GEOLOGICAL-GEOCHEMICAL EXPLORATION REPORT

HOWELL CREEK PROSPECT (CROFT,KRO CLAIMS)

Fort Steele Mining Division, British Columbia
114° 30' West, 49° 15' North
(NTS 82-G-2E)

by

N.C.Lenard, P.Geol., P.Eng.

Aug. 4, 1977

Consulting Geologist
Westbank, British Columbia

-CONTENTS-

INTRODUCTION

This report deals with the field examination of Pb-Zn-Cu anomalies in soils and stream sediments on the KRO claim, which were derived in 1971 (Williams) and 1972 (Netolitzky). A strong Lead anomaly was pit-tested and geochemically detailed in the current evaluation,and reconnaissance prospecting was carried out west of this site and along two tributaries of Wutluk Creek that yielded high Zinc values in the earlier surveys.

Object of the program was to seek mineralization and its controls re extensive alteration and brecciation in the complex Howell Creek syenite stock. Of particular interest was expanding data on indicated copper-silver potential and molybdenum mineralization suggested from spotty analyses in the earlier work on this ground. Geochemical correlation between soil and rock anlyses was also investigated in this current assessment.

SUMMARY AND CONCLUSIONS

Seven linear test pits on a strong lead soil anomaly mapped in the Netolitzky survey in 1972 disclosed no sulphides other than rusted pyrite, but new data confirms and partly outlines the anomaly, which fades uphill and terminates at a sharp change downhill to unbrecciated, unsilicified syenite.

Significant silver values occur in all but one of the 12 test pits that were hand-excavated. Since all contain syenite with varying degrees of brecciation, silicification

and iron oxides and pyrite disseminations, the nature of the silver enrichment - whether primary or partly or wholly secondary- is not evident. No related mineralization was seen in hand specimens. Although only traces of gold occur in all 14 rock samples, silver assays range to 0.36 oz./ton, averaging 0.19 oz./ton (11.25 and 5.94 ppm respectively). These concentrations are in the range found near or over mineable silver deposits, both massive and veined. As there is no consistent correlation between the silver enrichment and accompanying base metal values, hosting elements are obscure on the KRO Claim.

Preliminary conclusions from the subject, limited detailing and reconnaissance follow-up of earlier geochemical and alteration anomalies are:

1. Economic mineralization may be structurally controlled in part, related to brecciation and subsequent generations of quartz-sericite-potash alteration. As Netolitzky concluded in 1972, contacts of the syenite-trachyte bodies may be favourable areas for economic metallic and fluorite deposits. The above alteration suite may be close to ore.

2. Lack of sulphide mineralization in pits and outcrops sampled along with widespread shallow overburden indicates need for an I.P. geophysical survey to locate stripable drill targets: strong leaching in the brecciated rocks may have removed the source of metal values in the soils and streams. Further, steepness of slopes and lack of knowledge on glacial patterns makes finding of bedrock mineral sources from geochemical anomalies very unpredictable.

3. Silver appears to be widespread in the syenite-trachyte on the KRO Claim in amounts that warrant a concentrated search for dispersion halos in bedrock and soil. This may require sampling on 100 or 50-ft. grids to detect fissure veins or breccia pipes that may contain silver and polymetal deposits. All draws should be prospected and geochemically sampled - they could host eroded fissure veins or pipes.

4. Due to strong leaching of samples present in the subject prospect pits, good permeability is inferred in the syenite-trachyte breccia. Consequently, most metallic sulphides in bedrock may have been leached out to considerable depths, making test-pitting invalid. Shallow diamond coring may provide more direct,positive evidence of mineralization and its controls. It could be done on present geochemical anomalies or, better, on any I.P. conductors that could be established.

5. The strong Pb anomaly 'A' from 1972 work appears to be open to the northeast and merits reconnaisssance and detailed grid sampling of soils and rocks for geochemical leads to potential lode or disseminated mineralization. Mineable lodes are targets with surface area as small as 15 ft x 300 ft (5m x 91.5m) needing a small sampling grid to locate.

6. The headwaters of Wutluk Creek warrant prospecting and geochemical reconnaissance on the basis of earlier work by Williams (1971).

LOCATION & ACCESS

The Howell Creek property (Kro-Croft claim group) lies in the MacDonald Range of the central Canadian Rocky Mountains in Southeastern British Columbia at approximately latitude 49° 15' and longitude 114° 30' (Fig. 1-3).

Automobile access is from the Morrissey bridge ten miles southwest of Fernie, up Lodgepole Creek over Harvey Pass toward the Flathead Valley. A spur logging road toward Twentynine Mile Creek gives access to the claims.

PROPERTY DESCRIPTION

Two adjoining 3-unit claims form the present Howell Creek property. First prospected and staked by N.C.Lenard in 1969, the property then held 59 claims on the syenite intrusive complex between the headwaters of Howell and Twentynine Mile Creeks. A forest fire late in 1970 destroyed most of the claim posts, but exposed bedrock and float to advantage.

Present claims held by N.C.Lenard are:

Claim	Units	Record No.	Tag No.	Expires
KRO	3	59	11762	Aug.5, 1977
CROFT	3	60	11761	Aug.17, 1977

PHYSIOGRAPHY

The property is characterized by two, rugged east-west trending ridges with elevations of about 7,500 feet. Total relief is about 3,000 feet. Numerous, intermittent tributaries of Howell and Twentynine Mile Creeks drain the area.

As a result of the 1970 forest fire on the south slopes -Twentynine Mile Creek valley- accelerated erosion has disturbed soil profiles on the steep, upper slopes, hindering soil sampling.

PREVIOUS WORK

The Geological Survey of Canada (Price,1965) mapped the area on a scale of 1"=1 Mile, outlining the alkali syenite complex. Jones (1966,1977) carried out further structural studies on the Howell Creek structure (Fig.3).

Minor ground prospecting and reconnaissance field geochemical stream sampling were carried out in 1969 and 1970. Possible geochemical stream sediment anomalies were indicated by this preliminary work of N.C.Lenard.

Optioner Canarctic Resources of Calgary performed geological-geochemical evaluations on the property in 1971 and 1972, and a VLM-EM geophysical survey in 1972. The latter gave no sign of definite conductors. The geochemical results suggested presence of good potential for Pb,Zn and Ag mineralization and fair prospects for molybdenite mineralization.

GEOLOGY

General Geology

The Howell Creek window is the main geological feature of the area. A complex zoned stock of alkali syenite-trachyte intrusives is exposed along the southwest margin of the inferred fenster. An Upper Cretaceous (Cardium) to possibly Tertiary age is suggested for the intrusions. The sedimentary sequence in the locale ranges from Precambrian Purcell to Upper Cretaceous Wapiabi and Belly River beds(Fig.3).

The Lewis Thrust (debated) and subsidiary thrust faults form the main structures of the area, which has been inferred to lie on trend of a regional rift zone extending into southwestern Saskatchewan.

Detailed Geology

Earlier studies by Williams (1971) and Netolitzky (1972) divided the intrusive into two main rock units:

1A - Syenite,syenite porphyry, and leucocratic syenite;

1B - Trachyte, chloritized trachyte, and trachyte porphyry.

Alteration

Considerable alteration, related to post-intrusive fracturing and shearing, is pronounced in the complex, including sericitization, quartz veining silicification, and hematization. Extensive potash alteration is indicated from K20 analyses of 10%-12.5% in the syenites by Edwards (1962).

Since the combination, quartz-sericite and potassic alteration with a chloritized outer halo may has been close to ore bodies. in some Pb-Zn deposits, it may be a guide to mineralization on this property.

Structure

Earlier studies of the syenite complex revealed strong primary jointing overlain by a northeast joint set veined by quartz, related to tensional features. In part following this is shearing trending approximately N 70°W/40°N. reported by Netolitzky(1972).

Economic Geology

In the 1972 assessment of the ground on the KRO claim, the conclusions reached were that the syenite-trachyte boundaries appear favourable for metallic mineralization, which seems also to be associated with brecciation and subsequent silicification. Also, the author concluded that extensive leaching and paucity of outcrops prevent a definate evaluation of ore potential.

A similar conclusion was reached in the present evaluation, pointing to the need for an I.P. geophysical survey for the extensive brecciated-silicified belt and infilling-detailing of geochemical sampling for silver and copper anomalies for stripping prior to drilling.

GEOCHEMISTRY

The geochemical work consisted of soil-rock sampling in detail on a strong Pb anomaly derived in the 1972 survey in soils of the upper slopes on the east end of the KRO claim (Netolitzky's L2 line). A second stage was done on reconnaissance to the western part of the claim along two tributaries of Wutluk Creek that had yielded strong Zn anomalies in soils and stream sediments. A concurrent search for bedrock mineralization was carried out.

Soil-Rock Geochemistry

The soil profile in the area exhibits little or no differentiation of the parental material. Less than two feet thick on the steep upper slopes, the soil mantle has a very thin A_1 horizon and no well-defined B Horizon; the B and C horizons are an intimately mixed zone of rocky, fresh to ill-weathered material.

The results of the soil and rock geochemistry program are shown on Fig.4. The procedures and background values are those used by Williams (1971) at this site, except for silver, which was not then known to have economic potential here. Regional background values in soils of the area are:

Pb- 91 ppm; Zn - 96 ppm; Cu - 52 ppm; Mo - 11 ppm

Silver background values are not yet established at Howell Creek. Syenites of Bancroft, Ontario average 1.3ppmAg; of Scotland, 0.04 ppm Ag; and Norway, 0.03 ppm Ag. Soils of silver productive camps, Keno Hill, Y.T. and Walton-Cheverie, Nova Scotia have Ag background average contents of

0.04 and 0.03 ppm, respectively, increasing near silver lodes to a range of 2.0 to 20. ppm in the B horizons.

Generally, the average Ag content in ppm in underlying source rocks of anomalies is highly variable. Some mineralized zones have less tha 5.0 ppm Ag; others, like Magnet Cove, Nova Scotia are greatly enriched in silver, holding up to 500. ppm or more.

Regional background Ag values in stream sediments at Walton, N.S. average 0.1 ppm, ranging up to 0.5 to 2.0 ppm where draining known silver lodes. A similar background value occurs at Keno Hill, Yukon, near silver lodes increasing to 0.93 ppm (maximum 10. ppm).

At Howell Creek, Netolitzky's 1972 stream sampling gave an average siver content of the two Wutluk Creek tributaries on KRO claim of 1.63 ppm (1.4 - 2.6). Limited analyses for silver in soils then on the L2 line's Pb anomaly yielded an average 2.7 ppm Ag from 4 samples (1.0 -4.6 ppm); the average for all 7 samples run was 2.1 ppm Ag.

While the average silver values in stream, soil and rock samples analyzed appear economically interesting on the KRO claim at this stage, possible Fe-Mn hydroxides in the syenite complex may have 'scavenged' and enriched migrating silver in a misleading manner. Heavy concentrates may give a clue to the mineral source of the anomalous silver values at Howell Creek. Silver may be carried by disseminated pyrite and by hematite in the brecciated belt.

All the soil and rock samples were analyzed for Cu, Pb and Zn using the -80 mesh fraction. Gold and silver were determined in the 12 pit and 2 outcrop samples by fire assay.

Geochemical anysis was done by hot acid digestion and atomic absorption spectroscopy by Loring Laboratories of Calgary, Alberta. Details of sample preparations, mode of analysis and procedures are given in the appendix.

On Figure 3 map, the values for Pb, Zn, Cu and Ag have been plotted; contour revision has been done only on Anomaly'A' of Netolitzky (1972). This reduces 'A' to three smaller features, delineates the southern part of the anomaly, and indicates potential for extension to the northeast for Pb enrichment in soils.

Values for silver were converted from fire assay results. The soil samples were not analyzed for Ag, but are being processed for it now.

This study confirms and extends the earlier Pb anomaly of 1972 on line L2 and suggests that erratic values may reflect lack of well-developed,and mixed,soil profiles. It appears to support a zoning increase of Pb to the east.

There is only spotty correlation between pit rock and pit soil values for Pb,Zn and Cu,as was anticipated for such terrain. Silver seems uncorrelated with other values present.

RECOMMENDATIONS

1. Do further stream geochemistry on Howell and Wutluk Creek headwaters, previously inaccessible due to snow cover. Prospect and sample soils concurrently.

2. Analyze soil samples on hand for silver; selectively do the same for the suite of rock samples collected in 1972.

3. Leach representative rock samples from line L2 with cold acid ammonium oxalate solution to remove iron and manganese oxides and any associated trace elements such as Ag. If a high proportion of total Ag in an iron-rich sample can be thus extracted, then concentration by scavenging should be suspected.

4. Have microprobe analysis done on the black, soft metallic-appearing mineral disseminated in some rock samples and for other potential mineral sources for silver.

5. Perform an Induced Potential survey to define geophysical targets for stripping and drilling.

6. Drill up to six shallow core holes in the vicinity of Line L2 and Wutluk tributaries 1 & 2 to obtain unweathered bedrock samples, if possible. Depths should not exceed 5 m. below bedrock surface.

ESTIMATED COSTS OF RECOMMENDED PROGRAM

Following is an estimated budget for the program outlined in the recommendations.

1. Geochemical program:

Travel	$150.00
100 soil samples @ $3.40	340.00
90 rock samples @ $2.70	243.00
Five man-days sampling	300.00
Interpretation and report	400.00
Sub-total	$1,433.00

2. Induced Polarization Survey:

Mobilization/Demobilization	$500.00
Five Days I.P. @ $700/day	3,500.00
Interpretation and report	700.00
Sub-total	$4,700.00

3. Stripping Program: (Caterpillar D-8 tractor)

Seven days including mobilization	$5,000.00

4. Geological Reconnaissance and Mapping:

Ten days, geologist @ $225.00	$2,250.00
Expenses	250.00
Sub-total	$2,500.00
SUB-TOTAL:	13,633.00
Contingencies @ 10%	1,363.30
TOTAL -	$14,996.30

CERTIFICATE

I, N.C.LENARD, hereby certify:

1. That I am a consulting geologist resident in the community of Westbank in the Province of British Columbia.

2. That I am a graduate of the University of British Columbia with a Batchelor degee in Honours Geology (1949).

3. That I am a member of the Alberta and British Columbia Associations of Professional Engineers.

4. That I have been practising my profession for twenty-eight years in western Canada.

5. That I am the registered owner of the subject mineral claims, KRO & CROFT.

6. That the statements made in this report are based on a study of published and private reports on the property area and on personal examinations on portions of the claims, commencing September 27,1969 through the current assessment from July 9-12 inclusive,1977.

7. That no legal survey has been conducted over the subject mining property and, therefore, in accordance with the mining laws of the appropriate jurisdiction in which such properties are situate, the existence of and the area of such properties could be in doubt.

8. That I completed Short Course 45-71 - Exploration Geochemistry Applied To Mineral Deposits, Feb.22-Mar.5, 1971 At the University of Calgary.

DATED AT: The Community of Westbank, in the Province Of British Columbia, this 4th day of August, 1977

PROFESSIONAL GEOLOGIST ALBERTA N. C. LENARD

N.C.Lenard, P.Geol.,P.Eng.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA N. C. LENARD

Ex. Date Jan. 19, 1978

REFERENCES

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Currie,K.L. (1976) The Alkaline Rocks of Canada: Geol. Surv.Canada Bull 239

Edwards,G.E. and Gordy,P.L. (1962) Age of The Howell Creek Intrusives: Jour.Alberta Soc.Petrol.Geol., V.10,7, pp369-372

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Price,R.A. (1965) Geol.Surv.Canada, Memoir 336

Williams,H.H. and James,E.W. (1971) Geological-Geochemical Report, Howell Creek Prospect, British Columbia (Private Unpublished Assessment report : B.C. Dept. Mines, Pet.Res., GEM, 1971 Report 3785)

To: Mr. Neall Lenard,
Box 863,
Westbank, B.C. V0H 2A0

File No. 13605
Date July 18, 1977
Samples Soil Geochems

(Howell Creek Report)

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.		PPM Cu	PPM Pb	PPM Zn
"Soil Geochems"	Pit			
Pit L2-100S + 200E		19	390	80
L2-100S + 100W		27	100	115
L2-182mS + 182mW	8	27	130	82
L2-200S + 100E		17	310	79
L2-200S + 100W		18	100	98
L2-100ftS + 100ftE		22	290	71
Pit 3 L2400S	3	60	260	128
L2-400ftS + 100W		14	100	85
L2-400S + 200E		59	400	225
L2-500S on pit line		26	165	106
L2-Pit 4-600S	4	61	210	127
L2-600S + 100W		54	275	133
Pit 4 L2-600S+200E		73	340	138
L2-600S + 800W		54	115	183
L2-600S +900W 9	9	36	140	205
L2-600S + 1000W		136	100	340
L2-600S + 1300W	10	38	115	142
Pit 5 L2-800S true	5	48	165	146
L2-800S(T)+200E		46	360	74
L2-800S(T)+100W		96	195	178
L2-1^00S(T) Pit	6	148	520	195
L2-1000S + 100E		255	460	382
L2-1000S + 200E		51	400	81
P6 L2-1000S+100W		143	330	165
L2-1200S Pit 7	7	96	145	460
L2-1200S + 200E		120	130	255
L2-1200S + 100W		98	520	288

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

A. L. McLeod

Licensed Assayer of British Columbia

To: Mr. Neall Lenard,
Box 863,
WESTBANK, B. C. V0H 2A0

File No. 13605
Date July 18, 1977
Samples Rock Chips

*Insert by N.C.Lenard:
Regional backgrounds-
Cu 10 ppm)
Pb 38 ") Williams,
Zn 85 ") 1971

Certificate of ASSAY

LORING LABORATORIES LTD.

SAMPLE No.	OZ./TON Gold	OZ./TON Silver	Ag* ppm	PPM Cu	PPM Pb	PPM Zn
"ROCK CHIPS"						
Pit # 1	Trace	.26	8.13	8	20	115
Pit # 2	Trace	.26	8.13	15	26	15
Pit # 3	Trace	.08	0.2	12	162	8
Pit # 4	Trace	.22	6.88	8	188	5
Pit # 5	Trace	.20	6.25	15	45	6
Pit # 6	Trace	.36	11.25	47	520	12
Pit # 7	Trace	.12	3.75	31	48	95
Pit # 8	Trace	.14	4.38	24	260	14
Pit # 9	Trace	.26	8.13	69	55	80
Pit # 10	Trace	.16	5.0	27	36	29
Pit # 11	Trace	.16	5.0	17	78	15
Pit # 12	Trace	.14	4.38	32	106	28
O/C HEAD TRIB 2	Trace	.18	5.63	12	20	9
O/C TRIB # 1	Trace	.16	5.0	26	800	12

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

Licensed Assayer of British Columbia

Howell Creek 1977 Evaluation Report

Laboratory Sample Numbers vs Field Sample Designations

Soil Geochems (Footage)	(Metres)	Field Designation	Pit No.
Pit L2 -100S+200E	30.5S+ 61E	61E, Pit 2,as plotted	
L2 100S+100W	30.5S+30.5W	30.5W " 2 " "	
L2 182mS+182mW	as shown	as plotted W of Pit 4	8
L2-200S+100E	61S+30.5E	as Plotted	
L2-200S+100W	61S+ 30.5W		
L2-100S+100E	30.5S+30.5E	30.5mE Pit1	
L2-400S	L2 -122S	Pit	3
L2-400S+100W	122S+30.5W	30.5m W pit3	
L2-400S+200E	122S+71E	61 E, pit3	
L2-500S	L2-152.5S	30.5S pit3	
L2-600S	L2-182S	Pit	4
L2-600S+100W	L2-182S+30.5W	W,pit4 as plotted	
L2-600S+200E	L2-182S+61E	E,Pit4 " "	
L2-600S+ 800W	L2-182S+284w	30.5 E pit 9	
L2-600S+900W	L2-182S+274.5W	Pit	9
L2-600W+1000W	L2-182S+305W	30.5W pit 9	
L2-600S + 1300W	L2-182S+396.5W	Pit	10
L2-800S	L2-284S	Pit	5
L2-800S+200E	L2-284S+61E	E pit5	
L2-800S+100W	L2-284S+30.5W	W "	
L2-1000 S	L2-305S	Pit	6
L2-1000 S+ 100E	L2-305S + 100E	E pit 6	
L2-1000S +200E	L2-305S + 200E	E pit 6	
L2-1000S + 100W	L2-305S+ 30.5W	W " 6	
L2-1200S	L2-366S	Pit	7
L2-1200S + 200E	L2-366S + 61 E	E pit 7	
L2-1200S + 100W	L2-366S + 30.7	W " 7	

Rock Geochems

Pits No.1 - 10	As above
Pits No. 11,12	As Plotted: Pit 12 is 15m vert.above, 182m 342°(T) from Pit 11
Outcrop chips	Sites as plotted: Wutluk tributary 1 is east of #2

SAMPLE DESCRIPTIONS: HOWELL CREEK

Pit

1 Syenite, light grey, fine to medium grained, porphyritic, pyritic; jointed; trace green patina:'chlorite'

2 Rusty syenite, as above, light to medium dark grey, mottled, slightly pyritic; slight brecciation and silicification. spotty,waxy green films as above.

3 Syenite, mottled light grey, bleached appearance, very rusty; minor disseminated pyrite; brecciated with a network of quartz veinlets to 4 mm, grey, glassy, drusy in microvugs. Some vugs to 1.5 cm; rare dark grey metallic mineral disseminated in matrix.

4 Syenite, medium grey, porphyritic, rusty, brecciated, laced with grey quartz veinlets; leached vugs to 3 cm

5 Syenite, as above, but heavily brecciated and silicified with healing quartz veins to 2.5 cm: grey to dark grey, low temperature quartz.

6 Syenite, as above, quartz veinlets to 2 mm; slight limonitic coating; minor disseminations and breccia fillings of blackish, soft metallic mineral.

7 Syenite, medium dark grey, fresh, porphyritic with pink phenocrysts to 2 cm; dense, weathers rusty; trace of pyrite, biotite.

8 Syenite, light grey, bleached, brecciated, healed with a network of quartz veinlets to 1 cm: vuggy, low temperature quartz - float in pit.

9 Syenite, light to medium grey, very fine-grained, rusty-coated, brecciated, slightly pyritic: pit float.

10 Syenite, light grey, mottled, limonitic on fractures, leached disseminated pyrite.

11 Syenite, as above, fine to medium grained, rusting disseminated pyrite: bleached from flesh-coloured, porphyritic, with trace biotite; slightly brecciated with minor quartz veinlets to 1 mm.

12 Syenite, grey as above, minor brecciation, silicification in hairline fractures. Minor pyrite.

Outcrop

2 Syenite, light grey, fine to medium-grained, bleached, leached microvugs; slight brecciation and silica-fill.

1 Brecciated syenite, as above, rusty; quartz veinlets,1 mm.

LORING LABORATORIES LTD.
629 Beaverdam Rd. N.E.
Calgary 67, Alberta
Phone 274-2777

Geochemical Analysis of Soils, Sediments and Silts.

FOR: Copper, Lead, Zinc, Nickel and Silver

Sample Preparation:

-Samples were placed in dryer overnight at 105°C.
-All samples are seived through an 80 mesh nylon screen.
-The minus 80 is placed in pre-marked sample bag for analysis. The plus 80 portion is discarded.

Sample Dissolution:

-1/2 gram samples are weighed and transferred to test tubes.
-One ml water added, then three mls hydrochloric (concentrated), one ml nitric acid (concentrated) are added.
-Test tubes are then placed into hot water bath 100°C and digested for three hours with occasional shaking to ensure complete digestion.
-Test tubes are removed from water bath and allowed to cool.
-Test tubes are bulked to exactly 10 mls, corked and shook.
-All samples are then allowed to settle until clear.
-The clear solutions are then aspirated through the atomic absorption spectrophotometer with appropriate standards to obtain the metal content.

Detection Limits and Precision:

Element	Detection Limit	Precision at 100 ppm level
Copper	1 ppm	± 2 ppm
Lead	2 ppm	± 4 ppm
Zinc	1 ppm	± 2 ppm
Nickel	1 ppm	± 2 ppm
Silver	0.2 ppm	± 1 ppm

Fig.1 : To Accompany Report by N.C.Lenard
on Howell Crk. Claims Aug. 14,1977

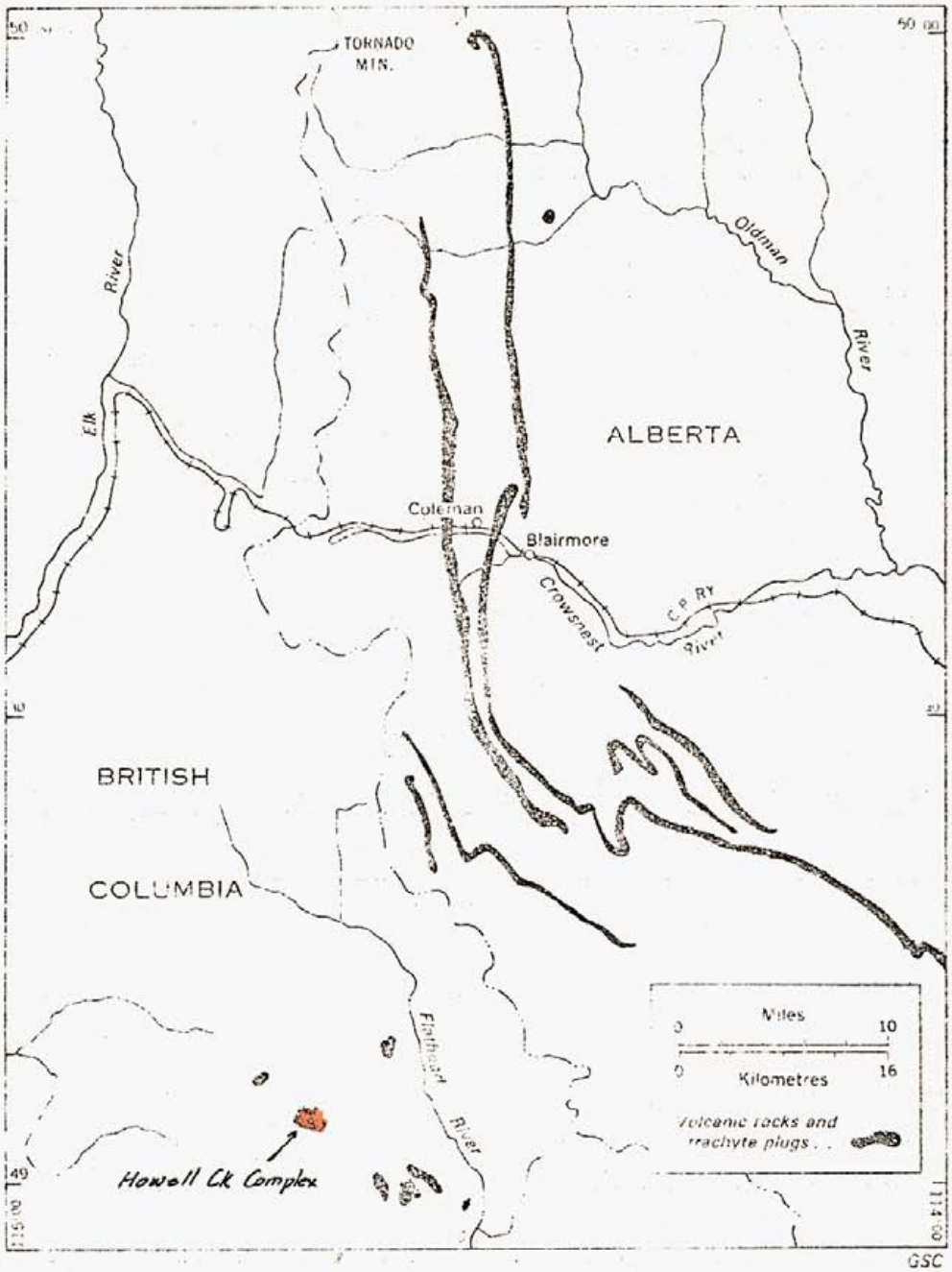


FIGURE 59. Alkaline rocks in the Crowsnest province (modified after Price, 1962).

151
Currie,K.C.
GSC Bull.239
1976

Fig.2: Property Map - To Accompany Report on Howell Crk.Claims
by N.C.Lenard, P.Eng. Aug. 4, 197

NATIONAL TOPOGRAPHIC SYSTEM 82 G/2E 1:50,000 Ft.Steele Min.Div.

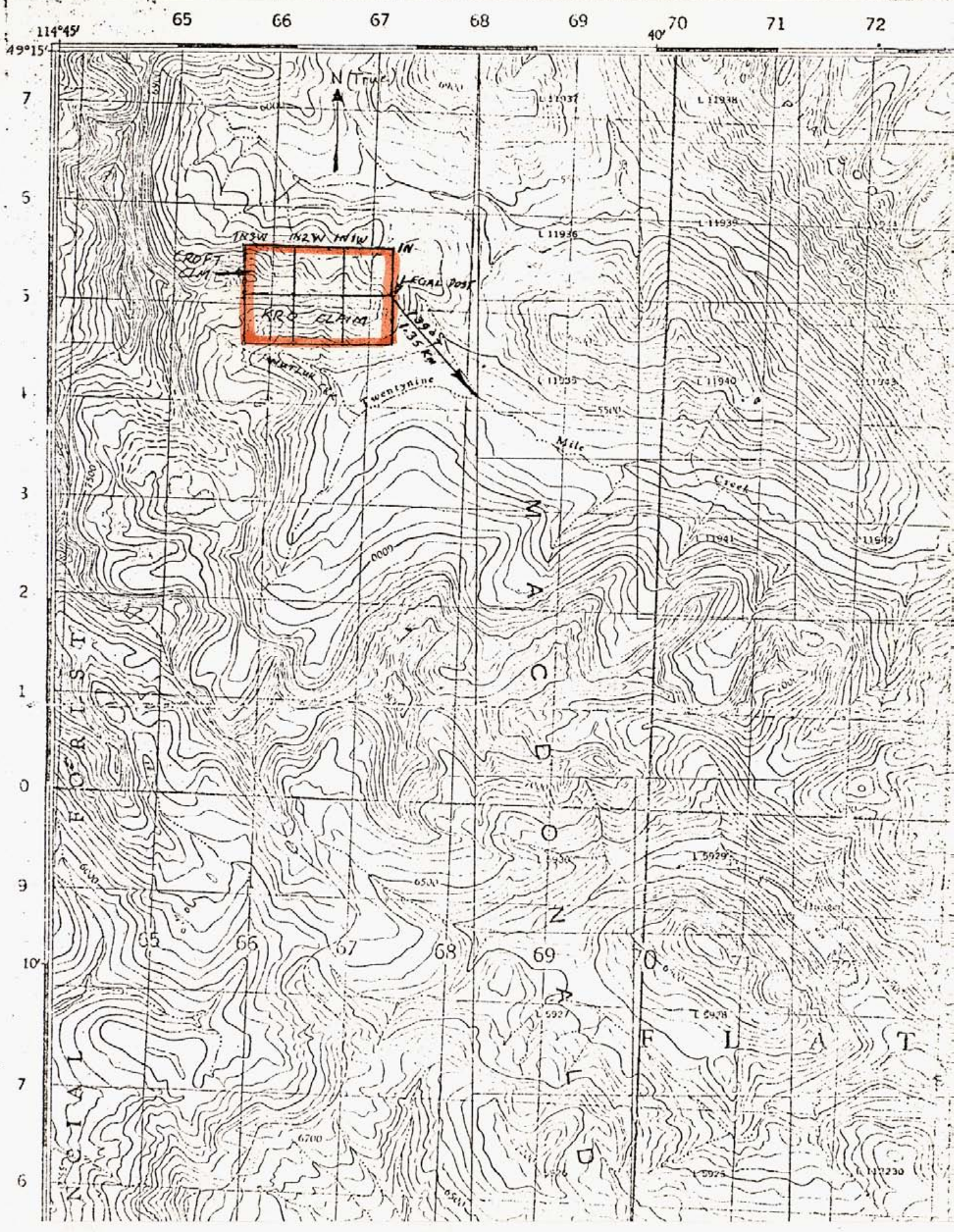
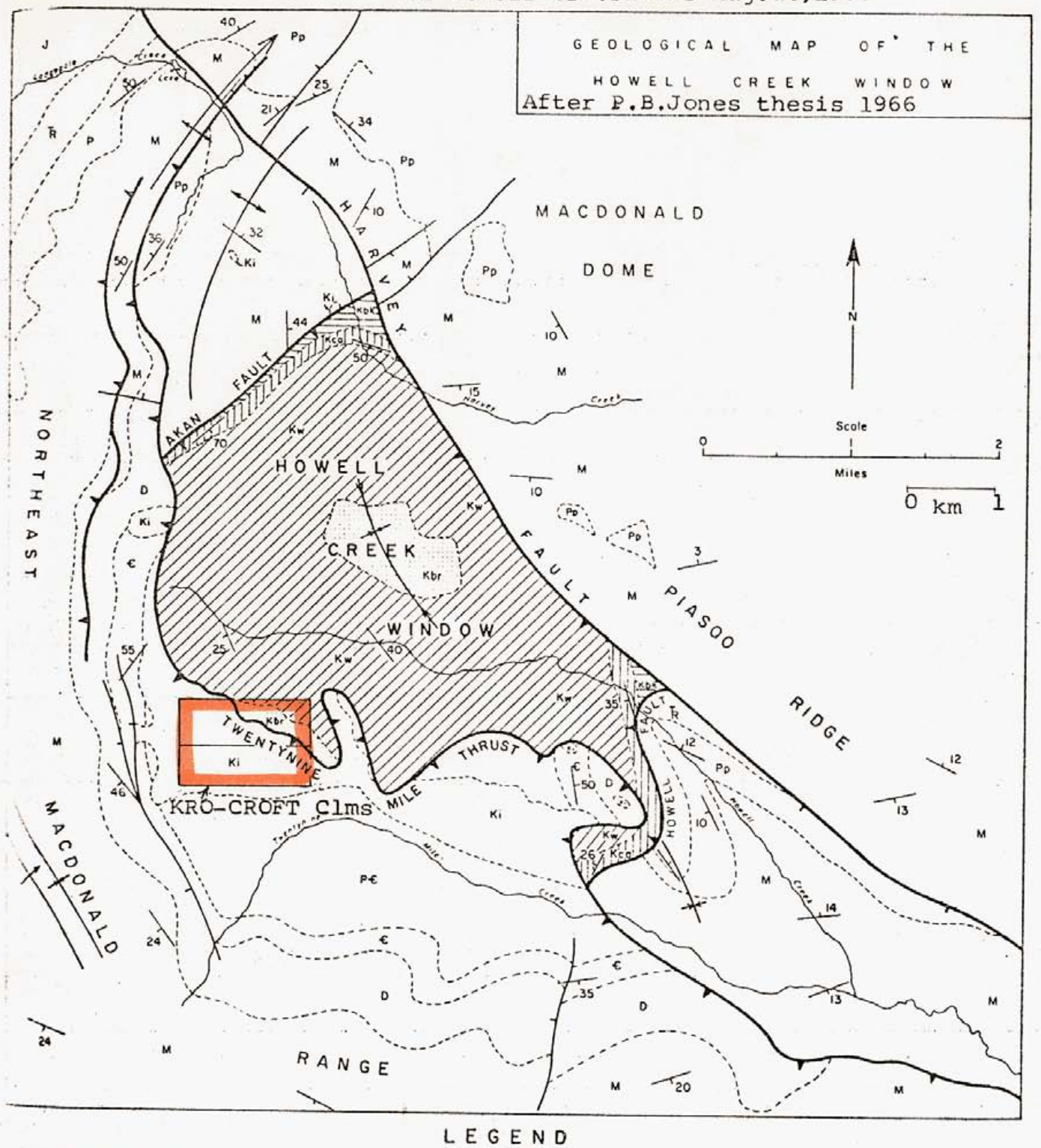


Fig.3: To Accompany Report by N.C.Lenard, P.Eng.
on Howell Crk. Claims Aug. 4, 1977



LEGEND

Northeast MacDonald Range & MacDonald Dome

- J — Jurassic
- Tr — Triassic
- Pp — Permo - Pennsylvanian
- M — Mississippian
- D — Devonian
- € — Cambrian
- P€ — Precambrian
- Ki — Cretaceous Intrusive Rocks

Howell Creek Window

- Kbr — Belly River Fm.
- Kw — Wapiabi Fm.
- Kco — Cordium Fm.
- Kbk — Blackstone Fm.

Upper Cretaceous

Dept. of Mines & Petroleum Resources,
Mineral Resources Branch,
Parliament Bldgs.,
Victoria, BC.

N.C.Lenard,P.Geol.,
Box 863,
Westbank,B.C.,
V0H 2A0
Sept.27,1977

Attn.: Chief Gold Commisioner

8926

Re: File 166-Ft.Steele KRO, CROFT

- Cost Statement: Evaluation of Work on ROK Claim,1977 -

Sir:

Following is an analysis of assessment work performed on the above claim this year as requested in your letter of Sept.22,1977. I performed my field sampling and prospecting concurrently with the physical work program.

(a) Labour: 2 men, 4 days each, July9-12 incl.,1977 (see attached pay schedule)	$364.00
(b) Food, accomodation: 3 men, 4 days, tent camp	$120.00
(c) Mobilize, demobilize:	
Automobile- 940 miles at 15¢	$141.00
Air, scheduled- 2 men Cranbrook-Kelowna	$ 72.80
(Note: onsite travel was on foot)	
(d) Geochemical and fire analyses:	
27 soil geochems	
14 rock "	
4 fire assays , Au,Ag	$137.55
(e) Report preparation:	
Geochemical-geological, 4 days onsite,	
1 day report preparation: 5 days@ $200.	$1,000.00
Total:	$1,835.35

SEP 30 '77 AM

DEPT. OF MINES AND PETROLEUM RESOURCES

Respectfully submitted,

N.C.Lenard

N.C.Lenard,P.Geol.,P.Eng.

Statement of Earnings July 19, 1977

Project: Howell Creek, B.C. (Croft, Kro Claims)

Labour:	July 9/77	8 hr.	travelling	@ $3.50	$28.00
	" 10	3 "	"		10.50
		5 "	labour	@ $5.00	25.00
	" 11	9½	"		47.50
	" 12	4 "	"		20.00
		4 "	travel		14.00
					$144.00

Received in Full. Croft Egan

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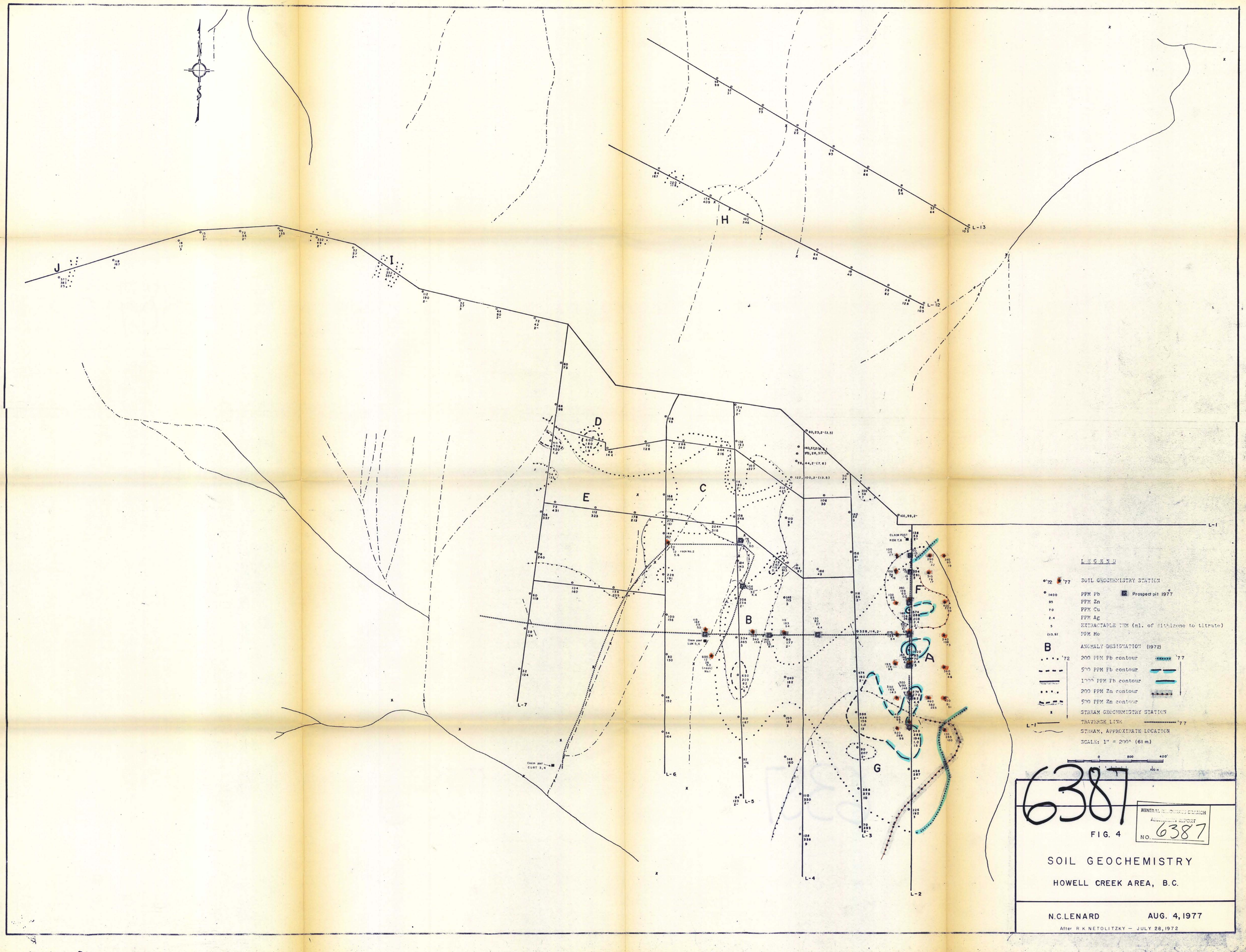
Received in Full.....



6387

FIG. 4

MINERAL RESOURCES DIVISION
ASSESSMENT REPORT
NO. 6387

SOIL GEOCHEMISTRY

HOWELL CREEK AREA, B.C.

N.C.LENARD AUG. 4, 1977

After R K NETOLITZKY — JULY 28, 1972