4478

GEOLOGICAL, GEOCHEMICAL & GEOPHYSICAL REPORT

- on the -

REISETER PROPERTY

OMINECA MINING DIVISION, B. C.

- for -

CHANNEL COPPER MINES LTD., N. P. L.,
248 - 2nd. Avenue,
KAMLOOPS, B. C.

COVERING: Reiseter #1 - 24 Mineral Claims

LOCATED: -54°57' N, 127°09'W.
-NTS 93L/14E
-9 miles north of Smithers, B. C.

Prepared by:

John R. Kerr, P. Eng.,
#6 - 219 Victoria Street,
KAMLOOPS, B. C.

July 19th., 1973.

INDEX

APPENDICES

APPENDIX A - GEOCHEMICAL RESULTS

APPENDIX B - COST STATEMENT

APPENDIX C - WRITER'S CERTIFICATE

LIST OF MAPS

FIGURE 78 - 1 #1 - LOCATION MAP 1": 120 miles

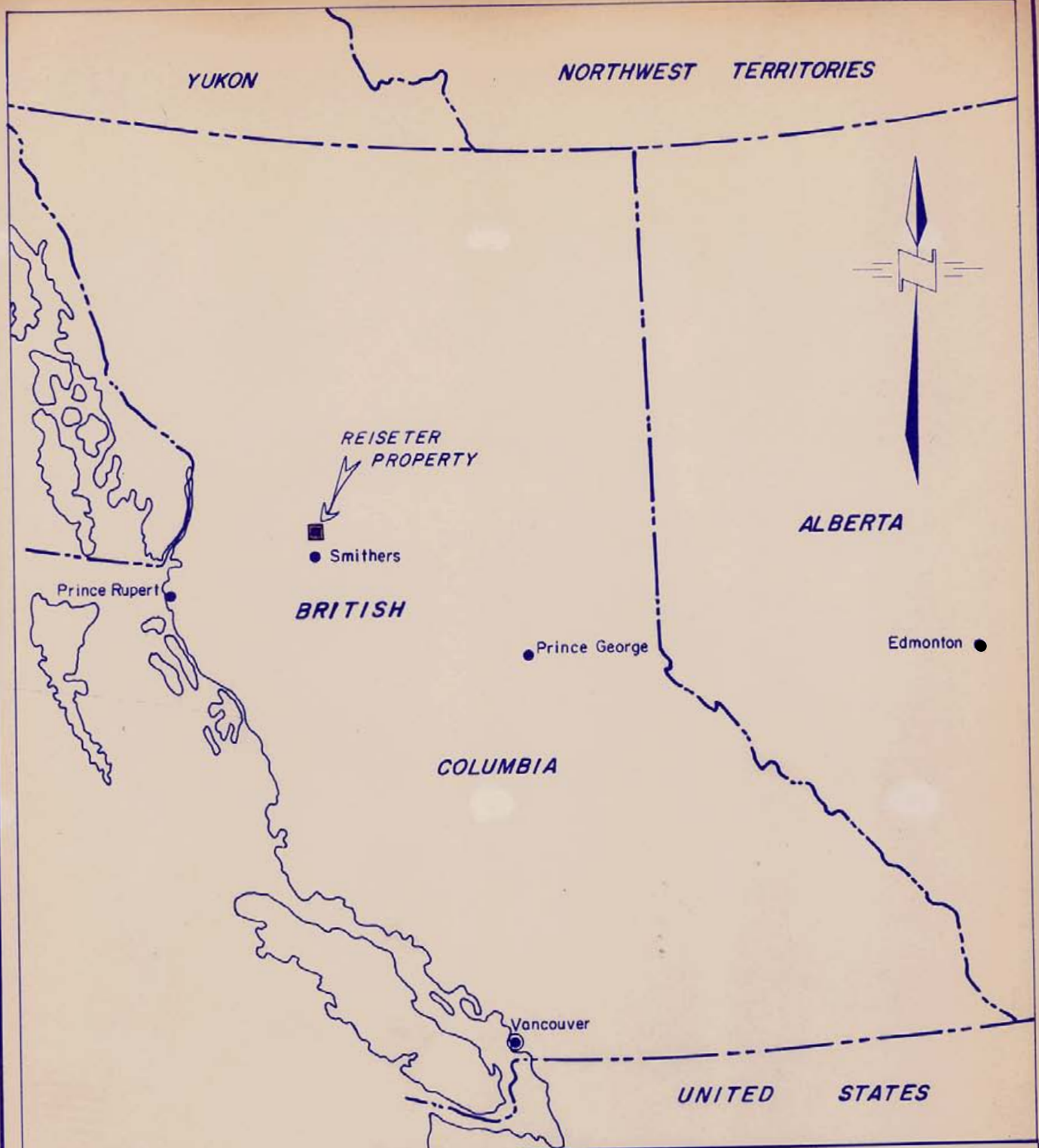
FIGURE 78 - 2 #2 - CLAIM MAP AND GENERAL GEOLOGY 1": 1,000 feet

FIGURE 78 - 3 #3 - DETAIL GEOLOGY - GRID AREA 1": 200 feet

FIGURE 78 - 4 #4 - MOLYBDENUM DISTRIBUTION IN SOILS 1": 200 feet

FIGURE 78 - 5 #5 - COPPER DISTRIBUTION IN SOILS 1": 200 feet

FIGURE 78 - 6 #6 - MAGNETIC SURVEY 1": 200 feet



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4478 MAP #1

CHANNEL COPPER MINES LTD. N.P.L.

LOCATION MAP
REISETER PROPERTY

Tech. Work by : K D A.	Scale = 1" : 120 mi.
Drawn by : Western Mapping	Date : July, 1973
App'd. by : J. Kerr	Drwg. No. 78 - 1

SUMMARY & CONCLUSIONS

Channel Copper Mines Ltd., N. P. L. have acquired, under an option agreement with Mr. A. Mesich, the rights to explore the 24 Reiseter claims, 9 miles due north of Smithers, B. C. The property was first discovered in the 1950's as a vein - type Sb-Pb-Zn-Ag exploration bet. In 1971/72, Dr. W. R. Bacon, consultant for Channel Copper, recognized the potential for a Cu/Mo porphyry type of deposit on the property, and thereby recommended an exploration programme oriented at discovering such a deposit. During the spring of 1973, the initial phase of Dr. Bacon's programme was completed, consisting of line - cutting, geochemistry, magnetics, and geological mapping.

The claims are underlain mainly by sedimentary and volcanic rocks of the Hazelton Group. A large batholith of granodiorite is situated to the south and east of the claim block. Although this batholith was not observed in the field, the government geological map sheet indicates the contact to cross the eastern portion of the claim block. Two small stocks, possibly related to the main batholith to the east, were mapped on the claim and grid area. These stocks apparently control all vein - type mineralization found on the property. The widespread distribution of thermal alteration of the sediments, the mineralized veins and dikes, suggest that the two small stocks, as exposed on surface, are possibly

part of a large granitic mass underlying the sedimentary capping. Magnetics, in part, supports this theory.

Results of the geochemistry indicate two strong molybdenum anomalies in the northeastern portion of the grid. Copper values are generally low, with very little correlation to molybdenum. It is therefore suspected that if a porphyry deposit is found, molybdenum will be the main metal of interest. As there may be a barren capping of sedimentary rocks overlying a mineralized zone, values of metal in soil may not delineate the full exploration target. It is therefore recommended that induced polarization surveys, and further detailed geochemistry be completed over a portion of the grid in order to locate the best drill targets.

INTRODUCTION

During May and June, 1973, Channel Copper Mines Ltd., N. P. L. completed detailed geological, geochemical and magnetic surveys over a six mile grid on the Reiseter claim block, 9 miles north of Smithers, B. C. At the request of Mr. J. Aa. B. Whist, President of Channel Copper, I visited the property May 13 - 15, May 21 - 26, and June 23 - 26, 1973 to supervise the programme, to map the property, and to assist in collecting soil samples. This report summarizes the results of the above programme.

LOCATION AND ACCESS:

The property is located on the east side of the Bulkley River Valley, 9 miles due north of Smithers, B. C. Smithers is located on the Yellowhead Highway, (#16), approximately 240 miles west of Prince George. The geographic coordinates of the property are 54^{o} 57' N longitude and 127^{o} 09' latitude.

Access into the property is possible via the old Telkwa - Morice town road, leaving Highway #16 on the east side of the Bulkley River at Smithers, and travelling approximately 12 miles north. A good bush road leads east of the main road, just south of Reiseter Creek, for 2 miles into the central portion of the claims and grid area.

TOPOGRAPHY AND VEGETATION:

The claims are situated in the transition belt between the Coast Mountain Range and Interior Plateau of British Columbia. The claims are on the east side of the broad, relatively flat Bulkley River Valley. Relief within the claims is quite moderate, with the exception of the steep canyon walls of Reiseter Creek. Elevations range from 2,000 ft. a. s. l. to over 3,500 ft. a. s. l. within the property. Hudson Bay Mountain on the west side of the Bulkley River rises to 8,400 ft. a. s. l.

The Smithers area is in a moderate rain belt of the Interior. Vegetation is in general quite heavy, with large stands of fir, spruce, hemlock, and jack pine on the property. Underbrush consists of tag alder and devil's club.

Soil cover is quite extensive over the claim area, varying from 1 ft. to 10 ft. thick. Most of the outcrop located is found along the ridge on the south slopes of Reiseter Creek. On the south steep valley wall of Reiseter Creek, a layer of thin overburden and vegetation covers in part coarse talus boulders.

HISTORY OF WORK:

The history of mining and exploration in the Smithers area dates back to the nineteenth century. Recent developments have led to the discovery of large low - grade porphyry type of Cu, Cu/Mo and Mo deposits

in the Smithers area; the Hudson Bay Mountain deposit of Amax; the Bell deposit of Noranda; and the Sam Goosly deposit of Kennecott.

It is believed that Anthony Mesich of Smithers, B. C. first discovered Sb, Pb, Zn, and Ag on the Reiseter claims in the mid 1950's. Mr. Mesich has held the six key claims from 1957 to this date. During this period considerable work has been completed on the property, mainly oriented at developing high grade antimony veins, by Mr. Mesich and three companies holding the property under option. A limited amount of vein material was hand cobbed from surface pits for metallurgical testing.

In January, 1972, Channel Copper Mines Ltd., N. P. L. optioned the property from Mr. Mesich. Dr. W. R. Bacon, consultant for Channel Copper, recognized the potential of the property for a low - grade Mo or Cu/Mo porphyry deposit, and in a report dated January 10th., 1972, recommended further exploration oriented at discovering this type of deposit. The May/June, 1973, completes the first phase of this programme.

CLAIMS:

The property consists of 24 full - sized claims as follows:

Claim Name	Record No.	Expiry Date
Reiseter #1	64846	November 12th., 1975.
Reiseter #2	64847	November 12th., 1975.

Claim Name	Record No.	Expiry Date
Reiseter # 3	13799	June 23rd., 1975.
Reiseter # 4	13800	June 23rd., 1975.
Reiseter # 5	11934	October 28th., 1975.
Reiseter # 6	11935	October 28th., 1975.
Reiseter # 7	12622	June 19th., 1975.
Reiseter # 8	12623	June 19th., 1975.
Reiseter # 9	64848	November 12th., 1975.
Reiseter #10	64849	November 12th., 1975.
Reiseter #11	83582	December 5th., 1975.
Reiseter #12	83583	December 5th., 1975.
Reiseter #13	106507	January 28th., 1974.
Reiseter #14	106508	January 28th., 1974.
Reiseter #15	106509	January 28th., 1974.
Reiseter #16	106510	January 28th., 1974.
Reiseter #17	106511	January 28th., 1974.
Reiseter #18	106512	January 28th., 1974.
Reiseter #19	106513	January 28th., 1974.
Reiseter #20	106514	January 28th., 1974.
Reiseter #21	106515	January 28th., 1974.
Reiseter #22	106516	January 28th., 1974.
Reiseter #23	106517	January 28th., 1974.
Reiseter #24	106518	January 28th., 1974.

All claims were staked by and are currently recorded in the name of Anthony Mesich, under an option agreement to Channel Copper Mines Ltd., N. P. L.

GEOLOGY

The general geology of the Smithers Area is best documented by the B. C. Dept. of Mines Map Sheet 69 - 1, Geological Compilation Map of the Smithers, Hazelton and Terrace Areas, 1":4 mi. by N. C. Carter and R. V. Kirkham. In the Smithers area, sedimentary and volcanic rocks of the Hazelton Group, Lower - Middle Jurassic, have been intruded by Late Cretaceous stocks and batholiths of granodiorite and quartz monzonite.

The claim area was mapped by the writer using the following two methods:

(1). Detailed mapping of all outcrops on a grid system, 4,400' long by 2,500' wide, with line intervals at 400 ft. The grid was cut and chained by transit and picket methods. Results of the detailed geological mapping are shown on the attached 1":200' scale map, Figure 78 - 3.

(2). Reconnaissance geological mapping of other areas of the claim block on a scale of 1":1,000', Figure 78 - 2, by pace, compass, and altimeter methods. Very little outcrop was found in areas outside of the grid.

ROCK DESCRIPTIONS:

The oldest and most dominant rock type underlying the Reiseter claims are rocks of the Jurassic Hazelton Group. These rocks have been subdivided into three major lithologics:

(1). Sedimentary rocks, mainly sandstone and greywacke. These rocks are generally highly thermally altered due to the nearby batholith and stocks. Very near the stock contacts, thermal alteration of the sediments is extreme, and the rock assumes a definite hornfelsic texture. Pyrite is found in moderate content (0.5 - 2%) throughout the sediments, both as disseminations throughout the rock, and as blebs and smears on fractures and schistosity planes.

(2). Sedimentary and/or volcanic tuff, very fine grained and in part chloritized. Sedimentary fragments up to 1" long have been recognized in some outcrops. In one locality, the tuffs have a very splintry texture, possibly due to shearing, or even an exfoliation weathering feature.

(3). Fine - grained grey - green chloritized andesite or basalt. In part this rock is thermally altered and is very difficult to differentiate from the thermally altered sediments. This rock was definitely recognized in float at the base of the steep slope into Reiseter Creek, north of the grid.

Two small stocks, each less than 1,000 ft. diameter as found on surface, were mapped within the grid area. This rock can be described as a medium - coarse grained highly altered granodiorite. Alteration includes sericitization, silicification, kaolinization, with minor epidotization and chloritization. The B. C. D. M. map indicates the contact of a large batholith to cut the eastern portion of the claim block, as shown on Figure 78 - 2. Due to thick and extensive overburden in this portion of the claims, outcrop of this rock was not observed.

Aplite and granitic dykes have been mapped cutting all sedimentary rocks of the Hazelton Group. Large boulders of granitic rocks have been found in various parts of the claim block, which would indicate that more granitic rock underlies the claims than is currently realized. Although there were no contacts of the stocks observed in the field, widespread thermal alteration of the sediments and volcanic rocks, and the widespread distribution of dikes, mineralized veins, and the granitic boulders, would suggest that a granitic mass underlies the sedimentary capping. If this is proven true, it could be assumed that the major batholith contact on the eastern edge of the property, dips very gradually to the northwest, and will underlie the grid area at depth.

MINERALIZATION:

It is within the sedimentary rocks of the Hazelton Group that all Sb-Pb-Zn-Ag veins are found. A total of 11 mineralized veins were found, all but one carrying values of Sb. Four veins were found to carry values of Pb-Zn-Ag. Previous assays indicate the following values:

0.68 - 24.9% Sb
0.06 - 0.80 oz. Ag/T

over widths 5"-12"

The Sb barren vein carries massive chalcopyrite. An assay of this material indicates:

Cu - 4.00%
Au - 0.03 oz./T

represents a width of 4"

The veins are in part very brecciated, and lenticular, ranging in thickness from 2" - 24" wide. Gangue material includes quartz and carbonate. The main attitude of the veins is N 50-60^{o} E, with dips of 45-55^{o} SE. Towards the south, the veins apparently assume a more northerly attitude. The location of vein concentrations are spatially related to the stock contacts. From this, it is assumed that the vein material has the same genetic origin as the stocks.

Within the altered granodiorite stocks, two showings of MoS_2 and Cpy were found as fine smears along fracture faces.

There is a widespread variation of mineralization evident on the Reiseter claims. From a surficial, two dimensional aspect, there is a distinct zoning of economic minerals in veins with respect to the distance from the stock contacts. Cu and Mo are found within the stock and in veins and dikes very near the stock contacts. Pb-Zn-Ag-Sb are found in veins further from the contact, with Sb increasing in content, at a distance from the contact. The possible economic significance of this will be discussed later in the chapter "Discussion of Results".

GEOCHEMISTRY

During the period June 23 - 26, a total of 376 soil samples were collected from the Reiseter claims. Of the 376 samples, 50 were collected by pace and compass methods, and 326 were collected from an established grid area.

FIELD METHODS:

The detailed soil samples were collected off of a pre-cut grid, with lines spaced at 400 ft. intervals, and samples collected at 100 ft. intervals along all lines. The grid was cut by Lloyd Hodgson of Smithers, B. C. by transit, chain, picket and power saw methods, suitable for follow - up I. P. surveys. The reconnaissance samples were collected at 200 ft. intervals along traverse lines established by pace and compass methods. Samples were identified by grid coordinate coding; e. g. R - 28 W - 10S; R - to designate Reiseter property; 28 W to designate L 28 + 00W; and 10S to designate station 10 + 00S. Location of all samples can be found on Figures 78 - 2, 4, and 5.

It was found that all samples could be collected from a grey - brown to red brown, well developed "B" horizon. Some intermixing of soils was encountered on the steep northern slopes of the Reiseter Creek valley. Samples were collected by digging pits 6" - 24" deep with a spade, and by placing the clean "B" horizon soil in pre - labelled brown kraft envelopes. All samples were collected by J. M. Dawson, P. Eng., and J. R. Kerr, P. Eng., both with more than 10 years of field experience.

ANALYTICAL TECHNIQUE:

All samples were sent to the Vancouver laboratories of Bondar - Clegg and Co. Ltd. to be analyzed for Cu and Mo. Samples from L 28 + OOW were analyzed for Pb, Zn, and Ag in addition. The samples were dried at 40° - 50° C in infra-red ovens, and sieved to -80 mesh in Tyler screens. An aliquot of the -80 mesh fraction was digested in hot aqua regia to extract the metals, and the metal content was determined by atomic absorbtion methods; Pb, Zn, Cu, and Mo at a detection limit of 1 ppm, and Ag at a detection limit of 0.2 ppm. Analytic results are appended to this report.

CLASSIFICATION OF DATA:

Statistical analyses were completed for each element (Cu and Mo), treating all samples as one population. The arithmetic mean, standard deviation, and histogram were derived for both copper and molybdenum from these analyses.

	Cu	Mo
mean	34.5 ppm	10.8 ppm
std. dev.	42 ppm	14.6 ppm

The histogram for copper shows a normal unimodal curve, which indicates a one population classification of sample results. The histogram for molybdenum indicates a dominant mode at 2 - 5 ppm; however, a weak second mode occurs at 35 - 40 ppm.

This second mode is represented by only 8 - 10 samples, therefore further statistics is not warranted at this time. A cause for a bimodal population could be explained by greater concentration of Mo in granitic rock, or by contamination from trenched areas.

For each element, the sample data were classified into the following anomalous categories:

		Cu	Mo
Negative	0 - m	0 - 34 ppm	0 - 10 ppm
Possibly Anomalous	m - (m+s)	35 - 76 ppm	11 - 25 ppm
Probably Anomalous	(m+s)-t	77 -118 ppm	26 - 40 ppm
Definitely Anomalous	>t	>118 ppm	> 40 ppm

where m - arithmetic mean
s - standard deviation
t - threshold (m + 2s)

PRESENTATION OF DATA:

The geochemical results were plotted at each sample station on separate map sheets for each element; Mo - Figure 78 - 4, Cu - Figure 78 - 5. Anomalous categories for each sample are represented as follows:

0 - Negative
Ø - Possibly Anomalous
Ø - Probably Anomalous
● - Definitely Anomalous

The anomalous limits were contoured to show the various anomalous zones. The significance of the geochemical results is discussed later in this report.

MAGNETIC SURVEY

A magnetometer survey was completed over the detailed grid, readings taken every 100 ft. along all cut lines. A McPhar M-700 reconnaissance magnetometer was used for the entire survey. A magnetometer base station was established on L 20 + 00W at 1 + 50N, and readings were taken at least four times per day to check for abnormal diurnal variations. Diurnal variations were weak, the greatest being 20 gammas in any one loop. Appropriate corrections were made to the readings.

The McPhar M-700 magnetometer is such that readings are taken directly in gammas, on one of five scales in both positive and negative polarity. All readings were taken on the most sensitive scale (1K) to an accuracy of 5 gammas. With the M-700 magnetometer, it is unnecessary to apply day - to - day corrections, as the scale can be adjusted to the base reading at the beginning of each traverse. All readings were taken by Mr. Lloyd Hodgson, an experienced field assistant.

All readings were plotted on a 1":200 ft. scale plan of the grid (Figure 78 - 6), and contours of equal magnetic intensity were drawn to indicate possible anomalous magnetic targets.

DISCUSSION OF RESULTS

On the Reiseter claims, there are three environments for the discovery of an ore deposit:

(1). Vein type of deposit, recovering primarily Sb, with minor amounts of Pb, Zn, Ag, and possibly Cu. For mining purposes, all exposed veins are very narrow (5" - 24"), which would be insufficient to support an underground mining operation, with reported surface grades. As Sb is the main metal of interest in veins, consideration would have to be placed on the rather unstable economic environment and limited marketing outlets of antimony.

(2). Conglomeration of all the veins to form a large economic zone which would be mined by pit methods. The eleven known veins are too wide spaced to consider the zone to be near economic at the present time. Consideration to this type of deposit would only be feasible if many more veins were found.

(3). A porphyry type of deposit, with primary values of Mo, and possibly Cu. This is probably the most realistic type of deposit that may be found on the property and is discussed in further detail below.

The geochemical programme was oriented at delineating zones of Cu and/or Mo concentrations that may lead to the discovery of a porphyry Cu/Mo deposit.

Results for copper were very low, the highest being 310 ppm. As soils are not too deep, and as the well developed soil horizons should reflect a higher content than 310 ppm Cu to indicate ore grade, and as the high copper values are rather eratic, interpretation of copper values and anomalies are given a low priority for future work. There is no correlation of copper with molybdenum.

Results of the molybdenum analyses are considered extremely favourable. In comparison to other Mo deposits, a threshold of 40 ppm Mo in a chemical soil environment (compared to a mechanical soil environment) could lead to the discovery of ore grade rock. Two definitely anomalous molybdenum zones were interpreted on the grid, one 1,600 ft. long X 500 ft. wide, and the other 600 ft. long X 500 ft. wide. One anomaly is directly related to the eastern portion of one of the small stocks.

A suitable host for a porphyry type of environment would be the contact zone or alteration zone of a granitic batholith or large stock. The stocks as exposed on surface are probably too small, unless they are part of a major underlying batholith. The widespread distribution of thermal alteration, dikes and mineralized veins suggests that the stocks are much larger than exposed on surface and may be part of the large batholith found to the east of the claims. The interesting metal zoning on the Reiseter claims is similar to some porphyry deposits in the United States. The Cu/Mo porphyry mineralization is at the center of all mineral activity flanked by Cu veins with Pb-Zn-Ag veins around the periphery of the zone.

The magnetic survey was completed in attempt to establish if magnetics could assist in delineating the granitic masses. Both granitic stocks are reflected by magnetic highs. The magnetic anomalies are considerably larger than the exposed stocks, which apparently establishes that the granitic stocks are larger than exposed on surface.

In summary, the strong molybdenum geochemical anomalies and the intense and diverse amounts of mineralization provide a favourable target for further exploration. As there is likely an overlying capping of barren sediments, possibly masking some of the geochemical values, geochemistry alone is not considered sufficient to give the best drill targets. Induced polarization methods may assist in interpreting the depth of an underlying granitic contact, and zones of concentrated sulphide mineralization.

Reconnaissance geochemistry and mapping outside of the grid area failed to indicate any area of immediate interest. Sample station on L 44 + 00W at 10 + 00N was high in Mo - 54 ppm, and moderately high in Cu - 96 ppm. This zone is open to the northwest of the grid, and should at some time be closed off by further detailed geochemistry.

RECOMMENDATIONS

With the completion of the initial phase of Dr. W. R. Bacon's programme, completion of the programme is hereby recommended, with the following modifications in the programme and costs and as a two phase programme.

PHASE I:

(1). Completion of approximately three miles of induced polarization survey from L0 + 00 to L 28 + 00W; from 10 + 00S to 10 + 00N. Tests to measure various I. P. properties and resistance by I. P. expander methods may assist in determining depths of underlying rock contacts.

Cost I. P. Survey.	$2,500.00

(2). Detailed soil sampling of pace and compass lines at 200 ft. intervals, between existing 400 ft. lines from L 0 + 00 to L 28 + 00W; from 10 + 00 S to 10 + 00N.

Cost Geochemistry	300.00

(3). Interpretation, summary report, and miscellaneous expenses 700.00

(4). Allow approximately 15% contingencies. 500.00

TOTAL PHASE I	$4,000.00

PHASE II:

Phase II will be partly contingent upon phase I; however, will mainly consist of diamond drilling Bulldozing, such as recommended by Dr. Bacon, is not being recommended at the present time, as much of the area of interest may be overlain by barren capping of sediments. Costs of Phase II are estimated as follows:

(1).	Diamond Drilling - 2,500 ft. @ $10.00 per foot	$25,000
(2).	Supervision.	1,000
(3).	Assays	1,200
(4).	Truck Costs	500
(5).	Miscellaneous supplies, travel expenses, room & board.	500
(6).	Interpretation and report	1,000
(7).	Allow 15% contingencies	4,300
	Total Phase II	$33,500
	Total Phase I	4,000
	TOTAL EXPLORATION COSTS . . .	$37,500

Respectfully Submitted By:

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA JOHN R. KERR

John R. Kerr

John R. Kerr, P. Eng.

July 19th., 1973,
KAMLOOPS, B. C.

APPENDIX A

GEOCHEMICAL RESULTS

BONDAR-CLEGG & COMPANY LTD.

geologists • geochemists • analysts

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.
PHONE 988-5315

GEOCHEMICAL LAB REPORT

No: 23 - 121

Extraction: Hot Aqua Regia

Method: Atomic Absorption

Fraction Used: -80 mesh

From: Mr. J. Kerr

Date: May 24, 1973

Analyst: K. B.

SAMPLE NO.	Cu ppm	Pb ppm	Zn ppm	Mo ppm	Ag ppm			REMARKS
R28W - 0N	48	40	360	61	1.2			cc Mr. J. Kerr-Smithers, B. C.
1N	43	25	200	14	0.8			
2N	31	26	185	14	0.8			
3N	32	26	320	15	0.6			
4N	13	14	116	25	0.6			
5N	18	13	168	10	0.6			
6N	56	16	145	17	0.6			
7N	36	26	190	18	0.6			
8N	24	16	186	9	0.6			
9N	37	16	140	6	0.4			
R28W - 10N	24	19	340	4	0.6			
R28W - 1S	48	20	172	16	0.6			
2S	35	26	410	20	0.8			
3S	53	22	410	42	1.2			
4S	70	27	900	17	2.2			
5S	40	16	176	17	0.6			
6S	31	14	240	3	0.6			
7S	24	14	127	9	0.5			
8S	58	18	162	20	1.0			
9S	28	11	120	20	0.8			
10S	32	14	120	1	0.8			
11S	32	12	108	1	0.7			
12S	29	11	96	1	0.6			
13S	30	11	129	1	0.6			
14S	36	13	97	2	0.5			
- 15S	39	12	108	2	0.6			

BONDAR-CLEGG & COMPANY LTD.

geologists • geochemists • analysts

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.
PHONE 988-5315

GEOCHEMICAL LAB REPORT

No: 23 - 266

Extraction: Hot Aqua Regia

Method: Atomic Absorption

Fraction Used:

From: Mr. John R. Kerr

Date: July 5, 19 73

Analyst: K. B.

SAMPLE NO.	Cu ppm	Mo ppm						REMARKS
R - 0 + 00 10 N	41	14						
9 N	29	6						NS denotes 'no sample'
8 N	44	19						
7 N	40	4						
6 N	16	3						
5 N	27	2						
4 N	16	3						
3 N	31	2						
2 N	48	3						
R - 0 + 00 1 N	36	2						
RO 0 + 00	22	3						
RO 1 S	17	3						
2 S	24	10						
3 S	22	2						
4 S	28	2						
5 S	26	3						
6 S	82	2						
7 S	22	1						
8 S	32	2						
9 S	16	1						
10 S	24	2						
11 S	20	2						
12 S	21	2						
3 S	24	2						
4 S	35	3						
5 S	14	1						
6 S	17	1						
3 S	20	2						
) S	11	2						
2 S	19	2						

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Geochemical Lab Report

Report No. 23 - 266 Page No. 2

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
RO 26 S	30	2			R 8W 4 S	104	69		
28 S	42	2			3 S	NS	NS		
RO 30 S	38	3			2 S	14	11		
R 4W 10 N	44	6			1 N	22	3		
9 N	26	15			0 + 00	24	22		
8 N	44	12			1 S	76	122		
7 N	28	8			2 S	35	73		
6 N	39	3			3 S	12	3		
5 N	12	3			4 S	53	3		
4 N	58	3			5 S	29	2		
3 N	41	6			6 S	25	2		
2 N	37	59			7 S	60	7		
1 N	34	58			8 S	40	3		
R 4W 0 + 00	28	13			9 S	25	2		
R 4W 1 S	44	9			10 S	36	2		
2 S	100	58			11 S	29	3		
3 S	30	5			12 S	66	6		
4 S	16	3			13 S	14	1		
5 S	32	2			14 S	38	2		
6 S	28	4			R 8W 15 S	305	2		
7 S	41	2			R 12W 10 N	49	24		
8 S	36	3			9 N	57	50		
9 S	30	3			8 N	47	37		
10 S	52	4			7 N	74	118		
11 S	30	2			6 N	32	24		
12 S	18	2			5 N	50	37		
13 S	22	7			4 N	54	46		
14 S	35	2			3 N	64	13		
W 15 S	40	2			2 N	44	18		
W 10 N	20	23			R 12W 1 N	23	6		
9 N	40	19			R 12W 0 + 00	43	5		
8 N	60	60			R 12W 1 S	36	9		
7 N	26	17			2 S	14	15		
6 N	32	37			3 S	52	11		
5 N	38	41			R 12W 4 S	28	5		

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Geochemical Lab Report

Report No. 23 - 266

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
R 12W 5 S	24	3			R 16W 9 S	47	15		
6 S	42	8			10 S	39	3		
7 S	25	16			11 S	33	2		
8 S	28	8			12 S	30	2		
9 S	40	5			13 S	30	2		
10 S	43	5			14 S	28	2		
11 S	26	3			R 16S 15 S	30	2		
12 S	30	4			R 20 15 N	44	3		
13 S	33	7			14 N	64	6		
14 S	28	6			13 N	14	3		
15 S	26	4			12 N	50	22		
R 16W 15 N	23	5			11 N	49	9		
14 N	17	15			10 N	25	20		
13 N	30	12			9 N	19	24		
12 N	39	11			8 N	23	23		
11 N	38	14			7 N	19	9		
10 N	42	20			6 N	20	19		
9 N	34	16			5 N	44	19		
8 N	34	39			4 N	46	86		
7 N	24	22			3 N	18	42		
6 N	34	35			2 N	39	15		
5 N	22	63			R 20 1 N	12	8		
4 N	60	19			R 20W 0 + 00	22	10		
3 N	30	18			R 20W 1 S	18	8		
2 N	32	8			2 S	36	15		
1 N	25	4			3 S	34	9		
R 16W 0 + 00	33	8			4 S	40	8		
R 16W 1 S	130	15			5 S	44	12		
2 S	46	12			6 S	22	9		
3 S	83	8			7 S	45	34		
4 S	39	3			8 S	33	35		
5 S	25	5			9 S	36	5		
6 S	48	22			10 S	26	2		
7 S	16	9			11 S	39	1		
8 S	25	9			R 20W 12 W	29	2		

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 23 - 266 Page No. 4

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
R 20W 13 S	30	2			R 32 18 N	41	12		
14 S	24	1			16 N	60	9		
R 20W 15 S	26	1			14 N	41	8		
R 24 15 N	18	4			12 N	40	6		
14 N	29	3			10 N	39	12		
13 N	21	6			9 N	28	10		
12 N	32	10			8 N	9	5		
11 N	16	10			7 N	13	6		
10 N	45	18			6 N	48	16		
9 N	30	3			5 N	12	7		
8 N	23	7			4 N	14	7		
7 N	28	31			3 N	24	10		
6 N	22	37			R 32 2 N	30	14		
5 N	20	21			R 32 1 N	29	10		
4 N	14	17			R 32 0 + 00	27	13		
3 N	39	20			R 32 1 S	21	13		
2 N	36	12			2 S	70	23		
1 N	32	15			3 S	40	11		
R 24W 0 + 00	46	12			4 S	34	23		
R 24W 1 S	37	11			5 S	32	14		
2 S	27	9			6 S	26	6		
3 S	30	10			7 S	24	9		
4 S	22	10			8 S	19	4		
5 S	16	7			9 S	25	3		
6 S	32	14			10 S	54	9		
7 S	25	6			11 S	260	9		
8 S	38	12			12 S	32	3		
9 S	30	8			13 S	60	2		
10 S	26	1			14 S	55	1		
11 S	30	2			R 32 15 S	30	1		
12 S	25	1			R 36W 28 N	12	3		
13 S	32	2			26 N	34	15		
14 S	32	2			24 N	18	11		
15 S	39	2			22 N	12	3		
20 N	200	21			R 36W 20 N	12	2		

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 23 - 266 Page No. 5

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
R 36W 18 N	80	19			R 20W 5 N	42	21		
16 N	160	18			4 N	40	9		
14 N	39	9			3 N	18	10		
R 36W 12 N	26	13			2 N	24	7		
R 36 10 N	46	12			R 20W 1 N	30	4		
9 N	24	21			R 20W 0 + 00	30	3		
8 N	14	18			R 20W 1 S	35	4		
7 N	17	22			2 S	20	3		
6 N	68	40			3 S	20	2		
5 N	310	30			4 S	21	3		
4 N	28	8			5 S	25	3		
3 N	17	13			6 S	12	3		
2 N	50	22			7 S	14	2		
R 36 1 N	28	15			8 S	20	3		
R 36W 0 + 00	29	10			9 S	21	1		
R 36W 1S	16	8			10 S	21	4		
2 S	20	6			11 S	32	3		
3 S	19	4			12 S	34	2		
4 S	10	3			13 S	70	4		
5 S	14	5			14 S	61	5		
6 S	10	6			R 20W 15 S	42	4		
7 S	28	6			R 44W 10 N	92	54		
8 S	21	3			9 N	43	21		
9 S	7	2			8 N	73	19		
10 S	12	2			7 N	48	17		
11 S	34	3			6 N	32	9		
12 S	32	3			5 N	44	9		
13 S	14	2			4 N	31	7		
14 S	10	2			3 N	33	8		
15 S	24	3			2 N	44	6		
10 N	17	10			R 44W 1 N	22	4		
9 N	26	21			R 44W 0 + 00	42	6		
8 N	25	21			R 44W 1 S	22	4		
7 N	19	13			2 S	11	2		
6 N	81	30			R 44W 3 S	10	3		

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 23 - 266 Page No. 6

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
R 44W 4 S	7	2			R 30 S 32 W	37	2		
5 S	15	4			34 W	31	2		
6 S	15	3			36 W	10	2		
7 S	15	2			38 W	13	3		
8 S	19	3			40 W	13	2		
9 S	6	3			R 30 S 42 W	12	3		
10 S	10	3			R - 0 24 S	57	2		
11 S	19	3							
12 S	23	4							
13 S	31	2							
14 S	35	3							
15 S	44	4							
16 S	19	5							
18 S	86	6							
20 S	57	3							
22 S	46	3							
24 S	13	2							
26 S	17	2							
28 S	18	3							
R 44W 30 S	17	3							
R 30S 2 W	26	1							
4 W	38	1							
6 W	31	2							
8 W	31	1							
10 W	24	1							
12 W	22	1							
14 W	17	2							
16 W	8	2							
18 W	17	2							
20 W	15	2							
22 W	33	3							
24 W	54	3							
26 W	23	3							
28 W	35	3							
30 W	55	2							

APPENDIX B

COST STATEMENT

COST STATEMENT

(1).	Field Personnel: May 13th. - June 26th., 1973.		
	J. Kerr, P. Eng. - Project Supervisor and Geological Mapping 15 days at $125.00 per day	$1,875.00	
	J. Dawson, P. Eng. - Soil Sampler 4 days at $70.00 per day	280.00	
	L. Hodgson - Magnetometer Operator 2 days at $50.00 per day	100.00	$ 2,255.00
(2).	Transportation:		
	Airfare - Kamloops - Smithers - return . .	106.00	
	Truck rental - 4 x 4	234.00	
	Car rental	183.00	523.00
(3).	Laboratory Expenses:		
	Geochemical Analysis (includes preparation) 376 samples for Cu, Mo. 26 samples Pb, Zn, Ag	678.50	
	Assays	8.00	686.50
(4).	Room and Board Expenses:		268.63
(5).	Line Cutting Contract: 6.8 miles at $90.00 per mile		612.00
(6).	Report Preparation:		
	J. Kerr, P. Eng.	500.00	
	Drafting	235.00	
	Photocopying and reproduction.	27.00	
	Secretarial.	20.00	
	Misc. freight expenses	11.55	793.55
	TOTAL COST		$5,138.68

CERTIFIED CORRECT:

John R. Kerr

John R. Kerr, P. Eng.

APPENDIX C

WRITER'S CERTIFICATE

JOHN R. KERR, P.ENG.
GEOLOGICAL ENGINEER

9—219 VICTORIA STREET
KAMLOOPS, B.C.

PHONE (604) 374-6427

WRITER'S CERTIFICATE

I, JOHN R. KERR, OF KAMLOOPS, B. C., HEREBY CERTIFY THAT:

(1). I am a member of the Association of Professional Engineers in the Province of British Columbia, and a fellow of the Geological Association of Canada.

(2). I am employed with Kerr, Dawson and Associates Ltd., at #9 - 219 Victoria Street, Kamloops, B. C.

(3). I have practiced as a geologist for 9 years since graduation from the University of British Columbia in 1964 with a B. A. Sc. in Geological Engineering.

(4). I have no direct or indirect interest or holdings of securities of Channel Copper Mines Ltd., N. P. L., or in the Reiseter Claims described in this report, nor do I expect to receive any.

(5). I personally supervised the programme, as described in this report, and completed all geological mapping.

John R. Kerr, P. Eng.,

July 19th., 1973,
KAMLOOPS, B. C.

To: Kerr - Dawson and Associates Ltd.

PAGE No. 1

REPORT No. A23 - 249

DATE: June 14, 1973

BONDAR-CLEGG & COMPANY LTD.

CERTIFICATE OF ASSAY

9 - 219 Victoria Street
Kamloops, B. C.
ATTENTION: MR. J. R. KERR

Samples submitted: June 11, 1973
Results completed: June 14, 1973

This is to certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Cu							TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
R - 1	0.03			4.00							

Registered Assayer, Province of British Columbia

in 93L/14E

REISETER 1 - 24
MINERAL CLAIMS

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4478 MAP #2

TO ACCOMPANY A REPORT BY J. KERR. P. Eng.

ROCK CLASSIFICATION

- A — CRETACEOUS — Quartz Monzonite & Grano Diorite
- B — HAZELTON GROUP - JURASSIC — Dominantry Greywacke & Sandstone
- C — TUFFACEOUS SEDIMENTS — Poss. Volcanic Tuff
- D — VOLCANIC ROCK - Andesite

LEGEND

- Claim Post & Boundary
- Mineralized Vein
- Mineralization
- Rock Contact, assumed from G.S.C.
- Access Road
- O/B Overburden
- Definite Mo Geochemical Anomaly

CHANNEL COPPER MINES LTD. N.P.L.
KAMLOOPS. B. C.

REISETER CLAIMS, OMINECA M.D.
CLAIM MAP
GENERAL GEOLOGY
REGIONAL GEOCHEMISTRY

Tech. Work by : J. Kerr	SCALE = 1" : 1000'
Drawn by : Western Mapping	Date : June, 1973
App'd. by : J. Kerr	Drwg. No.: 78 - 2

4478-M2

REISETER 1

REISETER 2

REISETER 3

REISETER 4

REISETER 5

REISETER 6

REISETER 7

REISETER 8

REISETER 9

REISETER 10

REISETER 11

REISETER 12

REISETER 13

BASE LINE

BASE LINE

L 44+00W

L 40+00W

L 36+00W

L 32+00W

L 28+00W

L 24+00W

L 20+00W

L 16+00W

L 12+00W

L 8+00W

L 4+00W

L 0+00

ROCK CLASSIFICATION

A — THERMALLY ALTERED SEDIMENTARY ROCK IN PART MAY BE CALLED HORNFELS
Rock mainly Greywacke with minor Sandstone & Quartzite. Secondary silicification dominant.

C — TUFFACEOUS SEDIMENTS
Possibly some Volcanic Tuffs — some large breccia frags. up to 1 inch diameter.

B — HIGHLY ALTERED GRANODIORITE OR QUARTZ MONZONITE
Alteration includes sericitization, kaolinization, silicification, pyritization, with minor chloritization & epidotization

LEGEND

- Area of outcrop or suboutcrop
- Boulders
- Access Road
- Bulldozer Trail or Trench
- Pits & Trench
- Rock Contact
- Dikes & Quartz Veins
- Mineralized Vein projected
- Fissility or weak schistosity
- Joint direction
- Fracturing
- Mineralization
- Creek
- Claim Post (located not located)
- Claim Boundary
- Sb — Stibnite
- Pb — Galena
- Cpy — Chalcopyrite
- MoSz — Molybdenite
- As — Arsenopyrite
- Py — Pyrite
- Zn — Sphalerite

4478 M3

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4478 MAP #3

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — JOHN KERR

TO ACCOMPANY A REPORT BY J. KERR, P. Eng.

CHANNEL COPPER MINES LTD. (N.P.L.)
KAMLOOPS, B. C.

REISETER CLAIMS, OMINECA M.D.

DETAILED GEOLOGY GRID AREA

TECH. WORK BY : J. KERR	SCALE = 1" : 200'
DRAWN BY : WESTERN MAPPING	DATE : JUNE, 1973
APPROVED BY : J. KERR	DWG. No. : 78 - 3

L 44+00W
L 40+00 W
L 36+00W
L 32+00W
L 28+00W
L 24+00W
L 20+00W
L 16+00W
L 12+00W
L 8+00 W
L 4+00W
0+00

LEGEND

- Geochemical Sample Station with Value in Parts per Million
- Cabin
- Road
- Claim Post
- Claim Boundary

GEOCHEMICAL CATEGORIES

0 — 11	NEGATIVE	
12 — 26	POSSIBLY	ANOMALOUS
27 — 40	PROBABLY	ANOMALOUS
> 40	DEFINITELY	ANOMALOUS

TO ACCOMPANY A REPORT BY J. KERR. P. Eng.

CHANNEL COPPER MINES LTD. (N.P.L.)
KAMLOOPS, B. C.

REISETER CLAIMS, OMINECA M.D.

GEOCHEMICAL PLAN
MOLYBDENUM

TECH. WORK BY : J. KERR	SCALE = 1" : 200'
DRAWN BY : WESTERN MAPPING	DATE : JUNE, 1973
APPROVED BY : J. KERR	DWG. No. 78 - 4

L 44+00W

L 40+00 W

L 36+00W

L 32+00 W

L 28+00W

L 24+00W

L 20+00W

L 16+00W

L 12+00W

L 8+00W

L 4+00W

L 0+00

LEGEND

- Geochemical Sample Station with Value in Parts per Million
- Cabin
- Road
- Claim Post
- Claim Boundary

GEOCHEMICAL CATEGORIES

0 — 34	NEGATIVE	
35 — 76	POSSIBLY	ANOMALOUS
77 — 118	PROBABLY	ANOMALOUS
> 118	DEFINITELY	ANOMALOUS

TO ACCOMPANY A REPORT BY J. KERR, P. Eng.

CHANNEL COPPER MINES LTD. (N.P.L.)
KAMLOOPS. B. C.

REISETER CLAIMS, OMINECA M.D.

GEOCHEMICAL PLAN
COPPER

TECH. WORK BY : J. KERR	SCALE = 1" : 200'
DRAWN BY : WESTERN MAPPING	DATE : JUNE, 1973
APPROVED BY : J. KERR	DWG. No. 78 - 5

MAGNETOMETER BASE STATION - 1000

L 44+00W
L 40+00W
L 36+00W
L 32+00W
L 28+00W
L 24+00W
L 20+00W
L 16+00W
L 12+00W
L 8+00W
L 4+00W
L 0+00

LEGEND

850 — STATION - MAGNETIC INTENSITY IN GAMMAS

100 GAMMA CONTOURS

50 GAMMA CONTOURS

READINGS TAKEN WITH McPHAR M-700 MAGNETOMETER
BY LLOYD HODGSON, SMITHERS, B. C.
ON MAY 25 & 26, 1973

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — JOHN R. KERR

4478-M6

TO ACCOMPANY A REPORT BY J. KERR, P. Eng.

CHANNEL COPPER MINES LTD. (N.P.L.)
KAMLOOPS, B. C.

REISETER CLAIMS, OMINECA M.D.

MAGNETOMTER SURVEY
GRID AREA

TECH. WORK BY : J. KERR	SCALE = 1" : 200'
DRAWN BY : WESTERN MAPPING	DATE : JUNE, 1973
APPROVED BY : J. KERR	DWG. No. 78 - 6

M-8744