COMINCO LTD.

EXPLORATION
NTS: 94F/7,10

WESTERN DISTRICT

ASSESSMENT REPORT

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

WIL-SUB GROUP

KWADACHA RIVER AREA

OMINECA MINING DIVISION

BRITISH COLUMBIA

LATITUDE: 57°32'N; LONGITUDE: 124°50'W

PERIOD OF FIELD WORK:

June 12 - July 27, 1981

DECEMBER 1981

M.R. MURRELL

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I. INTRODUCTION

The Wil-Sub claims were optioned in 1980 after Cominco reconnaissance work suggested a northerly extension of the favourable "Gunsteel" Formation from Cominco's Aikie-Sika claim group. The Gunsteel hosts the nearby (12 km) Cirque deposit which contains +30 mt of 7.8% Zn, 2.2% Pb, 48 g/t Ag. It was felt a similar geological environment could be present on the Wil-Sub claims.

A northwest trending belt of Devonian "Black Clastics" has been outlined by regional mapping programs conducted by the Geological Survey of Canada. The belt is located within the Rocky Mountain thrust and fold belt of the Columbian Orogen and is centered approximately 40 kilometers east of the Rocky Mountain Trench. The Devonian "Black Clastics" are continous from the Ospika River, northwesterly to Braid Creek, a distance of 200 kilometers. This belt is part of the northwest trending Kechika Trough which may represent a southern extension of the Selwyn Basin.

The Devonian "Black Clastic" succession is divisible into a lower proximal to distal turbidite assemblage formally named the Besa River Formation, which is the basinal equivalent of the Devonian Dunedin Formation, platformal carbonates to the east, and an upper division of silver-blue-grey weathering siliceous argillite, chert and carbonaceous-pyritic-black shale informally named as the Gunsteel Formation.

The Gunsteel Formation hosts four known barite-lead-zinc occurrences, namely: Driftpile Creek, Mount Alcock, Cirque and Elf. These occurrences are comparable to the Tom and Jason barite-lead-zinc prospects of the Selwyn Basin at MacMillan Pass, in the Yukon.

Recent work has suggested the Cirque-Elf-Fluke mineralization is controlled by deposition in small sub-basins within the Kechika Trough. There are likely a few of these NW-SE trending sub-basins present. The Cirque deposit is postulated to occupy a central sub-basin, whereas the Wil-Sub group covers the most-easterly one.

II. SUMMARY

Extensive work on the Cirque deposit has shown the Zn/Pb mineralization to be associated with bedded barite that had developed in a third order basin

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or trough. Cominco's 1981 work concentrated on identifying such a barite horizon on the Wil-Sub claims, and testing for its zinc-lead potential. The 1981 program consisted of reconnaissance and grid geochemical sampling combined with geological mapping and prospecting. A four man crew spent 87 man days on the Sub claims, and a variable sized crew spent 128 man days on the Wil claims. Results indicate that a thin barite horizon can be traced across much of the Sub claims, and extends onto the Wil claims. There appears to be no associated lead nor zinc with the barite.

III. OWNERSHIP

The owner is Active Minerals Ltd., 1015 - 837 W. Hastings Street, Vancouver, B.C., V6C 1C4. The principal is Mr. Chris Graf. The option agreement covers the Wil and Sub claims, totalling 400 units in 27 claims. Cominco may purchase the property through optional payments totalling $145,000, to be completed by January 31, 1985, with the optioner retaining 10% royalty on net production. Cominco may purchase the optioner's royalty prior to January 31, 2001, or before the production decision date (whichever is earlier) for $750,000. The next option payment is $20,000 due January 31, 1982.

IV. LOCATION AND ACCESS

Latitude: $57^{o}32'N$
Longitude: $124^{o}50'W$
Elevation: 1000 m - 2300 m
Mining District: Omineca

Access to the area is by fixed wing aircraft from MacKenzie, B.C. to Sikanni Chief Lake (233 km). The various campsites on the Wil-Sub claims are then reached by helicopter (45 - 65 km)

The Sub claims are covered mainly by flat to rolling swampland separated by intermittent, long, curving low ridges. The Wil claims cover a long NW trending valley with local canyons. The valley floor is grass to swamp covered, the sidehills are thick bush and tree covered, the higher portions are alpine. Access during 1981 was by foot.

V. HISTORY AND DEVELOPMENT

A. Sub Group (264 Units)

1980 - staked by Chris Graf
- optioned by Newmont.
- broad geochemical coverage (500 m spacing, 50 m intervals), geological mapping, airborne EM and magnetics and orientation gravity survey.
- option terminated by Newmont.

1981 - optioned and worked by Cominco.

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B. Wil Group (136 Units)

1978 - staked by Chris Graf.

1979 - optioned to RioCanex.
- broad geochemical coverage (1 km spacing, 100 - 200 m intervals).

1980 - reconnaissance geological mapping, grid geochemical sampling on two gossans at the south.
- option terminated by RioCanex.

1981 - optioned and worked by Cominco.

VI. GEOLOGY

A. Regional

The regional geology is well covered by D. MacIntyre of the B.C. Dept. of Mines in his paper "Geologic Setting of Recently Discovered Shale-Hosed Barite-Lead-Zinc Occurrences Northeast B.C.", and his "Preliminary Map 44 - Geology of the Akie River Ba-Pb-Zn Mineral District".

The salient points are:

1) The Akie River area is underlain by Proterozoic to Traissic strata arranged in narrow discontinuous belts bounded by NW trending thrust belts.

2) The Gunsteel "Formation" hosts the deposits and consists of Middle to Upper Devonian carbonaceous black shales, siliceous argillites, and cherts.

3) The Gunsteel overlies a turbidite sequence equivalent to platformal carbonates to the east.

4) The barite horizon is present throughout the basin, within the Gunsteel, but may or may not have associated Pb and Zn.

5) Local thickening of the barite unit, and build-ups of the Pb/Zn, is confined to smaller third order basins or troughs.

6) "The deposits, which are clearly syngenetic, typically occur with a siliceous, carbonaceous black argillite or shale facies which overlies or is interfingered with proximal to distal turbidites and is overlain by deeper water basinal black shales".

A study of MacIntyre's map shows the Wil-Sub group to be underlain by a very broad gently northwesterly plunging syncline (or synclinorium). The higher alpine areas on either side of the Wil-Sub valley consist of Ordovician-Silurian (Road River Formation) and Cambrian sediments. The central part of the valley and its sidehills consist of Upper Devonian rocks that are usually undifferentiated, and extensive Quaternary cover. Where the Devonian has been mapped in more detail,

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it is divided into two groups designated D_{Sh} (Upper Devonian) and D_{Sa} (Middle/Upper Devonian). The D_{Sh} is mainly blue-grey weathering black shale, while D_{Sa} contains numerous varieties and mixtures of silty, calcareous, and argillaceous units, including the favourable barite horizon. In small outcrops the D_{Sh} is often difficult to distinguish from the D_{Sa}. Geochemically, it appears the D_{Sa} has a higher background in Ba contents which helps to differentiate it at the usual property mapping scales. MacIntyre recognized tight and recumbent folding and thrust faulting of these two groups within the Devonian portion of the Wil-Sub claims.

B. Property Geology

1) Stratigraphy

Detail mapping by Cominco has attempted to further subdivide the two rock groups (D_{Sa} and D_{Sh}) into individual rock units. These have been recorded on themaps, but only inferred contacts between the more major rock groups are shown. The sub-units are distinguished usually by the presence of black chert (mudstone), or by the occurrence of limestone or siltstone in the sequence. No stratigraphic sequence is thus far inferred by these rock types, rather they appear to be interbedded to a great degree. They may be correlatable over short distances, but no attempt should be made to force a regional correlation, for lateral facies changes are probably present. A more complete stratigraphic breakdown is given on the Geological map legends. The usual extensive overburden cover below the alpine has prevented accurate correlation, which has therefore curtailed detailed structural analysis.

2) Barite Horizons

Since lead-zinc is usually closely associated with barite in the Kechika area, its identification and correlation is important. It occurs variably from minute pin-points to blebs reaching 0.5 cm in diameter, in variable percentages, usually set in the black to grey shales. Although most often seen in minor amounts (1-5%) the barite will occasionally be almost massive. In the field it is usually first identified on the bedding surface as small raised pips, giving the texture of very coarse sandpaper. On a fresh cross-section, the rounded to ovoid barite blebs are dark grey to black. Small chert nodules often closely resemble the blebby barite bands and are often intermixed. The barite-looking bands near the southern camp on the Sub claims are actually chert nodules. They are distinguished by their hardness and their low value analyses. It is tentatively inferred the chert nodule horizon is a lateral variation of the barite horizon, which is part of the Gunsteel Dsa rock group. No massive barite was discovered on the WIL-SUB property. Lead-Zinc is usually associated with massive barite.

Pyrite is sometimes present in the barite horizon package, which indicates a shift toward sulphide rather than sulphate deposition. Numerous samples were taken for analyses, but none returned significant amounts of lead or zinc.

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3) Structure

The WIL-SUB group is underlain by a broad gently northwesterly plunging syncline or synclinorium. This structure is readily evident on the WIL claims, but mainly inferred on the flatter, swamp-covered SUB claims. The topographic expression onthe SUB claims infers a gradual overall change in trend from NW-SE on the southern part, to more E-W in the northern part. This general shift is displayed by the numerous small ridges, and of course, by the strikes and dips of bedding. Tight folding and thrust faulting is likely present on the SUB claims, but the lack of marker units and lack of extensive outcrop prevents documentation. On the Wil claims, the north-westerly plunging synclinorium is bound on the west by a large thrust fault, and on the east by open large-scale folding. The synclinorium has many tight isoclinal to chevron folds that are often displayed in the sidewalls of E-W flowing creeks. More often the folds are "lost" in the tight compression of the black shales so that they are not discernable in a thin bedded outcrop. The axial planes are westerly dipping at 50^{o}-60^{o}, parallel to most bedding. Gravity slumping of many near-vertical beds is common on hillsides and can be quite misleading when sorting out the structure of small areas.

Lower in the valley, numerous exposures of blebby barite and chert are present in both the D_{Sa} and D_{Sh}. Although the barite appears to be present only at certain stratigraphic horizons, it is discontinuous and not everywhere present on those horizons. The baritic and cherty beds are likely caught up in the tight folding and faulting which would account for the multiple beds seen at some locations.

VII. GEOCHEMISTRY

During the period June 16 to July 26, 1982; 3320 soil and silt samples were taken from the Wil-Sub properties. Of these, 1505 have previously been declared for assessment purposes. Sampling was conducted in two methods.

The first method utilized 1:10,000 topographic maps, hip chain and compass. Sample lines were run down ridges and creeks, and along contour. The results are plotted at 1:10,000. This type of sampling was confined to the Wil claims.

The second method was grid geochemical sampling. Grid sample locations were controlled by working on compass lines off a cut base line. Linear control was by hip-chain. Sample locations are marked in the field by grid location and sample numbers on orange flagging. Soil sampling was done along lines spaced at 200 meters, at intervals of 25 and 50 meters. Grid samples are plotted at a scale of 1:5,000. Silt samples were taken whenever streams were crossed. The usual field techniques were utilized - ie. samples dug from the "B" horizon (if possible) with mattocks, placed in kraft envelopes and shipped to Cominco's Vancouver laboratory. There, they were processed and then analysed by atomic absorption. The sample pulps are stored at the Cominco laboratory.

On the Sub claims two large areas were covered by a mutual geochemical grid based on the pre-existing Newmont grid. The northern coverage made use of

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the Newmont data, and Cominco lines were placed between the previous lines, giving an overall line spacing of 250 metres. The southern grid gave fresh coverage at 200 x 25 metres.

On the Wil claims, previous geochemical work was too wide-spaced to be of current use, so a grid of 200 m x 50 m spacing was completed over much of the inferred favourable area. The remainder of the Wil claims were sampled in a close spaced reconnaissance fashion - ridges, contours, and creeks were sampled at spacings averaging 75 metres.

On the grids, a total of 2843 samples were collected. All were analyzed for Ba, Zn and Pb by Cominco's Vancouver laboratory.

Summary maps for the Wil and for the Sub groups were prepared at scales of 1:10,000. All maps have been contoured using the following breakdown:

	Ba (ppm)	Zn (ppm)	Pb (ppm)
Highly Anomalous	>7500	>1000	>100
Very Anomalous	5000-7500	800-1000	50-100
Anomalous	3000-5000	500- 800	30- 50
High Background	2000-3000	400- 500	20- 30

Anomalies on the Sub claims suggest a narrow, well defined barite anomalous horizon trending northwesterly through the northern portion of the claim group, parallel to the Kwadacha River and about 1 km SW of it. A highly anomalous barite area exists on Sub 10 and 13 and may be a continuation of the narrow band. A great area between the two anomalies was not sampled. A wide Ba anomalous area on the SW portion of the Sub claim group has no definite linear pattern to it, and it is felt this may be representing a higher bedrock background in this area. The zinc anomalies on the Sub claims are sporadic, unpatterned and often not spacially related to the barium anomalies. This sort of response is common on the Akie River area, so no particular importance is placed on these Zn anomalies. No significant anomalous lead patterns were produced on the Sub claims.

The Wil claims were more encouraging in that they produced a wide area of highly anomalous Ba values in the northern section, and contain several showings of blebby barite and associated(?) pyritic bands. The southern section of the Wil claims is devoid of Ba anomalies. Zinc anomalies are again sporadic, but overall form a loose pattern spacially associated with the barite anomalies. Very few anomalous lead values were returned on the Wil claims. Numerous small areas, some linear, are outlined by the high background (ie. 20-30 ppm) contour, but no revealing pattern is discernable Only values of >30 ppm should be considered anomalous, and only a few such values exist. No pronounced Pb values are present in the area of anomalous Ba values.

The overall conclusion is that the favourable type of barite rich horizons are present through much of the Wil-Sub group of claims, but apparently has no associated lead nor zinc sulphides.

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A small test program by Cominco's Technical Support Group examined the geochemical aspects of a few of the many large gossans on the Wil-Sub claims and elsewhere. A priority ranking placed the Wil-Sub gossan well below those of the Cirque deposit.

It is felt that barium anomalies indicate that the favourable horizon is present. Zinc anomalies are supportive positive data, but lead anomalies are necessary to "zero-in" as a potential Pb/Zn zone within a barite bed.

VIII. INTERPRETATION

This section is devoted to proposing a model for bringing together the various information from the geochemical and geological surveying. This model presents a feasible explanation for the spatial distribution of the barite beds, which might be used to predict of their possible extensions. It must be emphasized that this interpretation is very speculative, and not necessarily factual.

On the SUB claims, it is felt that the long linear barite anomalous horizon to the NE and the chert nodule horizon to the SW represent the same horizon and are part of the D_{sa} rock group. The horizon closes to the south, near the boundary with the WIL claims, forming a large, north-west plunging syncline. Multiple tight folds or faults cause repetition in the SW limb. On the WIL claims, the same horizon is present in the window of D_{sa} rocks exposed in the canyon and immediate area at the north end of the claim group.

A stratigraphically higher barite unit is present in the D_{sh} rock group in the central and southern part of the WIL claims. Its best exposure is at the peak of a small rounded mountain south of the WIL camp, where folding and good rock exposure has revealed a wide expanse of blebby barite. Other barite bands, assumed to be correlateable, are present to the SE, but the structural arrangement is not known.

IX. CONCLUSIONS

1. Most of the Sub claims and much of the Wil claims are underlain by the Upper Devonian D_{sh} unit, as proposed by D. MacIntyre.
2. A relatively small area is underlain by the Middle-Upper Devonian D_{sa} unit.
3. Barite and chert mineralization is present as blebby horizons to almost massive beds in the lower portions of the D_{sh} and in the higher portions of the D_{sa} units.
4. No obvious marker units are present, but the barite chert nodule beds may be used as markers for a rough first approximation of structure.
5. The area is underlain by a overall gently northwesterly plunging syncline that has numerous small tight isoclinal folds and probable faults within it. The barite beds are caught up in the folds and faults and may be repeated several times.
6. The barium geochemistry is useful in tracing the barite beds, but only a few areas anomalous in lead were discovered.

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7. No significant zinc or lead was found in place, however one piece of pyritic float on the Wil claims ran 74,600 ppm Zn.

8. Although the favourable barite horizons are present on the Wil-Sub property, no massive barite is present, and it appears no barite associated lead-zinc is present.

X. RECOMMENDATIONS

Since no significant encouragement was obtained during the 1982 program, it is recommended the option be dropped and the property returned to the owner.

Report by: M.R. Murrell
Project Geologist

Endorsed by: A.B. Mawer
A.B. Mawer
Senior Geologist

Approved for Release by: for J.A. Collins
G. Harden, Manager
Exploration
Western District

MRM/vmk

Distribution:

WIL-SUB PROPERTY

Assessment Report Attachments

Map No.	Type	Scale	Remarks
Appendix "A"	Statement of Qualifications		Attached
Appendix "B"	Statement of Expenditures		Attached
Sub 1	Location Map	1cm=24km	Attached
Sub 2	Claim Map	1:50,000	In Pocket
Sub 3	Geology	1:10,000	In Pocket
Sub 4	Geochem Summary and Index Map	1:10,000	In Pocket
Sub 5	Ba Geochemistry - Map 1	1: 5,000	In Pocket
Sub 6	Zn Geochemistry - Map 1	1: 5,000	In Pocket
Sub 7	Pb Geochemistry - Map 1	1: 5,000	In Pocket
Sub 8	Ba Geochemistry - Map 2	1: 5,000	In Pocket
Sub 9	Zn Geochemistry - Map 2	1: 5,000	In Pocket
Sub 10	Pb Geochemistry - Map 2	1: 5,000	In Pocket
Sub 11	Ba Geochemistry - Map 3	1: 5,000	In Pocket
Sub 12	Zn Geochemistry - Map 3	1: 5,000	In Pocket
Sub 13	Pb Geochemistry - Map 3	1: 5,000	In Pocket

APPENDIX "A"

STATEMENT OF QUALIFICATIONS

I, MICHAEL RAY MURRELL, hereby declare that I was graduated from the University of Alberta with an Honours B.Sc. in geology during May 1966. During my undergraduate summers I was employed on geological programs by B.A. Oil (now Gulf Oil), and by a small mining company. Upon graduation I joined Cominco Ltd. and have been engaged in many aspects of mining exploration since that time.

Dated this 15th day of December, 1981

at Vancouver, British Columbia

Signed: Mike Murrell

M.R. Murrell
Project Geologist

MRM/skg

STATEMENT OF EXPENDITURES

WIL SUB PROPERTY

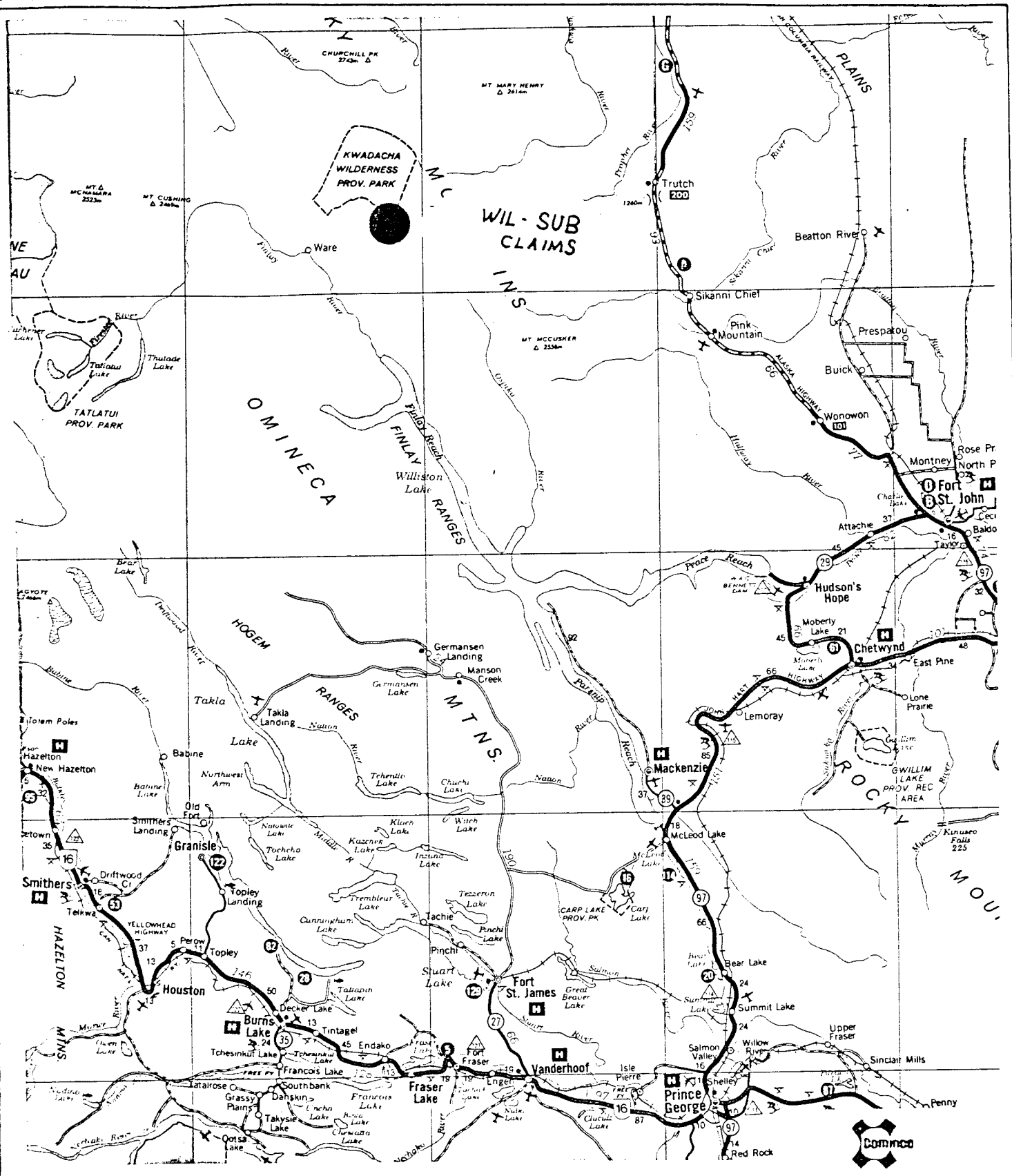
OMINECA M.D., B.C.

JANUARY 1, 1981 TO NOVEMBER 30, 1981

TRANSPORTATION:		
Fixed Wing	$ 5,182	
Helicopter	19,860	
Freight	89	
Fuel	64	
Expense Accounts	636	$ 25,831
GEOLOGY:		
Salaries - Permanent staff	11,755	
- Temporary staff	9,036	
- Bonus - Permanent	2,517	
- Bonus - Temporary	1,904	
Supplies	3,863	
Equipment	3,906	32,981
LINECUTTING: Contracted Work		5,670
GEOCHEMISTRY:		
Salaries - Temporary staff	4,194	
- Bonus - Temporary	896	
Supplies	39	
Freight	108	
Assay and Analysis	29,347	
Computer charges	1,158	35,742
ORGANIZATION AND FIELD SUPERVISION:		
Salaries - Permanent staff		1,156
CAMP COSTS:		
Supplies	2,814	
Equipment	3,635	
Expense Accounts	1,495	7,944
DRAFTING AND REPRODUCTION:		
Salaries - Permanent staff	2,722	
- Temporary staff	340	3,062
TENURE - All Other:		2,995
OPTION PAYMENTS:		15,000
SUPERVISION:		9,300
ADMINISTRATION:		12,468
		$ 152,149

Vancouver Office
December 16th, 1981

R. L. Woods
Supervisor,
Exploration Accounting



Drawn by: MRM	Traced by:
Revised by / Date	Revised by / Date

WIL - SUB GROUP

SUB LOCATION MAP

Scale: 1cm = 24Km. | Date: December 1981 | Plate: Sub 1

NCI - 112A - C1

210-0610

LEGEND - WIL-SUB GROUP

Gunsteel Formation

D_{Sh} Siliceous Black Shale - weathers blue-grey to green or black to rusty brown or ocassionally yellow. Fissile to platy. Has occasional thin beds of blue-grey weathering moderately resistent silfceous black mudstone with minor local blebby barite.

Has interbeds of the following:

- DSh_6 Recessive black-weathering shale
- DSh_5 Mixed with siliceous black mudstone
- DSh_4 Massive black siliceous mudstone
- DSh_3 Rusty, medium grained siltstone.
- DSh_2 Ochre to grey pods or bands of limestone
- DBA Barite - pin points to blebby horizons, *or nodular about*

D_{SA} Mudstone - Blue grey to black blocky weathering, thin to medium bedded siliceous and black. Fairly resistent overall.

Has interbeds of the following:

- DSA_5 Mixed with siliceous black thin bedded shale
- DSA_4 Massive black siliceous mudstone
- DSA_3 Rusty, medium grained siltstone
- DSA_2 Ochre to grey pods or bands of limestone
- DBA Barite - pin points to blebby to almost massive, (<1 m thick), often with rusty brown to grey weathering pyritic shale. Resistant *Grades to nodular about*

Besa River and Equivalent

D_{SS} Black to rusty brown weathering, thin bedded to platy turbiditic shale with subtle buff-white laminations, frequent yellowish-brown weathering, pyritic silty layers (1 m thick), moderately resistant.

D_{LS} Grey weathering, silty limestone with two holed crinoid hash debris, resistant (Dunedin Reef).

D_{ls} Lt. grey, blocky weathering micritic thick bedded lst. with local abundant fossils

D_{qt} Grey weathering, thick bedded, dolomitic quartz arenite turbidites, silicified solitary rugose corals and two holed crinoid fragments, resistant.

D_{sl} Dk grey blocky laminated mudstone, weathers lt. orange

Road River Formation

S_{Sl} Buff brown to orange weathering, mottled, pyritic, thin, medium to thick bedded siltstone to dolomitic siltstone, occasional beds of extensive bioturbation, resistant to moderately resistent with minor recessive maroon weathering, platy, muddy siltstone and minor black carbonaceous platy shales, recessive.

O_{sh} Blue grey, black to yellow weathering carbonaceous black shale, moderately recessive, contains black limestone balls and is graptolitic - Climacograptus
Middle to Upper Ordovician

S_{qt} Rusty brown to buff brown weathering medium bedded black quartzite, resistant

Kechika Formation

SO_K Grey to orange weathering, nodular, dolomitic to limy siltstone, resistant.

SYMBOLS

- Legal Corner Post
- Campsite
- Thrust fault, teeth on upthrown side
- Gossan or iron seep
- Bedding on foliation - dipping, vertical, flat
- anticlines, synclines, plunge shown
- P_y Pyrite in significant amounts
- Geological contacts: inferred
- Outcrops
- $BaSO_4$ float

93706 - Rock sample w. analyses in ppm Pb, Zn, Ba.

SCALE 200 100 0 200 400 600 m

MINERAL RESOURCES BRANCH ASSESSMENT REPORT 9977

WIL – SUB CLAIMS

Drawn by: MRM | Traced by:

Revised by	Date	Revised by	Date

NTS 94F/10W, F/11E

SUB PROPERTY GEOLOGY

Scale: 1:10,000 | Date: NOV, 1981 | Plate: Sub 3

NCI-119-G.L.

FORM 212-0080

9977

LEGEND

7/19/1000 — 1/1500/1500 — 23/15/1870 — 10/10/2370

1981 Soil Geochemistry

Previous Soil Geochemistry (Newmont Exploration)

} Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

	LEAD (p.p.m.)
HIGHLY ANOMALOUS	> 100
VERY ANOMALOUS	50 - 100
ANOMALOUS	30 - 50
HIGH BACKGROUND	20 - 30

50 0 50 100 150 200
(metres)

WIL - SUB PROPERTY

Cominco Ltd.

Drawn by: MRM	Traced by:	
Revised by	Date	Revised by / Date

SUB GROUP

Pb Geochemistry - Map 1

Scale: 1:5000 Date: Oct. 1981 Plate: Sub - 7

N.C.I. - 118 - CL

FORM 210 0670

LEGEND

1981 Soil Geochemistry
Previous Soil Geochemistry (Newmont Exploration)
} Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

	BARIUM (p.p.m)
HIGHLY ANOMALOUS	> 7500
VERY ANOMALOUS	5000 - 7500
ANOMALOUS	3000 - 5000
HIGH BACKGROUND	2000 - 3000

50 0 50 100 150 200
(metres)

WIL - SUB PROPERTY

MRM.

Drawn by: MRM	Traced by:
Revised by / Date	Revised by / Date

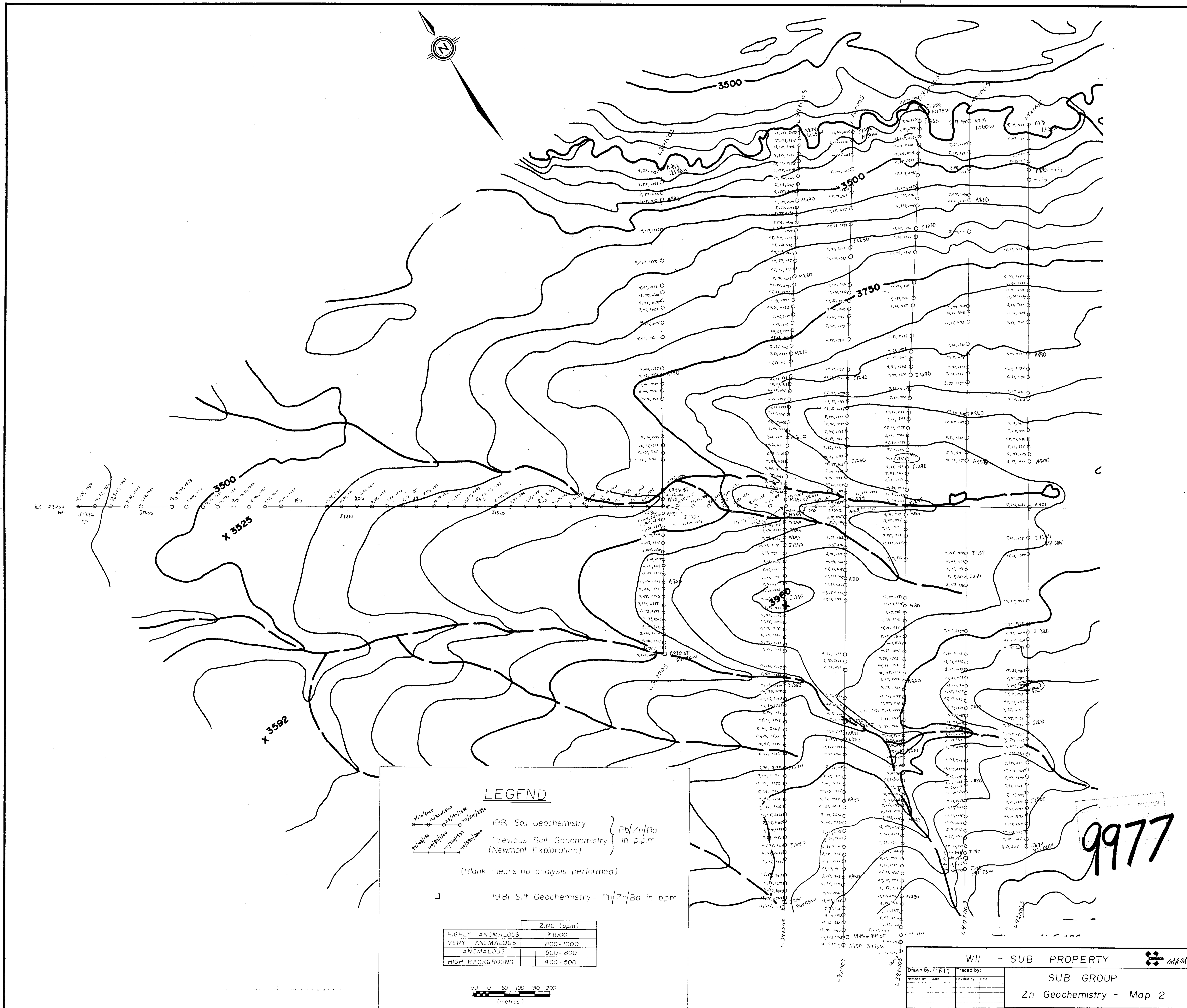
SUB GROUP
Ba Geochemistry - Map 2

Scale: 1:5000 Date: Oct. 1981 Plate: Sub - 8

9977

Form 210 0660

NC1 - 117 - C.L.



	ZINC (p.p.m.)
HIGHLY ANOMALOUS	>1000
VERY ANOMALOUS	800-1000
ANOMALOUS	500-800
HIGH BACKGROUND	400-500

WIL - SUB PROPERTY

MRM.

Drawn by: MRM | Traced by:

Revised by | Date | Revised by | Date

SUB GROUP

Zn Geochemistry - Map 2

Scale: 1:5000 Date: Oct. 1981 Plate: Sub - 9

Form 210-0660

LEGEND

1981 Soil Geochemistry
Previous Soil Geochemistry (Newmont Exploration)
} Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

	LEAD (p.p.m.)
HIGHLY ANOMALOUS	> 100
VERY ANOMALOUS	50 - 100
ANOMALOUS	30 - 50
HIGH BACKGROUND	20 - 30

50 0 50 100 150 200
(metres)

9977

WIL - SUB PROPERTY

MRM

Drawn by: MRM | Traced by:

Revised by	Date	Revised by	Date

SUB GROUP
Pb Geochemistry - Map 2

Scale: 1:5000 | Date: Oct. 1981 | Plate: Sub - 10

NCI - 117 - C.L.

Form 210 0660

LEGEND

1981 Soil Geochemistry
Previous Soil Geochemistry (Newmont Exploration)
} Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

	BARIUM (ppm)
HIGHLY ANOMALOUS	> 7500
VERY ANOMALOUS	5000 - 7500
ANOMALOUS	3000 - 5000
HIGH BACKGROUND	2000 - 3000

50 0 50 100 150 200
(metres)

9977

WIL - SUB PROPERTY

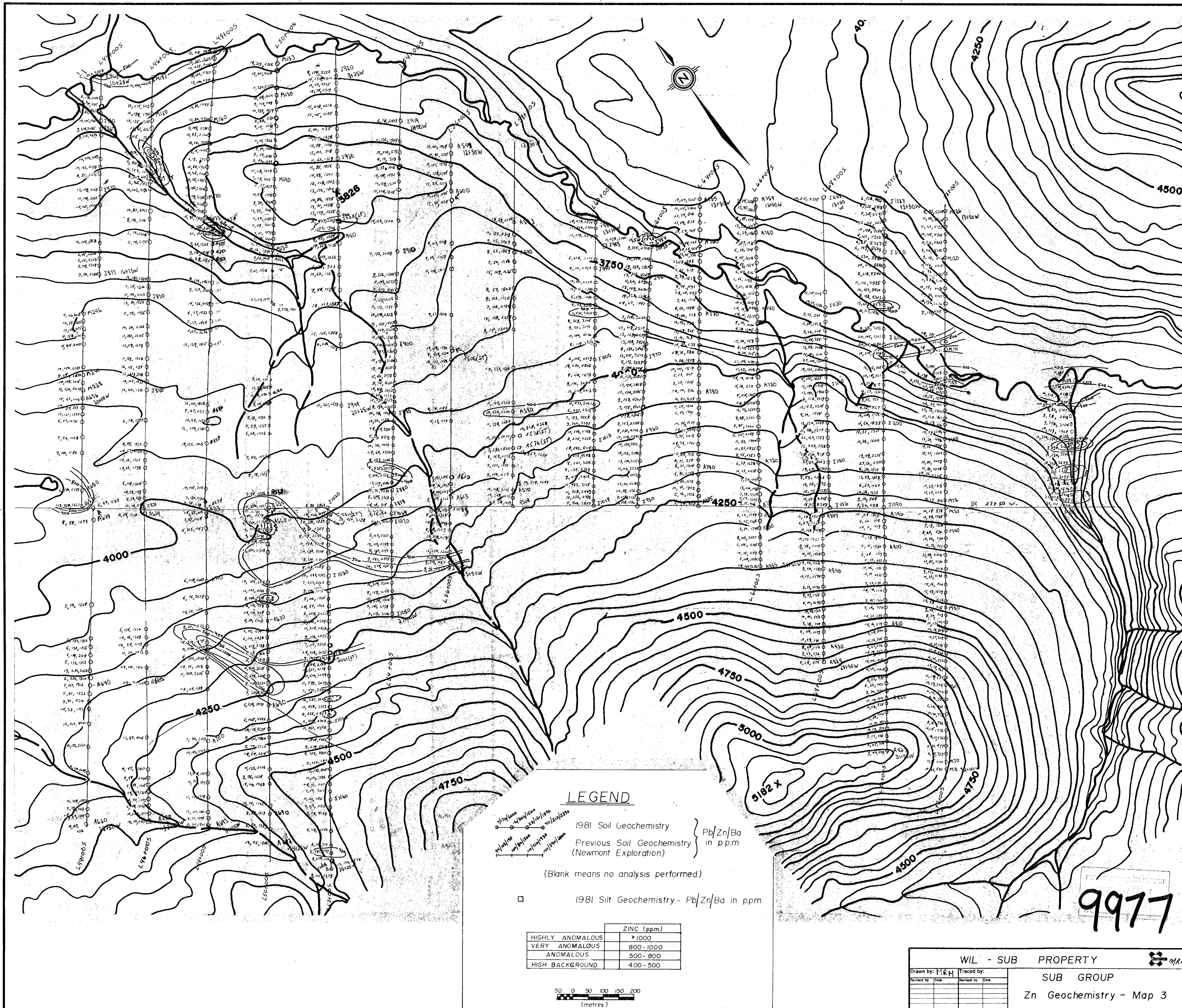
Drawn by: MRM | Traced by:

Revised by	Date	Revised by	Date

SUB GROUP
Ba Geochemistry - Map 3

Scale: 1:5000 Date: Oct. 1981 Plate: Sub-11

Form 210 0680



LEGEND

1981 Soil Geochemistry — Pb/Zn/Ba in p.p.m.

Previous Soil Geochemistry (Newmont Exploration) — Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

		ZINC (p.p.m.)
HIGHLY ANOMALOUS		>1000
VERY ANOMALOUS		800-1000
ANOMALOUS		500-800
HIGH BACKGROUND		400-500

50 0 50 100 150 200 (metres)

WIL - SUB PROPERTY

Cominco MRM

Drawn by: MRH | Traced by:

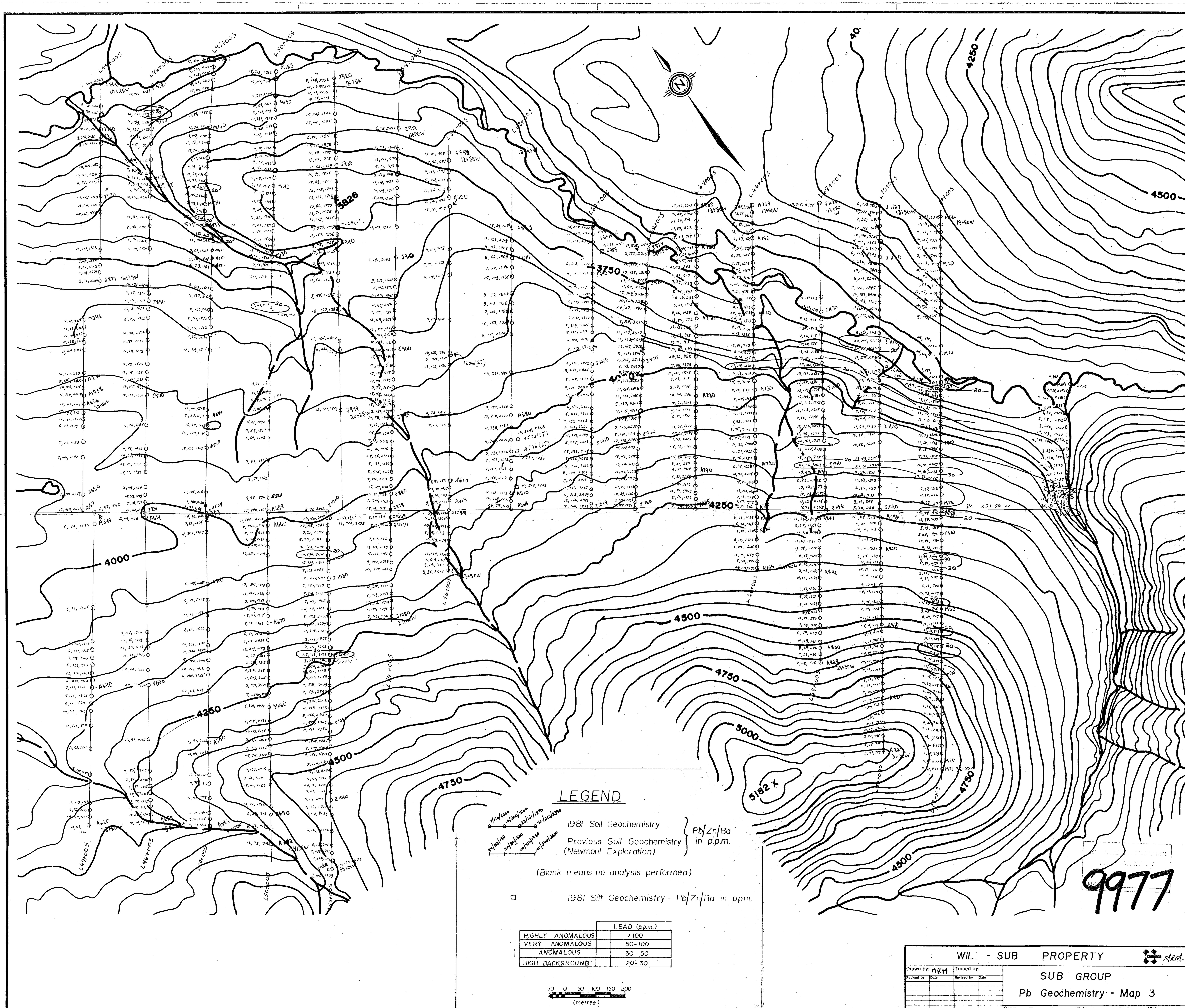
SUB GROUP

Zn Geochemistry - Map 3

Scale: 1:5000 | Date: Oct. 1981 | Plate: Sub-12

NCI - 117 - C.L.

Form 210 0660



LEGEND

7/170/6000 — 16/300/1500 — 23/150/1890 — 40/210/2390 — 1981 Soil Geochemistry

94/103/190 — 100/80/1500 — 110/410/1930 — 140/590/2800 — Previous Soil Geochemistry (Newmont Exploration)

Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

		LEAD (p.p.m.)
HIGHLY ANOMALOUS		>100
VERY ANOMALOUS		50-100
ANOMALOUS		30-50
HIGH BACKGROUND		20-30

50 0 50 100 150 200 (metres)

WIL - SUB PROPERTY

Cominco MRM

Drawn by: MRM | Traced by:

Revised by | Date | Revised by | Date

SUB GROUP

Pb Geochemistry - Map 3

Scale: 1:5000 | Date: Oct. 1981 | Plate: Sub-13

Form 210 0660

9977

LEGEND

1981 Soil Geochemistry
Previous Soil Geochemistry (Newmont Exploration)
} Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

	ZINC (ppm)
HIGHLY ANOMALOUS	> 1000
VERY ANOMALOUS	800 - 1000
ANOMALOUS	500 - 800
HIGH BACKGROUND	400 - 500

50 0 50 100 150 200
(metres)

WIL - SUB PROPERTY

Drawn by: HRM | Traced by:

Revised by	Date	Revised by	Date

SUB GROUP
Zn Geochemistry - Map I

Scale: 1:5000 | Date: Oct. 1981 | Plate: Sub 6

N.C.L. - 118 - OL

9977

LEGEND

1981 Soil Geochemistry
Previous Soil Geochemistry (Newmont Exploration)
} Pb/Zn/Ba in p.p.m.

(Blank means no analysis performed)

□ 1981 Silt Geochemistry - Pb/Zn/Ba in p.p.m.

	BARIUM (p.p.m)
HIGHLY ANOMALOUS	> 7500
VERY ANOMALOUS	5000 - 7500
ANOMALOUS	3000 - 5000
HIGH BACKGROUND	2000 - 3000

50 0 50 100 150 200
(metres)

WIL - SUB PROPERTY

Geotronics MRM

Drawn by: MRM | Traced by:

Revised by	Date	Revised by	Date

SUB GROUP
Ba Geochemistry - Map I

Scale: 1:5000 | Date: Oct. 1981 | Plate: Sub 5

N.C.I. - 118 - CL

FORM 210 0670

9977

LEGEND

- Ba 3000 – 5000 ppm
- Ba > 5000 ppm
- Zn 500 – 800 ppm
- Zn > 800 ppm
- Pb > 30 ppm

SUB MAP 1

SUB MAP 2

SUB MAP 3

KWADACHA RIVER

BLACK CREEK

CAMP 1

CAMP 2

W/L 3112'

SCALE 200 100 0 200 400 600 m

WIL → SUB GROUP

MRM.

NTS 92 F 2-10

SUB PROPERTY

GEOCHEM SUMMARY AND INDEX MAP

OMINECA M.D., B.C.

Drawn by: MRM

Traced by:

Revised by | Date

Scale: 1:10,000

Date: DEC 1981

Plate: Sub 4

NCF-119-OL

FORM 310-0080

125°00' W

N

KWADACHA

SUB 5
2600 (3)

SUB 2
2597 (3)

SUB 1
2596 (3)

SUB 6
2601 (3)

LCP

LCP

LCP

SUB 9
2604 (3)

RIVER

57° 33' N

SUB 7
2602 (3)

SUB 8
2603 (3)

SUB 3
2598 (3)

SUB 4
2599 (3)

SUB 11
2606 (3)

SUB 10
2605 (3)

LCP

SUB 12
2607 (3)

SUB 13
2608 (3)

SUB 15
2911 (7)

SUB 14
2910 (7)

LCP

SUB 16
2912 (7)

SUB 17
2913 (7)

WIL 1
1306 (7)

WIL 2
1307 (7)

WIL 3
1308 (7)

WIL 4
1309 (7)

WIL 5
1310 (7)

WIL 6
1311 (7)

WIL 7
1312 (7)

WIL 8
1313 (7)

WIL 9
1314 (7)

WIL 10
1315 (7)

125°00' W

0 5

Kilometres

WIL - SUB OPTION

N.T.S. 94 F/7, 10

Drawn by:		Traced by: SAW	
Revised by	Date	Revised by	Date

CLAIM MAP

OMINECA, M.D.

Scale: 1: 50,000 | Date: JUNE 1981 | Plate: SUB 2

NCI - 229 - C.L.