

1991 Geochemical and Geophysical Report

on the

Ket 20 Group

(Ket 11, Ket 12, Ket 20, and Ket 21 claims)

Greenwood Mining Division  
British Columbia

North Latitude 49°03' West Longitude 119°41'  
NTS 82E/3

Prepared for

Crownex Resources (Canada) Ltd.

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January 1992

22177

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**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

22,177

## 1991 Geochemical and Geophysical Report - Ket 20 Group

### 1.0 INTRODUCTION

#### 1.1 Summary

The 1991 exploration program on the Ket 20 Group (Ket 11, 12, 20 and 21 claims) consisted initially of reconnaissance prospecting traverses to determine access, claim boundaries, rock types and alteration assemblages. Subsequently, detailed prospecting, rock sampling, geological mapping and a magnetometer survey were conducted on a 7.5 line-kilometre grid on the eastern hill of the Ket 12 claim. Minor skarnification of the greenstones accompanied by widespread disseminated pyrite, pyrrhotite and magnetite mineralization and a complex swarm of dykes and sills of varying composition were the main exploration targets.

Detectable gold was found on the eastern side of the grid in an old trench which centered on a pyritic replacement or shear zone in light-gray quartzites. A grab from the trench dump returned 165 ppb gold and 2.0 ppm silver. Elsewhere, gold values were below or slightly above the detection limit. No significant base metals were encountered during the 1991 program, although minor enrichment of lead and zinc was found associated with quartz veining in another old trench located along the access road.

Four samples from the 1990 program were reassayed for platinum group metals, returning no significant values.



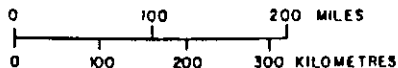
**PROPERTY  
LOCATION**

**CROWN RESOURCES CORP.**

**KET 20 GROUP  
PROPERTY LOCATION MAP**

**GREENWOOD MINING DIVISION**

*WK* **COAST MOUNTAIN GEOLOGICAL LTD.**



DRAWN BY: B.K.	NTS: 82E/3E	DATE: FEBRUARY, 1991	FIGURE: 1
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Skarnification in the form of epidote-carbonate-quartz-garnet alteration seemed to be intensifying towards the southern edge of the grid. Further reconnaissance prospecting of this area is recommended.

### 1.2 Location and Access

The Ket 20 group lies north of Highway #3 from the summit of the Anarchist Pass, approximately 14 kilometers east of Osoyoos (Figure 1). The approximate location of the centre of the Ket 20 group is north latitude  $49^{\circ}03'$  and west longitude  $119^{\circ}41'$ . The claims are located in the south central part of the NTS 82E/3 Osoyoos map sheet. Access to the Ket 20 group is provided by secondary roads off of Highway #3. Internal access to the individual claims is via farm and bush roads.

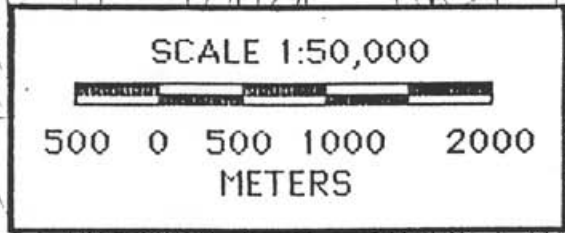
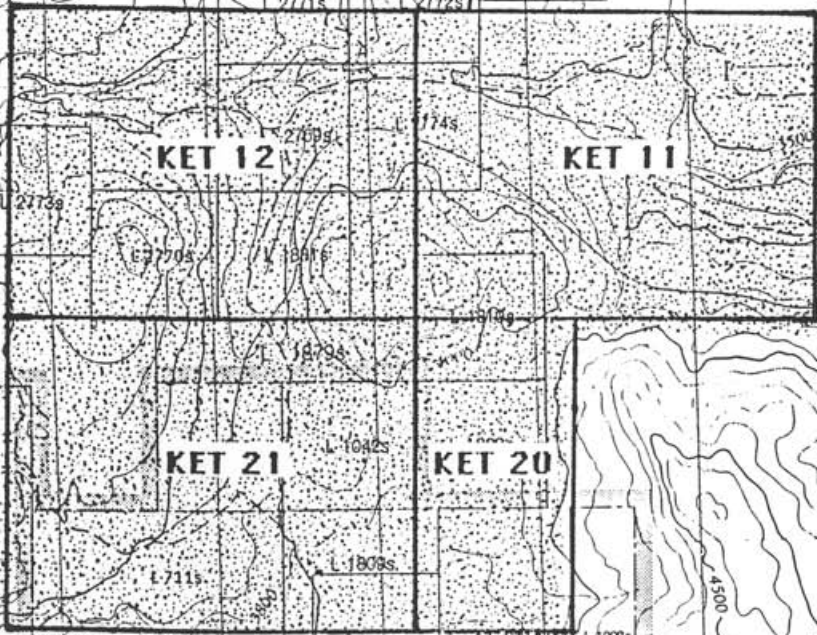
### 1.3 Physiography and Climate

Two small hills rising from a high plain provide a local relief of approximately 260 meters, from an elevation of 1100 meters in the Ket 11 claim at a McKinney Creek tributary, to 1360 meters at the summit of the westerly hill in Ket 12.

The high plains area is covered by natural grasses and pine trees while the upper parts of the hills are forested with pine, larch, poplar and minor birch. Marsh grasses, alders and willows are found in the drainages and marsh lands that lie on the northern edge of the claim grouping.



**KET 20 GROUP**



**CROWN RESOURCES CORP.**

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**KET 20 GROUP  
CLAIM MAP**

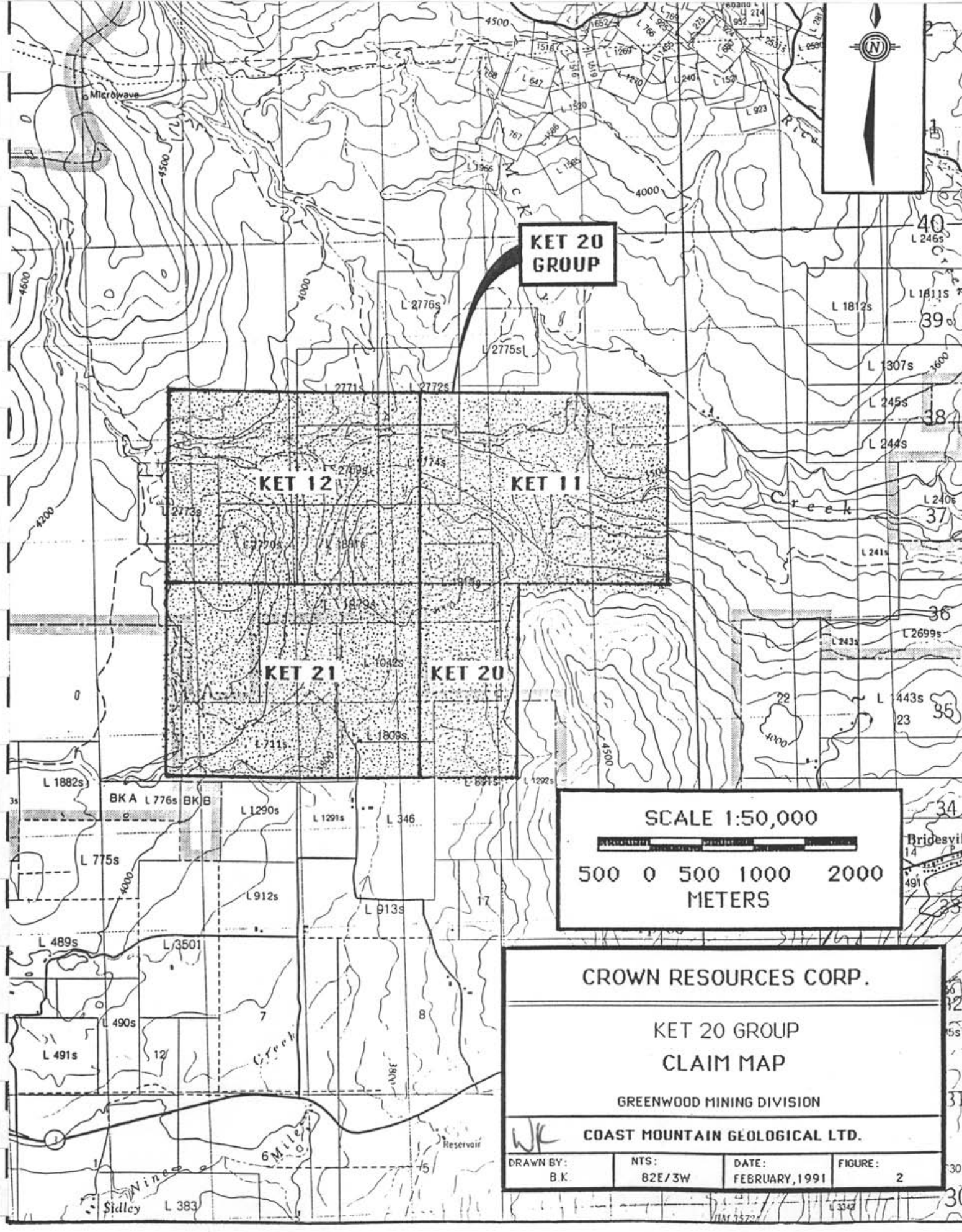
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**GREENWOOD MINING DIVISION**

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**WK COAST MOUNTAIN GEOLOGICAL LTD.**

DRAWN BY: B.K.	NTS: 82E/3W	DATE: FEBRUARY, 1991	FIGURE: 2
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The climate is characterized by hot, dry summers and mild winters with little precipitation.

#### 1.4 Property Description

The Ket 20 group is located within the Greenwood Mining Division of southern British Columbia and is comprised of 4 claims totalling 68 units and covering approximately 1700 hectares (Figure 2).

Crownex Resources (Canada) Ltd., a subsidiary of Crown Resources Corp of Denver, Colorado, is the registered owner of the claims. Table 1 summarizes the pertinent claim data.

**TABLE 1: CLAIM STATUS-KET 20 GROUP**

<u>Claim Name</u>	<u>Tenure Number</u>	<u>Units</u>	<u>Expiry Date*</u>
Ket 11	215192	20	03/12/92
Ket 12	215193	20	03/12/92
Ket 20	215195	8	10/12/92
Ket 21	215196	20	10/12/92

\* Pending acceptance of this report.

#### 1.5 Property History

The area in the vicinity of the claim group has a record of exploration dating back to the turn of the century. Many trenches, shafts and adits were dug by independent prospectors, and most are without any record of work. The most significant work in the area were the placer deposits the McKinney Creek and the mines of Camp McKinney, located 11 kilometres north of the subject property, and

worked from 1894 to 1962.

In the 1960's and 1970's numerous magnetometer, VLF-EM and soil geochemistry surveys were carried out, concentrating primarily on Cu-Ni deposits. Later surveys in the area concentrated on attempting to locate and delineate potential vent areas in the Kettle River Volcanics as a possible site for mineralization.

In the late 1980's, exploration in the Buckhorn Mountain skarn system, to the south of the claims in Washington State, produced significant results. In 1989 a regional airborne magnetometer and VLF-EM survey was conducted over the area by Terraquest Ltd. of Toronto, for Crown Resources Corp. of Colorado (Basil, 1990).

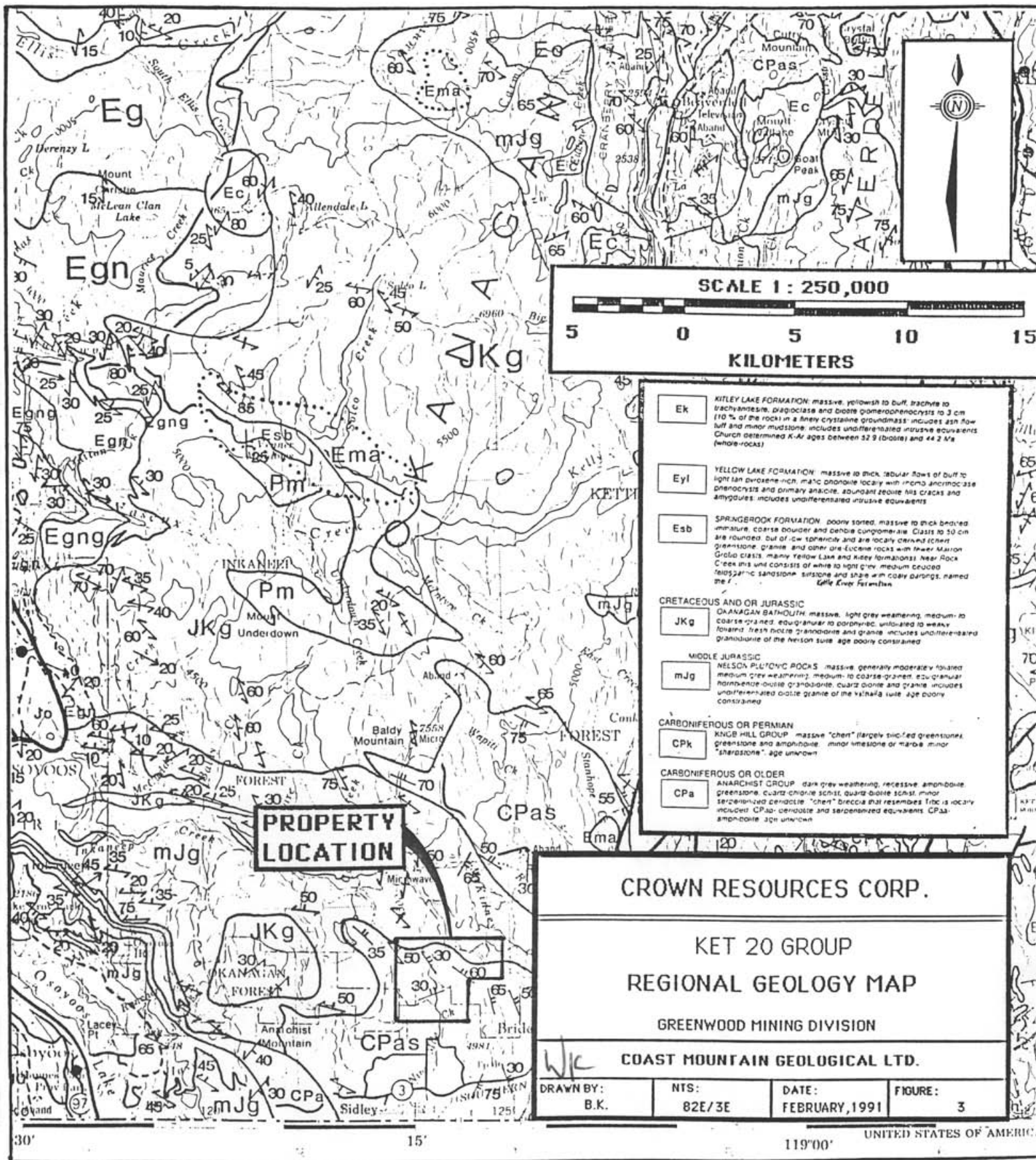
Anarchist Chrome lies one kilometre south of the Ket 20 Group. McKinney Camp and Dayton Camp, both gold camps, lie six kilometers north and four kilometers east respectively of the Ket 20 Group.

Very few prospects were noted while completing the reconnaissance program on this claim group, and no production appears to have been reported from the claim group. The nearest recorded production has come from the previously discussed McKinney and Dayton gold camps.

#### **1.6 1991 Work Program**

The 1991 Ket 20 field program was conducted in September; a total of 12 mandays were spent on the property. Initial reconnaissance





SCALE 1 : 250,000



- Ek** KITLEY LAKE FORMATION: massive, yellowish to buff, trachyte to trachyandesite, plagioclase and biotite gnomonophenocrysts to 3 cm (10 % of the rock) in a finely crystalline groundmass; includes ash flow tuff and minor mudstones; includes undifferentiated intrusive equivalents. Church determined K-Ar ages between 52.9 (biotite) and 44.2 Ma (whole-rocks)
- Eyl** YELLOW LAKE FORMATION: massive to thick, tabular flows of buff to light tan, coarse-rich, mafic phonolite locally with incrustations of dioritic phenocrysts and primary anorthite; abundant zeolite fills cracks and amygdulites; includes undifferentiated intrusive equivalents
- Esb** SPRINGEROCK FORMATION: poorly sorted, massive to thick bedded immature, coarse powder and debris conglomerate. Clasts to 50 cm are rounded, but of low sphericity and are locally derived (chert, greenstone, granite and other pre-Eocene rocks with fewer Marion Group clasts; many Yellow Lake and Kitley formations). Near Rock Creek this unit consists of white to light grey, medium bedded felsitic sandstone, siltstone and shale with coaly partings, named the *Gale Knap Formation*.
- CRETACEOUS AND OR JURASSIC**
- JKg** QANAGAN BATHOLITH: massive, light grey weathering, medium to coarse grained, equigranular to porphyritic, unfoliated to weakly foliated; fresh matrix granoblastic and granite; includes undifferentiated granoblastic of the Nelson suite; age poorly constrained
- MIDDLE JURASSIC**
- mJg** NELSON PLUTONIC ROCKS: massive generally moderately foliated medium grey weathering, medium to coarse grained, equigranular hornblende-biotite granoblastic, quartz diorite and granite; includes foliated biotite granite of the Valhalla suite; age poorly constrained
- CARBONIFEROUS OR PERMIAN**
- CPk** MCVIG HILL GROUP: massive "chert" (largely siliceous greenstone), greenstone and amphibolite; minor limestone or marble; minor "shales"; age unknown
- CARBONIFEROUS OR OLDER**
- CPa** ANARCHIST GROUP: dark grey weathering, recessive amphibolite greenstone, quartz chlorite schist, quartz diorite schist, minor serpenitized gneissite; "chert" breccia that resembles Tric is locally included; CPa- gneissite and serpenitized equivalents; CPa- amphibolite age unknown

**PROPERTY LOCATION**

**CROWN RESOURCES CORP.**

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**KET 20 GROUP  
REGIONAL GEOLOGY MAP**

**GREENWOOD MINING DIVISION**

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**WIC COAST MOUNTAIN GEOLOGICAL LTD.**

DRAWN BY: B.K.	NTS: 82E/3E	DATE: FEBRUARY, 1991	FIGURE: 3
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prospecting was followed by 7.5 line-kilometres of grid layout using a hipchain and compass. Rock sampling and geological mapping was performed during grid establishment and a ground magnetometer survey was conducted over the completed grid.

Forty rock samples were collected from the grid, and another 13 samples from scattered exposures near the western edge of the Ket 20 claim, for a total of 53 rock samples.

**TABLE 2: PERSONNEL**

D. Ridley.....	Geological Technician/Prospector
C. Ridley.....	Geological Technician/Prospector
C. Basil.....	Geophysical Technician

## **2.0 GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS**

### **2.1 Regional Geology**

The oldest rocks in the survey area are Carboniferous or older in age, belonging to the Anarchist Group (Figure 3). They are comprised of amphibolite, greenstone, quartz-chlorite schist, quartz-biotite schist and minor serpentized peridotite, and occur throughout the Ket 20 group. The majority of the intrusive rocks in the area are Middle Jurassic age Nelson Plutonic rocks. These rocks are comprised of massive hornblende-biotite granodiorite, quartz diorite, diorite and granite. Overlying rocks of Eocene age occur regionally and consist of flows and coarse unconsolidated sediments. Pleistocene period glacial deposits occur at higher

elevations, and fluvio-glacial deposits are the most extensive feature in the valleys.

## 2.2 Property Geology

Greenstones and quartzites with minor marble cap the easterly hill on Ket 12, while greenstones, massive serpentinites and propylitic diorite(?) outcrops on the westerly hill of the Ket 12.

Approximately 80% of the Ket 20 group is covered with unconsolidated glacial sediments. Exposure on the grid is limited to the west face of the ridge rising to the south and generally following along the baseline. Outcrops elsewhere form low, well-weathered knolls, generally covered with a thin layer of glacial till.

The grid area (Figure 5), is underlain by a north-northwest trending sequence of quartzite, greenstone, chloritic phyllite, altered greenstone and granodiorite, all of which are cut by a wide variety of dykes, sills and plugs(?) ranging in composition from rhyolite to gabbro.

Quartzite in the eastern portion of the grid consists of well bedded outcrop weathering light grey to off-white, with minor disseminated pyrite. The quartzite is highly folded along the greenstone contact at one exposure and may represent a faulted or sheared contact zone. A quartz vein with pyrite east of the grid

was found to contain an open cut. The mineralization trends 160/85° E, which roughly parallels bedding.

A biotite-feldspar porphyry granodiorite dyke(?) cuts through the quartzites in the northeastern portion of the grid (based on widely scattered outcrops and by magnetometer responses). The unit is mineralized with disseminated pyrite and magnetite.

A band of relatively unaltered greenstone trends north-northwest through the midpoint of the grid. The greenstone is mineralized with 1-2% finely disseminated pyrite, pyrrhotite and magnetite, with slightly higher concentrations of magnetite near intrusives.

Quartz-carbonate-epidote-chlorite altered greenstone and schists cut by rhyolitic to gabbroic dykes and sills, form the largest unit on the grid. A gradational contact exists between the unaltered greenstones and this unit, and bands and lenses of relatively unaltered greenstones are found throughout. Small, poorly formed garnets appear in the more highly altered areas. The unit is mineralized with 3-5% pyrite and pyrrhotite, and up to 10% magnetite. The magnetite locally forms massive stockwork style veinlets in hairline fractures.

A magnesium-rich high temperature skarn(?) of limited extent was found to outcrop above the main access road near the baseline. It is characterized by wollastonite(?) sericite-calcite mineralization

and is devoid of any visible metallic minerals.

A rhyolite dyke with 1% disseminated pyrrhotite trending 160/70° E outcrops along the main access road. A trench into the hillside above the road exposes a 1.5 metre quartz vein 1.5 meters trending 120/50° E.

The western portion of the Ket 12 claim consists of biotite schist, chert, siliceous tuffs and rhyolite in contact with a highly folded and contorted magnetite-rich serpentinite, characterized by a talcose, scaly texture.

### 2.3 Structure

Mylonites with a northwest orientation were observed in the quartzite outcropping on the easterly hill in Ket 12. A north-south fault is suggested for the area between the two hills due to the difference in the two lithologies. Other structures noted were minor in nature. Due to the heavy glacial cover no continuous folding and faulting could be traced.

### 2.4 Mineralization and Associated Alteration

Localized areas of disseminated euhedral pyrite are found in greenstones. Stringers and clots of anhedral magnetite are strongly associated with serpentinite. Pyrite was found closely associated with quartz stringers and silicious replacement beds near intrusive contacts. Minor pyrrhotite, usually with magnetite,

was observed in the greenstone in close proximity to epidote and calcite. Traces of pyrite(?) were found in the propylitically altered granodiorite of the west hill in the Ket 12 claim.

## 2.5 Geochemistry

Anomalous gold values were obtained from the trench dump on the eastern edge of the grid which returned 165 ppb Au (sample CR50R). A chip sample across 2 meters of the structure as exposed in the trench contained no detectable gold (Figure 5).

Gold values obtained during rock sampling of the grid in close proximity to the magnesium skarn outcrop were only slightly above the detection limit (15-25 ppb Au).

Samples collected from the trench discovered above the main access road, although elevated in lead (380 ppm) and zinc (592 ppm), contained no elevated precious metal values (Figure 4).

## 2.6 Geophysics

A ground magnetometer survey was carried out over the Ket 20 grid to aid in outlining a pyrite-pyrrhotite-magnetite mineralized greenstone/skarn unit. A total of 7.6 line-kilometres of data was collected from the baseline and lines 35+00N to 42+00N. A manually operated Genie G-816 Proton Procession magnetometer was used for the survey, with the sensor mounted on a 1.2 metre rod to reduce magnetic contamination from the operator. Data collection points

were at 25 metre intervals along the baseline and lines, and were shortened to 12.5 metres in regions of marked variance in readings. A baseline/tieline looping method of survey was utilized, rather than a base station magnetometer system. As the diurnal variation over the course of the survey was found to be negligible (15-25nT-gammas), in comparison to the 3600+ gamma range in values encountered, the raw data has been presented (Figure 6).

The magnetic field values ranged widely, from 54,600nT to over 58,200nT. Adequate exposure of the four basic lithological units found on the grid (quartzite, greenstone, altered greenstone and schists, granodiorite), permits ready definition of their respective magnetic signatures. A 150 metre wide band of anomalous high magnetics running the entire length of the grid in the vicinity of, and subparallel to the baseline, is of interest (Figure 7). This structure, open to the north and south, is coincident with the mineralized altered greenstones and schists along their contact with the greenstone unit. The 'banded' nature of this anomaly correlates well with the strongly foliated magnetite and pyrrhotite rich schists (the 160° foliation is parallel to the magnetic high trend).

### 3.0 DISCUSSION

Outcrop density on the grid was relatively adequate to trace rock units despite several critical areas which are virtually devoid of exposure. The magnesium skarn area is well exposed along the

southern contact, but rock outcrop to the north is extremely limited. A small soil sampling program centered on this skarn area would be helpful in the evaluation of this structure. It is of importance, in that the only detectable gold found in the altered greenstone unit was from this area. While values obtained were low, the high magnetic contrasts in this general area are worthy of further investigation.

Skarnification of the greenstones is open both to the north and south along strike and may be better mineralized at other points. Further reconnaissance prospecting of the Ket 20 group in this area would determine such.

The magnetometer survey proved an effective tool in tracing the greenstone/schist unit. Extending the grid and survey to the north and south should be performed to assist in delineation of the unit and outlining possible areas of mineralization. Such areas could then be examined by trenching.

#### 4.0 RECOMMENDATIONS

Additional work on the Ket 20 group is recommended in the form of;

- i) An initial soil sampling program of 25-30 samples centred on the magnesium skarn area of the grid. The object of this program would be to determine whether any precious-metal enrichment is associated with this largely overburdened structure.



- ii) Reconnaissance prospecting and mapping of the north-south extension of the altered greenstone unit through the central portion of the group.
- iii) Detailed prospecting and mapping in the CR50R trench area as well as the western end of the Ket 11 claim to determine whether better gold values can be found along the quartzite-greenstone contact.
- iv) Reconnaissance prospecting and mapping in the western portion of the Ket 12 claim.
- v) Extension of the Ket 20 magnetometer survey if warranted.

Respectfully Submitted,



W.R. Kushner, Geologist  
Coast Mountain Geological Ltd.

APPENDIX A  
STATEMENT OF QUALIFICATIONS

## STATEMENT OF QUALIFICATIONS

I, WILLIAM R. KUSHNER, of P.O. Box 1, Station 'A', Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Geologist in the employment of Coast Mountain Geological Ltd. with offices at 1410-650 West Georgia Street, Vancouver, British Columbia.
2. THAT I am a graduate from the University of Alberta with a bachelor of Science degree in Geology (1987).
3. THAT my primary employment since graduation has been in the field of mineral exploration.
4. THAT this report is based on field work conducted by Coast Mountain Geological Ltd. on the Ket 20 Group property during September, 1991, and on information from government publications and reports filed with the Government of British Columbia.
5. THAT I did not work on the subject property.
6. THAT I do not own or expect to receive any interest in the property described herein, nor in any securities of any company rendered in the preparation of this report.

DATED at Vancouver, British Columbia, this 14th day of February, 1992.



William R. Kushner, B.Sc.  
Geologist

APPENDIX B  
STATEMENT OF EXPENDITURES

## STATEMENT OF EXPENDITURES

### PERSONNEL

#### Geological Technicians:

D. Ridley, 6 days @ \$240.00/day	1440.00
C. Ridley, 6 days @ \$225.00/day	1350.00

### VEHICLE

Truck Rental: 6 days @ \$35/day	210.00
Mileage: 425 kms. @ \$0.35/km	148.75

### SAMPLE ANALYSIS

53 rocks @ \$15.00/sample	795.00
1 silt @ \$10.00/sample	10.00

### ROOM and BOARD

6 days @ \$80/day (all inclusive)	480.00
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### EXPENSES

Communications	39.10
Field Expendables	63.00

### MAGNETOMETER SURVEY

7.6 kilometers @ \$100/km.	760.00
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### MOB/DEMOB

300.00

### REPORT PREPARATION

675.00

Subtotal	6270.85
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### 13.5% MANAGEMENT FEE

846.56

### 7% GST

498.22

TOTAL COSTS	7615.63
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APPENDIX C

REFERENCES

## REFERENCES

Basil, Chris, 1990. Airborne Magnetic and VLF-EM Survey Report on the Ket 1-22 and Ket 24-32 Mineral Claims, Assessment Report for Crown Resources Corp.

Geological Survey of Canada, Map 15-1961, Kettle River, British Columbia, Sheet 82E West Half Scale 1:253,440.

Miller, B. and W. Kushner, 1991. 1990 Summary report on the Homestake and Daisy Fraction Claims, Assessment Report for Crown Resources Corp.

Templeman, Kluit, D.S., 1989. Geology, Penticton, British Columbia, Geological Survey of Canada, Map 1736A, 1:250,000 Scale.

**APPENDIX D**  
**CERTIFICATE OF ANALYSIS**  
**and**  
**ANALYTICAL PROCEDURES**



#### SOIL SAMPLING and PREPARATION

The soil grid was measured using hip chains and topo-fill thread. It was not slope corrected. A mattock was used to dig a hole in the soil at each station; soil samples were taken from the 'B' soil horizon, approximately 10 - 15 centimetres deep, unless stated otherwise. The samples were collected in kraft gusseted paper bags and sent to Chemex Labs Ltd. of North Vancouver, B.C., for analysis. At Chemex, the samples were oven dried at 60°C and sieved to minus 80 mesh.

#### ROCK SAMPLING and PREPARATION

Rock samples were taken from bedrock, except in cases where the sample is identified as a float sample. The rock chips were collected in plastic bags and also sent to Chemex Labs, where they were crushed to 3/16 of an inch. A 250 gram specimen was split out and pulverized to 99% minus 100 mesh using a ring mill pulverizer.

#### ICP ANALYSIS

A 0.50 gram sample of the prepared pulp is digested with 3 millilitres of 3:1:2 HCl-HNO<sub>3</sub>-H<sub>2</sub>O at 95°C for one hour, diluted to 10 millilitres with water, and then analyzed for 30 elements.

#### GOLD ANALYSIS (Fire Geochem)

10 grams of pulp is ignited at 600°C for 4 hours and fused with F.A. flux. The dore bead is dissolved in aqua regia and analyzed by ICP.

#### GOLD ANALYSIS (AA)

A 10 gram sample is ignited at 600°C for 4 hours and digested with aqua regia at 95°C on the water bath for one hour. 50 millilitres aliquote is extracted into 10 millilitres of MIBK and analyzed by graphite furnace AA.

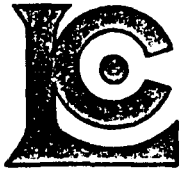
**'QUICK-SUMMARY' COMPILATION**  
**of 12 ELEMENTS for**  
**ROCK CHIP ASSAYS**

KET 20 GROUP SAMPLE ANALYSIS RESULTS

	Au	Ag	As	Ba	Bi	Ca	Cr	Cu	Fe	Pb	W	Zn
91KT12:D12R:	<5	0.2	10	70	<2	0.26%	109	36	1.71%	16	<10	174
91KT11:D70R:	40	0.8	<5	60	<2	0.06%	158	38	1.36%	8	<10	20
91KT11:D71R:	<5	<0.2	<5	90	2	1.33%	39	32	6.94%	<2	<10	84
91KT12:D72R:	25	0.6	<5	90	2	0.05%	153	28	1.81%	6	<10	30
91KT12:D73R:	<5	0.2	5	160	2	1.26%	42	56	3.43%	26	<10	52
91KT12:D74R:	<5	<0.2	<5	10	<2	>15.00%	16	5	0.94%	6	10	18
91KT12:D75R:	<5	<0.2	<5	<10	<2	>15.00%	13	4	0.91%	6	10	12
91KT12:D77R:	<5	<0.2	5	720	<2	3.49%	34	119	4.10%	<2	<10	54
91KT12:D78R:	<5	<0.2	5	80	<2	1.48%	76	54	5.07%	<2	<10	78
91KT12:D79R:	<5	<0.2	<5	180	<2	1.40%	51	33	3.65%	18	<10	78
91KT12:D80R:	<5	<0.2	<5	110	<2	2.71%	35	8	6.88%	<2	<10	92
91KT12:D81R:	<5	<0.2	<5	90	<2	0.73%	114	13	3.99%	6	<10	74
91KT12:D82R:	<5	<0.2	10	90	<2	1.85%	163	131	2.28%	6	<10	22
91KT12:D83R:	<5	<0.2	<5	30	2	1.01%	69	33	8.76%	<2	<10	86
91KT12:D84R:	<5	<0.2	5	50	<2	1.77%	67	129	5.16%	<2	<10	54
91KT12:D85R:	<5	<0.2	5	10	<2	0.47%	244	35	1.11%	6	<10	16
91KT12:D86R:	<5	<0.2	10	170	<2	1.81%	132	44	4.82%	<2	<10	44
91KT12:D93R:	<5	<0.2	<5	10	<2	1.64%	117	60	3.74%	24	<10	80
91KT12:D94R:	<5	0.4	<5	<10	<2	0.80%	158	80	1.08%	380	<10	592
91KT12:D95R:	<5	<0.2	10	20	<2	0.60%	133	54	4.22%	64	<10	156
91KT12:D96R:	<5	<0.2	5	40	<2	0.99%	121	67	4.31%	4	10	94
91KT12:D97R:	<5	<0.2	10	60	<2	0.26%	105	22	3.66%	10	<10	54
91KT12:D98R:	<5	<0.2	10	100	<2	0.49%	51	13	2.20%	<2	<10	52
91KT12D141R:	<5	0.2	<5	20	10	0.38%	24	439	1.92%	<2	<10	16
91KT12D142R:	<5	<0.2	10	50	6	0.17%	411	124	4.66%	4	<10	28
91KT12D143R:	<5	<0.2	<5	<10	6	0.04%	533	9	4.53%	<2	<10	10
91KT12D144R:	<5	<0.2	<5	<10	12	0.76%	933	23	4.41%	<2	<10	12
91KT12D145R:	5	<0.2	10	<10	8	0.02%	340	37	2.88%	<2	10	28
<hr/>												
91KT11:C50R:	165	2.0	<5	120	<2	0.11%	123	36	2.02%	4	<10	24
91KT12:C51R:	15	<0.2	<5	30	8	0.68%	42	57	8.11%	<2	<10	132
91KT12:C54R:	<5	0.2	15	1170	<2	1.27%	40	66	3.38%	42	<10	66
91KT12:C55R:	<5	<0.2	10	320	<2	1.17%	104	21	3.08%	<2	<10	66
91KT12:C56R:	<5	<0.2	<5	40	<2	2.09%	107	77	2.68%	<2	<10	42
91KT12:C57R:	<5	<0.2	<5	500	<2	1.12%	112	29	3.69%	<2	<10	74
91KT12:C58R:	<5	<0.2	<5	60	<2	0.73%	182	35	3.99%	22	<10	108
91KT12:C59R:	<5	<0.2	20	160	<2	1.18%	171	102	2.33%	4	<10	52
91KT12:C60R:	<5	<0.2	<5	270	4	0.56%	68	45	1.76%	<2	<10	42
91KT12:C61R:	<5	<0.2	<5	320	<2	0.34%	118	76	5.60%	<2	<10	62
91KT12:C62R:	<5	<0.2	15	70	<2	0.36%	97	16	3.56%	36	<10	106
91KT12:C63R:	<5	<0.2	<5	130	<2	0.79%	143	44	3.40%	6	<10	86
91KT12:C64R:	<5	<0.2	5	30	4	1.89%	62	5	4.44%	<2	<10	76
91KT12:C65R:	<5	<0.2	5	130	<2	2.40%	77	28	5.23%	<2	<10	62
91KT12:C66R:	<5	<0.2	<5	260	<2	1.97%	169	14	3.45%	<2	<10	66

91KT12:C69R:	<5	<0.2	15	100	<2	1.62%	160	55	4.98%	26	<10	84
91KT12:C70R:	<5	<0.2	<5	60	<2	0.11%	82	3	0.94%	6	<10	32
91KT12:C71R:	<5	<0.2	10	60	<2	0.22%	90	27	4.10%	<2	<10	98
91KT12:C97R:	<5	<0.2	<5	100	<2	0.21%	39	16	1.04%	2	<10	22
91KT12:C98R:	<5	<0.2	<5	140	6	0.40%	40	24	2.37%	<2	<10	44
91KT12:C99R:	25	<0.2	5	160	<2	0.33%	31	23	0.99%	6	<10	32
91KT12C100R:	<5	<0.2	<5	290	<2	1.41%	27	62	2.79%	<2	<10	80

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# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: CROWN RESOURCE CORPORATION  
 SEVENTEENTH STREET PLAZA  
 1225 17TH ST., STE. 1500  
 DENVER, COLORADO  
 80202

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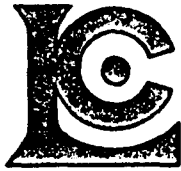
Project : MIDWAY  
 Comments : ATTN: CHRIS HERALD CC:R. MILLER CC:J. SHANNON CC:M. SAWIUK

## CERTIFICATE OF ANALYSIS A9122990

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
91KT12:CR68R	205 294	< 5	< 0.2	3.07	15	400	< 0.5	< 2	1.07	< 0.5	33	53	34	8.50	< 10	< 1	1.68	< 10	2.52	735
91KT12:CR69R	205 294	< 5	< 0.2	2.29	15	100	< 0.5	< 2	1.62	< 0.5	25	160	55	4.98	< 10	< 1	0.14	10	1.91	609
91KT12:CR70R	205 294	< 5	< 0.2	0.33	< 5	60	< 0.5	< 2	0.11	< 0.5	1	82	3	0.94	< 10	< 1	0.13	10	0.14	125
91KT12:CR71R	205 294	< 5	< 0.2	1.80	10	60	< 0.5	< 2	0.22	< 0.5	19	90	27	4.10	< 10	< 1	0.51	20	1.27	560
91KT12:D93R	205 294	< 5	< 0.2	1.58	< 5	10	< 0.5	< 2	1.64	< 0.5	21	117	60	3.74	< 10	1	0.05	10	1.42	680
91KT12:D94R	205 294	< 5	0.4	0.51	< 5	< 10	< 0.5	< 2	0.80	2.0	6	158	80	1.08	< 10	< 1	< 0.01	< 10	0.49	340
91KT12:D95R	205 294	< 5	< 0.2	2.14	10	20	< 0.5	< 2	0.60	0.5	20	133	54	4.22	< 10	< 1	0.06	30	1.82	835
91KT12:D96R	205 294	< 5	< 0.2	1.97	5	40	< 0.5	< 2	0.99	< 0.5	16	121	67	4.31	< 10	< 1	0.07	20	1.58	695
91KT12:D97R	205 294	< 5	< 0.2	1.54	10	60	< 0.5	< 2	0.26	< 0.5	15	105	22	3.66	< 10	< 1	0.18	20	0.93	605
91KT12:D98R	205 294	< 5	< 0.2	1.37	10	100	< 0.5	< 2	0.49	< 0.5	6	51	13	2.20	< 10	< 1	0.16	< 10	0.82	540
91KT27:D87R	205 294	120	< 0.2	1.63	90	260	< 0.5	< 2	3.34	< 0.5	19	15	27	5.76	10	< 1	0.49	50	0.64	945
91KT27:D88R	205 294	< 5	< 0.2	1.37	15	90	< 0.5	< 2	6.14	< 0.5	21	243	291	3.23	20	< 1	0.18	20	3.56	690
91KT27:D89R	205 294	< 5	4.0	1.20	10	90	< 0.5	4	6.21	2.0	24	190	3870	2.82	20	< 1	0.17	20	3.39	665
91KT27:D90R	205 294	< 5	6.0	2.01	< 5	90	< 0.5	16	3.83	70.5	72	252	5490	3.52	10	< 1	0.13	20	2.88	810
91KT27:D91R	205 294	< 5	0.8	0.09	10	20	< 0.5	< 2	0.52	0.5	3	151	124	0.68	< 10	< 1	0.02	< 10	0.05	285
91KT27:D92R	205 294	< 5	< 0.2	2.28	40	100	< 0.5	4	2.03	< 0.5	20	236	69	3.80	10	< 1	0.21	10	2.29	605

CERTIFICATION:

*B. Caplin*



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Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
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To: CROWN RESOURCE CORPORATION  
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Project : MIDWAY  
Comments: ATTN: CHRIS HERALD CC:R. MILLER CC:J. SHANNON CC:M. SAWIUK

## CERTIFICATE OF ANALYSIS

### A9122990

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
91KT12:CR68R	205 294	< 1	0.07	19	1430	4	< 5	10	40	0.48	< 10	< 10	192	10	118
91KT12:CR69R	205 294	< 1	0.05	98	1310	26	< 5	6	40	0.37	< 10	< 10	124	< 10	84
91KT12:CR70R	205 294	< 1	0.05	2	330	6	< 5	< 1	13	0.04	< 10	< 10	13	< 10	32
91KT12:CR71R	205 294	< 1	0.02	44	390	< 2	< 5	2	12	0.13	< 10	< 10	43	< 10	98
91KT12:D93R	205 294	1	0.06	46	1110	24	< 5	8	32	0.25	< 10	< 10	95	< 10	80
91KT12:D94R	205 294	2	0.01	21	170	380	< 5	3	13	0.04	< 10	< 10	24	< 10	592
91KT12:D95R	205 294	< 1	0.03	53	400	64	< 5	11	10	0.29	< 10	< 10	91	< 10	156
91KT12:D96R	205 294	3	0.02	39	1180	4	< 5	13	23	0.22	< 10	< 10	117	10	94
91KT12:D97R	205 294	2	0.02	28	450	10	< 5	7	14	0.21	< 10	< 10	47	< 10	54
91KT12:D98R	205 294	< 1	0.05	3	680	< 2	< 5	3	34	0.13	< 10	< 10	49	< 10	52
91KT27:D87R	205 294	< 1	0.02	19	4100	4	< 5	4	52	< 0.01	< 10	< 10	38	10	42
91KT27:D88R	205 294	< 1	0.01	255	510	< 2	< 5	6	118	< 0.01	< 10	< 10	35	10	30
91KT27:D89R	205 294	< 1	0.01	225	440	2	< 5	6	132	< 0.01	< 10	< 10	33	< 10	28
91KT27:D90R	205 294	< 1	0.01	272	590	22	< 5	7	73	< 0.01	< 10	< 10	63	< 10	44
91KT27:D91R	205 294	4	< 0.01	13	510	2	< 5	< 1	75	< 0.01	< 10	< 10	24	< 10	36
91KT27:D92R	205 294	< 1	0.01	288	640	12	5	9	45	0.01	< 10	< 10	66	10	38

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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 Invoice No. : 19123716  
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Project : MIDWAY  
 Comments: ATTN: CHRIS HERALD CC:R.MILLER CC:J.SHANNON CC:M.SAWIUK

## CERTIFICATE OF ANALYSIS A9123716

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
91KT7CR116R	205 294	< 5	< 0.2	0.11	< 5	40	< 0.5	6	2.85	< 0.5	87	396	4	4.83	< 10	< 1	< 0.01	< 10	4.63	685
91KT7CR117R	205 294	< 5	< 0.2	2.11	< 5	40	< 0.5	< 2	2.58	1.0	18	44	39	4.20	10	< 1	0.16	30	1.65	730
91KT7CR118R	205 294	< 5	< 0.2	1.91	< 5	130	< 0.5	< 2	0.72	0.5	16	47	48	4.12	< 10	< 1	0.71	20	1.50	585
91KT7CR119R	205 294	< 5	< 0.2	1.68	5	100	0.5	2	1.93	< 0.5	13	5	33	3.48	10	< 1	0.41	30	1.30	610
91KT7CR120R	205 294	< 5	< 0.2	1.83	5	110	0.5	6	1.20	< 0.5	14	47	34	3.87	10	< 1	0.45	40	1.19	555
91KT7CR121R	205 294	< 5	< 0.2	2.37	5	140	< 0.5	< 2	1.58	0.5	11	39	8	4.69	10	< 1	0.48	20	2.11	785
91KT7CR122R	205 294	< 5	< 0.2	2.26	< 5	220	< 0.5	2	1.91	0.5	10	47	13	4.47	10	3	0.81	20	1.78	805
91KT7CR123R	205 294	< 5	< 0.2	0.99	< 5	250	0.5	< 2	0.67	< 0.5	4	49	5	1.61	10	< 1	0.31	50	0.34	435
91KT9CR124R	205 294	< 5	< 0.2	1.62	5	290	< 0.5	2	1.02	< 0.5	7	63	48	2.80	< 10	< 1	0.69	10	0.93	470
91KT9CR125R	205 294	< 5	< 0.2	1.93	5	360	< 0.5	6	0.77	< 0.5	11	115	191	4.45	< 10	< 1	0.41	10	1.15	250
91KT9CR126R	205 294	< 5	< 0.2	3.41	< 5	1100	< 0.5	< 2	0.37	1.0	16	63	62	5.14	< 10	< 1	1.92	< 10	2.01	825
91KT9CR127R	205 294	< 5	< 0.2	1.13	< 5	70	< 0.5	2	0.94	< 0.5	5	86	9	1.48	< 10	< 1	0.33	10	0.33	260
91KT9CR128R	205 294	< 5	< 0.2	2.57	< 5	200	< 0.5	4	1.7	< 0.5	13	110	115	4.10	10	< 1	0.37	10	2.05	690
91KT8D156R	205 294	< 5	< 0.2	1.59	< 5	230	< 0.5	< 2	0.91	< 0.5	21	179	205	3.50	< 10	< 1	0.47	10	0.82	190
91KT8D157R	205 294	< 5	< 0.2	2.81	5	250	< 0.5	< 2	1.54	< 0.5	23	102	71	4.23	10	< 1	0.59	10	1.48	200
91KT8D158R	205 294	< 5	0.2	0.44	55	80	< 0.5	2	0.48	< 0.5	< 1	117	33	1.65	< 10	< 1	0.09	10	0.37	35
91KT8D159R	205 294	10	0.4	1.58	10	210	< 0.5	2	0.52	2.5	37	201	254	8.07	< 10	< 1	0.22	10	0.88	140
91KT8D160R	205 294	< 5	< 0.2	1.81	15	60	< 0.5	< 2	0.19	< 0.5	28	136	77	3.80	< 10	< 1	0.42	< 10	1.75	300
91KT12CR097R	205 294	< 5	< 0.2	0.75	< 5	100	< 0.5	< 2	0.21	< 0.5	2	39	16	1.04	< 10	< 1	0.19	< 10	0.22	230
91KT12CR098R	205 294	< 5	< 0.2	1.58	< 5	140	< 0.5	6	0.40	< 0.5	6	40	24	2.37	< 10	< 1	0.21	< 10	0.99	370
91KT12CR099R	205 294	25	< 0.2	1.04	5	160	< 0.5	< 2	0.33	< 0.5	2	31	23	0.99	< 10	1	0.33	< 10	0.39	280
91KT12CR100R	205 294	< 5	< 0.2	2.34	< 5	290	< 0.5	< 2	1.41	0.5	10	27	82	2.79	< 10	< 1	0.77	< 10	1.65	645
91KT12D141R	205 294	< 5	0.2	1.04	< 5	20	< 0.5	10	0.38	< 0.5	7	24	439	1.92	< 10	< 1	0.06	< 10	0.75	155
91KT12D142R	205 294	< 5	< 0.2	4.55	10	50	< 0.5	6	0.17	0.5	32	411	124	4.66	< 10	< 1	< 0.01	< 10	6.25	345
91KT12D143R	205 294	< 5	< 0.2	0.13	< 5	< 10	< 0.5	6	0.04	< 0.5	69	533	9	4.53	< 10	< 1	< 0.01	< 10	11.90	625
91KT12D144R	205 294	< 5	< 0.2	0.13	< 5	< 10	< 0.5	12	0.76	< 0.5	63	933	23	4.41	< 10	< 1	< 0.01	< 10	13.15	1150
91KT12D145R	205 294	5	< 0.2	0.11	10	< 10	< 0.5	8	0.02	< 0.5	88	340	37	2.88	< 10	< 1	< 0.01	< 10	13.00	510
91KT14CR101R	205 294	< 5	< 0.2	1.26	< 5	100	< 0.5	2	0.24	< 0.5	1	1	1	1	< 10	< 1	< 0.01	< 10	0.22	230
91KT17CR82R	205 294	< 5	< 0.2	2.73	< 5	340	< 0.5	< 2	0.13	1.0	5	65	43	4.15	< 10	< 1	0.63	< 10	1.87	290
91KT17CR83R	205 294	< 5	< 0.2	2.03	< 5	310	< 0.5	< 2	1.45	0.5	28	35	169	5.12	10	< 1	0.25	< 10	1.32	750
91KT17CR84R	205 294	10	< 0.2	1.07	5	40	0.5	4	0.36	< 0.5	7	12	75	3.09	< 10	< 1	0.06	< 10	0.43	175
91KT17D125R	205 294	< 5	< 0.2	2.69	20	600	< 0.5	4	0.21	< 0.5	15	98	136	4.10	< 10	< 1	1.42	< 10	1.52	325
91KT18D140R	205 294	< 5	< 0.2	0.94	< 5	40	< 0.5	< 2	0.21	< 0.5	4	50	33	1.83	< 10	< 1	0.07	< 10	0.54	160
91KT27CR86R	205 294	< 5	< 0.2	2.18	25	240	< 0.5	< 2	3.30	< 0.5	27	8	11	6.58	10	< 1	0.40	30	1.57	895
91KT27CR87R	205 294	< 5	< 0.2	0.92	70	20	< 0.5	< 2	0.23	< 0.5	3	45	14	2.58	< 10	< 1	0.06	< 10	0.37	240
91KT27CR88R	205 294	< 5	< 0.2	3.65	< 5	100	< 0.5	4	5.67	0.5	31	230	98	5.97	20	< 1	< 0.01	20	3.66	875
91KT27D126R	205 294	80	< 0.2	1.64	80	290	< 0.5	< 2	3.48	< 0.5	16	11	32	5.14	10	< 1	0.61	30	0.88	820
91KT27D127R	205 294	60	< 0.2	1.76	< 5	260	< 0.5	< 2	3.00	0.5	14	10	12	6.00	10	< 1	0.52	50	0.96	1270
91KT30CR085R	205 294	< 5	< 0.2	2.76	5	20	< 0.5	4	1.46	< 0.5	28	57	51	4.09	< 10	< 1	0.03	< 10	1.95	515

CERTIFICATION: *B. Coughlin*



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 212 Brooksbank Ave., North Vancouver  
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## CERTIFICATE OF ANALYSIS

### A9123716

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
91KT7CR116R	205 294	2	< 0.01	1690	170	< 2	< 5	6	102	< 0.01	< 10	< 10	17	< 10	12
91KT7CR117R	205 294	< 1	0.05	19	1010	2	< 5	10	93	0.04	< 10	< 10	17	< 10	70
91KT7CR118R	205 294	< 1	0.10	13	1140	4	< 5	8	52	0.27	< 10	< 10	10	< 10	64
91KT7CR119R	205 294	< 1	0.06	11	920	4	< 5	9	143	0.24	< 10	< 10	95	< 10	56
91KT7CR120R	205 294	< 1	0.07	10	1040	12	< 5	7	65	0.12	< 10	< 10	90	< 10	62
91KT7CR121R	205 294	< 1	0.09	7	980	< 2	< 5	17	64	0.25	< 10	< 10	166	< 10	78
91KT7CR122R	205 294	1	0.09	4	970	< 2	< 5	15	92	0.30	< 10	< 10	136	< 10	76
91KT7CR123R	205 294	1	0.05	4	600	8	< 5	2	110	0.01	< 10	< 10	20	< 10	46
91KT9CR124R	205 294	1	0.10	3	670	< 2	< 5	9	25	0.13	< 10	< 10	86	< 10	50
91KT9CR125R	205 294	< 1	0.06	24	1170	2	< 5	11	32	0.10	< 10	< 10	85	< 10	78
91KT9CR126R	205 294	2	0.05	8	640	6	5	16	12	0.2	< 10	< 10	177	< 10	80
91KT9CR127R	205 294	< 1	0.04	3	930	2	< 5	3	299	0.2	< 10	< 10	34	< 10	30
91KT9CR128R	205 294	1	0.04	13	570	2	< 5	14	43	0.03	< 10	< 10	125	< 10	58
91KT8D156R	205 294	2	0.11	87	1660	< 2	< 5	3	47	0.18	< 10	< 10	77	< 10	40
91KT8D157R	205 294	< 1	0.23	65	930	< 2	< 5	2	2	0.25	< 10	< 10	70	< 10	50
91KT8D158R	205 294	13	< 0.01	18	2130	8	< 5	1	48	< 0.01	< 10	< 10	102	< 10	62
91KT8D159R	205 294	17	0.03	158	2010	< 2	5	8	8	0.11	< 10	< 10	271	< 10	150
91KT8D160R	205 294	< 1	0.10	108	290	< 2	< 5	7	7	0.11	< 10	< 10	101	< 10	70
91KT12CR097R	205 294	< 1	0.07	4	270	2	< 5	< 1	20	0.06	< 10	< 10	8	< 10	22
91KT12CR098R	205 294	< 1	0.06	7	610	< 2	< 5	2	31	0.12	< 10	< 10	46	< 10	44
91KT12CR099R	205 294	< 1	0.05	4	230	6	< 5	< 1	15	0.04	< 10	< 10	7	< 10	32
91KT12CR100R	205 294	4	0.04	8	730	< 2	< 5	1	33	0.14	< 10	< 10	50	< 10	80
91KT12D141R	205 294	14	0.07	< 1	450	< 2	< 5	< 1	25	0.15	< 10	< 10	21	< 10	16
91KT12D142R	205 294	1	< 0.01	202	50	4	5	3	7	0.03	< 10	< 10	82	< 10	28
91KT12D143R	205 294	< 1	< 0.01	1195	< 10	< 2	< 5	3	1	< 0.01	< 10	< 10	23	< 10	10
91KT12D144R	205 294	1	< 0.01	1145	10	< 2	< 5	4	36	< 0.01	< 10	< 10	22	< 10	12
91KT12D145R	205 294	< 1	< 0.01	1365	30	< 2	< 5	3	1	< 0.01	< 10	< 10	16	10	28
91KT17CR82R	205 294	1	0.03	27	480	< 2	< 5	8	19	0.12	< 10	< 10	110	< 10	92
91KT17CR83R	205 294	1	0.15	2	1010	< 2	< 5	13	14	0.31	< 10	< 10	154	< 10	124
91KT17CR84R	205 294	67	0.10	18	330	4	< 5	4	21	0.11	< 10	< 10	65	< 10	150
91KT17D125R	205 294	2	0.09	21	410	< 2	< 5	12	23	0.17	< 10	< 10	139	< 10	94
91KT18D140R	205 294	1	0.03	6	290	2	< 5	1	14	0.07	< 10	< 10	15	< 10	20
91KT27CR86R	205 294	< 1	0.03	6	3050	< 2	< 5	5	71	0.02	< 10	< 10	57	< 10	80
91KT27CR87R	205 294	1	0.10	2	350	4	< 5	8	9	0.01	< 10	< 10	9	< 10	46
91KT27CR88R	205 294	< 1	0.01	98	1230	2	5	18	289	0.01	< 10	< 10	200	< 10	86
91KT27D126R	205 294	< 1	0.03	15	3530	< 2	< 5	4	69	< 0.01	< 10	< 10	36	< 10	42
91KT27D127R	205 294	< 1	0.03	11	3350	< 2	5	4	68	0.01	< 10	< 10	39	< 10	62
91KT30CR085R	205 294	< 1	0.05	23	540	< 2	< 5	7	22	0.51	< 10	< 10	112	< 10	48

CERTIFICATION: *B. Capl.*



**APPENDIX E**  
**ROCK SAMPLE DESCRIPTIONS**

## ROCK SAMPLE SHEET

Sampler C. J. RIDLEY

Date \_\_\_\_\_

Property KET 20 GROUPNTS 82E/3

SAMPLE NO.	Sample Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS				
		Rock Type	Alteration	Mineralization		Au	Ag	Cu	Pb	Zn
91KT11 CR50R	float grab	Qtz. vein			T3L25E: 37+25N: grab off dump from old trench	165	2.0	36	4	24
91KT12 CR51R	grab	greenstone	chlorite calcite	banded Pyrrh.	L41N: 20+25E: 5m. wide x 10 m. long (±) oc: mafic intr. to the S.E.	15	< 0.2	57	<2	132
91KT12 CR54R	grab	diorite	silica	biotite magnetite	L42+05N: 17+82E: strike 158°/dip slightly E.	<5	0.2	66	42	66
91KT12 CR55R	grab	diorite	chlorite epidote	trace Py	L41N: 16+64E:	<5	< 0.2	21	<2	66
91KT12 CR56R	grab	green- stone	chlorite calcite	trace silvery Py	L41N: 17+24E: strike 174°/dip 54°E	<5	< 0.2	77	<2	42
91KT12 CR57R	grab	diorite	chlorite silica	magnetite trace Py	L41N: 17+59E: gneiss-like look to rock;	<5	< 0.2	29	<2	74
91KT12 CR58R	grab	green- stone	chlorite silica	trace Py	L40N: 19E: strike 132°/dip 79°S	<5	< 0.2	35	22	108
91KT12 CR59R	grab	?skarn	chlorite calcite epidote		L40N: 18E:	<5	< 0.2	102	4	52
91KT12 CR60R	grab	grano- diorite	chlorite epidote	trace Py	L40N: 17+75E: oc of chert w/ sporadic Py in trend? 018°? contact w/ granodiorite	<5	< 0.2	45	<2	42
91KT12 CR61R	grab	green stone	chlorite silica epidote	>2% magnetite	L40N: 17+25E:	<5	< 0.2	76	<2	62
91KT12 CR62R	grab	hyalite		Py	L39N: 19E: in contact w/ chlorite schist strike 046°/dip 60°W	<5	< 0.2	16	36	106
91KT12 CR63R	grab	chlorite schist	calcite	Py	L39N: 19+11E: strike 002°/dip 74°W	<5	< 0.2	44	6	86
91KT12 CR64R	grab	green stone	chlorite epidote calcite	Py	L39N: 19+25E: skarny looking rock strike 178°/dip 58°W	<5	< 0.2	5	<2	76
91KT12 CR65R	grab	green stone	chlorite calcite epidote	>3% magnesite trace Py	L39N: 20+60E:	<5	< 0.2	28	<2	62
91KT12 CR66R	grab	green stone	chlorite calcite epidote		L39N: 20+92E: trend 130°/dip to the N.	<5	< 0.2	14	<2	66



**ROCK SAMPLE SHEET**

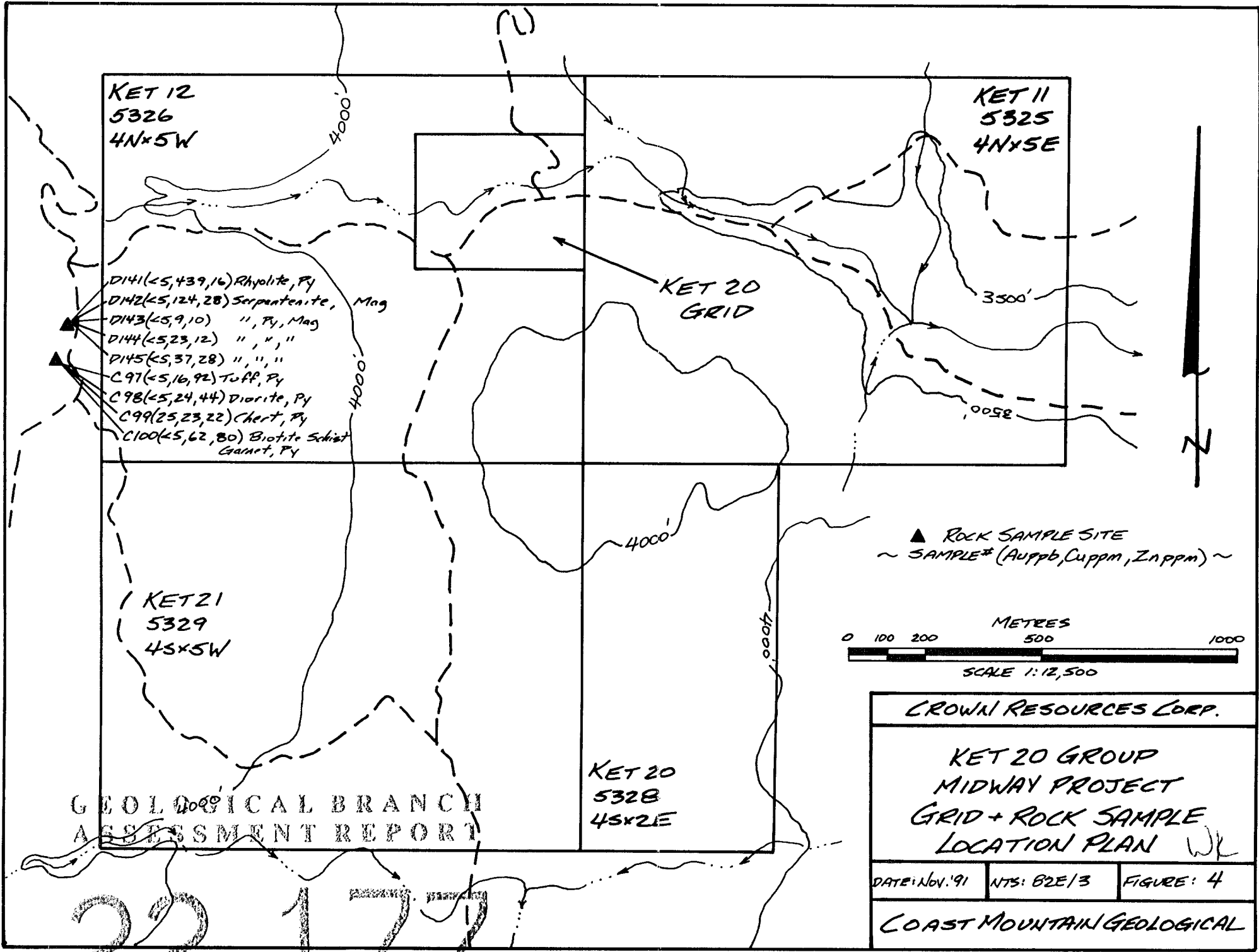
Sampler D. Ridley  
Date Sept. 1991

Property KET 20 Group

NTS 82E/2

SAMPLE NO.	Sample Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS				
		Rock Type	Alteration	Mineralization		As	Ag	Cu	Pb	Zn
91KT12 D12R	G	siliceous marble?	silica	1-5% disem + stringers of pyrite	≈ 60m NE of old trench:	<5	0.2	36	16	124
91KT11 D70R	G	siliceous meta-seds	silica chlorite muscovite	up to 1% pyrite	old trench BL25E137+25N1: ≈ 3m E of Δ vein system trends 160/85E; grab of best mineralization	40	0.8	38	8	20
91KT11 D71R	1.8m	"	"	"	chip across vein system D70R	<5	<0.2	32	<2	84
91KT12 D72R	1m	chlorite schist	qtz carbonate minor epidote	magnetite rich minor pyrite rare chalcopyrite.	L40+95N: 19+60E: magnetite-rich chlorite schist with qtz-carb. stringers: foliation trends 160/90	25	0.6	28	6	30
91KT12 D73R	G	diorite to gabbro	chlorite garnet	minor magnetite	BL20E: 41+30A: exposed in skid trail: contains small poorly formed garnets: grades from diorite to gabbro over 2m: poor exposure: may be dyke?	<5	0.2	56	26	52
91KT12 D74R	1.5m	skarn	wollastinite sericite (tak?) calcite	no magnetite or sulphides seen.	above road ≈ 50m SE of D73R: minor qtz-carb stringers: small localized area.	<5	<0.2	5	6	18
91KT12 D75R	G	"	"	"	≈ 5m S of D74R: calcite veinlets are flesh-red colour: (siderite?): old trench?	<5	<0.2	4	6	12
91KT12 D77R	G	diorite to gabbro	—	up to 3% pyrrhotite rare chalcopyrite	sub-crop rubble: dug up during road construction?	<5	<0.2	119	<2	54
91KT12 D78R	1.5m	mottled chlorite schist	qtz-carb stringers epidote	minor magnetite	qtz-carbonate stringers produce banded effect similar to gneissic texture.	<5	<0.2	54	<2	78
91KT12 D79R	1.5m	feldspar porphyry dyke	—	minor magnetite	trends 270/40N: in chlorite schist-greenstone wallrocks.	<5	<0.2	33	18	78
91KT12 D80R	2m	chlorite schist	epidote garnets	magnetite-rich minor disem pyrrhotite	fairly widespread (+ 25 sq m); garnets are poorly formed.	<5	<0.2	8	<2	92
91KT12 D81R	2m	chlorite muscovite schist	qtz-carb stringers muscovite?	minor magnetite	muscovite is common; foliation 144/50E; may represent fault or shear zone.	<5	<0.2	13	6	74
91KT12 D82R	50cm	siliceous greenstone	silica	up to 2% disem pyrrhotite	in chlorite schist-greenstone: siliceous sulphide rich section 50cm wide: wallrx non-magnetic	<5	<0.2	131	6	22
91KT12 D83R	F	fault breccia?	qtz-carb healing minor epidote	1-3% disem pyrrhotite	greenstone clasts cemented by qtz-carbonate: possible subcrop:	<5	<0.2	33	<2	86
91KT12 D84R	G	altered banded schist	qtz-carb epidote chlorite	minor pyrrhotite 1-5mm bands of magnetite	subcrop rubble on hill top:	<5	<0.2	129	<2	54





KET 12  
5326  
4N x 5W

KET 11  
5325  
4N x 5E

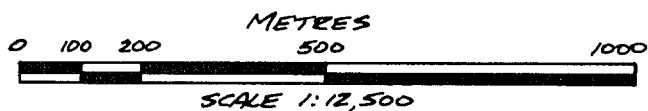
- D141(45,43,16) Rhyolite, Py
- D142(45,124,28) Serpentine, Mag
- D143(45,9,10) " , Py, Mag
- D144(45,23,12) " , " , "
- D145(45,37,28) " , " , "
- C97(45,16,92) Tuff, Py
- C98(45,24,44) Diorite, Py
- C99(25,23,22) Chert, Py
- C100(45,62,80) Biotite Schist  
Garnet, Py

KET 20  
GRID

KET 21  
5329  
4S x 5W

KET 20  
5328  
4S x 2E

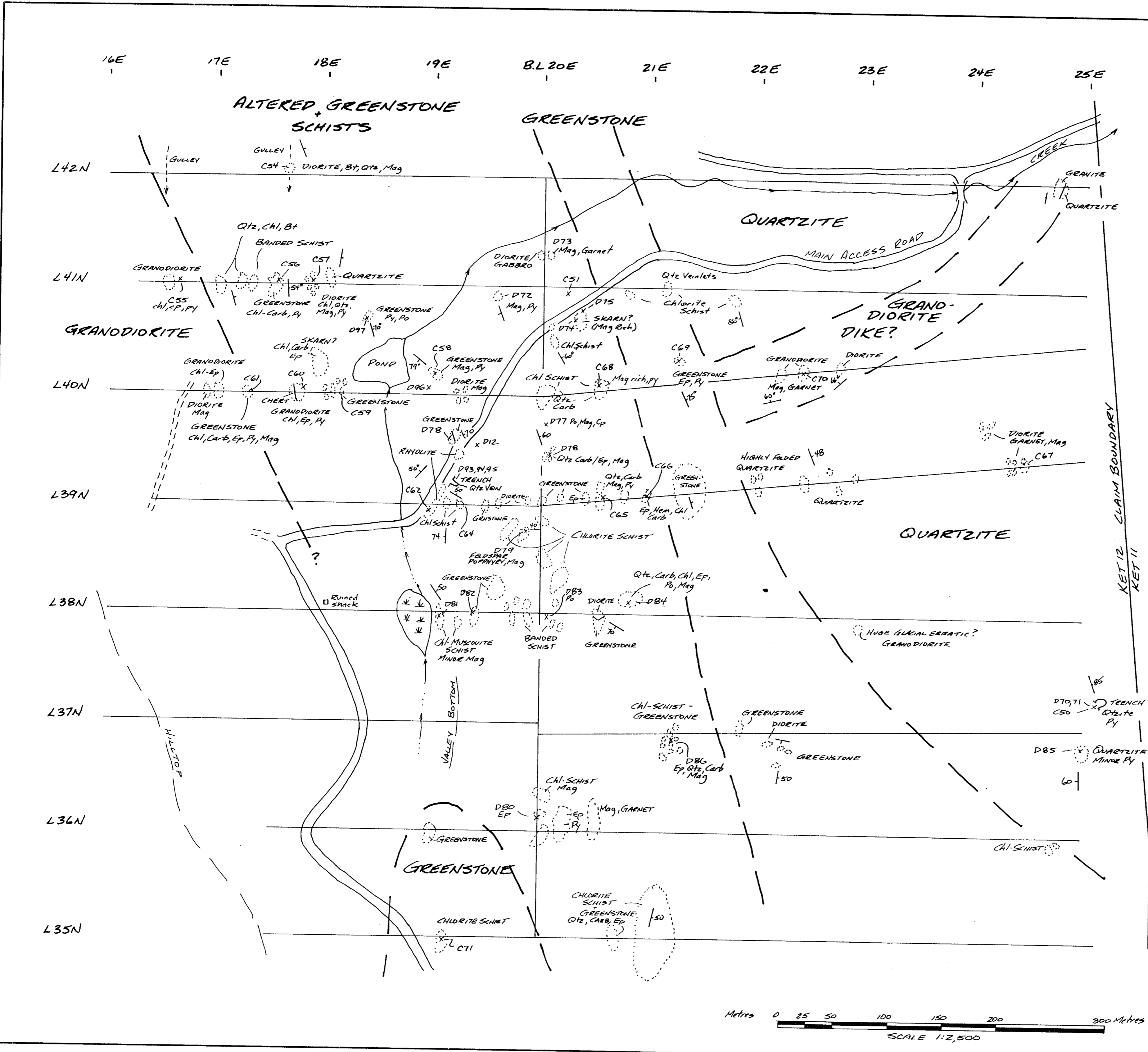
▲ ROCK SAMPLE SITE  
~ SAMPLE# (Au, Pb, Cu, ppm, Zn, ppm) ~



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

CROWN RESOURCES CORP.		
KET 20 GROUP MIDWAY PROJECT GRID + ROCK SAMPLE LOCATION PLAN Wk		
DATE: Nov. '91	NTS: B2E/3	FIGURE: 4
COAST MOUNTAIN GEOLOGICAL		

22, 177



**LEGEND**

- GEOLOGICAL CONTACT ASSUMED
- OUTCROP
- 30 BEPPING
- X ROCK SAMPLE LOCATION
- Ep EPIDOTE
- Chl CHLORITE
- Carb CARBONATE
- Bt Biotite
- Py PYRITE
- Po PYRRHOTITE
- Mag MAGNETITE
- Hem HEMATITE

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

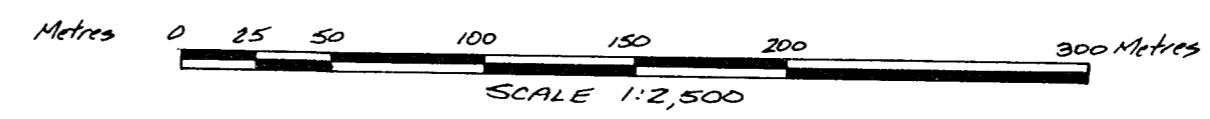
**22,177**

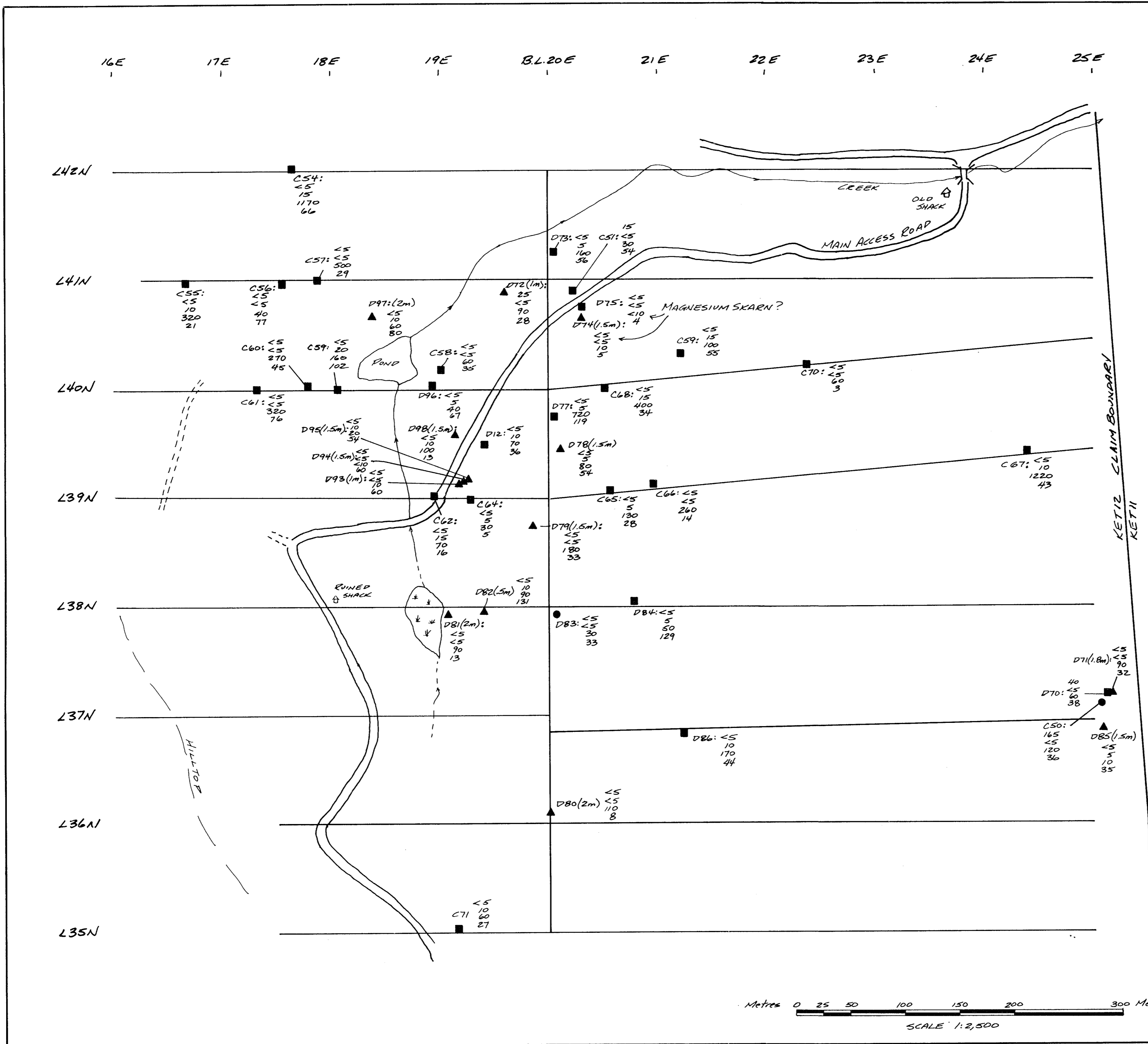
CROWN RESOURCES CORP.

KET 20 GROUP  
MIDWAY PROJECT  
GRID GEOLOGY  
PLAN

DATE: Nov '91 NTS: BZE/3 FIGURE: 5

COAST MOUNTAIN GEOLOGICAL





**LEGEND**

- ▲ ROCK CHIP SAMPLE
- ROCK GRAB SAMPLE
- ROCK FLOAT SAMPLE

GEOCHEMICAL VALUES EXPRESSED AS:  
 SAMPLE#: Au ppb  
 As ppm  
 Ba ppm  
 Cu ppm

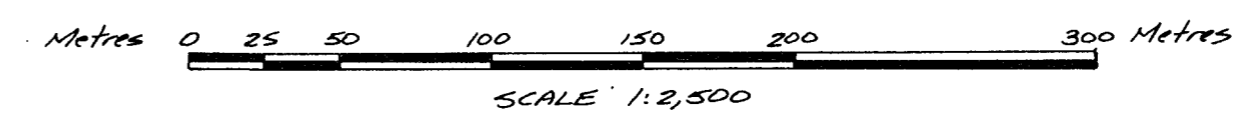
**GEOLOGICAL BRANCH ASSESSMENT REPORT**

**22,177**  
 CROWN RESOURCES CORP.

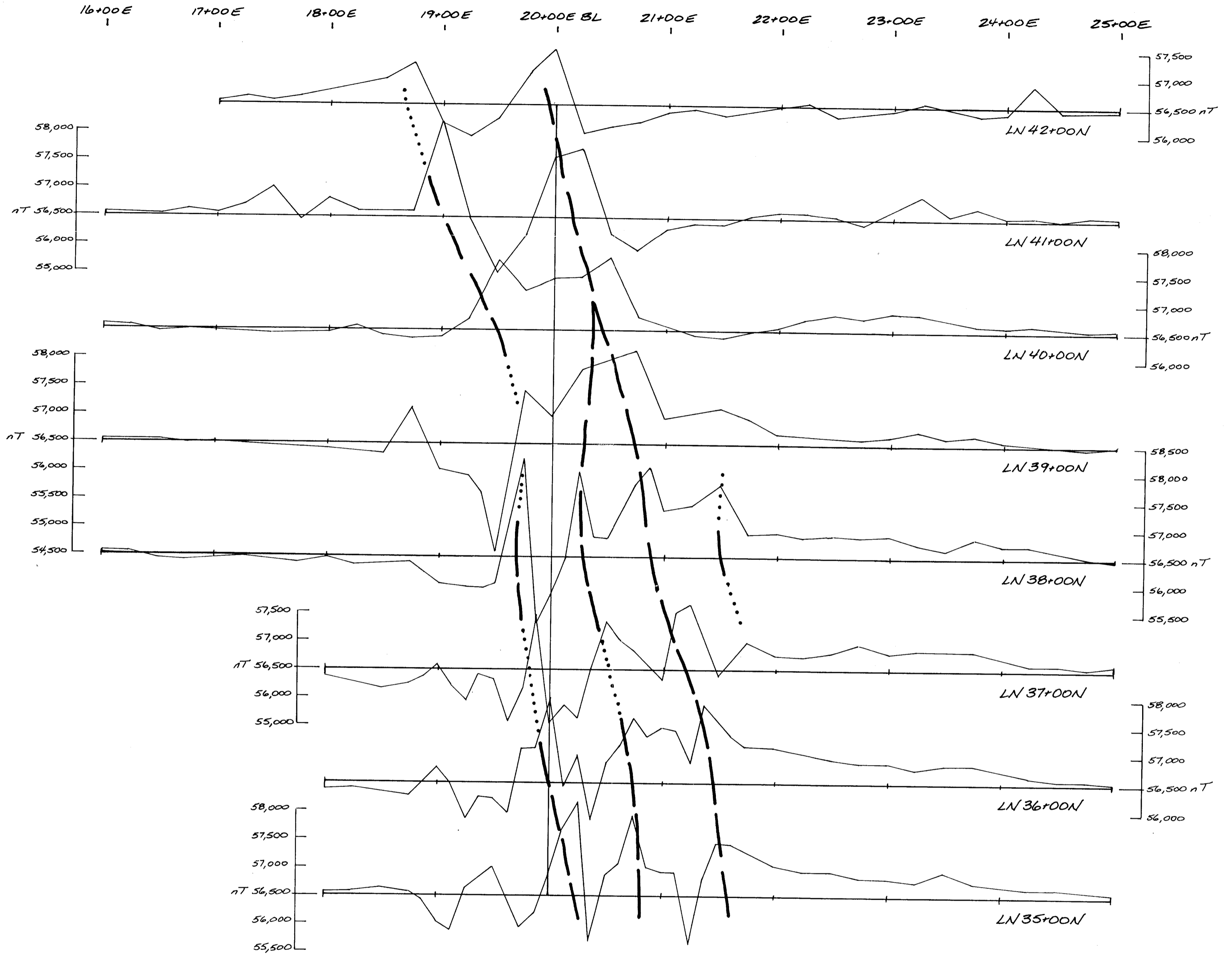
KET20 GROUP  
 MIDWAY PROJECT  
 ROCK SAMPLE LOCATION  
 AND GEOCHEM PLAN

DATE: Nov '91    NTS: BZE/B    FIGURE: 6

COAST MOUNTAIN GEOLOGICAL







--- MAG. HIGH TREND > 1000 nT (GAMMAS) ABOVE BACKGROUND

..... MAG. HIGH TREND 500-1000 nT (GAMMAS) ABOVE BACKGROUND

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

22,177

Metres 0 25 50 100 150 200 300 Metres

SCALE 1:2,500



CROWN RESOURCES CORP.

KET20 GROUP  
MIDWAY PROJECT  
GRID MAGNETOMETER  
SURVEY WL

DATE: Nov '91 NTS: 82E/3 FIGURE: 7

COAST MOUNTAIN GEOLOGICAL