
| RECOMMENDATIONS | 7 |
| BIBLIOGRAPHY | 8 |
| STATEMENT OF QUALIFICATIONS | 9 |
| PROGRAM COSTS | 10 |


### List of Figures


| | | |
|---|---|---|
| Figure 1 | Index Map | |
| Figure 2 | Claim Map; Scale 1:50,000 | |
| Figure 3 | Regional Geology; Scale 1:250,000 | |
| Figure 4 | Property Geology; Scale 1:50,000 | |
| Figure 5 | Sample Location Map; Scale 1:10,000 | In pocket |


### List of Appendices


| | |
|---|---|
| Appendix I | Sample Assay Results |
| Appendix II | Sample Descriptions |

## INTRODUCTION

The KER 1-7 mineral claims are located approximately 8 kilometres north 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 9 kilometres to the east.

The 1990 lithogeochemical program was designed to further evaluate the mineral potential of the KER claims which had previously been prospected in 1988. During the month of August, 75 rock chip samples were collected.

The KER claims cover a limestone unit on their western portion in contact with basalts, volcanic units and andesite flow to the east.

Results of the 1990 program are discussed in the text of this report and the data are plotted on the accompanying maps.

## LOCATION, ACCESS AND TOPOGRAPHY

The claims are located approximately 8 kilometres north 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 1065 metres to 1310 metres A.S.L. The claims are surrounded by glaciers on the north, south and west sides.

## PROPERTY AND LIST OF CLAIMS

The KER 1-7 mineral claims consist of the following modified grid claims wholly owned by Kestrel Resources Ltd.:

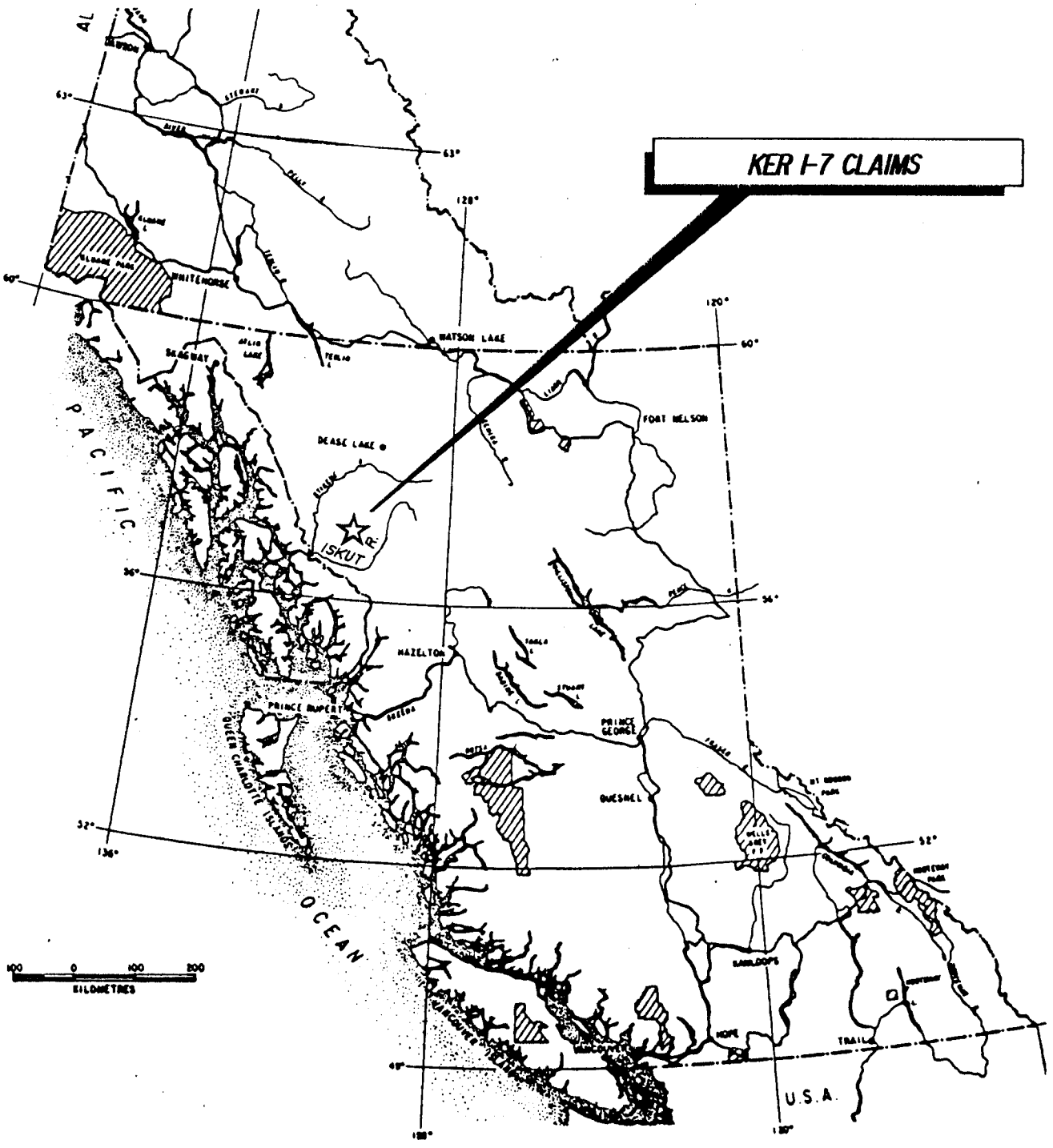
| Claim Name | Record No. | No. of Units | Record Date | Expiry Date |
|---|---|---|---|---|
| KER 1 | 4744 | 12 | June 28, 1988 | June 28, 1992 |
| KER 2 | 4745 | 12 | June 28, 1988 | June 28, 1992 |
| KER 3 | 4746 | 8 | June 28, 1988 | June 28, 1992 |
| KER 4 | 4747 | 8 | June 28, 1988 | June 28, 1992 |
| KER 5 | 4748 | 10 | June 28, 1988 | June 28, 1992 |
| KER 6 | 4749 | 4 | June 28, 1988 | June 28, 1992 |
| KER 7 | 4750 | 4 | June 28, 1988 | June 28, 1992 |

## 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.



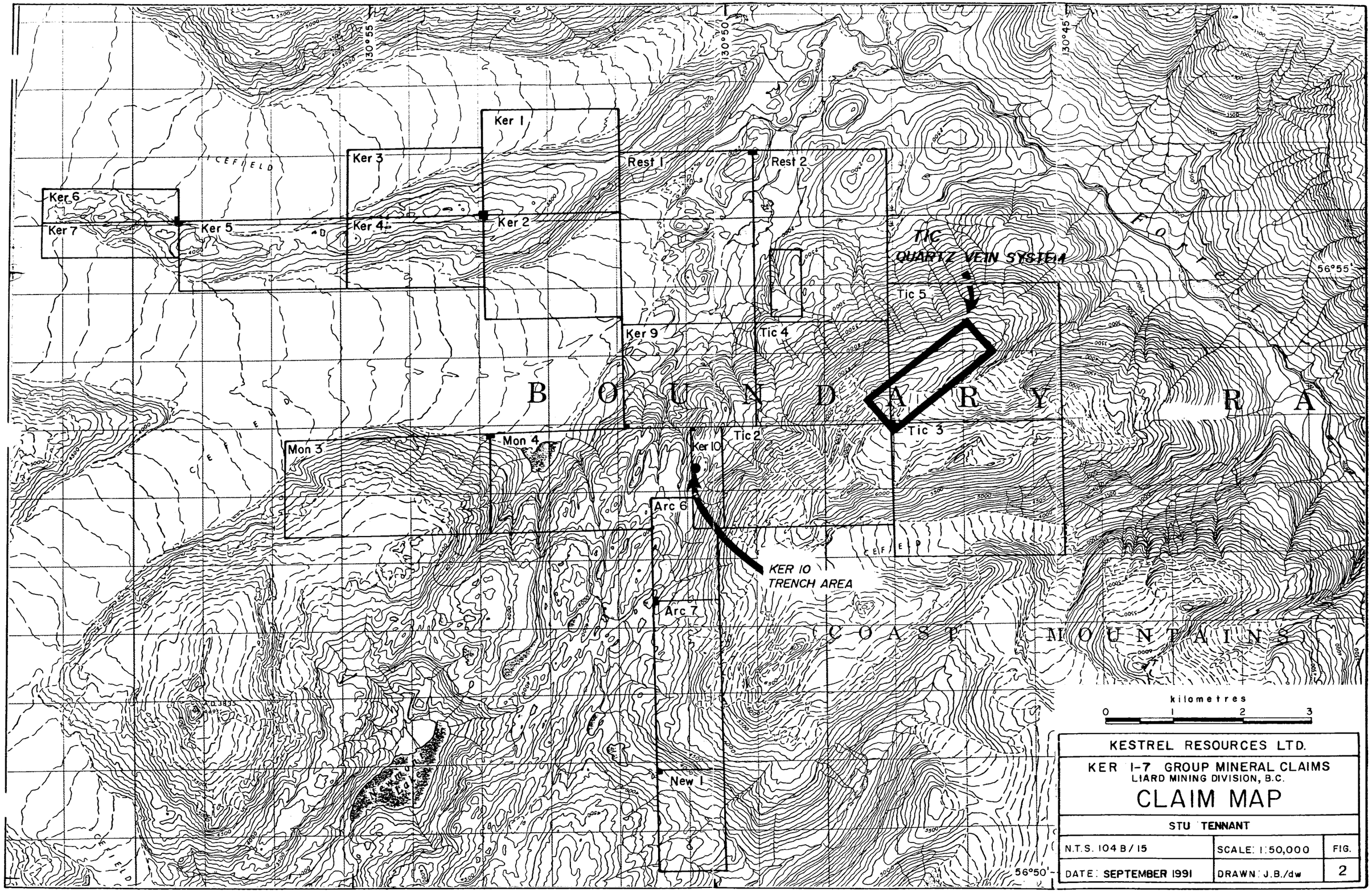

KESTREL RESOURCES LTD.

# LOCATION MAP

LIARD MINING DIVISION, B.C.

STU TENNANT

| SCALE: | DATE: | MAP: | N.T.S. |
|---|---|---|---|
| NOTED | APRIL 91 | 1 | 104B/15 |




KESTREL RESOURCES LTD.

KER 1-7 GROUP MINERAL CLAIMS
LIARD MINING DIVISION, B.C.

# CLAIM MAP

STU TENNANT

| | | |
|---|---|---|
| N.T.S. 104 B/15 | SCALE: 1:50,000 | FIG. |
| DATE: SEPTEMBER 1991 | DRAWN: J.B./dw | 2 |

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 McIymont 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.

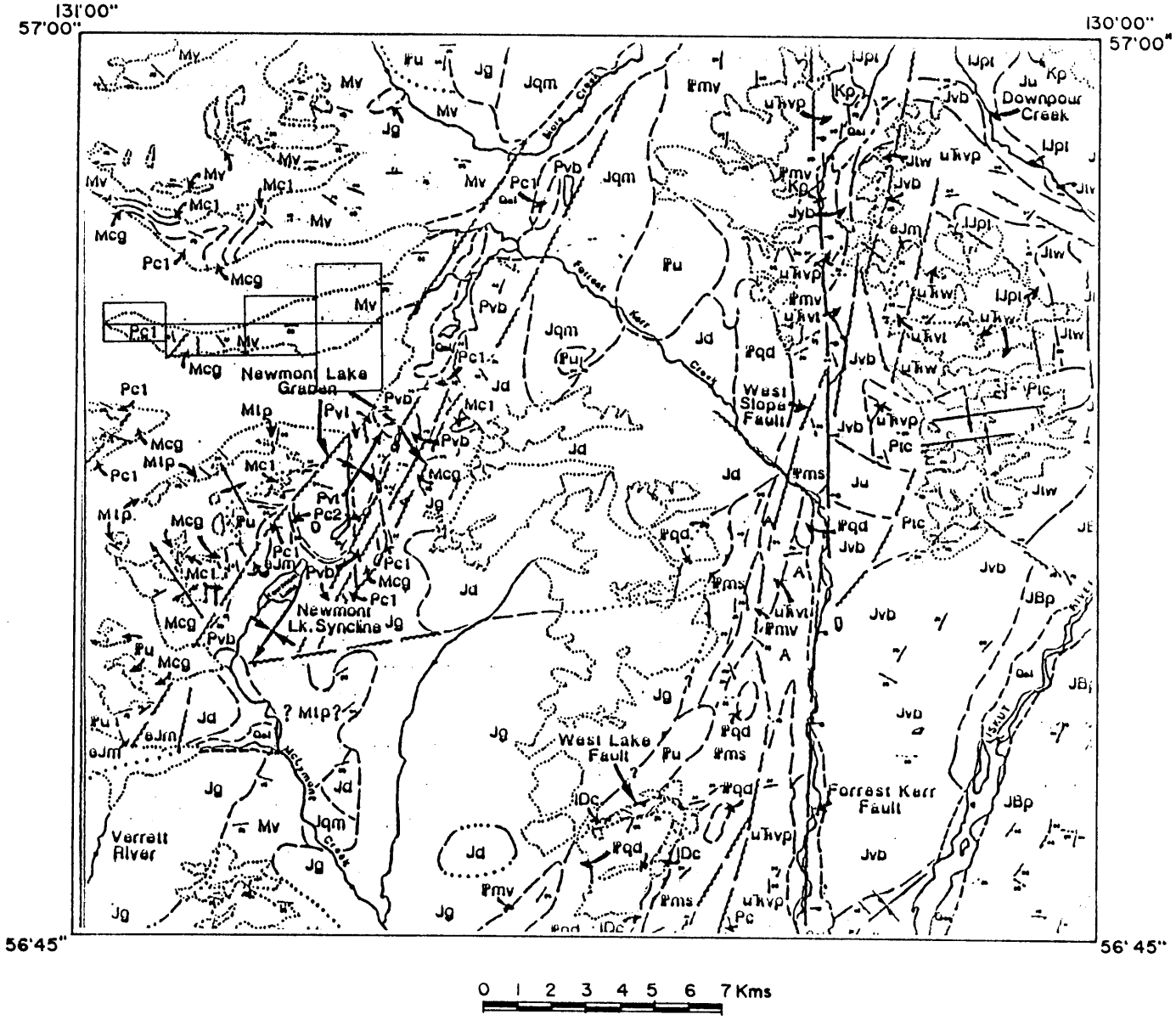
Overlying the Triassic Hazelton volcanic-sedimentary assemblage is a similar group of volcanic-sedimentary rocks of Middle Jurassic age tentatively named the Betty Creek Formation.

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




Geology map of the Forrest Kerr Creek map sheet 104B/15

| KESTREL RESOURCES LTD. | |
|---|---|
| KER 1-7 CLAIMS<br>LIARD MINING DIVISION, B.C.<br>REGIONAL GEOLOGY MAP<br>STU TENNANT | |
| DATE SEPTEMBER 1991 | SCALE NOTED |
| NTS 104 B/15 | FIGURE 3 |

# LEGEND

## QUATERNARY

| | |
|---|---|
| Qal | TILL, ALLUVIUM |

## STRATIFIED ROCKS

### MIDDLE TO UPPER JURASSIC BOWSER LAKE GROUP

| | |
|---|---|
| JBp | SILTSTONE, SANDSTONE, MINOR CONGLOMERATE |

### JURASSIC

| | |
|---|---|
| Ju | UNDIVIDED VOLCANICS AND SEDIMENTS |
| Jtw | SILICEOUS WACKE, TUFF, CONGLOMERATE |
| Jvb | PILLOW BASALT, BRECCIA FLOWS, SILICEOUS SEDIMENTS |
| Ljpt | SHALE, SANDSTONE, LESSER LIMESTONE, TUFF |

### UPPER TRIASSIC STUHINI GROUP

| | |
|---|---|
| uTrvl | MAROON AND GREEN EPICLASTICS, AUGITE AND PLAGIOCLASE-PHYRIC VOLCANIC BRECCIAS |
| uTrvp | DARK GREEN PLAGIOCLASE-PHYRIC FLOWS |
| uTrva | GREY-GREEN APHANITIC TUFF |
| uTrw | TUFFACEOUS WACKE, ARGILLITE, LIMESTONE, CONGLOMERATE WITH LIMESTONE CLASTS, PLAGIOCLASE-PORPHYRITIC ANDESITE |

### MIDDLE TRIASSIC

| | |
|---|---|
| mTrs | CARBONACEOUS CALCAREOUS SILTSTONE |

### PALEOZOIC STIKINE ASSEMBLAGE

| | |
|---|---|
| Pu | UNDIVIDED METAVOLCANICS AND METASEDIMENTS |

#### WESTERN ASSEMBLAGE

##### PERMIAN

| | |
|---|---|
| Pvl | FELSIC WELDED TUFF, VOLCANIC SANDSTONE AND SILTSTONE, RHYOLITE FLOWS |
| Pc2 | THIN-LAMINATED, GREY ALGAL LIMESTONE |
| Pvb | INTERMEDIATE TUFF AND EPICLASTICS, MAROON LAHAR, BRECCIA FLOWS |
| Pc1 | MEDIUM-BEDDED BIOCLASTIC LIMESTONE WITH CHERTY INTERBEDS |

##### MISSISSIPPIAN

| | |
|---|---|
| Mtp | SILTSTONE, SANDSTONE, TURBIDITES, LESSER LAPILLI TUFF |
| Mcg | POLYMICTIC VOLCANIC CONGLOMERATE |
| Mcl | INTERBEDDED SILICEOUS SILTSTONE AND LIMESTONE, THICK-BEDDED CRINOIDAL CALCARENITE |
| Mv | PILLOW BASALT, HYALOCLASTITE, ASH-FLOW FELSIC TUFF |

#### EASTERN ASSEMBLAGE

##### PERMIAN

| | |
|---|---|
| Plc | INTERMEDIATE TO MAFIC META-TUFF, THIN-BEDDED LIMESTONE AND METASEDIMENTS |
| Pc | MEDIUM-BEDDED BIOCLASTIC LIMESTONE |

##### PERMIAN AND OLDER

| | |
|---|---|
| Pms | SILICEOUS TURBIDITES, PHYLLITES, LESSER CHERTY TUFFS |
| Pmv | MAFIC TO FELSIC METAVOLCANICS, METASEDIMENTS, LIMESTONE LENSES |

##### LOWER DEVONIAN

| | |
|---|---|
| lDc | LIMESTONE, SILICEOUS TUFF |

## INTRUSIVE ROCKS

### CRETACEOUS AND YOUNGER (?)

| | |
|---|---|
| Kp | PLAGIOCLASE QUARTZ PORPHYRY |

### JURASSIC

| | |
|---|---|
| Jg | PINK HORNBLENDE BIOTITE GRANITE |
| Jqm | QUARTZ MONZONITE |
| Jd | HORNBLENDE DIORITE, HORNBLENDE QUARTZ DIORITE |

### EARLY JURASSIC

| | |
|---|---|
| eJm | HORNBLENDE-PLAGIOCLASE-PORPHYRITIC MONZONITE, SYENITE |

### PALEOZOIC

| | |
|---|---|
| Pqd | DEFORMED HORNBLENDE QUARTZ DIORITE |

### UNKNOWN

| | |
|---|---|
| A | ALTERED DIORITE |

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 KER claims at a scale of 1:50,000.

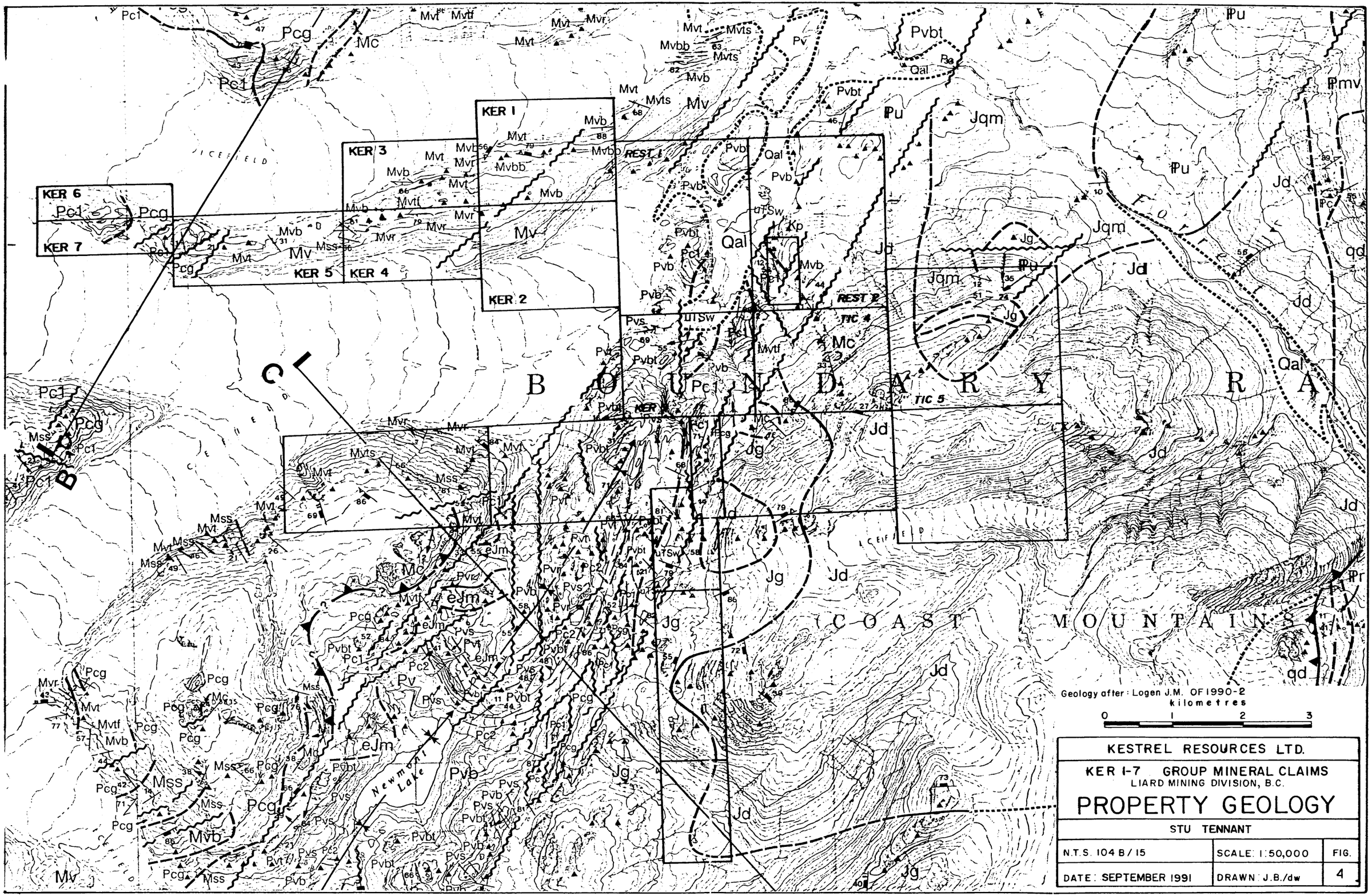
The KER claims cover a limestone unit on their western portion in contact with basalts, volcanic units, andesite flows and pyroclastic rocks to the east. Mineralization consists of minor pyrite, chalcopyrite and tetrahedrite in fine quartz veins within the limestones. The limestone comprises primarily massive to thin-bedded grey bioclastic calcarenite and lesser buff silty dolomitic units.

## 1990 EXPLORATION PROGRAM

The 1990 lithogeochemical program was designed to further evaluate the mineral potential of the KER claims which had previously been prospected in 1988. The field program was conducted during the month of August.

Access was via helicopter (provided by Northern Mountain Helicopters), from a base camp at the Forrest Kerr airstrip, some 9 kilometres to the east. Field work was conducted by employees of Kestrel Resources Ltd. under the supervision of the author. A total of 75 rock chip samples were collected.

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.




Geology after : Logen J.M. OF 1990-2

kilometres

0 1 2 3

KESTREL RESOURCES LTD.

KER 1-7 GROUP MINERAL CLAIMS
LIARD MINING DIVISION, B.C.

# PROPERTY GEOLOGY

STU TENNANT

| | | |
|---|---|---|
| N.T.S. 104 B/15 | SCALE: 1:50,000 | FIG. |
| DATE: SEPTEMBER 1991 | DRAWN: J.B./dw | 4 |

# LEGEND

## QUATERNARY

| | |
|---|---|
| Rv | *RECENT VOLCANICS* |
| Qal | *TILL, ALLUVIUM* |

## LAYERED ROCKS

### MIDDLE TO UPPER JURASSIC BOWSER LAKE GROUP

| | |
|---|---|
| JBp | *PLANAR BEDDED SHALE AND LOCALLY CROSSBEDDED SANDSTONE TURBIDITE COUPLETS* |
| JBcg | *CHERT PEBBLE TO GRANULE CONGLOMERATE* |

### JURASSIC

| | |
|---|---|
| Ju | *UNDIVIDED SEDIMENTS AND VOLCANICS* |
| Jw | *BRECCIATED AND CRACKLE FRACTURED DARK GREEN AND GREY SILICEOUS SILTSTONES AND PYRITIC CHERT, CARBONACEOUS TUFFACEOUS WACKES WITH INTERBEDDED CONGLOMERATE CONTAINING CLASTS OF CHERT, BLACK SILTSTONE, AND INTERMEDIATE TO FELSIC VOLCANICS (Jwcg)* |

### MIDDLE(?) JURASSIC

| | |
|---|---|
| mJvb | *DENSE MEDIUM GREY TO GREEN PILLOW BASALT, LOCALLY AMYGDALOIDAL, PLAGIOCLASE PHYRIC, PILLOW BRECCIA FLOWS AND FLOW BRECCIAS, HYALOCLASTITE.* |
| mJvs | *THINLY BEDDED, ALTERNATING BLACK AND WHITE SILICEOUS TUFFS AND SEDIMENTS* |

### LOWER(?) JURASSIC

| | |
|---|---|
| lJp | *FISSILE, THIN BEDDED, SILTSTONE AND SANDSTONE WITH CARBONACEOUS WOOD FRAGMENTS, GRANULE CONGLOMERATES CONTAINING INTERMEDIATE VOLCANIC, SEDIMENTARY AND LIMESTONE CLASTS.* |
| lJl | *BROWNISH GREY LAPILLI AND CRYSTAL TUFF; RHYOLITE CRYSTAL TUFF AND LESSER FLOWS (lJlr)* |

### UPPER TRIASSIC STUHINI GROUP

| | |
|---|---|
| uTS | *UNDIVIDED VOLCANICS AND SEDIMENTS* |
| uTSvl | *MAROON AND GREEN PLAGIOCLASE AND LESSER AUGITE-PHYRIC LAPILLI TO BLOCK TUFFS AND ASSOCIATED EPICLASTICS* |
| uTSv | *MAROON AND GREEN PORPHYRITIC VOLCANIC FLOW BRECCIAS, PLAGIOCLASE-PHYRIC (uTSvp); AUGITE-PHYRIC (uTSva)* |
| uTSt | *GREY-GREEN APHANITIC TUFF* |
| uTSw | *TUFFACEOUS WACKE, ARGILLITE, LIMESTONE; CARBONACEOUS AND CALCAREOUS SILTSTONE INTERBEDDED WITH FINE GRAINED SANDSTONE AND MINOR CONGLOMERATE; MAROON VOLCANIC CONGLOMERATE WITH LIMESTONE CLASTS(uTSwcg)* |

PALEOZOIC STIKINE ASSEMBLAGE

**Pu** — *UNDIVIDED METAVOLCANICS AND METASEDIMENTS*

WESTERN ASSEMBLAGE

**PERMIAN**

**Pv** — *UNDIVIDED PERMIAN VOLCANICS AND SEDIMENTS*

- **Pvt** — *LAPILLI AND PLAGIOCLASE CRYSTAL TUFF, FELSIC WELDED ASH TUFF, THINLY BEDDED SILICEOUS LIMESTONE LENSES; RHYOLITE FLOWS (Pvr); VOLCANIC SANDSTONE, SILTSTONE AND MAROON SHALLOW(?) WATER CONGLOMERATES (Pvs)*
- **Pc2** — *ALGAL LIMESTONE; THIN-LAMINATED, DARK GREY TO BLACK, LOCALLY FETID, WEATHERS BUFF, PISOLITE-RICH BEDS AND CUSPATE STACKED CONCAVE ALGAL STRUCTURES COMMON*
- **Pvb** — *HORNBLENDE-PLAGIOCLASE PORPHYRITIC ANDESITE BRECCIA FLOWS; LOCALLY AMYGDALOIDAL, CONTAINS 30 TO 40 PERCENT EUHEDRAL WHITE PLAGIOCLASE AND 15 PERCENT CHLORITIC ACICULAR HORNBLENDE CRYSTALS; MAROON LAHAR AND LAPILLI TUFF (Pvbt)*
- **Pc1** — *BIOCLASTIC LIMESTONE WITH CHERTY INTERBEDS; MEDIUM-BEDDED TO MASSIVE GREY BIOCLASTIC CALCARENITE AND LESSER BUFF SILTY DOLOMITIC UNITS; THIN BEDDED SECTIONS CONTAIN BLACK TO YELLOWISH BUFF AMORPHOUS SILICA BEDS UP TO 20 CENTIMETRES THICK; SOLITARY CORALS, FORAMINIFERA, BRYOZOAN, CRINOIDS AND VARIOUS BRACHIOPODS ARE LOCALLY ABUNDANT*
- **Pcg** — *THICK BEDDED, BOULDER TO PEBBLE CONGLOMERATE, CLASTS ARE AUGITE PHYRIC, PLAGIOCLASE PHYRIC, ANDESITE, BASALT, AND LIMESTONE CLASTS.*

**MISSISSIPPIAN - PENNSYLVANIAN**

- **Mss** — *SILTSTONE-SANDSTONE TURBIDITES AND LESSER CHERTS*
- **Mc** — *THICK-BEDDED CRINOIDAL CALCARENITE WITH INTERBEDDED SILICEOUS SILTSTONE*
- **Mv** — *UNDIVIDED VOLCANICS*
  - **Mvt** — *MAFIC TO INTERMEDIATE SCORIACEOUS LAPILLI TUFF; SILICEOUS DUST TUFFS AND EPICLASTICS (Mvts); INTERMEDIATE TO FELSIC ASH FLOW AND WELDED TUFFS (Mvrt)*
  - **Mvr** — *RHYOLITE, RHYODACITE, PINK AND ORANGE FLOW BANDED BRECCIAS VARYING TO MASSIVE SUBVOLCANIC BODIES, GLOMEROPORPHYRITIC FELDSPAR AND QUARTZ EYES COMMON.*
  - **Mvb** — *MASSIVE-AMYGDALOIDAL BASALT FLOWS; HYALOCLASTITE DEBRIS FLOWS (Mvbb); PILLOW BASALT (Mvbp)*

EASTERN ASSEMBLAGE

**PERMIAN**

- **Ptc** — *DEFORMED CHLORITIC TUFFS AND METAVOLCANICS, INTERBEDDED TUFFACEOUS AND SILICEOUS SILTSTONES AND NUMEROUS THIN BEDDED RECRYSTALLIZED LIMESTONES.*
- **Pc** — *LIMESTONE; BIOCLASTIC, MEDIUM-BEDDED, RECRYSTALLIZED, WHITE TO BUFF, SPARSELY CRINOIDAL CALCARENITE WHICH LOCALLY IS COMPLETELY RECRYSTALLIZED TO COARSE CALCITE*

**PERMIAN AND OLDER**

- **Pms** — *METASEDIMENTS AND MINOR LIMESTONE; SILTSTONES ARE GREY TO LIGHT GREEN, PHYLLITIC AND INTERLAYERED WITH GRAPHITIC ARGILLITE AND SILICEOUS PHYLLITE AND THIN LENSES OF DARK BROWN LIMESTONE; GREEN AND WHITE SILICEOUS TURBIDITE COUPLETS AND CHERTY TUFFS(Pmst) OCCUR HIGH IN THE STRATIGRAPHY.*
- **Pc** — *LIMESTONE; RECRYSTALLIZED, THIN BEDDED TO MORE COMMONLY MASSIVE, WHITE TO BUFF COLOURED.*
- **Pmv** — *MAFIC TO FELSIC METAVOLCANICS, RARE LIMESTONE LENSES; VARIABLY FOLIATED TO SCHISTOSE, PURPLE TO DARK GREEN PLAGIOCLASE PORPHYRITIC FLOWS AND TUFFS.*

**LOWER DEVONIAN**

- **lDc** — *DEFORMED CORALLINE LIMESTONES; LESSER INTERBEDDED PEBBLE CONGLOMERATE, SILICEOUS AND CARBONACEOUS SHALES AND BOTH MAFIC AND FELSIC TUFFS.*

## INTRUSIVE ROCKS

### CRETACEOUS AND YOUNGER (?)

| | |
|---|---|
| Kp | *PLAGIOCLASE QUARTZ PORPHYRY; OCCURS AS SMALL PLUGS AND DYKES INTRUDING NORTH TRENDING FAULTS, PYRITIC AND OXIDIZED TO YELLOW AND RED GOSSANS.* |

### JURASSIC AND YOUNGER(?)

| | |
|---|---|
| Jg | *BIOTITE GRANITE; PINK, COARSE TO MEDIUM GRAINED, EQUIGRANULAR TO 'QUARTZ EYE' PORPHYRITIC, LESS COMMONLY HORNBLENDE IS THE MAFIC CONSTITUENT, QUARTZ EXCEEDS 30 PERCENT, QUARTZ RICH PHASES (50 PER CENT) ARE SPATIALLY RELATED TO FAULT STRUCTURES* |
| Jqm | *HORNBLENDE QUARTZ MONZONITE TO MONZONITE; COARSE TO MEDIUM GRAINED, HORNBLENDE AVERAGES 20 PERCENT AS 5 MILLIMETRE CRYSTAL LATHS AND POIKILITIC CLOTS, BIOTITE WHERE PRESENT IS FINE GRAINED AND LESS THAN 5 PERCENT.* |
| Jd | *HORNBLENDE DIORITE, HORNBLENDE QUARTZ DIORITE; HORNBLENDE IS CHLORITIC AND COMPRISES MORE THAN 40 PERCENT OF THE ROCK.* |

### MIDDLE(?) JURASSIC

| | |
|---|---|
| Jdl | *DIORITE TO GABBRO; COARSE GRAINED, OCCURS AS STOCKS AND SILLS, PLAGIOCLASE CRYSTALS ARE EUHEDRAL TO SUBHEDRAL ACICULAR CLOTS WHICH IMPART A DISTINCTIVE FELTY INTERLOCKING TEXTURE, THESE SUBVOLCANIC INTRUSIONS MAY REPRESENT FEEDERS TO THE PILLOW BASALTS(Jvb)* |

### EARLY JURASSIC

| | |
|---|---|
| eJm | *HORNBLENDE-PLAGIOCLASE-PORPHYRITIC MONZONITE; OCCURS AS DYKES, SILLS AND PLUGS CHARACTERIZED BY A HEMATITIC GROUNDMASS ALTERED WITH PINK SUBHEDRAL TO EUHEDRAL PLAGIOCLASE (UP TO 50 PERCENT) AND HORNBLENDE CRYSTALS, TRACHYTIC TEXTURES ARE COMMON, STRONGLY MAGNETIC.* |
| eJg | *HORNBLENDE BIOTITE POTASSIUM FELDSPAR MEGACRYSTIC GRANITE.* |

### AGE UNKNOWN

| | |
|---|---|
| qd | *HORNBLENDE QUARTZ DIORITE; MEDIUM GRAINED, LOCALLY FOLIATED AND ALTERED, CONTAINS IRREGULAR MAFIC INCLUSIONS (UP TO 100 CENTIMETRES) OF AMPHIBOLITES.* |
| d | *ALTERED DIORITE* |
| DYKES | *a) APHYRIC ANDESITE AND BASALT; pp) MAFIC PLAGIOCLASE PHYRIC; l) LAMPROPHYRE; r) RHYOLITE/APLITE* |

## MAP SYMBOLS

---

Geological contact (defined, approximate, assumed) .....

Unconformable contact (defined, assumed) .....

Bedding (horizontal, inclined, overturned).....

Foliation .....

Fault (observed, inferred).....

Thrust or high angle reverse fault (defined, assumed).....

Anticline (direction of plunge indicated).....

Syncline (direction of plunge indicated).....

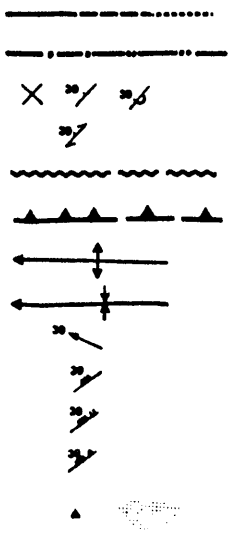
Minor fold axis.....

Joint.....

Dyke.....

Vein.....

Outcrop visited.....



At Vangeochem Lab Ltd., each rock sample was ground to -100 mesh and an 0.5 gram pulp was digested with 5 millilitres of 3:3:1 hydrochloric acids 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, cadmium, 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 at 1900°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.

Prospecting traverses and all sample locations are shown on Figure 5 of this report. The lithogeochemical sample descriptions and analytical results accompany this report as Appendices I and II respectively.

## DISCUSSION OF RESULTS

A total of 9 man days were spent on the geochemical sampling program on the KER claims which was designed to further evaluate the mineral potential of the claims. Samples taken in 1988 along the northern edge of KER 6 claim assayed up to 40 opt in silver and greater than 2% zinc. Samples taken in 1990 in the centre of KER 6 assayed up to 6.0 opt Ag, 16% Zn and >1% Pb. Gold values are generally not significant. Mineralization consists of tetrahedrite, chalcopyrite, sphalerite and galena in barite carbonate veins as well as fine quartz veins in limestones. The limestone is tilted and appears to be folded with the axis trending north-south.

Two 100 metre lines of 3 metre continuous chip sampling was carried out in order to check continuity of mineralization in two different areas. Results of this sampling, although on the low side, indicate that the mineralization is erratic which may be due to widespread narrow shears and veins. The main anomalous Ag-Zn area needs additional work to fully evaluate the potential of the property.

## RECOMMENDATIONS

The KER 1-7 mineral claims cover a limestone unit on their western portion in contact with basalts, volcanic units, and andesite flows to the east. Sampling to date has located a large area of anomalous Ag-Zn mineralization on the KER 6 claim.

A program to follow up the Ag-Zn anomaly on the KER 6 mineral claim is necessary to further evaluate the potential of the property. This program should include:

1. Establish a grid over the anomalous silver area
2. Geological mapping in detail
3. Closely spaced sampling program
4. Possible geophysical survey
5. Trenching program to expose fresh bedrock

## 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

**Stuart J. Tennant**

DATED at Vancouver, British Columbia, this 18th day of September, 1991.

## PROGRAM COSTS

| | | | |
|---|---|---|---|
| S. Tennant<br>Geologist | 2 days @ $325/day | $ | 325 |
| C. Buchholz<br>Geologist | 1 day @ $325/day | | 325 |
| K. Forster<br>Prospector | 3 days @ $200/day | | 600 |
| W. Grier<br>Prospector | 3 days @ $200/day | | 600 |
| | | | 2,150 |

**Field Expense**

| | | |
|---|---|---|
| Room and Board | 9 days @ $125/day | 1,125 |
| Helicopter | 1.5 hours @ $800/hour | 1,200 |
| Drafting and Maps | | 50 |
| Assaying (Vangeochem Labs)<br>75 samples @ $18/samples | | 1,350 |
| Report | | 325 |
| TOTAL COST | $ | **6,200** |

# APPENDIX I

## Sample Assay Results

1630 PANDORA STREET
VANCOUVER, BC V5L 1L6
(604) 251-5656

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 NUMBER: 900271 GA JOB NUMBER: 900271 SULLIVAN MANAGEMENT/KESTREL RES. 

| SAMPLE # | Ag ppm | Au ppb |
|---|---|---|
| 92384 | 11.0 | nd |
| 92385 | 50.0 | 50 |
| 92386 | 19.0 | 40 |
| 92387 | 33.0 | 50 |
| 92388 | 6.8 | 60 |
| 92389 | nd | 30 |
| 92390 | 12.0 | 30 |
| 92391 | > 50.0 | 20 |

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

VANGEOCHEM LA LIMITED

1630 Pandora Street, Vancouver, B.C. V5L 1L6
Ph:(604)251-5656 Fax:(604)254-5717

# ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to $HNO_3$ to $H_2O$ at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST:

REPORT #: 900271 PA | SULLIVAN MANAGEMENT / KESTREL RES. | PROJECT: KERR 5 | DATE IN: AUG 20 1990 | DATE OUT: SEPT 07 1990 | ATTENTION: MR. JOHN BUCHHOLZ | PAGE 1 OF 1

| Sample Name | Ag | Al | As | Ba | Bi | Ca | Cd | Co | Cr | Cu | Fe | K | Mg | Mn | Mo | Na | Ni | P | Pb | Sb | Sn | Sr | U | W | Zn |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ppm | % | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | % | % | % | ppm | ppm | % | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| 92384 | 11.0 | 0.11 | <3 | 37 | <3 | >10.00 | 297.5 | 9 | 55 | 55 | 2.57 | <0.01 | 4.11 | 5825 | 50 | <0.01 | 43 | <0.01 | 5324 | <2 | 16 | 666 | <5 | <3 | >20000 |
| 92385 | 50.0 | 0.01 | <3 | 65 | <3 | 5.58 | 269.0 | 6 | 51 | 117 | 0.65 | <0.01 | 0.74 | 1469 | 43 | <0.01 | <1 | <0.01 | 11217 | 24 | 10 | 805 | <5 | <3 | >20000 |
| 92386 | 19.0 | 0.04 | 1070 | 37 | <3 | 3.11 | 152.2 | 13 | 52 | 2117 | 2.13 | <0.01 | 1.26 | 1541 | 31 | <0.01 | 7 | <0.01 | 648 | 76 | 13 | 702 | <5 | <3 | 16162 |
| 92387 | 33.0 | 0.01 | <3 | 29 | <3 | >10.00 | 826.1 | 13 | 90 | 292 | 5.35 | <0.01 | 7.51 | 8661 | 88 | <0.01 | 11 | <0.01 | 5203 | 37 | 23 | 482 | <5 | <3 | >20000 |
| 92388 | 6.8 | 0.02 | <3 | 10 | <3 | 4.65 | >1000.0 | 14 | 133 | 64 | 0.81 | <0.01 | 1.02 | 2108 | 134 | <0.01 | <1 | <0.01 | 11353 | 3 | 22 | 132 | <5 | 660 | >20000 |
| 92389 | <0.1 | <0.01 | 36 | >1000 | <3 | 2.55 | 29.1 | 3 | 150 | 9 | 0.38 | <0.01 | 0.47 | 480 | 19 | <0.01 | <1 | <0.01 | 241 | <2 | 11 | 63 | <5 | <3 | 3322 |
| 92390 | 12.0 | <0.01 | <3 | 50 | <3 | 7.77 | 434.7 | 7 | 54 | 157 | 1.38 | <0.01 | 3.76 | 3897 | 52 | <0.01 | <1 | <0.01 | 3332 | 15 | 15 | 655 | <5 | 42 | >20000 |
| 92391 | >50.0 | 0.03 | 243 | 19 | <3 | 5.31 | 32.8 | 11 | 85 | 8319 | 3.10 | <0.01 | 0.35 | 1710 | 28 | <0.01 | 3 | <0.01 | 275 | 502 | 19 | 194 | <5 | <3 | 3158 |
| Minimum Detection | 0.1 | 0.01 | 3 | 1 | 3 | 0.01 | 0.1 | 1 | 1 | 1 | 0.01 | 0.01 | 0.01 | 1 | 1 | 0.01 | 1 | 0.01 | 2 | 2 | 2 | 1 | 5 | 3 | 1 |
| Maximum Detection | 50.0 | 10.00 | 2000 | 1000 | 1000 | 10.00 | 1000.0 | 20000 | 1000 | 20000 | 10.00 | 10.00 | 10.00 | 20000 | 1000 | 10.00 | 20000 | 10.00 | 20000 | 2000 | 1000 | 10000 | 100 | 1000 | 20000 |

< - Less Than Minimum  > - Greater Than Maximum  is - Insufficient Sample  ns - No Sample  ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested.

1630 PANDORA STREET
VANCOUVER, BC V5L 1L6
(604) 251-5656

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 NUMBER: 900271 AA JOB NUMBER: 900271 SULLIVAN MANAGEMENT/KESTREL RES. 

| SAMPLE # | Zn % | Ag oz/st |
|---|---|---|
| 92384 | 3.97 | -- |
| 92385 | 3.87 | 1.40 |
| 92387 | 7.24 | -- |
| 92388 | 16.40 | -- |
| 92390 | 3.92 | -- |
| 92391 | -- | 6.23 |
| DETECTION LIMIT | .01 | .01 |

1 Troy oz/short ton = 34.28 ppm 1 ppm = 0.0001% ppm = parts per million < = less than

signed: _____

VGC VANGEOCHEM LAB LIMITED

MAIN OFFICE
1630 PANDORA STREET
VANCOUVER, B.C.
V5L 1L6
TEL (604) 251-5656
FAX (604) 254-5717

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

REPORT NUMBER: 900455 GA JOB NUMBER: 900455 SULLIVAN MANAGEMENT/KESTREL RES. 

| SAMPLE # | Ag ppm | Au ppb |
|---|---|---|
| 80738 | .2 | nd |
| 80739 | nd | nd |
| 80740 | nd | nd |
| 80741 | 3.0 | nd |
| 80742 | .3 | 20 |
| 80743 | .3 | 20 |
| 80744 | nd | 20 |
| 80745 | 20.6 | 20 |
| 80746 | .3 | 30 |
| 80747 | .1 | nd |
| 80748 | .2 | 20 |
| 80749 | 1.5 | nd |
| 80750 | .6 | 20 |
| 80751 | .2 | 30 |
| 80752 | .5 | 20 |
| 80753 | nd | nd |
| 80754 | nd | nd |
| 80755 | nd | nd |
| 80756 | nd | nd |
| 80757 | nd | nd |
| 80758 | nd | nd |
| 80759 | .3 | 180 |
| 80760 | 3.5 | 20 |
| 80761 | nd | nd |
| 80762 | nd | nd |
| 80763 | nd | nd |
| 80764 | nd | nd |
| 80765 | nd | nd |
| 80766 | nd | nd |
| 80767 | nd | nd |
| 80768 | nd | nd |
| 80769 | .5 | nd |
| 80770 | .4 | nd |
| 80771 | nd | nd |
| 80772 | nd | nd |
| 80773 | nd | nd |
| 80774 | nd | nd |
| 80775 | nd | nd |
| 80776 | nd | nd |
| DETECTION LIMIT | 0.1 | 5 |

nd = none detected -- = not analysed is = insufficient sample

VGC VANGEOCHEM LAB LIMITED

MAIN OFFICE
1630 PANDORA STREET
VANCOUVER, B.C.
V5L 1L6
TEL (604) 251-5656
FAX (604) 254-5717

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

REPORT NUMBER: 900455 GA JOB NUMBER: 900455 SULLIVAN MANAGEMENT/KESTREL RES. 

| SAMPLE # | Ag ppm | Au ppb |
|---|---|---|
| 80777 | .2 | nd |
| 80778 | .2 | nd |
| 80779 | .1 | nd |
| 80780 | nd | nd |
| 80781 | nd | nd |
| 80782 | .3 | nd |
| 80783 | .3 | nd |
| 80784 | nd | nd |
| 80785 | .2 | 20 |
| 80786 | .1 | nd |
| 80787 | nd | nd |
| 80788 | nd | 10 |
| 80789 | nd | nd |
| 80790 | nd | 10 |
| 80791 | nd | nd |
| 80792 | .1 | 20 |
| 80793 | .1 | 10 |
| 80794 | nd | nd |
| 80795 | nd | nd |
| 80796 | nd | nd |
| 80797 | .2 | 10 |
| 80798 | .1 | 10 |
| 80799 | .2 | nd |
| 80800 | nd | nd |
| 80801 | 3.6 | nd |
| 80802 | .2 | nd |

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

VANGEOCHEM LAB LIMITED
1630 Pandora Street, Vancouve . V5L 1L6
Ph:(604)251-5656 Fax:(60 -5717

# ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to $HNO_3$ to $H_2O$ at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST:

REPORT #: 900455 PA SULLIVAN MANAGEMENT / KESTREL RES. PROJECT: KER-6-7 DATE IN: SEPT 12 1990 DATE OUT: OCT 09 1990 ATTENTION: MR. TENNANT & MR. BUCHHOLZ 

| Sample Name | Ag | Al | As | Ba | Bi | Ca | Cd | Co | Cr | Cu | Fe | K | Mg | Mn | Mo | Na | Ni | P | Pb | Sb | Sn | Sr | U | W | Zn |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ppm | % | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | % | % | % | ppm | ppm | % | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| B0738 | 0.2 | 0.02 | <3 | >1000 | <3 | >10.00 | <0.1 | <1 | 6 | 23 | 0.32 | <0.01 | 0.84 | 933 | 3 | 0.03 | 10 | <0.01 | 38 | 8 | <2 | 269 | <5 | <3 | 23 |
| B0739 | <0.1 | 0.02 | <3 | >1000 | <3 | >10.00 | 0.7 | <1 | 20 | 10 | 0.26 | <0.01 | 0.51 | 1002 | 4 | 0.04 | 10 | <0.01 | 60 | 7 | <2 | 269 | <5 | <3 | 44 |
| B0740 | <0.1 | 0.03 | <3 | >1000 | <3 | >10.00 | 0.9 | <1 | 6 | 15 | 0.29 | <0.01 | 0.43 | 1229 | 5 | 0.03 | 10 | <0.01 | 68 | 8 | <2 | 301 | <5 | <3 | 39 |
| B0741 | 3.0 | 0.04 | 400 | 240 | <3 | >10.00 | 100.8 | 2 | 16 | 1271 | 0.68 | 0.10 | 0.13 | 781 | 3 | 0.10 | 7 | <0.01 | 684 | 28 | <2 | 727 | <5 | <3 | 2655 |
| B0742 | 0.3 | 0.06 | 33 | >1000 | <3 | >10.00 | 5.7 | <1 | 9 | 145 | 0.21 | <0.01 | 0.44 | 1116 | 4 | 0.04 | 10 | 0.01 | 67 | 12 | <2 | 265 | <5 | <3 | 197 |
| B0743 | 0.3 | 0.03 | 77 | 591 | <3 | >10.00 | 2.1 | 2 | 18 | 275 | 0.43 | <0.01 | 0.55 | 1159 | 3 | 0.03 | 6 | <0.01 | 58 | 13 | <2 | 539 | <5 | <3 | 184 |
| B0744 | <0.1 | 0.02 | <3 | >1000 | <3 | >10.00 | 0.7 | <1 | 6 | 17 | 0.23 | <0.01 | 1.56 | 977 | 6 | 0.03 | 8 | <0.01 | 45 | 8 | 2 | 238 | <5 | <3 | 29 |
| B0745 | 20.6 | 0.02 | <3 | 60 | <3 | >10.00 | 165.8 | 2 | 14 | 146 | 0.98 | 0.03 | 3.41 | 3493 | 7 | 0.48 | 5 | <0.01 | 1665 | 45 | 3 | 627 | <5 | <3 | 15527 |
| B0746 | 0.3 | 0.04 | <3 | 347 | <3 | >10.00 | 3.7 | 1 | 7 | 12 | 0.58 | <0.01 | 2.24 | 1943 | 7 | 0.04 | 8 | <0.01 | 80 | 11 | 2 | 234 | <5 | <3 | 302 |
| B0747 | 0.1 | 0.02 | <3 | >1000 | <3 | >10.00 | 2.0 | <1 | 7 | 22 | 0.59 | <0.01 | 1.41 | 2363 | 5 | 0.04 | 7 | <0.01 | 65 | 9 | 3 | 202 | <5 | <3 | 172 |
| B0748 | 0.2 | 0.02 | 20 | 619 | <3 | >10.00 | 3.0 | 2 | 5 | 120 | 0.99 | <0.01 | 2.76 | 4083 | 7 | 0.04 | 5 | <0.01 | 124 | 15 | 3 | 374 | <5 | <3 | 308 |
| B0749 | 1.5 | 0.02 | 36 | 850 | <3 | >10.00 | 1.8 | <1 | 4 | 261 | 1.10 | 0.03 | 1.57 | 3125 | 5 | 0.03 | 6 | <0.01 | 55 | 15 | 3 | 617 | <5 | <3 | 131 |
| B0750 | 0.6 | 0.02 | 10 | 799 | <3 | >10.00 | 2.3 | 2 | 7 | 72 | 1.15 | <0.01 | 2.86 | 5478 | 9 | 0.04 | 7 | <0.01 | 59 | 15 | 5 | 270 | <5 | <3 | 112 |
| B0751 | 0.2 | 0.02 | <3 | >1000 | <3 | >10.00 | 3.0 | <1 | 6 | 26 | 0.19 | <0.01 | 0.34 | 1023 | 4 | 0.04 | 4 | <0.01 | 54 | 13 | 2 | 242 | <5 | <3 | 145 |
| B0752 | 0.5 | 0.03 | <3 | >1000 | <3 | >10.00 | 4.4 | <1 | 3 | 13 | 0.14 | <0.01 | 0.28 | 680 | 3 | 0.04 | 3 | <0.01 | 47 | 8 | <2 | 218 | <5 | <3 | 338 |
| B0753 | <0.1 | 0.03 | <3 | 430 | <3 | >10.00 | 0.8 | 1 | 4 | 6 | 0.12 | <0.01 | 0.70 | 441 | 5 | 0.03 | 7 | <0.01 | 48 | 9 | <2 | 154 | <5 | <3 | 26 |
| B0754 | <0.1 | <0.01 | <3 | 477 | <3 | >10.00 | <0.1 | <1 | 20 | 6 | 0.16 | <0.01 | 0.83 | 529 | 4 | 0.03 | 6 | <0.01 | 41 | 7 | <2 | 129 | <5 | <3 | 22 |
| B0755 | <0.1 | 0.01 | <3 | 167 | <3 | >10.00 | 1.1 | <1 | 29 | 5 | 0.23 | <0.01 | 0.81 | 829 | 4 | 0.03 | 3 | <0.01 | 45 | 8 | <2 | 161 | <5 | <3 | 17 |
| B0756 | <0.1 | 0.03 | <3 | 317 | <3 | >10.00 | <0.1 | <1 | 5 | 5 | 0.13 | <0.01 | 0.37 | 723 | 3 | 0.03 | 3 | <0.01 | 52 | 7 | 2 | 148 | <5 | <3 | 10 |
| B0757 | <0.1 | 0.01 | <3 | >1000 | <3 | >10.00 | 1.0 | <1 | 6 | 7 | 0.32 | <0.01 | 1.67 | 1300 | 6 | 0.03 | 4 | <0.01 | 47 | 9 | 3 | 169 | <5 | <3 | 20 |
| B0758 | <0.1 | 0.03 | <3 | 197 | <3 | >10.00 | 1.4 | 1 | 4 | 7 | 0.17 | <0.01 | 0.88 | 717 | 5 | 0.03 | 9 | <0.01 | 57 | 9 | 3 | 167 | <5 | <3 | 33 |
| B0759 | 0.3 | 0.02 | 48 | 87 | <3 | >10.00 | 104.3 | 2 | 7 | 238 | 0.48 | 0.02 | 3.31 | 1336 | 8 | 0.36 | 3 | <0.01 | 63 | 10 | 4 | 572 | <5 | <3 | 11570 |
| B0760 | 3.5 | <0.01 | 278 | 10 | <3 | >10.00 | >1000.0 | 7 | 34 | 1116 | 1.06 | <0.01 | 3.85 | 3627 | 25 | 4.16 | 12 | <0.01 | 113 | 17 | 7 | 97 | <5 | <3 | >20000 |
| B0761 | <0.1 | 0.01 | <3 | >1000 | <3 | >10.00 | 15.1 | <1 | 6 | 18 | 0.41 | <0.01 | 5.43 | 1425 | 11 | 0.07 | 6 | <0.01 | 33 | 8 | 5 | 139 | <5 | <3 | 1305 |
| B0762 | <0.1 | 0.03 | <3 | 548 | <3 | >10.00 | 13.8 | <1 | 4 | 17 | 0.38 | <0.01 | 2.52 | 1014 | 6 | 0.07 | 3 | <0.01 | 52 | 9 | 4 | 144 | <5 | <3 | 1159 |
| B0763 | <0.1 | 0.02 | <3 | >1000 | <3 | >10.00 | 1.5 | <1 | 3 | 5 | 0.33 | <0.01 | 1.89 | 1261 | 6 | 0.03 | 3 | <0.01 | 46 | 8 | 4 | 247 | <5 | <3 | 80 |
| B0764 | <0.1 | <0.01 | <3 | 210 | <3 | >10.00 | 2.8 | 1 | 3 | 4 | 0.18 | <0.01 | 2.31 | 918 | 7 | 0.04 | 3 | <0.01 | 50 | 11 | 4 | 143 | <5 | <3 | 79 |
| B0765 | <0.1 | <0.01 | <3 | 254 | <3 | >10.00 | 1.2 | <1 | 3 | 3 | 0.25 | <0.01 | 4.47 | 1202 | 11 | 0.03 | 6 | <0.01 | 40 | 9 | 4 | 98 | <5 | <3 | 38 |
| B0766 | <0.1 | <0.01 | <3 | >1000 | <3 | >10.00 | 2.8 | <1 | 3 | 9 | 0.24 | <0.01 | 2.94 | 1256 | 6 | 0.04 | 3 | <0.01 | 39 | 8 | 4 | 133 | <5 | <3 | 228 |
| B0767 | <0.1 | 0.02 | <3 | 413 | <3 | >10.00 | 1.8 | <1 | 2 | 2 | 0.16 | <0.01 | 1.78 | 724 | 5 | 0.03 | 4 | <0.01 | 45 | 9 | 4 | 132 | <5 | <3 | 67 |
| B0768 | <0.1 | <0.01 | <3 | 121 | <3 | >10.00 | 1.1 | <1 | 3 | 2 | 0.16 | <0.01 | 2.37 | 870 | 6 | 0.03 | 4 | <0.01 | 45 | 6 | 4 | 116 | <5 | <3 | 26 |
| B0769 | 0.5 | <0.01 | <3 | 48 | <3 | >10.00 | 1.8 | <1 | 4 | 2 | 0.19 | <0.01 | 3.41 | 795 | 7 | 0.03 | 6 | <0.01 | 41 | 5 | 4 | 104 | <5 | <3 | 42 |
| B0770 | 0.4 | <0.01 | <3 | 84 | <3 | >10.00 | <0.1 | <1 | 38 | 4 | 0.21 | 0.11 | 0.67 | 458 | 2 | 0.02 | 1 | <0.01 | 29 | 8 | <2 | 44 | <5 | <3 | 82 |
| B0771 | <0.1 | <0.01 | <3 | 31 | <3 | >10.00 | <0.1 | <1 | 49 | 2 | 0.19 | 0.02 | 0.85 | 775 | 3 | 0.03 | <1 | <0.01 | 36 | 10 | <2 | 146 | <5 | <3 | 40 |
| B0772 | <0.1 | <0.01 | <3 | 29 | <3 | >10.00 | <0.1 | <1 | 16 | 1 | 0.10 | <0.01 | 0.47 | 720 | 2 | 0.02 | <1 | <0.01 | 33 | 9 | <2 | 240 | <5 | <3 | 19 |
| B0773 | <0.1 | <0.01 | <3 | 44 | <3 | >10.00 | <0.1 | <1 | 33 | 1 | 0.10 | <0.01 | 0.23 | 509 | 2 | 0.03 | <1 | <0.01 | 42 | 7 | <2 | 97 | <5 | <3 | 35 |
| B0774 | <0.1 | <0.01 | <3 | 91 | <3 | >10.00 | <0.1 | <1 | 30 | 2 | 0.15 | <0.01 | 0.46 | 684 | 2 | 0.02 | <1 | <0.01 | 36 | 8 | <2 | 105 | <5 | <3 | 29 |
| B0775 | <0.1 | <0.01 | <3 | 33 | <3 | >10.00 | 1.7 | <1 | <1 | 1 | <0.01 | <0.01 | 0.17 | 259 | 2 | 0.03 | <1 | <0.01 | 47 | 4 | <2 | 116 | <5 | <3 | 22 |
| B0776 | <0.1 | <0.01 | <3 | 67 | <3 | >10.00 | <0.1 | <1 | 15 | 1 | 0.21 | <0.01 | 1.26 | 901 | 2 | 0.03 | <1 | <0.01 | 48 | 7 | 4 | 98 | <5 | <3 | 28 |
| Minimum Detection | 0.1 | 0.01 | 3 | 1 | 3 | 0.01 | 0.1 | 1 | 1 | 1 | 0.01 | 0.01 | 0.01 | 1 | 1 | 0.01 | 1 | 0.01 | 2 | 2 | 2 | 1 | 5 | 3 | 1 |
| Maximum Detection | 50.0 | 10.00 | 2000 | 1000 | 1000 | 10.00 | 1000.0 | 20000 | 1000 | 20000 | 10.00 | 10.00 | 10.00 | 20000 | 1000 | 10.00 | 20000 | 10.00 | 20000 | 2000 | 1000 | 10000 | 100 | 1000 | 20000 |

< - Less Than Minimum > - Greater Than Maximum is - Insufficient Sample ns - No Sample ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested.

VANGEOCHEM LAB LIMITED
1630 Pandora Street, Vancouver, B.C. V5L 1L6
Ph:(604)251-5656 Fax:(604)254-5717

# ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to $HNO_3$ to $H_2O$ at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: _____

REPORT #: 900455 PA | SULLIVAN MANAGEMENT / KESTREL RES. | PROJECT: KER-6-7 | DATE IN: SEPT 12 1990 | DATE OUT: OCT 09 1990 | ATTENTION: MR. TENNANT & MR. BUCHHOLZ | PAGE 2 OF 2

| Sample Name | Ag | Al | As | Ba | Bi | Ca | Cd | Co | Cr | Cu | Fe | K | Mg | Mn | Mo | Na | Ni | P | Pb | Sb | Sn | Sr | U | W | Zn |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ppm | % | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | % | % | % | ppm | ppm | % | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| 80777 | 0.2 | 0.01 | <3 | 126 | <3 | >10.00 | 0.2 | <1 | 3 | 2 | 0.03 | <0.01 | 0.17 | 274 | 5 | 0.04 | 10 | <0.01 | 32 | 6 | 4 | 126 | <5 | <3 | 21 |
| 80778 | 0.2 | 0.01 | <3 | 272 | <3 | >10.00 | 0.8 | <1 | 14 | 3 | 0.12 | <0.01 | 0.20 | 731 | 3 | 0.03 | 5 | <0.01 | 37 | 5 | <2 | 343 | <5 | <3 | 42 |
| 80779 | 0.1 | 0.02 | <3 | 85 | <3 | >10.00 | <0.1 | <1 | 35 | 3 | 0.23 | 0.09 | 0.49 | 676 | 4 | 0.02 | 9 | <0.01 | 26 | 5 | <2 | 89 | <5 | <3 | 37 |
| 80780 | <0.1 | <0.01 | <3 | 28 | <3 | >10.00 | 1.0 | <1 | 13 | 2 | 0.06 | <0.01 | 0.19 | 438 | 4 | 0.03 | 5 | <0.01 | 32 | 3 | 3 | 123 | <5 | <3 | 34 |
| 80781 | <0.1 | 0.02 | <3 | 80 | <3 | >10.00 | 1.7 | <1 | 41 | 3 | 0.30 | 0.02 | 0.49 | 797 | 2 | 0.02 | 5 | <0.01 | 28 | 2 | <2 | 85 | <5 | <3 | 88 |
| 80782 | 0.3 | <0.01 | <3 | 70 | <3 | >10.00 | <0.1 | <1 | 11 | 2 | 0.04 | <0.01 | 0.15 | 382 | 4 | 0.03 | 2 | <0.01 | 28 | 7 | 3 | 114 | <5 | <3 | 36 |
| 80783 | 0.3 | <0.01 | <3 | 403 | <3 | >10.00 | 0.8 | <1 | 5 | 2 | <0.01 | <0.01 | 0.16 | 312 | 4 | 0.03 | 7 | <0.01 | 34 | <2 | 3 | 140 | <5 | <3 | 27 |
| 80784 | <0.1 | <0.01 | <3 | 176 | <3 | >10.00 | 0.7 | <1 | 3 | 2 | <0.01 | <0.01 | 0.19 | 311 | 4 | 0.03 | 6 | <0.01 | 37 | 3 | <2 | 150 | <5 | <3 | 41 |
| 80785 | 0.2 | 0.02 | <3 | 42 | <3 | >10.00 | <0.1 | <1 | 70 | 2 | 0.17 | 0.11 | 0.14 | 518 | <1 | 0.01 | 3 | <0.01 | 16 | 3 | <2 | 56 | <5 | <3 | 43 |
| 80786 | 0.1 | 0.02 | <3 | 25 | <3 | >10.00 | <0.1 | <1 | 23 | 2 | 0.07 | 0.03 | 0.10 | 459 | 2 | 0.02 | 4 | <0.01 | 17 | 3 | <2 | 87 | <5 | <3 | 37 |
| 80787 | <0.1 | 0.01 | <3 | 18 | <3 | >10.00 | 0.5 | <1 | 29 | 1 | 0.04 | <0.01 | 0.17 | 445 | 2 | 0.03 | 6 | <0.01 | 33 | 3 | <2 | 141 | <5 | <3 | 27 |
| 80788 | <0.1 | <0.01 | <3 | 13 | <3 | >10.00 | 1.1 | <1 | 18 | 1 | 0.02 | <0.01 | 0.12 | 419 | 3 | 0.03 | 4 | <0.01 | 33 | <2 | <2 | 102 | <5 | <3 | 21 |
| 80789 | <0.1 | 0.02 | <3 | 23 | <3 | >10.00 | <0.1 | <1 | 48 | 2 | 0.07 | 0.07 | 0.07 | 301 | <1 | 0.02 | <1 | <0.01 | 14 | <2 | <2 | 56 | <5 | <3 | 28 |
| 80790 | <0.1 | <0.01 | <3 | 12 | <3 | >10.00 | 1.4 | <1 | 4 | 1 | 0.04 | <0.01 | 1.00 | 680 | 4 | 0.03 | 1 | 0.01 | 42 | 2 | 3 | 125 | <5 | <3 | 18 |
| 80791 | <0.1 | 0.01 | <3 | 8 | <3 | >10.00 | 1.0 | <1 | <1 | <1 | <0.01 | <0.01 | 0.31 | 389 | 3 | 0.05 | <1 | <0.01 | 27 | 2 | 5 | 113 | <5 | <3 | 28 |
| 80792 | 0.1 | 0.01 | <3 | 14 | <3 | >10.00 | 1.2 | <1 | 4 | <1 | <0.01 | <0.01 | 0.28 | 248 | 3 | 0.03 | <1 | <0.01 | 44 | 2 | <2 | 109 | <5 | <3 | 24 |
| 80793 | 0.1 | 0.01 | <3 | 19 | <3 | >10.00 | 1.0 | <1 | 4 | <1 | <0.01 | <0.01 | 0.14 | 248 | 3 | 0.04 | <1 | <0.01 | 30 | 5 | 3 | 107 | <5 | <3 | 18 |
| 80794 | <0.1 | 0.01 | <3 | 179 | <3 | >10.00 | 1.4 | <1 | <1 | <1 | <0.01 | <0.01 | 0.12 | 923 | 3 | 0.04 | <1 | <0.01 | 47 | 3 | 4 | 142 | <5 | <3 | 36 |
| 80795 | <0.1 | 0.02 | <3 | 17 | <3 | >10.00 | 1.3 | <1 | <1 | <1 | <0.01 | <0.01 | 0.15 | 475 | 2 | 0.04 | <1 | <0.01 | 46 | 3 | 3 | 148 | <5 | <3 | 28 |
| 80796 | <0.1 | 0.02 | <3 | 19 | <3 | >10.00 | 1.5 | <1 | 27 | <1 | 0.04 | <0.01 | 0.10 | 434 | 2 | 0.02 | <1 | 0.01 | 30 | 2 | <2 | 92 | <5 | <3 | 34 |
| 80797 | 0.2 | 0.02 | <3 | 30 | <3 | >10.00 | <0.1 | <1 | 56 | 1 | 0.10 | 0.05 | 0.10 | 441 | <1 | 0.03 | <1 | <0.01 | 36 | 4 | <2 | 83 | <5 | <3 | 33 |
| 80798 | 0.1 | 0.02 | <3 | 11 | <3 | >10.00 | <0.1 | <1 | 53 | <1 | 0.07 | 0.11 | 0.05 | 185 | 3 | 0.02 | <1 | <0.01 | 15 | <2 | <2 | 51 | <5 | <3 | 15 |
| 80799 | 0.2 | 0.02 | <3 | 28 | <3 | >10.00 | <0.1 | <1 | 76 | <1 | 0.08 | 0.13 | 0.04 | 349 | <1 | 0.02 | <1 | <0.01 | 13 | 4 | <2 | 42 | <5 | <3 | 18 |
| 80800 | <0.1 | 0.01 | <3 | 302 | <3 | >10.00 | 1.0 | <1 | 7 | <1 | <0.01 | <0.01 | 0.13 | 570 | 1 | 0.04 | <1 | 0.01 | 46 | 3 | 3 | 150 | <5 | <3 | 22 |
| 80801 | 3.6 | 0.04 | <3 | >1000 | <3 | >10.00 | 5.5 | <1 | 42 | 25 | 0.47 | 0.02 | 0.54 | 1702 | 2 | 0.04 | <1 | <0.01 | 59 | 15 | 3 | 134 | <5 | <3 | 425 |
| 80802 | 0.2 | 0.02 | <3 | 67 | <3 | >10.00 | <0.1 | <1 | 48 | <1 | 0.04 | 0.07 | 0.08 | 352 | <1 | 0.04 | <1 | <0.01 | 39 | 7 | 4 | 68 | <5 | <3 | 34 |
| Minimum Detection | 0.1 | 0.01 | 3 | 1 | 3 | 0.01 | 0.1 | 1 | 1 | 1 | 0.01 | 0.01 | 0.01 | 1 | 1 | 0.01 | 1 | 0.01 | 2 | 2 | 2 | 1 | 5 | 3 | 1 |
| Maximum Detection | 50.0 | 10.00 | 2000 | 1000 | 1000 | 10.00 | 1000.0 | 20000 | 1000 | 20000 | 10.00 | 10.00 | 10.00 | 20000 | 1000 | 10.00 | 20000 | 10.00 | 20000 | 2000 | 1000 | 10000 | 100 | 1000 | 20000 |

< - Less Than Minimum  > - Greater Than Maximum  is - Insufficient Sample  ns - No Sample  ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested.

VGC VANGEOCHEM LAB LIMITED

MAIN OFFICE
1630 PANDORA STREET
VANCOUVER, B.C.
V5L 1L6
TEL (604) 251-5656
FAX (604) 254-5717

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

REPORT NUMBER: 900455 AA JOB NUMBER: 900455 SULLIVAN MANAGEMENT/KESTREL RES. 

| SAMPLE # | Zn % |
|---|---|
| 80760 | 11.30 |

DETECTION LIMIT .01

1 troy oz/short ton = 34.28 ppm 1 ppm = 0.0001% ppm = parts per million < = less than

signed: _____

# APPENDIX II

## Sample Descriptions

# Geochemical Data Sheet - ROCK SAMPLING

NTS 104G15

Sampler K. FORSTER / W. GRIER  Project ISKUT  Location FORREST KERR

Date AUGUST 28/90  Property KERR 6  M.D.

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width | DESCRIPTION | | | OBSERVATIONS | ASSAYS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | | Au ppb | Ag ppm | Zn % | Pb % |
| 80735 | 2170 FT | SELECT GRAB (ROCK) | 30CM | BARITE CARBONITE SWARM | LIMONITE, MALACHITE, AZURITE | CHALCO GALENA SPHALERITE | EAST SIDE NORTH END OF FAULT 5M SQUARE OF LIMESTONE | | 10 | 3.6 | 0.56 | 0.07 |
| 80736 | 2060 FT | ROCK SELECT GRAB | 60CM | BARITE CARBONITE SWARM | MALACHITE AZURITE | CHALCO TETRAHEDRITE | 200M SOUTH-EAST of 80735 | | 20 | 30.0 | 4.43 | 0.63 |
| 80737 | 2210 FT | " " | 20CM | ANDESITE | LIMONITE | FE. PYRITE | 150M SE of 80736 | | nd | 1.3 | 0.11 | |

PRINTED IN

# Geochemical Data Sheet - ROCK SAMPLING

NTS _____

Sampler Kent Forster & Wes Grier  Project JsKut  Location _____

Date Aug 29/90  Property Kerr 6  M.D. _____

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width | DESCRIPTION | | | OBSERVATIONS | ASSAYS | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Ag ppm | Au ppb. |
| | Chip line 4250ft. El. | Select Grab | 3m | Limestone 5m. Cryptoids | Small Barite Sweats | | dip ~~Strike~~ 46°-47° S.W. | .2 | nd |
| 80738 | 0m-3m | | | " | | | " " | nd | nd |
| 80739 | 3m-6m | | | " | Silicified Veins | | dip 48° S.W. | nd | nd |
| 80740 | 6m-9m | | | " Barite 60cm² | Malichite Azurite | Galena Chalco Tetrahedrite | " " Barite in fracture | 3.0 | nd |
| 80741 | 9m-12m | | | | | | | .3 | 20 |
| 80742 | 12m-15m | | | Limestone | Small Silicified Stringers | | | .3 | 20 |
| 80743 | 15m-18m | | | " | " Barite | Galena mal.+Azurite | Barite ⇒ 70°↓74° to the N.W. | nd | 20 |
| 80744 | 18m-21m | | | " | | | dip 60° to the S.W. | 20.6 | 20 |
| 80745 | 21m-24m | | | " | Silicified Limestone | Sphalirite Galena Chalco | malichite Azurite | .3 | 30 |
| 80746 | 24m-27m | | | " | Small amount of Barite | | dip 55° to the S.W. | .1 | nd |
| 80747 | 27m-30m | | | " | | | | | |
| 80748 | 30m-33m | | | Barite & Silic Limestone | Malichite/Azurite | Tetrahedrite/Chalco | / 3m x 5m | .2 | 20 |
| 80749 | 33m-36m | | | " | " | " | " | 1.5 | nd |
| 80750 | 36m-39m | | | Carbonated Limestone | Barite 20cm x 1m | | 2-2.3m x 5m ⇒ 110° ↓ 52° to the SW | .6 | 20 |
| 80751 | 39m-42m | | | " | | | | .2 | 30 |
| 80752 | 42m-45m | | | " | traces of Barite | | | .5 | 20 |
| 80753 | 45m-48m | | | " | " | | | nd | nd |
| 80754 | 48m-51m | | | " | " | | | nd | nd |
| 80755 | 51m-54m | | | " | | | | nd | nd |
| 80756 | 54m-57m | ↓ | ↓ | " | | | Barite 3m Above | nd | nd |

PRINTED

# Geochemical Data Sheet - ROCK SAMPLING

NTS _____

Sampler Kent Forster & Wes Grier  Project Iskut  Location _____

Date Aug 29/90  Property Kerr  M.D. _____

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width | DESCRIPTION | | | OBSERVATIONS | ASSAYS | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Ag ppm | Au ppb. |
| | Chip Line 4250 A. El. | Select Grab | 3m | | | | | | |
| 80757 | 57m-60m | | | Limestone Sm. Crynoids | Small Amount of Barite | | dip - 50°-52° to the SW. | nd | nd |
| 80758 | 60m-63m | | | " | " | | | nd | nd |
| 80759 | 63m-66m | | | Carbonated Limestone | | | dip 52° to the SW. Barite 2m Above | .3 | 180 |
| 80760 | 66m-69m | | | Limestone Barite | Azurite, Mal. | Chalco Sphalerite Tetrahedrite | Barite 60cm x 2m | 3.5 | 20 |
| 80761 | 69m-72m | | | Limestone | | | dip 50° SW. | nd | nd |
| 80762 | 72m-75m | | | " | | | " " | nd | nd |
| 80763 | 75m-78m | | | " | | | " " | nd | nd |
| 80764 | 78m-81m | | | " | | | | nd | nd |
| 80765 | 81m-84m | | | Crynoids Limestone | | | | nd | nd |
| 80766 | 84m-87m | | | " | | | dip 35° SW | nd | nd |
| 80767 | 87m-90m | | | " | | | dip 50° SW | nd | nd. |
| 80768 | 90m-93m | | | " | | | " " | nd | nd |
| 80769 | 93m-96m | | | " | | | " " | .5 | nd |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | ↓ | ↓ | | | | | | |

PRINTED

# Geochemical Data Sheet - ROCK SAMPLING

NTS _____

Sampler Kent Forster/Wes Gries  Project Iskut  Location _____

Date Aug 30/90  Property Kerr 6  M.D. _____

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width | DESCRIPTION | | | OBSERVATIONS | ASSAYS | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Ag ppm | Au ppb. |
| Chip Line on most Westerly fault | | Select Grab | 3m | Limestone Inter Bedded Silicifide | | | Silicifide Limestone vein 60cm Wide ↓ @ 60° to the SW | .4 | nd |
| 80770 | 0m - 3m | | | " | | | 30cm of Silicifide Limestone - Limestone - 60cm of Silicate of | nd | nd |
| 80771 | 3m - 6m | | | | | | Same dip + Strike | nd | nd |
| 80772 | 6m - 9m | | | " | | | 30cm Silicifide Limestone Vein in middle of 3m Sta. / ↓ 56° to SW | nd | nd |
| 80773 | 9m - 12m | | | " | | | 20cm Silicifide Limestone Vein at end of Section / ↓ 50° to the SW | nd | nd |
| 80774 | 12m - 15m | | | " | | | Same / faulted 1m to the SW. Cross Bedded Fracture ↓ 50° NW | nd | nd |
| 80775 | 15m - 18m | | | " | | | " " " " " | nd | nd. |
| 80776 | 18m - 21m | | | " | | | Silicifide Vein 40-25cm Wide ↓ 58° SW 10cm Vein Parallel | | |
| 80777 | 21m - 24m | | | Limestone | | | | .2 | nd |
| 80778 | 24m - 27m | | | Interbedded Lime / Sil. | | | Silicifide Vein 60cm wide ↓ 48° to the SW. Cont. into 80779 | .2 | nd |
| 80779 | 27m - 30m | | | " | | | " " " | .1 | nd |
| 80780 | 30m - 33m | | | Limestone | | | | nd | nd |
| 80781 | 33m - 36m | | | Silicifide Limestone | | | Crynoids - 2.5m Wide ↓ 46° to the SW. | nd | nd. |
| 80782 | 36m - 39m | | | Lime Stone | | | | .3 | nd |
| 80783 | 39m - 42m | | | " " | | | | .3 | nd |
| 80784 | 42m - 45m | | | Inter bedded Lime / Sil. | | | Vein with Crynoids 1m Wide ↓ 44° to the SW. | nd | nd |
| 80785 | 45m - 48m | | | " | | | " " " | .2 | 20 |
| 80786 | 48m - 51m | | | " | | | Silicification 45cm Wide ↓ 40° to SW dip to Edge of Sta. | .1 | nd |
| 80787 | 51m - 54m | | | Limestone | | | | nd | nd |
| 80788 | 54m - 57m | ↓ | ↓ | Inter bedded Lime / Sil. | | | Vein 20cm Wide ↓ 50° to S.W. Running through middle | nd | 10 |

PRINTED

# Geochemical Data Sheet - ROCK SAMPLING

NTS _____

Sampler Kent Forster/Wes Grier  Project Iskut  Location _____

Date Aug 30/90  Property Kerr 6  M.D. _____

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width | DESCRIPTION | | | OBSERVATIONS | ASSAYS | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | Ag ppm | Au ppb. |
| Chip Line on most Westerly fault | | Select Grab | 3m | Inter Bedded Limestone & Silicifide Limeston | | Veins | | | |
| 80789 | 57m-60m | | | " | " | " | Silicifide Vein 1m Wide ↓ 50° to S.W. | nd | nd |
| 80790 | 60m-63m | | | Lime Stone | | | | nd | 10 |
| 80791 | 63m-66m | | | " | | | | nd | nd |
| 80792 | 66m-69m | | | " | | | | .1 | 20 |
| 80793 | 69m-72m | | | " | | | Small silicifide sweat | .1 | 10 |
| 80794 | 72m-75m | | | " | | | " " " | nd | nd |
| 80795 | 75m-78m | | | " | | | | nd | nd |
| 80796 | 78m-81m | | | " | | | | nd | nd |
| 80797 | 81m-84m | | | Inter Bedded Limestone & Silicious Veins | | | Silicifide Vein 2m Wide ↓ 52° to S.W. | .2 | 10 |
| 80798 | 84m-87m | | | " | " | | Two Silicifide sweats 1cm Wide ↓ 50° S.W. | .1 | 10 |
| 80799 | 87m-90m | | | " | " | | Three Silicifide sweats 20-30cm Wide ↓ 45° S.W. | .2 | nd |
| 80800 | 90m-93m | | | " | " | | " " " ~~Bottle of~~ ~~fracture~~ | nd | nd |
| 80801 | 93m-96m | | | " | " | | " " " Bank in fracture → 42° ↓ 80° to E | 3.6 | nd |
| 80802 | 96m-99m | | | Limestone | | | Small Silicious sweats | .2 | nd |
| E.O.L | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

PRINTED IN C

# Geochemical Data Sheet - ROCK SAMPLING

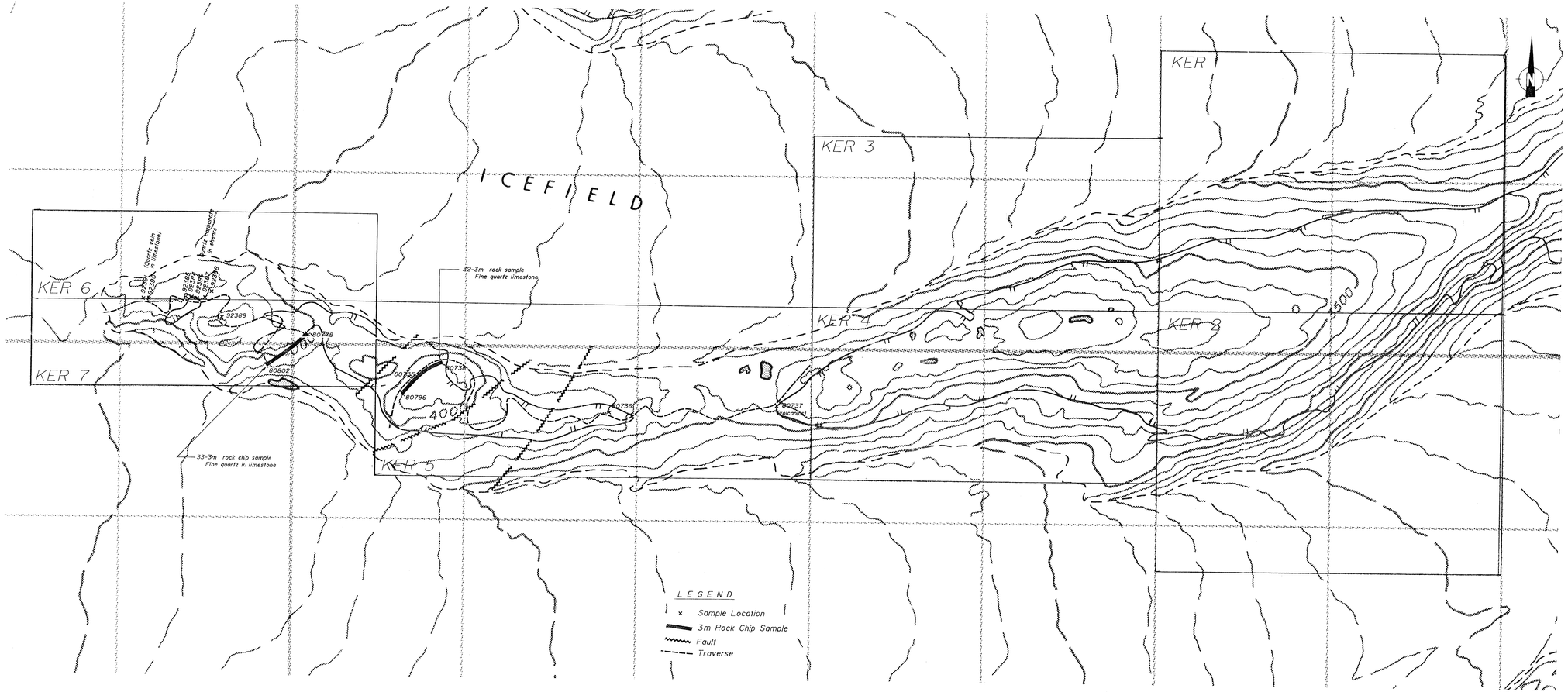
NTS 104 B/15

Sampler Kent Forster | Project Iskut | Location Ref Forest Kerr Cr.

Date Aug 7/90 | Property Kerr #7 | Air Photo No

| SAMPLE NO. | LOCATION | SAMPLE TYPE | Sample Width / True Width | DESCRIPTION | | | ADDITIONAL OBSERVATIONS | ASSAYS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rock Type | Alteration | Mineralization | | ppm Ag | Ca % Cd | % Cu | ppm Zn | ppm W | Au ppb |
| 92384 | El. 4260 Ft | Select Grab Rock | 20cm | Barite Qtz Carbonate Sheer | Limonite Staining | Galena | 20cm x 60cm ⇒ 65° In from E.W Trending fault 250m Tip | 11.0 | >10% | | >20,000 | | hd |
| 92385 | " | " | 20cm | " | " | " | ⇒ 80° 25cm x 5m 10m SW of 92384 | 50 | 5.5 | | >20,000 | | 50 |
| 92386 | El. 4250 Ft. | " | 20cm | " | Malachite Limonite Staining | Tetrahedrite Chalco Kaolinite | 30cm x 10m ⇒ 280° ↓ 90° 20m South of 92385 | 19 | 3.1 | 2117 | 16162 | | 40 |
| 92387 | El. 4220 Ft | " | 30cm | " | Limonite staining Sphalerite | Galena Chalco | 1m x 2m 30m west of 92385 on N. Side of fault | 33 | >10.0 | | >20,000 | | 50 |
| 92388 | El. 4200 Ft | " | 20cm | " | " magenes | " | 20m South of 92387 on East Side of fault | 06 | 4.6 | | >20,000 | 660 | 60 |
| 92389 | El. 4200 Ft | " | 1m | Qtz Vein | Limonite Staining | | 1.5 x 25m ⇒ 350° ↓ 60-65° E 30m East of 92384 | 3.1 | 2.5 | | 3322 | | 30 |
| 92390 | El. 4280 Ft. | " | 15cm | Qtz. Barite Vein | " | Galena | 15cm x 3m ⇒ 260° ↓ 90° 250m W of 92384 | 12 | 7.7 | | >20,000 | 42 | 30 |
| 92391 | El. 4260 Ft | " | 30cm | " | Limonite magnes Malachite | Galena Chalco Sphalerite | 1m x 250° 250m from 92384 | >50 | 5.3 | 8319 | 3150 | | 20 |

PRINTED IN CANADA




| Sample No. | Au(ppb) | Ag(ppm) | Zn(%) | Pb(%) |
|---|---|---|---|---|
| 92384 | nd | 11 | 3.97 | 0.52 |
| 92385 | 50 | 50(1.4 opt) | 3.87 | 1.12 |
| 92386 | 40 | 19 | 1.82 | 0.06 |
| 92387 | 50 | 33 | 7.04 | 0.52 |
| 92388 | 60 | 6.8 | 16.40 | 1.32 |
| 92389 | 30 | nd | 0.33 | 0.02 |
| 92390 | 30 | 12 | 3.92 | 0.32 |
| 92391 | 20 | >50(6.23 opt) | 0.32 | 0.03 |
| 80735 | 10 | 3.6 | 0.56 | 0.07 |
| 80736 | 20 | 30.0 | 4.43 | 0.63 |
| 80737 | nd | 1.3 | 0.11 | |
| 80738 | nd | 0.2 | | |
| 80739 | nd | nd | | |
| 80740 | nd | nd | | |
| 80741 | nd | 3.0 | 0.27 | 0.07 |
| 80742 | 20 | 0.3 | | |
| 80743 | 20 | 0.3 | | |
| 80744 | 20 | nd | | |
| 80745 | 20 | 20.6 | 1.55 | 0.17 |
| 80746 | 30 | 0.3 | | |
| 80747 | nd | 0.1 | | |
| 80748 | nd | 0.2 | | |
| 80749 | 20 | 1.5 | | |
| 80750 | 10 | 0.6 | | |
| 80751 | 30 | 0.2 | | |
| 80752 | 20 | 0.5 | | |
| 80753 | nd | nd | | |
| 80754 | nd | nd | | |
| 80755 | nd | nd | | |
| 80756 | nd | nd | | |
| 80757 | nd | nd | | |
| 80758 | nd | nd | | |
| 80759 | 180 | 0.3 | 1.16 | |
| 80760 | 20 | 0.3 | | |
| 80761 | nd | 1.5 | | |
| 80762 | nd | nd | 0.01 | |
| 80763 | nd | nd | 0.01 | |
| 80764 | nd | nd | | |
| 80765 | nd | nd | | |
| 80766 | nd | nd | | |
| 80767 | nd | nd | | |
| 80768 | nd | nd | | |
| 80769 | nd | 0.5 | | |
| 80770 | nd | 0.4 | | |
| 80771 | nd | nd | | |
| 80772 | nd | nd | | |
| 80773 | nd | nd | | |
| 80774 | nd | nd | | |
| 80775 | nd | nd | | |
| 80776 | nd | nd | | |
| 80777 | nd | 0.2 | | |
| 80778 | nd | 0.2 | | |
| 80779 | nd | 0.1 | | |
| 80780 | nd | nd | | |
| 80781 | nd | nd | | |
| 80782 | nd | 0.3 | | |
| 80783 | nd | 0.3 | | |
| 80784 | nd | nd | | |
| 80785 | 20 | 0.2 | | |
| 80786 | nd | 0.1 | | |
| 80787 | nd | nd | | |
| 80788 | 10 | nd | | |
| 80789 | nd | nd | | |
| 80790 | 10 | nd | | |
| 80791 | nd | nd | | |
| 80792 | nd | nd | | |
| 80793 | 20 | 0.1 | | |
| 80794 | 10 | 0.1 | | |
| 80795 | nd | nd | | |
| 80796 | nd | nd | | |
| 80797 | nd | nd | | |
| 80798 | 10 | 0.2 | | |
| 80799 | 10 | 0.1 | | |
| 80800 | nd | 0.2 | | |
| | nd | nd | | |
| 80801 | nd | 3.6 | | |
| 80802 | nd | 0.2 | | |

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,696

0 250 500 750 m

KESTREL RESOURCES LTD.

KER 1-7 MINERAL CLAIMS

SAMPLE LOCATION MAP

LIARD MINING DIVISION, B.C.

| | |
|---|---|
| DATE : SEPTEMBER 1991 | SCALE : 1 : 10000 |
| DRAWN : S. TENNANT | FIGURE : 5 |