

REPORT ON THE 1975 WORK PROGRAM

on the

MAL CLAIM GROUP

(Welcome North Mines Limited Option)

ROSS RIVER AREA

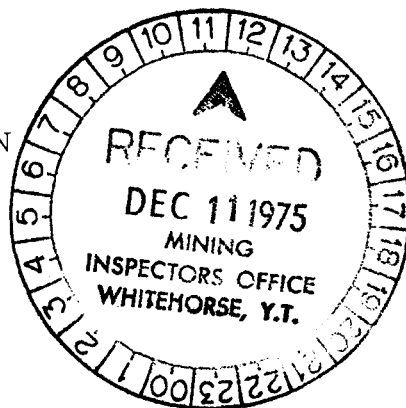
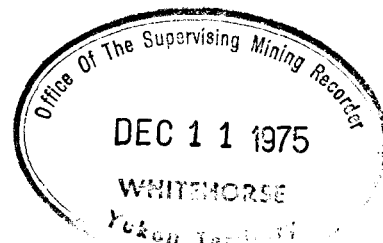
Whitehorse Mining District, Yukon

for

BOLIDEN PREUSSAG EXPLORATION

by

J. B. PAUL SAWYER, P. ENG.



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 38,000.00

H.R. Craig
Resident Geologist or
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

VANCOUVER, B. C.

September 5, 1975

B.R. Baxter
B.R. BAXTER
Supervising Mining Recorder
J.C.
Commissioner of Yukon Territory

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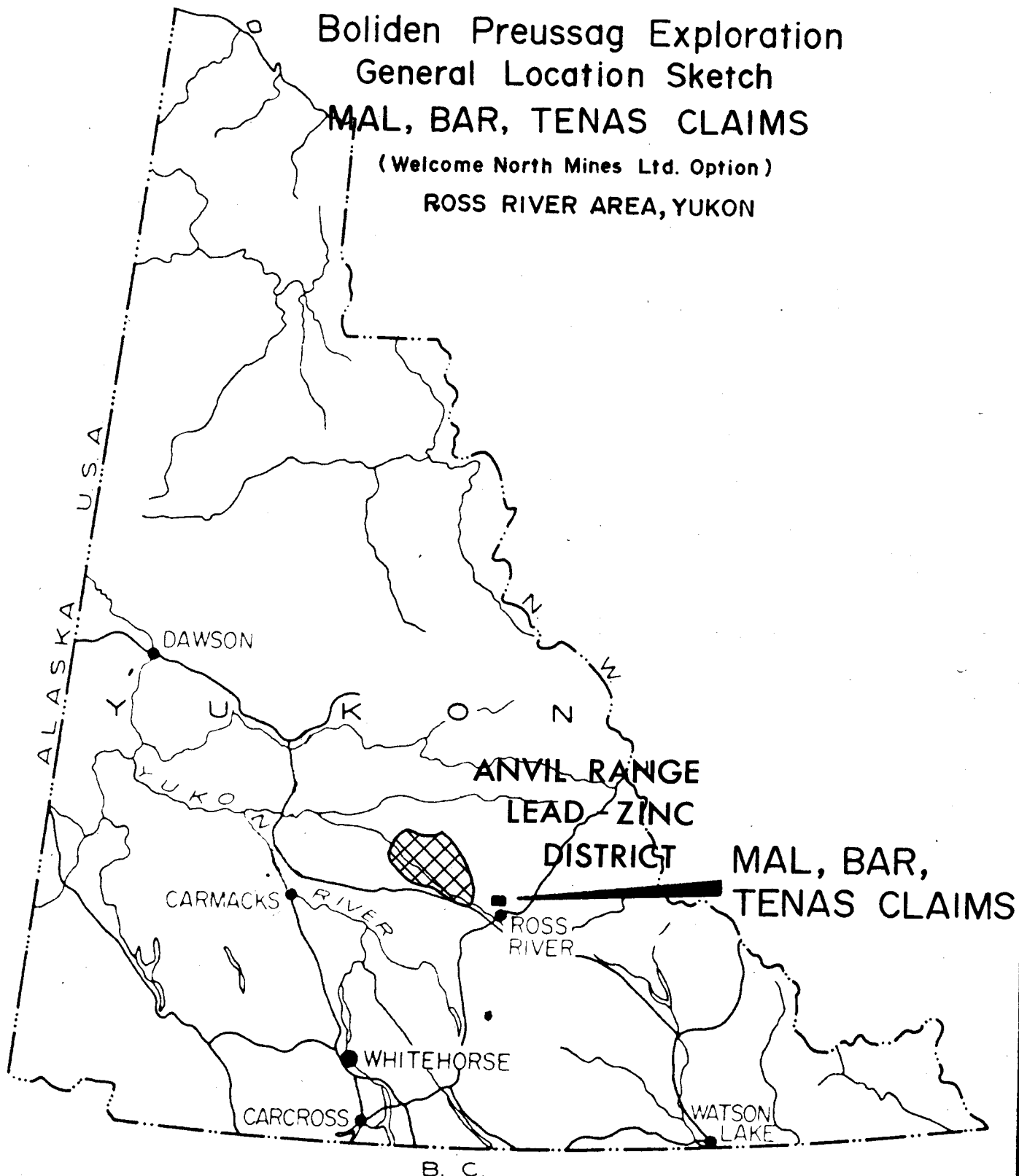
Maps in pocket

CLAIMS AND GRID	1" = 500'
GEOLOGY	1" = 500'
SOIL SAMPLING PLAN - COPPER	1" = 500'
SOIL SAMPLING PLAN - LEAD	1" = 500'
SOIL SAMPLING PLAN - ZINC	1" = 500'

Boliden Preussag Exploration General Location Sketch MAL, BAR, TENAS CLAIMS

(Welcome North Mines Ltd. Option)

ROSS RIVER AREA, YUKON



Scale: 1 Inch = Approx. 80 Miles

INTRODUCTION

The MAL Claim Group was staked in August 1974 by Welcome North Mines Ltd., as one of three claim groups which adjoin and alternate with the claim groups controlled by a syndicate including DuPont Exploration, Teck Corporation, and R. Chaplin & Associates. Early in 1975 the three claim groups, including the MAL Claims, were optioned to Boliden-Preussag Exploration who commissioned the writer to carry out a first phase exploration program in the 1975 field season. This report describes the work completed in the period May 25th to August 15th, 1975, and discusses the results of this work program.

SUMMARY

The work program completed in the 1975 field season included line cutting, which was carried out on a contract basis by Eastern Associates Reg'd of Whitehorse, geochemical soil sampling, the field work for which was carried out under contract by Donegal Developments Ltd. of Vancouver, Turam E. M. surveying carried out by Peter E. Walcott and Associates Ltd. of Coquitlam, and geological mapping carried out by J. B. P. Sawyer and G. Boggaram. The geochemical analyses were carried out by Barringer Research Ltd. at their Whitehorse Laboratory.

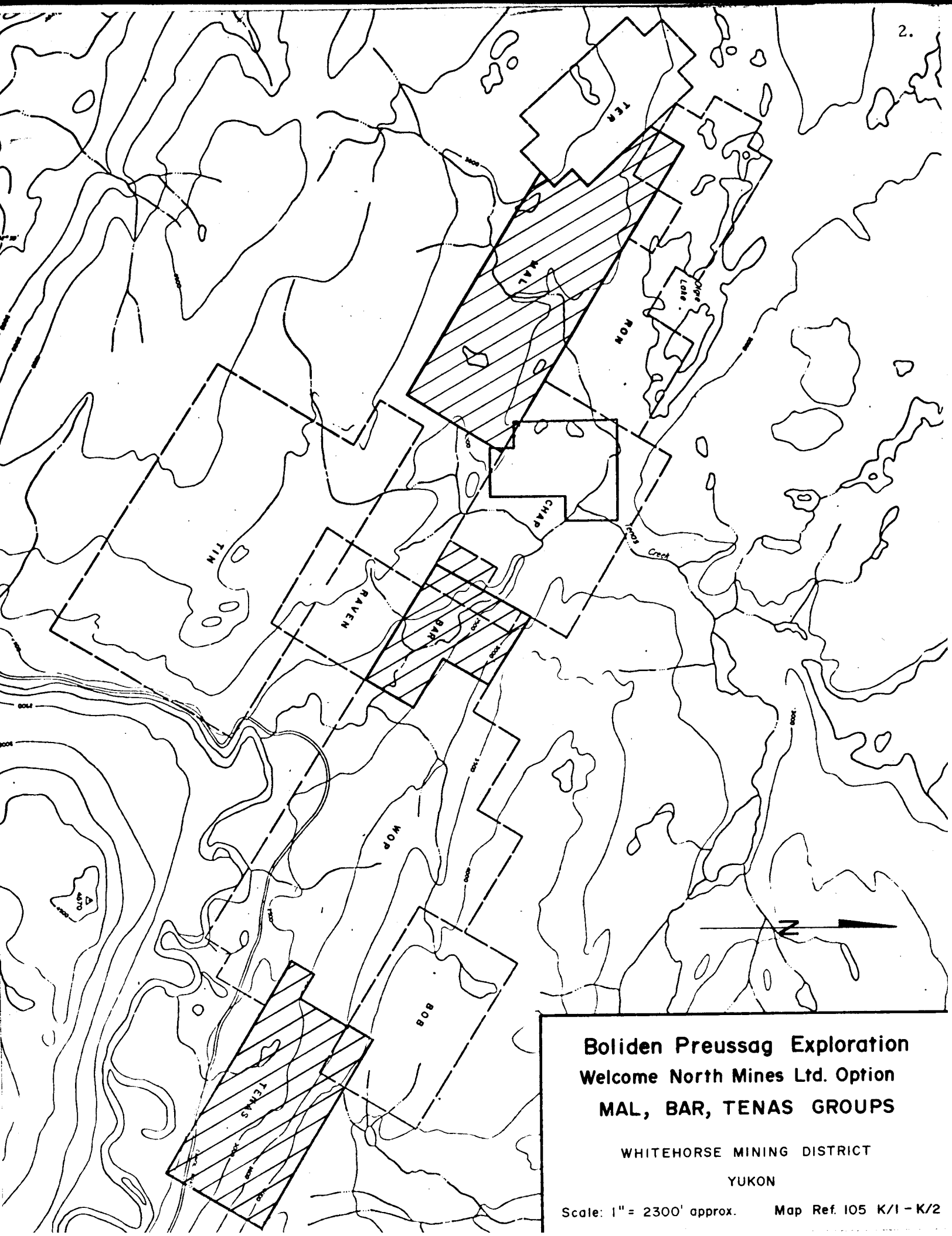
Geologically, the property is underlain by volcanic rocks of intermediate type, by quartz sericite schists and some phyllites which in large part on this claim group are highly graphitic. These graphitic rocks are strongly reflected in very intense and "noisy" Turam readings. No significant geochemical anomalies were detected. Further work on this claim group is not recommended on the basis of the 1975 field program.

PROPERTY

The MAL Claim Group consists of 44 full claims, MAL 1 to 44 inclusive, Grant Numbers Y80379 to Y80422 inclusive, which were recorded on August 22, 1974. These claims are shown on Yukon claim maps 105 K/1 and 105 K/2. The co-ordinates of a point approximately at the centre of the claim group are 62° 05' N, 132° 28' W. Claim tags have been affixed to the posts.

LOCATION AND ACCESS

The MAL Claim Group is in the Olgie Lake-Tenas Creek area of the Yukon approximately 10 miles north of Ross River. There is no road access to the property which is most easily reached from Olgie Lake which



**Boliden Preussag Exploration
 Welcome North Mines Ltd. Option
 MAL, BAR, TENAS GROUPS**

WHITEHORSE MINING DISTRICT
 YUKON

Scale: 1" = 2300' approx. Map Ref. 105 K/1 - K/2

provides ample landing for fixed wing aircraft. The north boundary of the claim group lies roughly one half mile or less from the south shore of the lake. Alternatively, access can be had onto the claim group itself by helicopter.

HISTORY

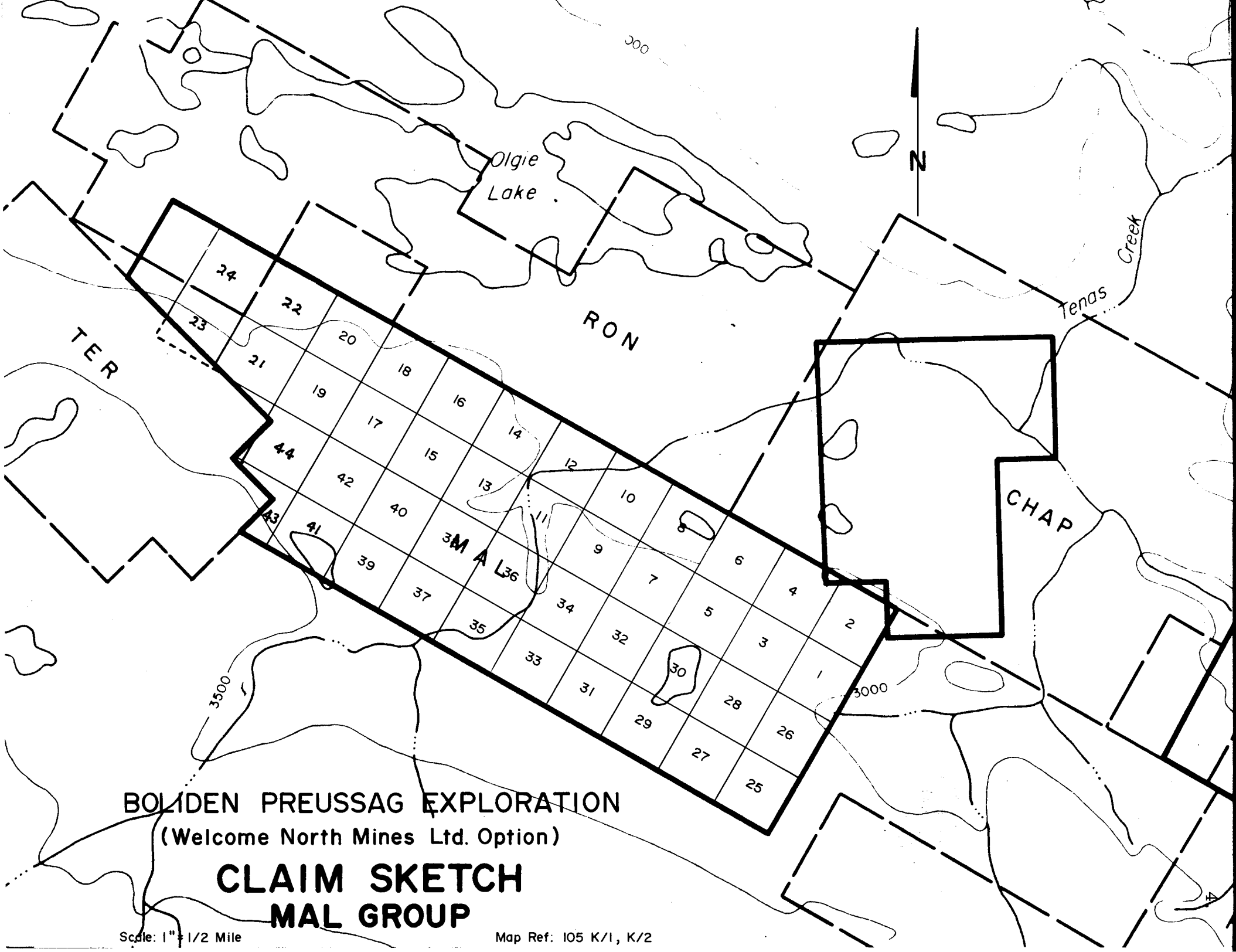
It is believed that the only previous work done on the area of the present MAL Claim Group has been general prospecting in the middle and late 1960's. The former Snowcap Claim Group which was owned by Cominco Ltd. appears to have overlapped the northwestern end of the MAL Claim Group. Work on the Snowcap Group by Cominco, as described in a report by T. Muraro dated March 20, 1967, included geological mapping, ground magnetometer survey, airborne E.M. survey, geochemical sampling and a limited amount of diamond drilling. The Snowcap Claims were described as being underlain by andesitic volcanics on the south with a central belt of phyllites and associated limy rocks between the volcanics and intrusive rocks on the north. None of the geophysical and geochemical work by Cominco appears to have detected any significant features, and the diamond drilling completed was only minor totalling, apparently, 175 feet in three holes.

The former Olgie Claims, also apparently owned by Cominco, may have overlapped the extreme northeastern corner of the present MAL Claim Group. The work program, similar to that on the Snowcap Claims, i. e., soil geochemistry, ground magnetics and mapping produced results which were not considered by Cominco to warrant any further work.

No detailed work on the greater part of the present MAL Claim Group appears to have been completed previous to the current program.

1975 WORK PROGRAM

The work carried out on the MAL 1 to 44 claims in the period May 25 to August 15, 1975 included geological mapping and prospecting, geochemical soil sampling, and a Turam E.M. survey, all of which utilized grid lines spaced 1,000 feet apart for control. The line cutting established a base line running northwest-southeast through the centre of the property from which picket lines were turned off at 1,000 foot intervals. A total of 22.8 line miles of grid were established on the MAL Claim Group.



BOLIDEN PREUSSAG EXPLORATION
(Welcome North Mines Ltd. Option)

CLAIM SKETCH MAL GROUP

Scale: 1" = 1/2 Mile

Map Ref: 105 K/1, K/2

REGIONAL GEOLOGY

The Mal, Bar, and Tenas claims lie at the southeastern extremity of the Anvil Range Lead-Zinc District. The areas in which these claims lie, within the Tay River Map Sheet was mapped by Roddick and Green of the G. S. C. in the period 1958 to 1960 and the results of their work was published as Map 13-1961. Their mapping shows the area within which the three claim groups lie to be underlain by Map Units 7, 8 and 11. Map Unit 7 is described as consisting of banded quartzose granulite, green and purplish banded skarn, quartz-sericite schist, hornfels and phyllite, chlorite schist and thin altered andesite with minor crystalline limestone. Unit 8 is described as consisting of altered, dark-green andesite and basalt flows and tuffs, commonly schistose, rarely porphyritic; minor phyllite, dark argillite, and light gray quartzite. Unit 11 is a medium to coarse grained quartz monzonite and granodiorite, commonly porphyritic; minor diorite and gneiss. All of these rocks are of probable Mississippian age or later according to Roddick and Green and would, therefore, appear to be younger than the Cambrian rocks which host the Anvil and other ore-bodies which lie to the northwest along the belt.

A later map, Map 1261A which presents the results of more detailed work by Tempelman-Kluit in 1967 and 1968 provides no direct information on the area in which the Mal, Bar, and Tenas claim groups lie; however, the nearest mapping to these properties does include some rocks mapped as light to dark gray massive muscovite-quartz schist, micaceous quartzite and graphitic quartzite of Hadrynian (Precambrian) age. From this more recent mapping it would appear that the rocks which host the lead-zinc orebodies at Faro, Vangorda, Swim Lakes, etc. lie in a belt the extension of which might pass north of the area of the Mal and Bar claims. If this is in fact the case the rocks underlying these properties would probably be stratigraphically above the ore horizons known to the northwest.

GEOLOGY OF THE MAL CLAIM GROUP

Rocks mapped on the Mal Group include volcanic types, generally of intermediate composition which are broadly described as greenstones or andesites and are grouped in this report under the heading Greenstone Unit, quartz-sericite schists and phyllites and graphitic phyllites (Phyllite or Schist Unit) and intrusive rocks of two possible ages.

Greenstone Unit

Rocks mapped on the Mal Claim Group and included within this category are mostly medium to fine grained rocks, greenish to gray-green

in colour and locally carrying minor sulphides including pyrite and pyrrhotite. In places some of these volcanic rocks exhibit a faint foliation or rudimentary schistosity; for example, around line 110 E, 38 N, approximately, near the contact with graphitic schists. In other places the rocks are lighter coloured and appear to be rather more acidic, possibly dacitic in composition.

On the Mal Claim Group volcanic rocks have been mapped in two general areas, the southwestern part of the claim group, i. e. south of the base line on lines 70 E to 90 E approximately, and in the northeastern part of the property generally in the area around 50 N to 60 N, and approximately from 150 E to around 175 E or 180 E.

Phyllite and/or Schist Unit

Mapped rock types which are included within this group vary considerably in coarseness of texture, and in composition. All have fairly common and abundant sericite, some quartz, with local variations in content of carbonate and graphite. The greater part of the Mal Claim Group appears to be underlain by rocks of this type which, broadly, form a northeasterly-southwesterly trending band lying south of the intrusive rocks and surrounding the greenstone areas. In two areas within or adjacent to the property boundaries, there is a very strong development of graphite within schistose and phyllitic rocks and exposures of these are seen along the bank of the creek at the southern edge of the property between 110 E and 120 E and again on the base line near its intersection with line 110 E. At these locations the rocks are extremely highly sheared and foliated and pyrite is a fairly common mineral within the graphitic schists. Elsewhere on the property good exposures of schistose and phyllitic rocks occur on the base line at around 30 E and again on the base line from about 20 E to 23 E. Near this latter location a strong recumbent fold in sericite phyllite was observed, the axis of the fold appearing to be plunging about 30° true north. The phyllites in this location, and also at 30 E on the base line, are cut by a very coarse grained intrusive rock which are probably younger dykes of granitic to granodioritic composition. In the northern part of the property good exposures occur flanking a prominent gully which runs parallel for several hundred feet to picket-line 90 E. On the western side of this gully, which probably represents a fault line, the rocks are all fairly fine grained quartz muscovite-biotite schist. The foliation, or schistosity in these rocks strikes generally 140° and has a southwesterly dip of 20° - 40° . On the eastern side of this gully at 70 N approximately, phyllites as described above are seen

to be underlain by a light coloured gray-brown highly calcareous rock which is described as a bedded limestone carrying some sulphides, mainly pyrite, along the bedding traces. Strike of the bedding is 070° with a southeasterly dip of approximately 35° . It is, therefore, seen to be apparently discordant with the overlying phyllites. Immediately to the north and to the south outcrop is of intrusive rock.

Intrusive Rocks

At the northern extremity of the property and from the north property boundary to Olgie Lake the underlying bedrock is intrusive material which is part of, or equivalent to, the Anvil Batholith. These rocks are medium to coarse grained, gray to white in colour composed of quartz, whitish feldspar, and hornblende, plus or minus biotite. The rocks exposed on the eastern side of the gully at 90 E may be part of the Batholith but are thought to be dykes of possibly a younger age than the main part of the batholith. The intrusive rocks of granodioritic composition exposed along the base line at around 30 E and again at around 20 E are similarly thought to be dyke rocks and are probably younger in age than the main batholithic intrusion.

Structure

Exposure on the Mal Claim Group is really insufficient to permit of any detailed structural interpretation. The few good exposures of phyllite and/or schist, for example, on base line at 20 + 60 E suggest a complex structural history involving at least two or three periods of deformation and in this respect these rocks do resemble rocks of roughly similar composition which have been mapped to the northwest along the main part of the Anvil Range Lead-Zinc District. The intensely sheared graphitic phyllites described above also give evidence of strong deformation and/or faulting and as noted earlier, the prominent gully which strikes approximately 033° true along line 90 E is probably the surface expression of a fault zone.

The major formational bands, and predominant structural "grain" of the area is northwest-southeast.

GEOCHEMISTRY

Geochemical sampling was carried out on a contract basis by personnel of Donegal Developments Ltd. of Vancouver. Samples were collected using narrow bladed shovels at 200 foot intervals along all of the picket lines, i. e. , a 1,000 by 200 foot grid. Samples were taken at sufficient depth to get below the thin ash layer which is ubiquitous in this part of the Yukon. Some difficulty was encountered on this property due to frozen ground but over the greater part of the property, it was possible to obtain satisfactory material, although proper soil profiles are not well developed. The samples were collected in wet strength Kraft envelopes and were shipped to the Whitehorse geochemical laboratory of Barringer Research Ltd. where they were analyzed for total copper, lead and zinc using a perchloric acid extraction. Determinations of metal concentrations were made using an atomic absorption unit. Because of the problems inherent in determining lead with this type of equipment, corrected lead values were determined to eliminate interference by absorption lines of other elements near those of lead.

The results of the geochemical work are shown on three separate plots which give the values in parts per million for copper, zinc and lead, at each station sampled. These results have been treated in the normal statistical manner and thresholds for the three metals have been determined as follows:-

Threshold (Th) = Arithmetic Means (AM) + twice Standard Deviation (SD)

Copper Th = 87

Lead Th = 77

Zinc Th = 251

Considering the zinc values, reference to the soil sampling plan shows that values in zinc above the threshold number only about 30 out of a total number of samples of approximately 540, and these few anomalous samples appear to be randomly scattered throughout the grid. Exceptionally high single values in zinc occur at 100E, 66N (935 ppm), at 170E, 42N (840 ppm), and at 190E, 46N (2,700 ppm). As a general observation, there seems to be slightly more numbers in the threshold range and marginally above at the eastern end of the grid but no consistent pattern of higher values is evident.

Considering the lead plot, only two samples exceed the calculated threshold of 77 parts per million on the entire grid and one of these, at 190E, 46N, coincides with the highest zinc value.

The copper values on the MAL grid are similarly uniformly low, only eight samples from the whole grid exceeding the calculated threshold value of 87 parts per million.

GEOPHYSICS

Geophysical work completed on the MAL Claim Group consists of a Turam electromagnetic survey which was carried out under contract by Peter E. Walcott and Associates Ltd. of Coquitlam, B.C. These results are described in detail in a report by P. E. Walcott, P. Eng. dated July 1975 to which the reader is referred for details. A copy of Mr. Walcott's report accompanies this report.

CONCLUSIONS

From the results of the work program carried out in 1975 on the MAL 1 to 44 mineral claims, the following conclusions can be drawn:-

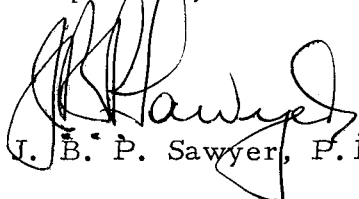
1. The MAL Claim Group lies immediately south of the eastern end of the major batholithic intrusion which occupies the core of the anticlinal structure known as the Anvil Arch. Intrusive rocks which are part of this batholith outcrop at the northern boundary of the MAL Claim Group. The rest of the claim group is underlain by a mixed assemblage of metamorphosed volcanic and sedimentary rocks, now represented by quartz-mica schists and phyllites, and younger volcanic rocks.
2. The metamorphic rocks occurring in this area carry abundant graphitic horizons which have a typical geophysical signature well recognized in other parts of the Anvil camp.
3. While all of the known ore occurrences in the Anvil area are associated with graphitic horizons, there is nothing in the geochemical, geological or geophysical data derived from the current work program to suggest that large tonnages of base metals sulphides occur associated with the graphitic horizons which are part of the metamorphic complex underlying the MAL Claim Group.
4. The geochemical results indicate that there are no anomalous concentrations of base metals in the soils of this property.

5. In all probability, the rocks underlying the MAL Claim Group do not lie within the stratigraphic interval which is considered most favourable for the occurrence of large stratiform base metals sulphide deposits of the type characteristic of this camp and there is no evidence to suggest that such deposits occur within the boundaries of this claim group. It may be noted, however, that the MAL Group is probably not very greatly removed from this favourable stratigraphic position.

RECOMMENDATIONS

On the basis of the results of the work program described in detail above, no further work appears justified at this time on the MAL Claim Group. The assessment work should be filed to maintain claims in good standing for a further year and the geology and geophysics of this group could be re-considered and possibly re-evaluated should any more detailed information come to light as a result of other work in the same general belt.

Respectfully submitted,

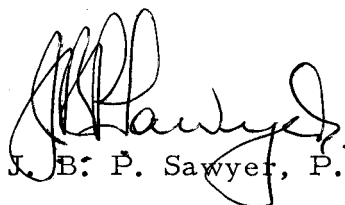


J. B. P. Sawyer, P. Eng.

CERTIFICATE

I, J. B. P. Sawyer, of 3212 Connaught Avenue, North Vancouver, British Columbia DO HEREBY CERTIFY:

- (1) That I am a consulting geologist with a business office at 1 - 425 Howe Street, Vancouver, B.C. V6C 2A9.
- (2) That I am a graduate in geology of Manchester University (B.Sc. - 1953) and of the University of Western Ontario (M.Sc. - 1957).
- (3) That I am a Registered Professional Engineer (geological) in the Association of Professional Engineers of the Province of British Columbia, and have non-resident status with the Association of Professional Engineers of Manitoba, with permission to practice in that Province.
- (4) That I am a Fellow of the Geological Association of Canada (1965) and a Member of the Canadian Institute of Mining and Metallurgy (1960).
- (5) That I have practiced my profession as a geologist for the past twenty-two years.
- (6) That the work programs on the Mal, Bar and Tenas Claim Groups described in the attached reports were under my general supervision.
- (7) That the information, opinions, and recommendations in the attached reports are based on personal knowledge of the properties gained from work in the field in the period May 30th to August 31st, 1975 and on general knowledge of the Anvil Range Lead Zinc District gained over the past nine years.
- (8) That I hold no interest, nor do I expect to receive any interest, in the shares or securities of Boliden Preussag Exploration nor of Welcome North Mines Limited.


J. B. P. Sawyer, P. Eng.

DATED at Vancouver, British Columbia this 5th day of September, 1975.

2/8/75 11/2/75



BARRINGER RESEARCH Limited

Boliden-Preussag Exploration
c/o Dr. J. B. P. Sawyer
1-425 Howe Street
Vancouver, British Columbia

304 Carlingview Drive
Rexdale, Toronto, Canada
Phone: 677-2491
Cable: Baresearch

Geochemical
Laboratory
Report

DATE
July 29th, 1975

Attention: Dr. J. B. P. Sawyer

REPORT NUMBER 35-A

CORR.

Q.F

SAMPLE NUMBER	HC10 ₄		HC10 ₄		HC10 ₄					
	Cu ppm		Pb ppm		Zn ppm					
10E-40N	4		2		7					
42N	18		6		82					
44N	32		3		25					
46N	13		2		7					
48N	31		24		120					
50N	35		2		110					
52N	18		14		280					
54N	7		5		15					
56N	33		10		62					
58N	21		10		90					
60N	38		11		140					
62N	28		4		300					
64N	48		15		170					
66N	37		2		65					
68N	16		9		83					
70N	25		4		61					
20E-40N	26		2		40					
42N	79		9		120					
44N	24		8		51					
46N	33		2		71					

Sample No.	CORR.				Sample No.	CORR.			
	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm			HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm	
50E-56N	13	2	16		60E-48N	20	12	195	
58N	11	2	32		50N	15	7	30	
60N	19	4	34		52N	3	9	9	
62N	24	8	120		54N	42	2	125	
64N	55	2	35		56N	41	8	110	
66N	14	5	41		58N	29	8	90	
68N	23	6	61		60N	IS	IS	IS	
70N	71	7	125		62N	IS	IS	IS	
60E-10N	22	6	75		64N	2	2	14	
12N	20	15	140		66N	16	3	29	
14N	37	4	115		68N	32	2	110	
16N	44	17	110		70N	22	2	91	
18N	57	5	47		70E-10N	24	2	23	
20N	49	5	270		12N	17	9	125	
22N	4	3	9		14N	4	4	11	
24N	14	4	22		16N	24	2	60	
26N	13	8	12		18N	65	3	160	
28N	43	8	170		20N	56	18	320	
30N	6	2	8		22N	16	2	26	
32N	55	11	49		24N	28	5	52	
34N	16	2	25		26N	82	12	300	
36N	24	6	11		28N	29	10	160	
38N	24	21	120		30N	18	10	36	
40N	16	17	115		32N	72	3	160	
42N	8	4	9		34N	53	7	82	
44N	86	69	360		36N	33	10	96	
46N	42	30	190		38N	21	2	60	

Ual

CORR.

CORR.

Sample No.	HC10 ₄ Cu ppm	HC10 ₄ Pb ppm	HC10 ₄ Zn ppm		Sample No.	HC10 ₄ Cu ppm	HC10 ₄ Pb ppm	HC10 ₄ Zn ppm	
70E-40N	18	17	66		80E-32N	14	5	49	
42N	15	3	22		34N	26	5	17	
44N	23	7	41		36N	115	7	96	
46N	3	2	8		38N	27	2	72	
48N	16	5	52		40N	23	11	210	
50N	20	2	95		42N	11	3	6	
52N	31	14	91		44N	6	2	7	
54N	19	14	81		46N	9	5	55	
56N	29	17	94		48N	17	2	48	
58N	35	2	81		50N	11	2	14	
60N	29	7	25		52N	12	2	82	
62N	7	3	6		54N	16	3	110	
64N	36	2	83		56N	15	2	165	
66N	6	6	18		58N	60	2	125	
68N	2	2	8		60N	13	6	150	
70N	50	6	135		62N	10	2	49	
80E-10N	39	14	83		64N	30	10	250	
12N	48	5	87		66N	36	2	41	
14N	15	5	90		68N	15	2	67	
16N	28	9	160		70N	16	12	56	
18N	3	4	10		90E-10N	13	6	90	
20N	46	4	235		12N	20	2	72	
22N	44	15	145		14N	64	3	255	
24N	29	8	53		16N	20	4	69	
26N	5	8	13		18N	8	2	16	
28N	62	5	200						
30N	49	9	180						

Mal

CORR.

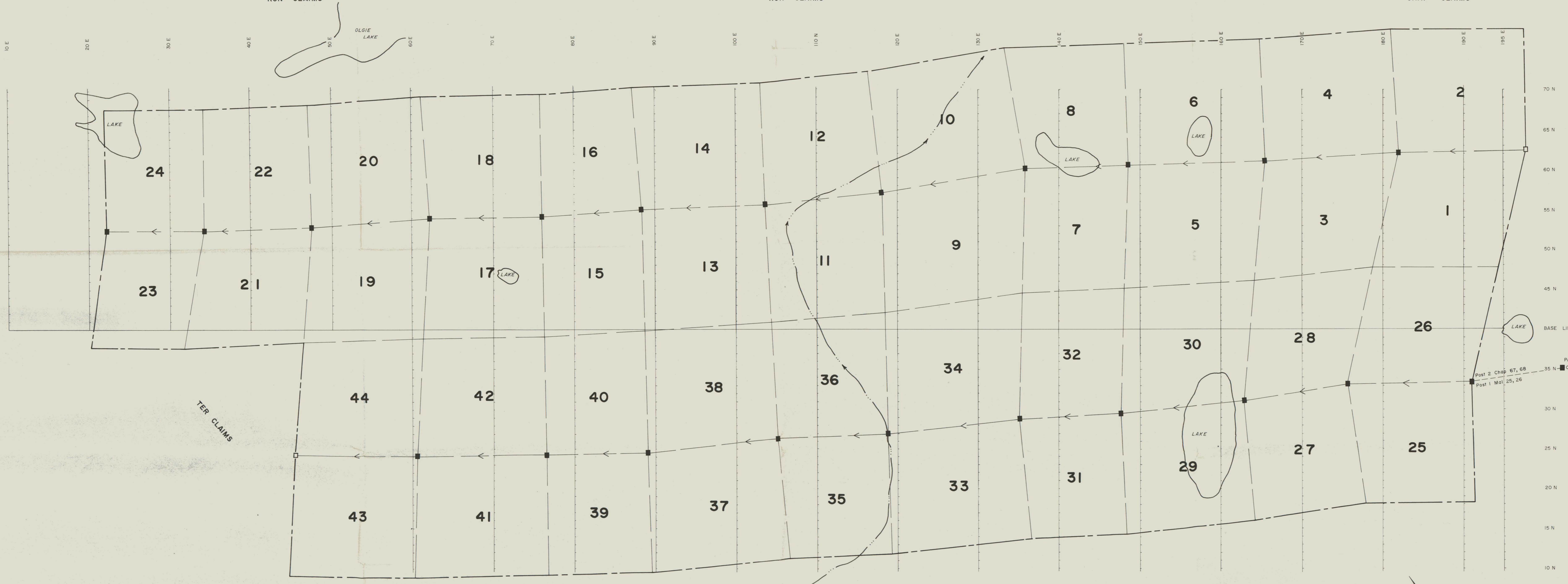
CORR.

Sample No.	HC10 ₄ Cu ppm	HC10 ₄ Pb ppm	HC10 ₄ Zn ppm		Sample No.	HC10 ₄ Cu ppm	HC10 ₄ Pb ppm	HC10 ₄ Zn ppm	
140E-22N	31	2	185		150E-12N	26	2	74	
24N	16	2	84		14N	58	2	73	
26N	74	3	210		16N	89	7	410	
28N	20	2	16		18N	60	10	185	
30N	14	2	54		20N	27	2	130	
32N	26	3	255		22N	18	2	115	
34N	16	3	105		24N	29	3	150	
36N	34	6	235		26N	66	2	160	
38N	31	8	185		28N	48	8	155	
40N	43	20	315		30N	27	7	310	
42N	25	2	130		32N	17	12	160	
44N	38	2	130		34N	23	2	155	
46N	12	2	63		36N	17	9	180	
48N	94	17	155		38N	45	6	165	
50N	27	2	190		40N	40	2	120	
52N	53	2	77		42N	15	2	175	
54N	49	8	160		44N	37	16	375	
56N	38	11	190		46N	39	11	280	
58N	48	10	220		48N	17	2	67	
60N	61	3	235		50N	22	10	290	
62N	33	6	86		52N	30	10	170	
64N	28	7	66		54N	29	13	180	
66N	21	2	54		56N	33	15	200	
68N	28	2	73		58N	52	14	235	
70N	46	2	125		60N	32	8	125	
150E-10N	20	2	60		62N	19	2	175	

RON CLAIMS

RON CLAIMS

CHAP CLAIMS



TER CLAIMS

LEGEND

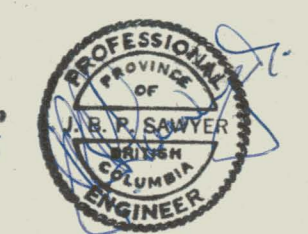
- CLAIM POST LOCATION
- CLAIM POST ASSUMED LOCATION
- - - PROPERTY BOUNDARY
- ← CLAIM LOCATION LINE

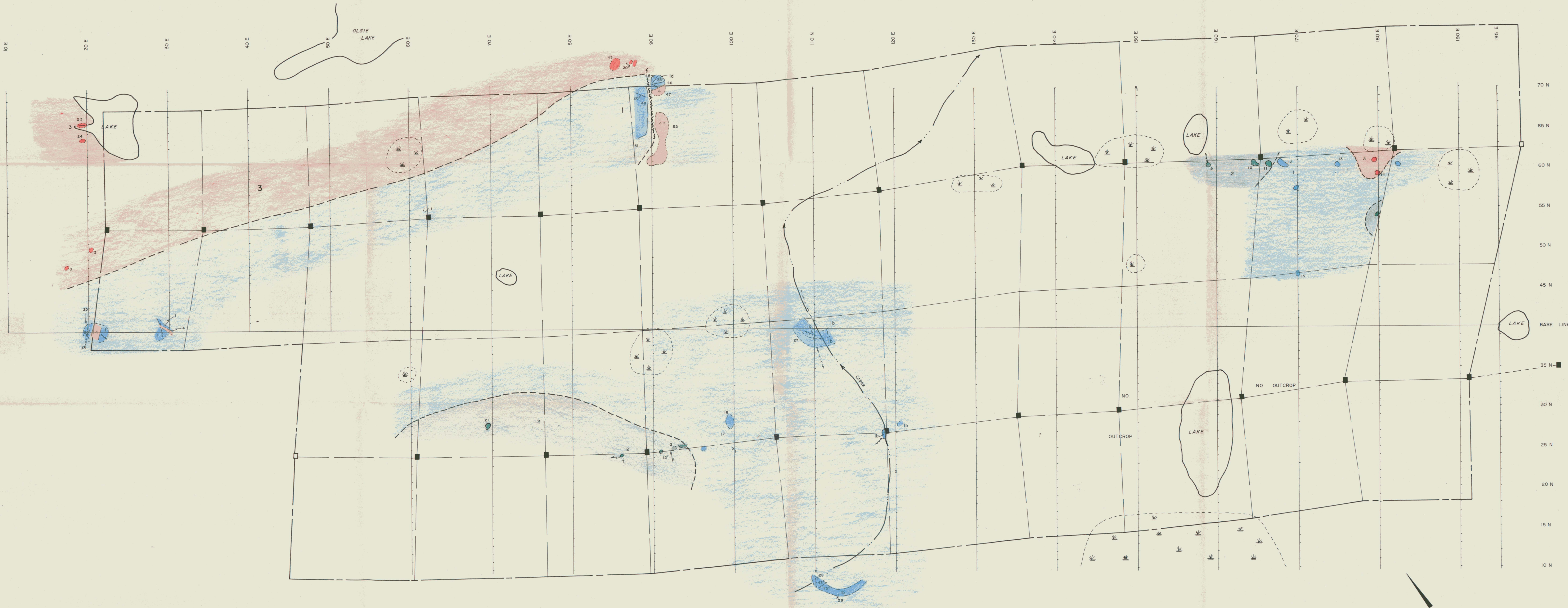
BOLIDEN-PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

**MAL CLAIM GROUP
 CLAIMS AND GRID**

Scale: 1 Inch = 500 Feet
 DRAWN BY: C. L. C. DATE: JULY, 1975

TO ACCOMPANY REPORT
 BY J.B.P. SAWYER, P. ENG.,
 DATED Sept. 5, 1975





LEGEND

- | | | |
|---|---|--|
| <p>CRETACEOUS or YOUNGER</p> <ul style="list-style-type: none"> 4 Coarse grained granodiorite, occur as dykes cutting phyllite & greenstone units. <p>CRETACEOUS - Anvil Batholith</p> <ul style="list-style-type: none"> 3 Medium to coarse grained granite granodiorite. <p>MISSISSIPPIAN? - "Greenstone Unit"</p> <ul style="list-style-type: none"> 2 Dark green, grey green to grey andesitic volcanics generally medium to medium coarse grained, in places foliated, probably includes minor phyllite, or argillite. "Phyllite / Quartz Sericite Schist Unit" 1 Grey to grey green phyllite, quartz - sericite schist, quartz sericite - biotite schist and phyllite; in places chloritic - la, and/or graphitic - lb; locally calcareous and/or quartzose, quartzose granulite - lc; Minor crystalline limestone - ld, calcareous argillite. | <p>Geological Boundary, defined, approximate, inferred</p> <p>Bedding, strike and dip</p> <p>Foliation, strike and dip</p> <p>Jointing, strike and dip</p> <p>Fold axis, direction and angle of plunge</p> <p>Fault, defined, assumed</p> <p>Outcrop</p> <p>Float, rock unit 2</p> <p>Area of Discontinuous outcrop and/or boulders in situ</p> <p>Location Number, observation point, sample and/or outcrop number</p> <p>Stream, direction of flow</p> <p>Claim Post</p> <p>Road or trail</p> | |
|---|---|--|

BOLIDEN -PREUSSAG EXPLORATION
WELCOME NORTH MINES LIMITED OPTION
Ross River Area, Yukon

**GEOLOGY
MAL CLAIM GROUP**

Scale: 1 Inch = 500 Feet

DRAWN BY: C. L. C. DATE: SEPT, 1975

TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED Sept 5, 1975

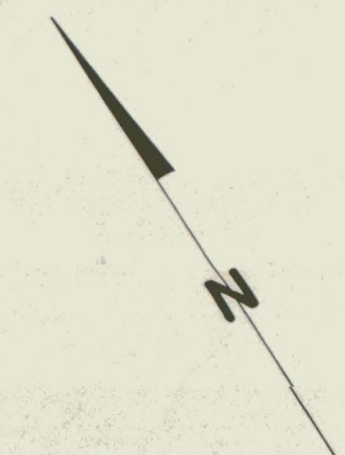


38 = ppm Total Copper
 Calculated Threshold = 79 ppm

BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

**SOIL SAMPLING PLAN - COPPER
 MAL CLAIM GROUP**

TO ACCOMPANY REPORT
 BY J. B. P. SAWYER, P. ENG.
 DATED 2/25/1975



7 = ppm Total Lead
 Calculated Threshold = 77 ppm

BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

**SOIL SAMPLING PLAN - LEAD
 MAL CLAIM GROUP**

Scale: 1 Inch = 500 Feet
 DRAWN BY: C. L. C. DATE: JULY, 1975

TO ACCOMPANY REPORT
 BY J. B. P. SAWYER, P. ENG.
 DATED Sept 5th 1975



BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

**SOIL SAMPLING PLAN - ZINC
 MAL CLAIM GROUP**

65 = ppm Total Zinc
 Calculated Threshold = 251 ppm

TO ACCOMPANY REPORT
 BY J. B. P. SAWYER, P. ENG.
 DATED Sept 5th 1975



REPORT ON THE 1975 WORK PROGRAM

on the

BAR CLAIM GROUP

(Welcome North Mines Limited Option)

ROSS RIVER AREA

Whitehorse Mining District, Yukon

for

BOLIDEN PREUSSAG EXPLORATION

by

J. B. PAUL SAWYER, P. ENG.

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APPENDIX A - GEOCHEMICAL ANALYSIS RESULTS

LIST OF ILLUSTRATIONS

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Maps in pocket

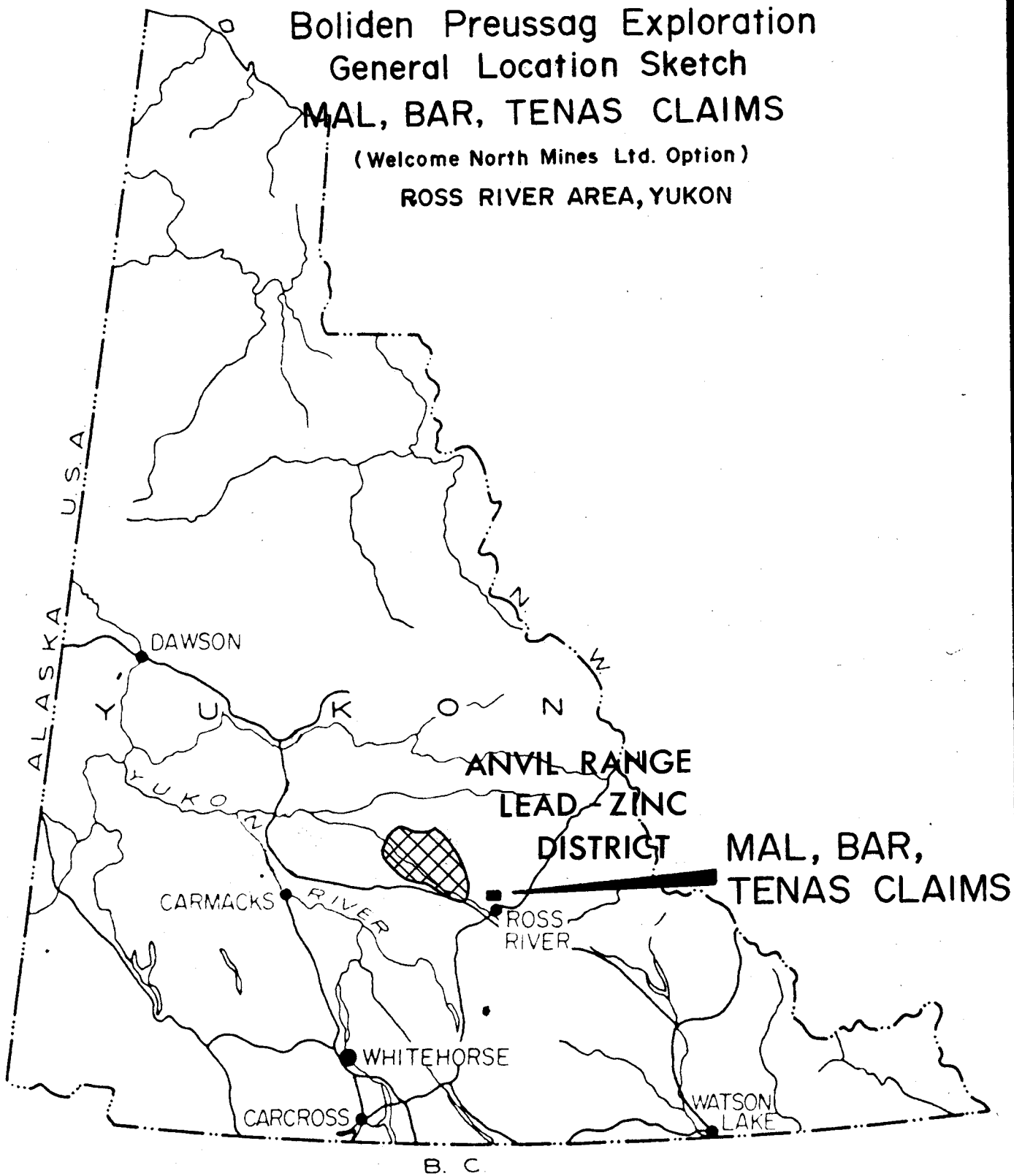
CLAIMS AND GRID	1" = 500'
GEOLOGY	1" = 500'
SOIL SAMPLING PLAN - COPPER	1" = 500'
SOIL SAMPLING PLAN - LEAD	1" = 500'
SOIL SAMPLING PLAN - ZINC	1" = 500'

Boliden Preussag Exploration General Location Sketch

MAL, BAR, TENAS CLAIMS

(Welcome North Mines Ltd. Option)

ROSS RIVER AREA, YUKON



Scale: 1 Inch = Approx. 80 Miles

INTRODUCTION

The BAR Claim Group was staked in August 1974 by Welcome North Mines Ltd. as one of three claim groups which adjoin and alternate with the claim groups controlled by a syndicate including DuPont Exploration, Teck Corporation and R. Chaplin & Associates. Early in 1975 the three claim groups, including the BAR Claims, were optioned to Boliden-Preussag Exploration who commissioned the writer to carry out a first phase exploration program in the 1975 field season. This report describes the work completed in the period May 25 to August 15, 1975, and discusses the results of this work program.

SUMMARY

The work carried out on the BAR Claim Group in the period May 25 to August 15, 1975 included establishment of a grid with picket lines at 1,000 foot intervals to establish control for geological, geochemical and geophysical work. The line cutting work was carried out under contract by Eastern Associates Reg'd of Whitehorse. Geochemical work consisted of soil sampling which, due to the very swampy and wet nature of the property was difficult and did not cover the entire grid area. Geophysical work consisted of a Turam E.M. survey carried out by Peter E. Walcott and Associates and the property was traversed with a view to making a geological map, however, the property is almost devoid of outcrop with the exception of the extreme northern part of the claim group.

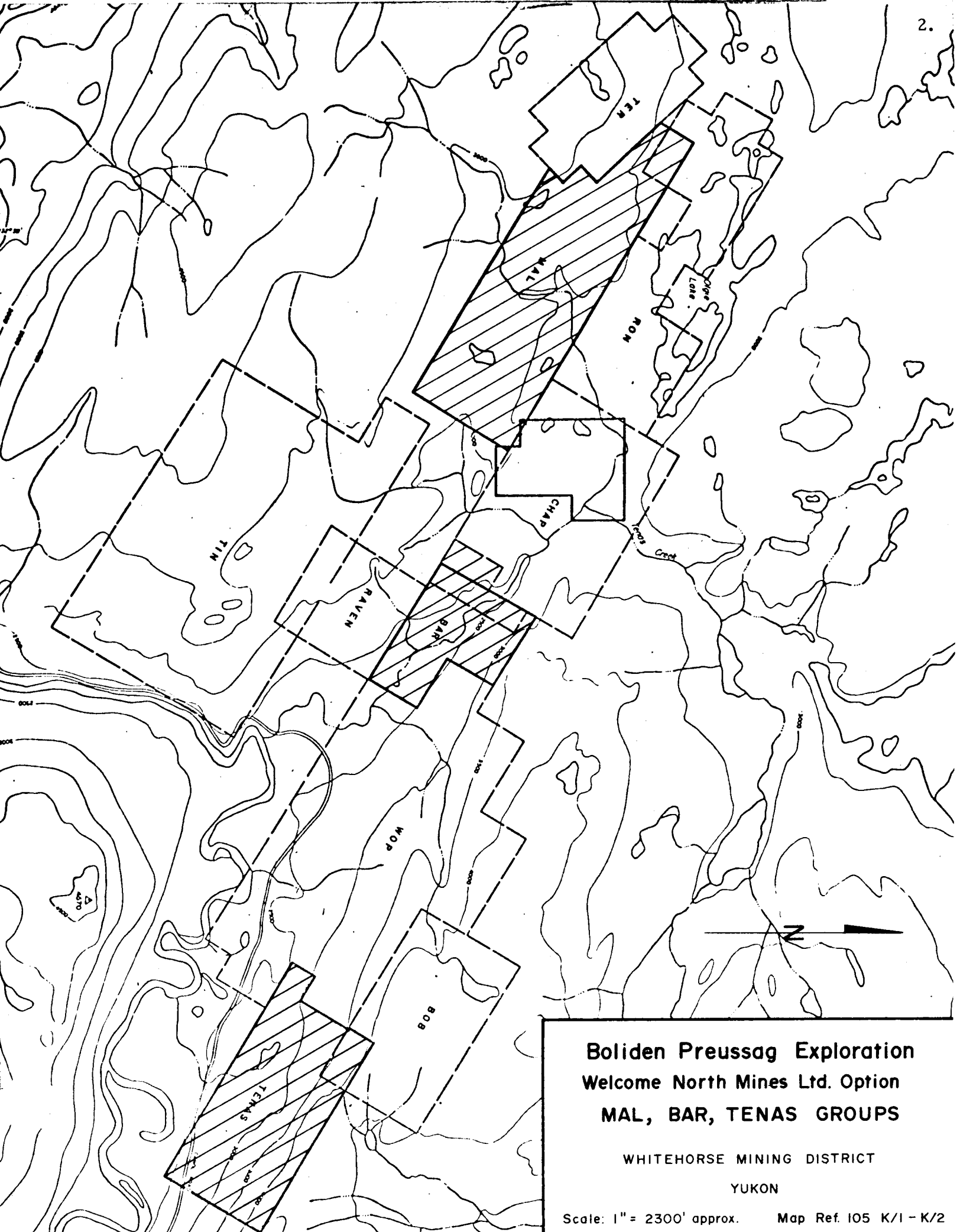
There were no positive results from either the geological or geochemical programs. However, the Turam E.M. work did define a number of conductors of varying conductivity of which the strongest, designated conductor A by P. E. Walcott, exhibits good conductivity at its western extremity. Some follow-up magnetic and gravity work to check this conductor further is recommended in the geophysical report.

PROPERTY

The BAR Claim Group consists of 18 claims numbered BAR 1 through 18 inclusive, Grant Numbers Y80328 to Y80345 inclusive, which were recorded on August 22, 1974. They are plotted on Yukon claim map 105 K/1 in the Whitehorse Mining District. Claim tags have been affixed to the posts.

LOCATION AND ACCESS

The BAR Claim Group lies on Tenas Creek approximately two miles due east of the MAL Claim Group and approximately 8 miles north of the village of Ross River. Both to the east and to the west the BAR Claim Group adjoins claim blocks owned by the Teck-DuPont-Chaplin Group which were explored in the 1974 field season. The Chap Group



**Boliden Preussag Exploration
 Welcome North Mines Ltd. Option
 MAL, BAR, TENAS GROUPS**

WHITEHORSE MINING DISTRICT
 YUKON

Scale: 1" = 2300' approx. Map Ref. 105 K/1 - K/2

lies to the west and the Wop Group to the east. Co-ordinates of a point approximately at the centre of the claim group are $132^{\circ}23'W$, $62^{\circ}04'N$.

Access to the property may be had by a bush road or trail which leaves the north Canol Road approximately 3,000 ft. east of the point where the road crosses Tenas Creek.

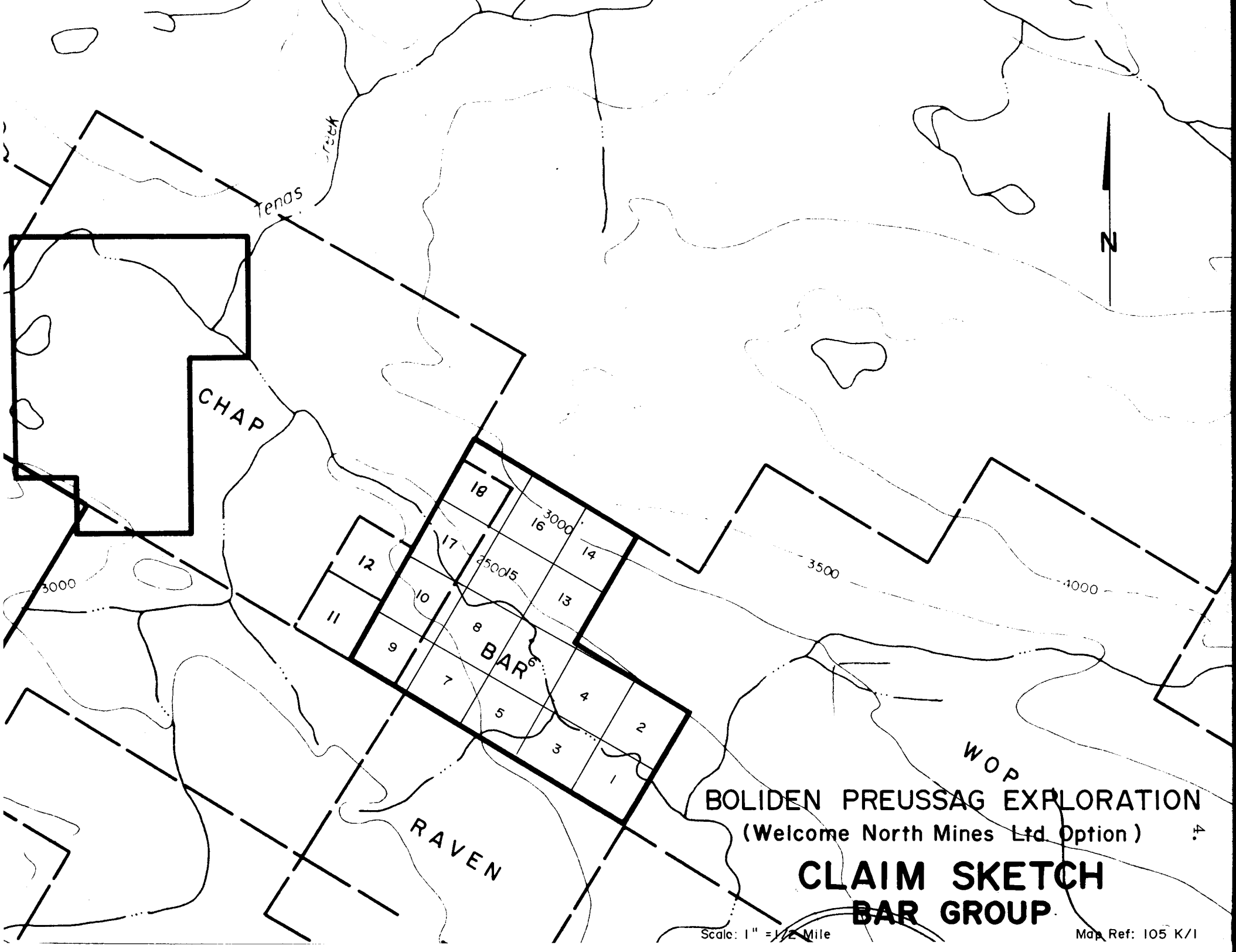
HISTORY

As far as can be ascertained, there is no record of any previous work on the ground now covered by the BAR Claims. The work by the Teck-DuPont Group in 1974 on the adjacent Chap and Wop Claim Groups undoubtedly overlapped onto the Bar Group. A very generalized geological compilation shows a band of phyllitic rocks occupying the greater part of the BAR Group.

1975 WORK PROGRAM

The work program on the BAR Claim Group in 1975 consisted of:

- a) Line Cutting - A base line oriented on a bearing of 300° (True) was cut approximately through the centre of the claim group and grid lines turned off at right angles to the base line at 1,000 foot intervals were cut, chained, and picketed. Because of the shape of the claim block, the two most easterly and the two most westerly lines were cut only south of the base line. The grid is shown on the accompanying plans. A total of 9.5 line miles of grid were established on the BAR Claim Group.
- b) Turam E.M. Survey was read by P. E. Walcott and Associates over all of the grid lines.
- c) Soil Sampling was attempted over all of the grid lines, but because of the extremely swampy nature of the terrain, it was not possible to obtain the samples at all the stations and indeed, the southernmost 2,000 feet of the last three lines on the east, i. e., 320E, 330E, and 340E, were not sampled due to their being under water.
- d) Geological Mapping was attempted but due to the almost complete absence of outcrop except on the northern extremity of the grid, no meaningful geological map could be produced.



CHAP

Tenas

18

3000

17

16

3500

14

12

10

13

11

9

8

BAR

3

7

5

4

2

3

1

RAVEN

WOP

BOLIDEN PREUSSAG EXPLORATION

(Welcome North Mines Ltd Option)

CLAIM SKETCH
BAR GROUP

Scale: 1" = 1/2 Mile

Map Ref: 105 K/1

GEOCHEMISTRY

Soil samples were taken, or attempted, using a narrow bladed shovel at 200 foot stations on all of the picket lines. The samples were shipped to the laboratory of Barringer Research Ltd. in Whitehorse in wet strength Kraft bags where they were dried and screened, and the minus 80 mesh fractions were analyzed for total copper, lead and zinc using a perchloric acid digestion. Determinations of metal content were made using atomic absorption equipment and corrected values for lead were determined to eliminate interference from other metals whose absorption lines in the spectrum are close to those of lead. The results are shown on three separate plots, one for copper, one for lead, and one for zinc, which accompany this report. Threshold values for each metal were determined using standard statistical techniques as follows:-

Threshold (Th) = Arithmetic Mean (AM) + twice Standard Deviation (SD)

Copper Th = 79 ppm

Lead Th = 16 ppm

Zinc Th = 214 ppm

Referring to the plots for these metals, it is seen that there are no copper values which are anomalous, and on the zinc plot only 7 samples at widely scattered locations are above the threshold value. While they do not show any distinct pattern, the majority of these few higher values do appear to lie in the southwestern one third of the property. However, they do not show any good coincidence with the Turam conductors. On the lead plot 5 samples, again at widely scattered locations, and forming no significant pattern, exceed the threshold value of 16 parts per million.

GEOLOGY

As already stated, there is virtually no outcrop on the greater part of the BAR Claim Group. Along the northern extremity some outcrops of intrusive material, undoubtedly the margin of the Anvil Batholith at this point, occur. Immediately south of this a few occurrences of float of phyllite were also noted. One is forced to extrapolate mapping from adjacent claim groups and/or to use geophysical signatures to suggest possible variations in the underlying bedrock and on the basis of these latter responses, the southwestern and southeastern corners of the block are possibly underlain by phyllites with a second band of phyllites trending across the claim group immediately south of the batholith. This latter feature would correspond to the limited geological field observations. The central portion of the property appears to be underlain by volcanic or intrusive rocks.

GEOPHYSICS

The geophysical work completed on the BAR Claim Group consisted of a Turam E.M. survey conducted by Peter E. Walcott and Associates of Coquitlam, B.C. The results of this work are described in a separate report dated July 1975 by P. E. Walcott, P. Eng. to which the reader is referred for more detail.

CONCLUSIONS

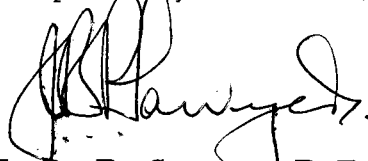
From the results of the 1975 work program on the BAR Claim Group the following conclusions can be drawn:-

1. Based on mapping of adjacent properties and on interpretation of the E.M. results, the property appears to be underlain by a mixed assemblage of volcanic and schistose or phyllitic rocks.
2. The geophysical results do not suggest any extensive occurrences of graphite within the area covered by this claim group.
3. One conductor at the southwestern corner of the claim group appears to have moderate to good conductivity.
4. No anomalous concentration of metal ions in the soil or overburden of the BAR Claim Group were detected, however, this lack may be due in part, if not wholly, to the extremely wet and swampy nature of the terrain.

RECOMMENDATIONS

On the basis of the results of the 1975 work program which have been described in detail above, no further work is recommended on the BAR Claim Group at this time. The work completed should be filed for assessment credit to keep the claims in good standing for the immediate future. Should work on adjacent ground delineate any targets of interest, the Turam conductor in the southwestern portion of the property may be worthy of some re-evaluation as suggested in the geophysical report.

Respectfully submitted,

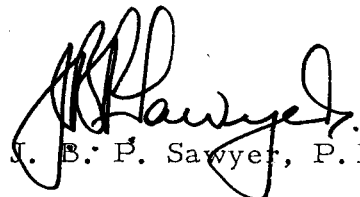


J. B. P. Sawyer, P. Eng.

CERTIFICATE

I, J. B. P. Sawyer, of 3212 Connaught Avenue, North Vancouver, British Columbia DO HEREBY CERTIFY:

- (1) That I am a consulting geologist with a business office at 1 - 425 Howe Street, Vancouver, B.C. V6C 2A9.
- (2) That I am a graduate in geology of Manchester University (B.Sc. - 1953) and of the University of Western Ontario (M.Sc. - 1957).
- (3) That I am a Registered Professional Engineer (geological) in the Association of Professional Engineers of the Province of British Columbia, and have non-resident status with the Association of Professional Engineers of Manitoba, with permission to practice in that Province.
- (4) That I am a Fellow of the Geological Association of Canada (1965) and a Member of the Canadian Institute of Mining and Metallurgy (1960).
- (5) That I have practiced my profession as a geologist for the past twenty-two years.
- (6) That the work programs on the Mal, Bar and Tenas Claim Groups described in the attached reports were under my general supervision.
- (7) That the information, opinions, and recommendations in the attached reports are based on personal knowledge of the properties gained from work in the field in the period May 30th to August 31st, 1975 and on general knowledge of the Anvil Range Lead Zinc District gained over the past nine years.
- (8) That I hold no interest, nor do I expect to receive any interest, in the shares or securities of Boliden Preussag Exploration nor of Welcome North Mines Limited.


J. B. P. Sawyer, P. Eng.

DATED at Vancouver, British Columbia this 5th day of September, 1975.

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BARRINGER RESEARCH Limited

Boliden-Preussag Exploration
 c/o J.B.P. Sawyer
 1-425 Howe Street
 Vancouver, British Columbia
 V6C 2A9

304 Carlingview Drive
 Rexdale, Toronto, Canada
 Phone: 677-2491
 Cable: Baresearch

Environmental
 Laboratory
 Report

DATE
 July 22nd, 1975

Attention: Mr. J. B. P. Sawyer

REPORT NUMBER 34-A

CORR.

27

SAMPLE NUMBER	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
260E 70N	20	2	29						
72N	9	2	9						
74N	16	5	68						
76N	23	7	155						
78N	20	2	45						
80N	8	2	18						
81N	21	4	46						
84N	19	2	41						
86N	33	4	87						
88N	29	9	140						
90N	29	4	43						
92N	31	2	50						
94N	19	7	71						
96N	12	4	72						
98N	11	4	69						
100N	47	11	180						
270E 70N	18	4	91						
72N	7	7	73						
74N	19	6	160						
76N	18	2	36						

Sa

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
280E 96N	36	8	155						
98N	14	4	170						
100N	13	2	17						
102N	13	7	85						
104N	10	6	140						
106N	14	3	38						
108N	18	2	25						
110N	25	8	140						
112N	23	5	120						
114N	21	6	86						
116N	49	10	59						
118N	27	6	91						
120N	11	2	77						
122N	14	7	65						
124N	15	9	170						
126N	27	4	86						
128N	30	4	81						
130N	25	3	94						
290E 70N	10	2	83						
72N	11	2	9						
74N	17	2	54						
76N	28	8	91						
78N	26	9	77						
80N	10	2	14						
82N	4	2	5						
84N	22	2	21						
86N	11	2	17						

San

Sample No.	CORR.			HClO ₄ Zn ppm					
	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Pb ppm						
300E 80N	42		16	140					
82N	28		5	95					
84N	37		20	91					
86N	34		9	84					
88N	24		8	120					
90N	21		2	76					
92N	29		2	94					
94N	20		11	130					
96N	16		14	190					
98N	17		23	38					
100N	NS		NS	NS					
102N	20		8	70					
104N	17		15	72					
106N	17		5	81					
108N	52		7	270					
110N	41		8	175					
112N	30		6	130					
114N	18		12	66					
116N	27		9	155					
118N	19		6	85					
120N	19		5	51					
122N	34		2	90					
124N	37		11	79					
126N	22		2	125					
128N	11		2	35					
130N	12		2	34					
310E 70N	25		2	77					

32



Sample No.	CORR.			HC10 ₄ Zn ppm					
	HC10 ₄ Cu ppm	HC10 ₄ Pb ppm	HC10 ₄ Zn ppm						
310E 72N	38	11	94						
74N	44	3	92						
76N	25	10	80						
78N	38	10	87						
80N	38	11	140						
82N	64	2	42						
84N	34	8	125						
86N	24	13	91						
88N	10	5	37						
90N	20	6	84						
92N	28	2	26						
94N	24	24	90						
96N	18	9	67						
98N	55	22	400						
100N	32	5	64						
102N	28	13	130						
104N	41	14	155						
106N	26	16	125						
108N	25	2	89						
110N	22	21	94						
112N	18	12	135						
114N	18	3	120						
116N	29	2	130						
118N	32	7	135						
120N	55	6	140						
122N	40	3	140						
124N	25	7	83						

San

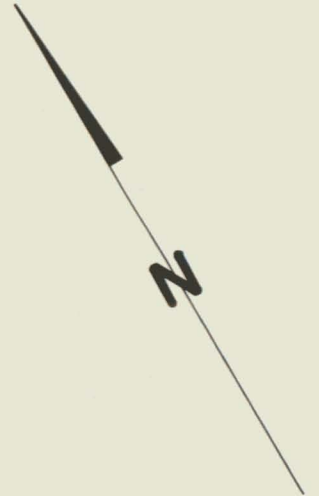
Geochemical Laboratory Report /

34-A

PAGE 7

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
310E 126N	39	10	115						
128N	31	14	110						
130N	19	20	125						
320E 100N	31	8	83						
102N	22	2	64						
104N	32	2	130						
106N	35	2	93						
108N	50	3	38						
110N	9	2	14						
112N	38	8	130						
114N	25	2	190						
116N	15	5	95						
118N	40	10	94						
120N	20	2	110						
122N	44	16	140						
124N	38	10	94						
126N	22	8	120						
128N	22	5	110						
130N	32	11	120						
320E 90N	9	3	13						
92N	14	4	47						
94N	21	3	110						
96N	22	3	89						
98N	40	8	165						
330E 90N	26	3	110						
92N	31	12	130						
94N	27	2	115						



- LEGEND
- CLAIM POST LOCATION
 - CLAIM POST ASSUMED LOCATION
 - PROPERTY BOUNDARY
 - - -> CLAIM LOCATION LINE

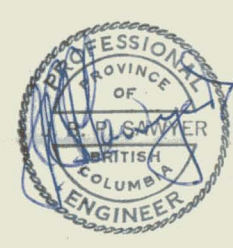
BOLIDEN-PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

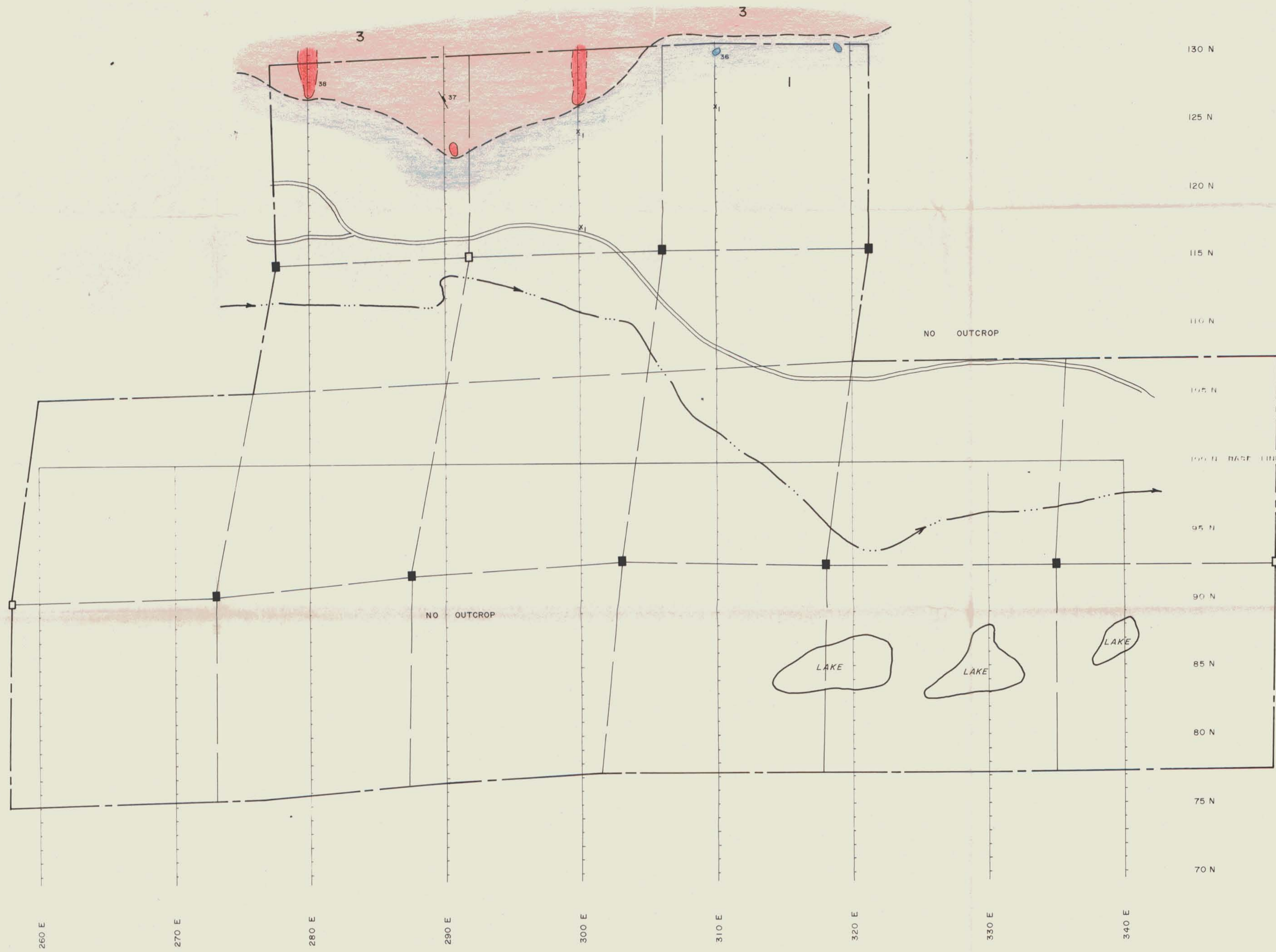
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 DATED Sept 5th 1975





LEGEND

CRETACEOUS or YOUNGER

4 Coarse grained granodiorite, occur as dykes cutting phyllite and greenstone units.

CRETACEOUS - Anvil Batholith

3 Medium to coarse grained granite, granodiorite.

MISSISSIPPIAN? - "Greenstone Unit"

2 Dark green, grey green to grey andesitic volcanics generally medium to medium coarse grained, in places foliated; probably includes minor phyllite, or argillite.

"Phyllite / Quartz Sericite Schist Unit"

1 Grey to grey green phyllite, quartz - sericite schist, quartz sericite - biotite schist and phyllite; in places chloritic - 1a, and/or graphitic - 1b; locally calcareous and/or quartzose, quartzose granulate - 1c; Minor crystalline limestone - 1d, calcareous argillite.

Geological Boundary, defined, approximate, inferred

Bedding, strike and dip

Foliation, strike and dip

Jointing, strike and dip

Fold axis, direction and angle of plunge

Fault, defined, assumed

Outcrop

Float, rock unit 2

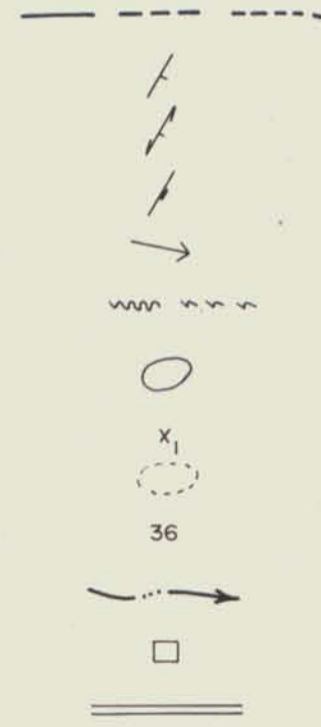
Area of Discontinuous outcrop and/or boulders in situ

Location Number, observation point, sample and /or outcrop number

Stream, direction of flow

Claim Post

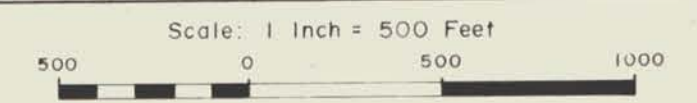
Road or trail



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 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

GEOLOGY
BAR CLAIM GROUP

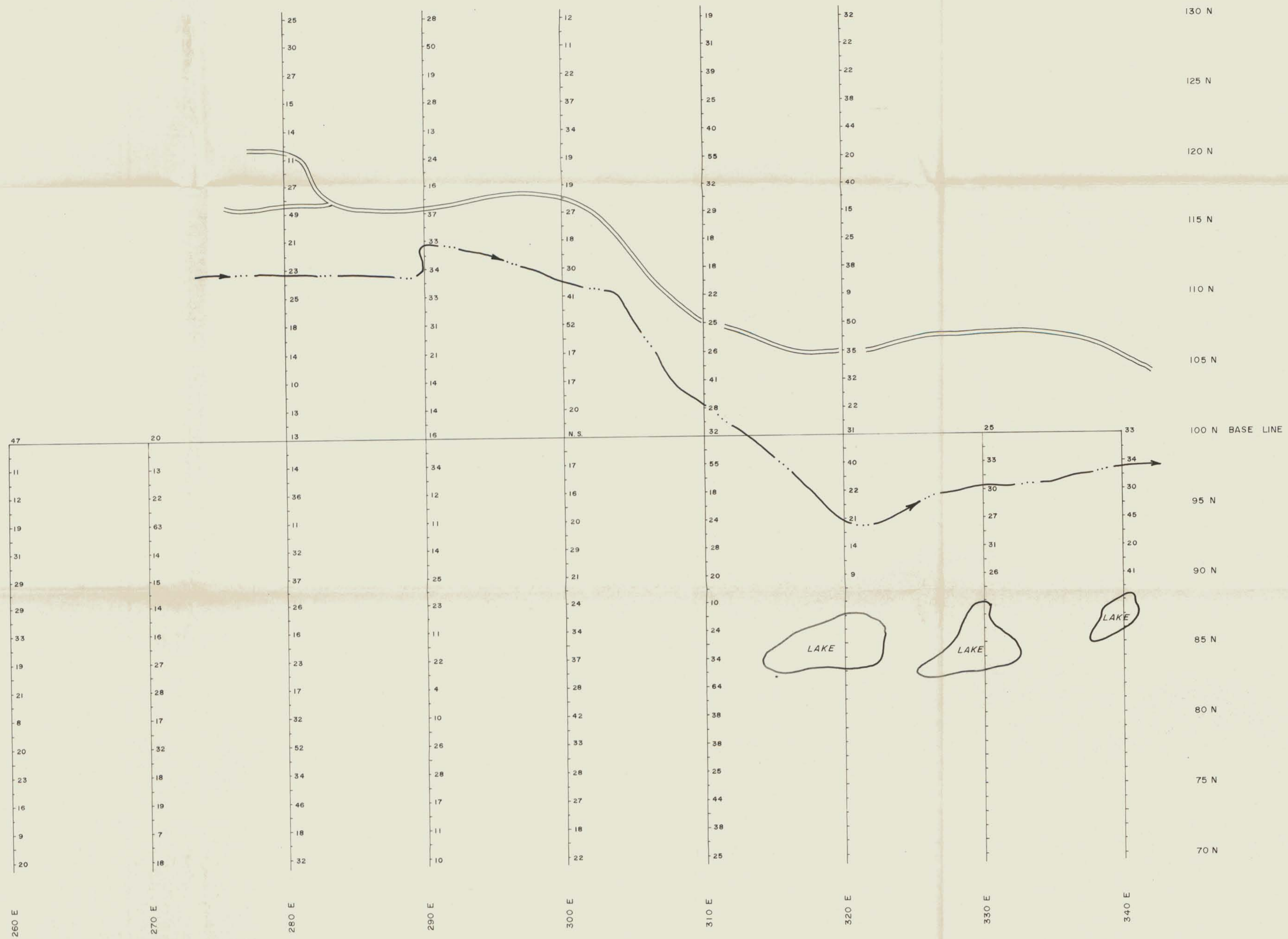
DRAWN BY C. L. C.



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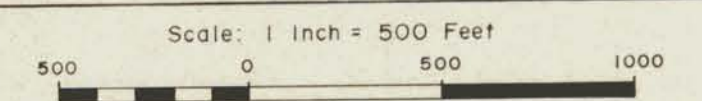




BOLIDEN - PREUSSAG EXPLORATION
WELCOME NORTH MINES LIMITED OPTION
Ross River Area, Yukon

**SOIL SAMPLING PLAN - COPPER
BAR CLAIM GROUP**

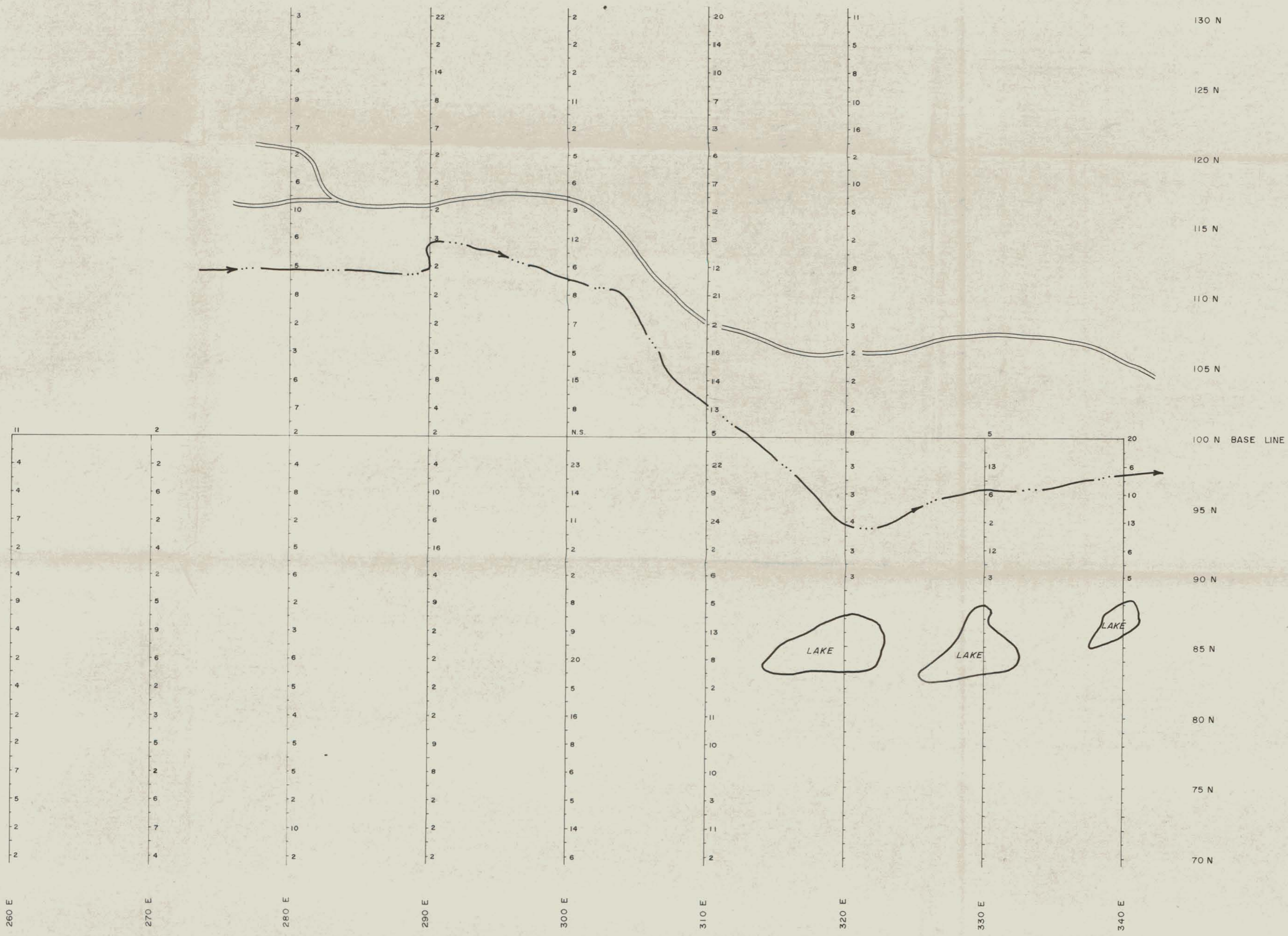
DRAWN BY: C. L. C.



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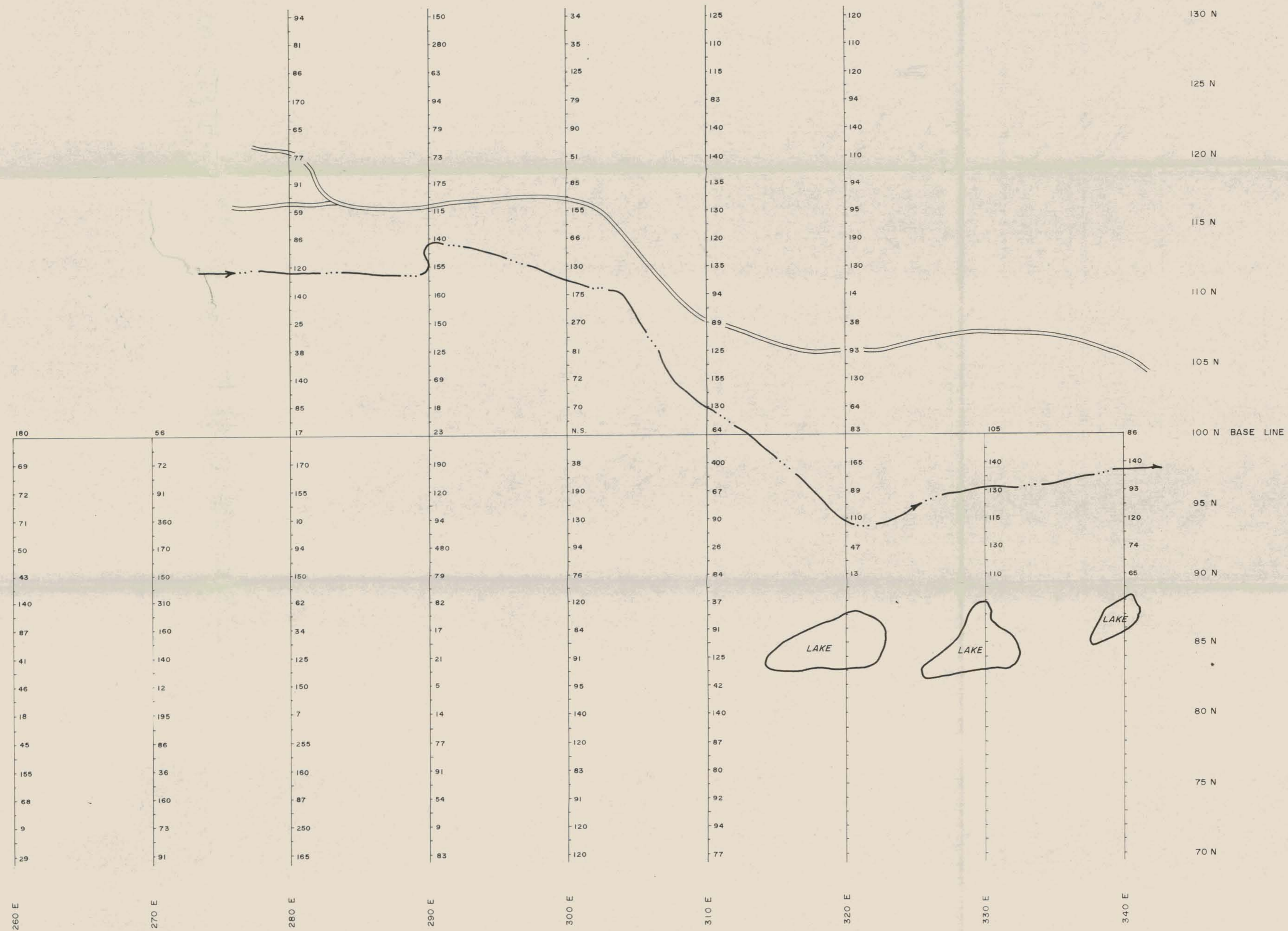




BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

**SOIL SAMPLING PLAN - LEAD
 BAR CLAIM GROUP**

B = ppm Total Lead
 Calculated Threshold = 16 ppm



BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

**SOIL SAMPLING PLAN - ZINC
 BAR CLAIM GROUP**

140 = ppm Total Zinc
 Calculated Threshold = 214

TO ACCOMPANY REPORT
 BY J.B.P. SAWYER, P. ENG.
 DATED Sept. 5th 1975

REPORT ON THE 1975 WORK PROGRAM

on the

TENAS CLAIM GROUP

(Welcome North Mines Limited Option)

ROSS RIVER AREA

Whitehorse Mining District, Yukon

for

BOLIDEN PREUSSAG EXPLORATION

by

J. B. PAUL SAWYER, P. ENG.

VANCOUVER, B.C.

September 5, 1975

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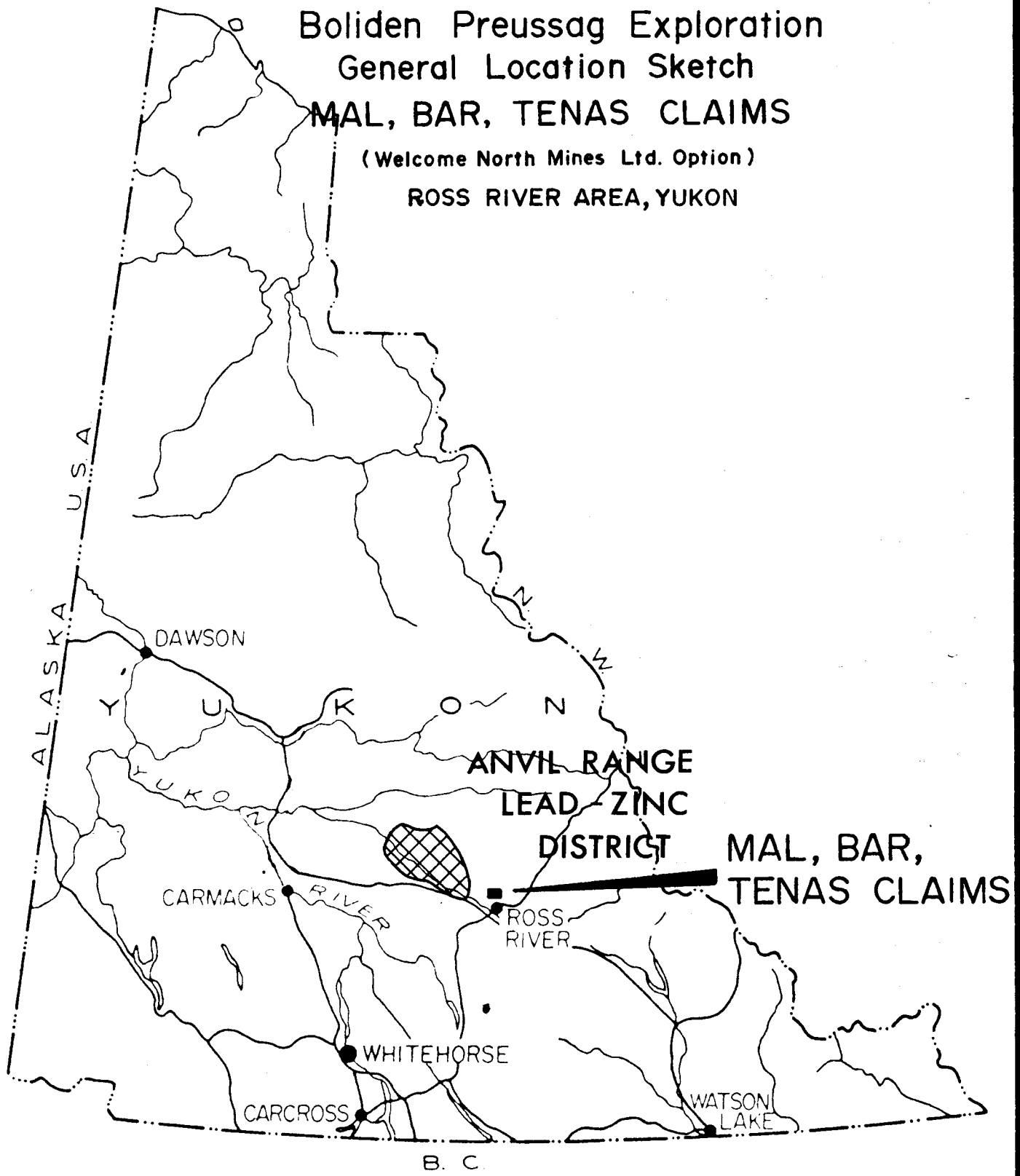
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Maps in pocket

CLAIMS AND GRID	1" = 500'
GEOLOGY	1" = 500'
SOIL SAMPLING PLAN - COPPER	1" = 500'
SOIL SAMPLING PLAN - LEAD	1" = 500'
SOIL SAMPLING PLAN - ZINC	1" = 500'

Boliden Preussag Exploration General Location Sketch MAL, BAR, TENAS CLAIMS

(Welcome North Mines Ltd. Option)
ROSS RIVER AREA, YUKON



Scale: 1 Inch = Approx. 80 Miles

INTRODUCTION

The TENAS Claim Group was staked in August 1974 by Welcome North Mines Ltd. as one of three claim groups which adjoin and alternate with the claim groups controlled by a syndicate including DuPont Exploration, Teck Corporation and R. Chaplin & Associates. Early in 1975 the three claim groups, including the TENAS Claims, were optioned to Boliden-Preussag Exploration who commissioned the writer to carry out a first phase exploration program in the 1975 field season. This report describes the work completed in the period May 25 to August 15, 1975, and discusses the results of this work program.

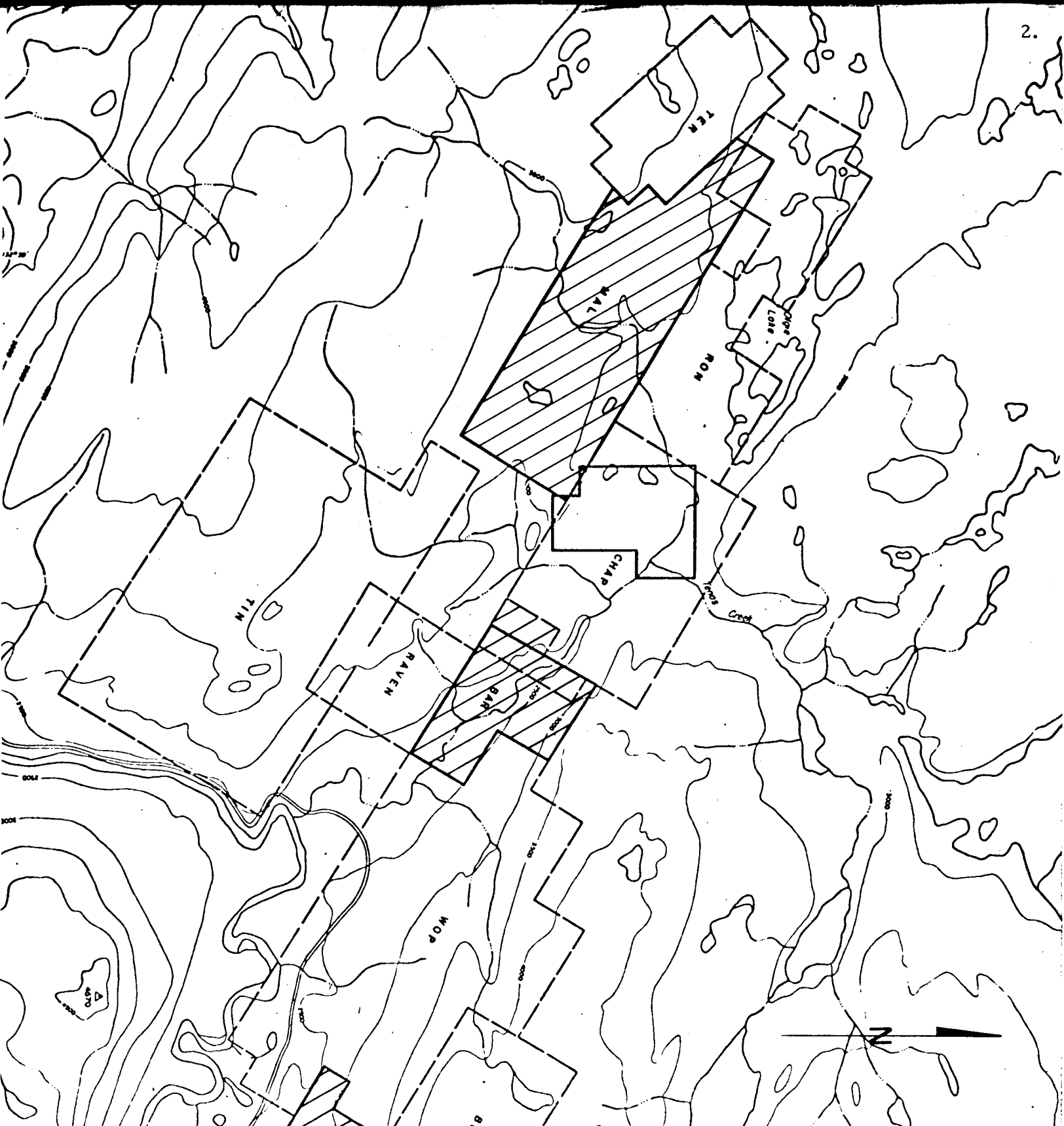
SUMMARY

The field work completed in the 1975 field season, under the writer's supervision, consisted of line cutting, Turam E.M. surveying, geological mapping, and geochemical sampling. The results of this work program showed the property to be underlain by phyllitic rocks as well as some volcanics, and at the northern edge of the group by intrusive rocks of the Anvil Batholith. The geophysical work defined a number of conductors which appeared to run generally across the property from east to west having moderate to poor conductivity.

The most interesting group of conductors lies at the northwestern part of the property immediately north of the base line and this band of parallel conductive zones extends from the western boundary for 5,000 to 6,000 feet eastward. Geological mapping indicates that this conductive zone lies within an area underlain by chloritic phyllites, and it is of interest that the most consistent anomalous geochemical response on the property shows some coincidence with this zone also. The geochemical results show anomalies in both lead and zinc up to 7 or 8 times threshold and although the values are somewhat erratic in places, there is reasonably good coincidence between anomalous values in both metals and they do constitute a valid zone of higher metal concentration. Some follow-up work including more detailed geochemical sampling and additional geophysical work, magnetic surveying, and possibly gravity profiling, is recommended.

PROPERTY

The TENAS Claim Group consists of 33 full claims numbered TENAS 1 to 33 inclusive, Grant Numbers Y80346 to Y80378 inclusive. The claims were recorded on August 22, 1974. They are shown on Yukon claim map 105 K/1 and are in the Whitehorse Mining District. The claim tags have been fixed to the posts.



Boliden Preussag Exploration
Welcome North Mines Ltd. Option
MAL, BAR, TENAS GROUPS

WHITEHORSE MINING DISTRICT
 YUKON

Scale: 1" = 2300' approx. Map Ref. 105 K/1 - K/2

LOCATION AND ACCESS

The TENAS Claim Group lies approximately three miles in a southeasterly direction from the Bar Claim Group. The eastern half of the south boundary of the claim group lies just south of the north Canol Road. The most westerly of the grid lines, Line 530E, meets the road at a point two miles east of where the north Canol Road crosses Tenas Creek. The coordinates of a point approximately at the centre of the claim group are $132^{\circ}14'W$, $62^{\circ}02'30''N$. At its western boundary the TENAS Claim Group adjoins and in part overlaps the Wop Group and is overlapped at the north-western corner by the Bob Claim Group.

Access to the property can be had easily from the north Canol Road which cuts the southern part of the claim group. This road is accessible to vehicular traffic for the greater part of the year. A Government car ferry operates at Ross River when the river is not frozen, providing access for vehicles to the northern section of the road.

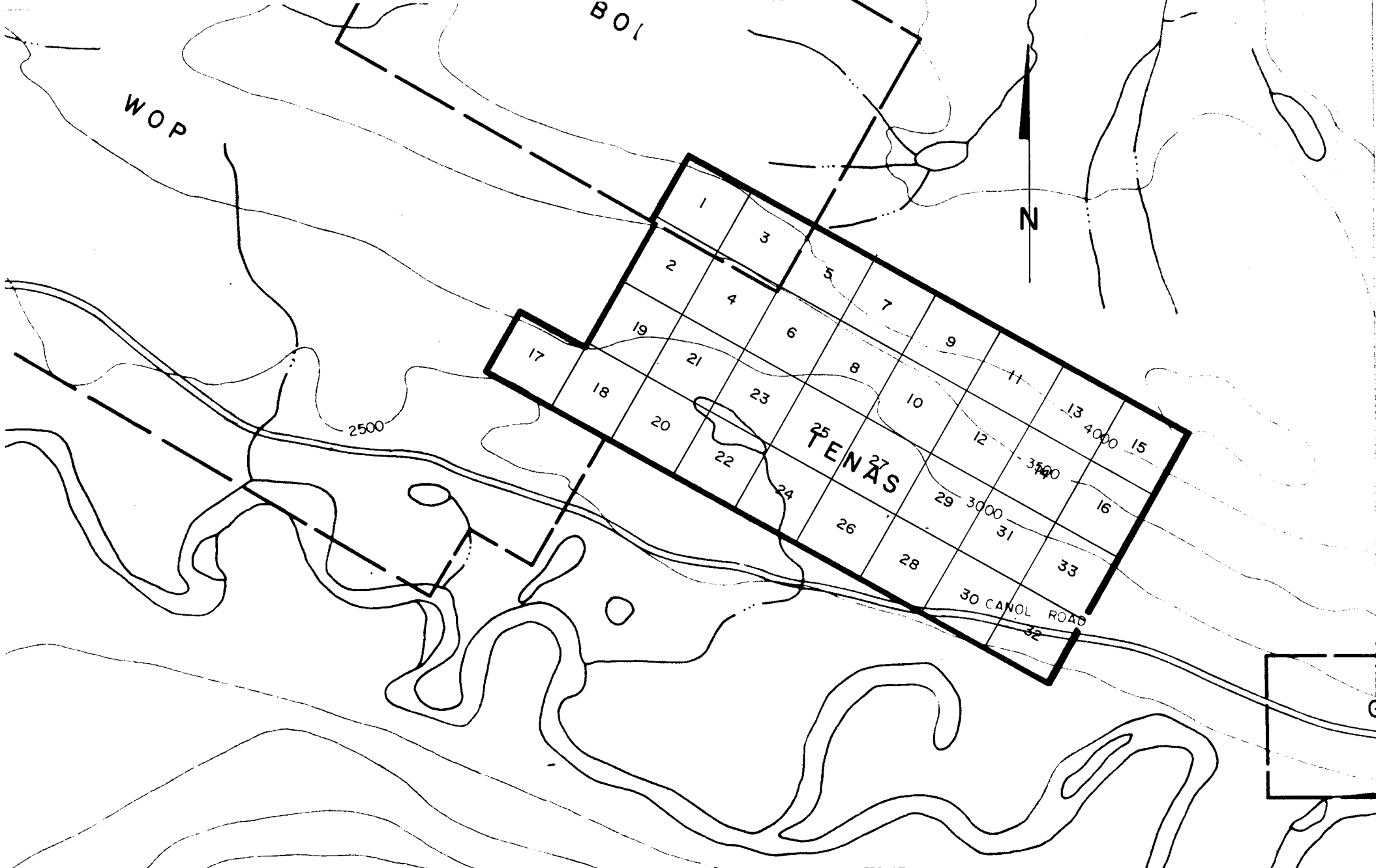
HISTORY

There appears to be no record of any previous exploration work having been carried out on the TENAS Claim Group other than general regional prospecting and/or mapping. Some of the airborne magnetic surveying carried out by the Teck-DuPont-Chaplin Group in 1974 probably covered the TENAS group of claims.

1975 WORK PROGRAM

Work completed on the TENAS Claim Group in 1975 consisted of line cutting, geological mapping, a Turam E. M. Survey, and geochemical soil sampling.

The line cutting was carried out by Eastern Associates Reg'd of Whitehorse. The base line through the centre of the property was cut on a bearing 294° (True) and grid lines were turned off at 1,000 foot intervals at right angles to this base line and were chained and picketed with stations established at 100 foot intervals. A total of 15.7 line miles of grid was established.



BOLIDEN PREUSSAG EXPLORATION

(Welcome North Mines Ltd. Option)

**CLAIM SKETCH
TENAS GROUP**

Scale: 1" = 1/2 Mile

Map Ref: 105 K/1

REGIONAL GEOLOGY

The Mal, Bar, and Tenas claims lie at the southeastern extremity of the Anvil Range Lead-Zinc District. The areas in which these claims lie, within the Tay River Map Sheet was mapped by Roddick and Green of the G. S. C. in the period 1958 to 1960 and the results of their work was published as Map 13-1961. Their mapping shows the area within which the three claim groups lie to be underlain by Map Units 7, 8 and 11. Map Unit 7 is described as consisting of banded quartzose granulite, green and purplish banded skarn, quartz-sericite schist, hornfels and phyllite, chlorite schist and thin altered andesite with minor crystalline limestone. Unit 8 is described as consisting of altered, dark-green andesite and basalt flows and tuffs, commonly schistose, rarely porphyritic; minor phyllite, dark argillite, and light gray quartzite. Unit 11 is a medium to coarse grained quartz monzonite and granodiorite, commonly porphyritic; minor diorite and gneiss. All of these rocks are of probable Mississippian age or later, according to Roddick and Green and would, therefore, appear to be younger than the Cambrian rocks which host the Anvil and other ore-bodies which lie to the northwest along the belt.

A later map, Map 1261A which presents the results of more detailed work by Tempelman-Kluit in 1967 and 1968 provides no direct information on the area in which the Mal, Bar and Tenas claim groups lie; however, the nearest mapping to these properties does include some rocks mapped as light to dark gray massive muscovite-quartz schist, micaceous quartzite and graphitic quartzite of Hadrynian (Precambrian) age. From this more recent mapping it would appear that the rocks which host the lead-zinc orebodies at Faro, Vangorda, Swim Lakes, etc. lie in a belt the extension of which might pass north of the area of the Mal and Bar and Tenas claims. If this is in fact the case the rocks underlying these properties would probably be stratigraphically above the ore horizons known to the northwest.

GEOLOGY OF THE TENAS CLAIM GROUP

The greater part of the Tenas Claim Group is underlain by phyllitic and schistose rocks which show local variations in composition and lie in a fairly broad northwesterly-southeasterly trending belt immediately south of the intrusive rocks which outcrop at the northern extremity of the claim group and form part of the major batholithic intrusions of the district. Volcanic rocks occur mainly in the southwestern quarter of the property and are also seen in outcrop at the

extreme eastern boundary of the property just north of the base line. It may be that a band of volcanic rocks runs roughly through the centre of the property between these two areas but lack of outcrop in the central part of the property precludes verification of this.

There is moderate exposure over a good part of the property although low-lying swampy areas along the base line, i. e. roughly through the centre of the property are almost entirely devoid of outcrop.

Greenstone Unit

Volcanic rocks observed on the Tenas Claim Group are predominantly intermediate types, which can broadly be called andesites, of medium to quite coarse grain and in some places exhibiting weakly developed foliation. Locally the rocks become much harder and more acidic in composition, probably approaching that of dacite, for example, on line 580 E at about 125 N. Minor sulphides, predominantly pyrite but with some pyrrhotite in places, are associated with these volcanic rocks. In general terms most of the area lying west of 580 E and south of the base line, i. e. the southwestern quadrant of the property is underlain by volcanic rocks of the greenstone unit.

Phyllite/Quartz Sericite Schist Unit

Rocks of this unit underly the greater part of the Tenas Claim Group and are moderately well exposed in a fairly broad band across the northern half of the property. They are in contact to the north with the intrusive rocks. Rocks assigned to this unit are predominantly highly foliated quartz sericite, plus or minus chlorite, schists and phyllites with varying quartz and carbonate content. In general there is more chlorite in the phyllites in this part of the belt than seen, for example, further west on the Mal Claim Group and biotite content is generally fairly minor. The higher chlorite content is, perhaps, reflecting a more intense deformation which is particularly evident in some outcrops, for example, at 570 E, 156 N (sample number 24) and at 540 E, 130 N (sample number 35). Here very tight chevron folding of small amplitude is evident in highly chloritic phyllites and the intensity of foliation is such that there has been failure along or parallel to the axial plane of this F2 folding. Strike of the foliation appears to be quite variable from slightly west of north to about 065° . Carbonate content in the schists and phyllites

is quite variable but most of these rocks show at least some carbonate content. In places, for example, at about 166 N on line 600 E, i. e. immediately south of the intrusive contact, there is a narrow band of almost massive dark gray limestone showing only very slight shearing or foliation which is included here within the phyllite unit. The same or similar variation is also seen in quartz content within the phyllitic rocks. There are few, if any visible indications of graphite in the rocks of the phyllite unit, but on the basis of geophysical signatures obtained from the areas underlain by phyllites and schist they probably do include some graphitic horizons. In general, sulphides are absent, or present in only very minor amount.

Intrusive Rocks

The only intrusive rocks mapped on the Tenas property occur along the northern edge of the claim group and represent the southern edge of the batholith in this area. The rocks are coarse grained light coloured to the pinkish granites and granodiorites. In one or two places along the contact coarse euhedral crystals of pyrite are developed within the quartzose phases of the phyllite.

Structure

The highly deformed nature of the rocks of the Phyllite Unit on the Tenas Claim Group, as on the Mal claims, gives evidence of a complex structural history involving at least two or three periods of deformation. The F2 foliation, that which is prominently seen in most of the outcrops, strikes generally northeasterly with local variations to just west of north. This is in general consistent with the structures which are observed in the main part of the Anvil Range Lead-Zinc District to the northwest.

GEOCHEMISTRY

Geochemical sampling was carried out on a contract basis by Donegal Developments Ltd. of Vancouver who used narrow bladed shovels to obtain suitable samples. Samples were taken at sufficient depth to get below the ash layer and over the greater part of the property it was possible to get good soil material. Samples were collected at 200 foot intervals along all of the picket lines, i. e., on a 200 by 1,000 foot grid, and were shipped in wet strength Kraft envelopes to the geochemical laboratory of Barringer Research Ltd. in Whitehorse where they were dried and screened. The minus 80 mesh fractions were analyzed for total copper, lead, and zinc using a hot perchloric acid digestion. Metal determinations were made using atomic absorption equipment with corrected values for lead being determined in order to eliminate interference from other elements whose absorption lines in the spectrum are similar, or close, to those of lead. The values obtained from each sample are plotted in parts per million on three separate maps, one each for copper, lead and zinc. Threshold values for each metal were determined using standard statistical techniques as follows:-

Threshold (Th) = Arithmetic Mean (AM) + twice Standard Deviation (SD)

Copper Th = 114 ppm

Lead Th = 80 ppm

Zinc Th = 262 ppm

Referring to the plots for the three metals, it is seen that 11 samples out of a total of approximately 370 returned anomalous values in copper. Some of these form a very narrow band, perhaps of the order of 200 feet in width, which extends from Line 550E, 166N to Line 570E, 162N, while the others are scattered throughout the northern half of the grid without forming any distinct pattern. It may be of interest that this narrow band of higher values in copper appears to lie along the northern flank of a wider band of anomalous values in lead and zinc. The geochemical values in zinc are of some interest and provide the only really important zone of anomalous values on any of the three claim groups, MAL, BAR or TENAS. A number of samples over the entire grid returned anomalous values, i. e., above the threshold value of 262 parts per million zinc, and of these the most interesting lie north of the base line and extend from the western boundary of the property, Line 530E, to at least Line 580E, a distance of some 5,000 feet. This zone varies in width from about 200 feet minimum at the western end to at least 800 feet in width at its best development on Line 570E. Within this zone are a number of highly anomalous values, for example, at 540E, 150N (1,800 ppm), 550E, 154N (785 ppm), 570E, 156N to 160N (760, 650, and 635 ppm respectively from 156N to 160N) and on Line 580E at 160N (1,900 ppm). Anomalous values in lead are less abundant on the TENAS

Group than those of zinc but there are a number of values well above the threshold and although these are somewhat erratic, probably due to sampling problems, there is reasonably good coincidence between lead and zinc values in this main anomalous zone. The highest lead value, 870 ppm at 540E, 150N, is ten times threshold value and coincides with a high zinc reading. Similarly on Line 570E, three strongly anomalous values from 156N to 160N coincide with the high zinc value described previously.

This zone of strongly anomalous values in lead and zinc, though erratic, is of interest in that it occurs within phyllitic rocks and shows some coincidence with the zone of Turam conductors of moderate conductivity.

GEOPHYSICS

The geophysical work completed on the TENAS Claim Group in the 1975 field season consisted of a Turam E. M. survey carried out under contract by Peter E. Walcott & Associates of Coquitlam, B. C. The results of this work are provided in a separate report by P. E. Walcott, P. Eng. dated July 1975 to which the reader is referred for more detail.

CONCLUSIONS

From the results of the 1975 work program which has been described in detail above, the following conclusions can be drawn:-

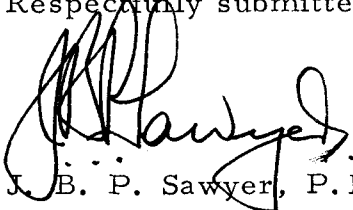
1. The TENAS Claim Group is underlain by a mixed assemblage of phyllites and schists, volcanic, and intrusive rocks. A fairly wide band of phyllites traverses the northern part of the property, south of the batholith.
2. A number of Turam conductors occur on the property which are probably caused by conductive bands within the phyllites. The most interesting feature defined by the E. M. work is a complex conductive band striking across the claim group just north of the base line. The western part of this complex, which is interpreted as having a shallower source, is characterized by two conductors of short strike length on the north side of the main band at Line 570E.
3. Anomalous concentrations of lead and zinc in the soil coincide with this conductive complex with the highest values in both metals occurring over the short strike length conductor.

4. This zone of coincident geochemical and geophysical anomalies, within an area underlain by chloritic phyllites, warrants further investigation.

RECOMMENDATIONS

1. The recommendations for further work on the TENAS Claim Group, by Peter E. Walcott, P.Eng., in his report dated July 1975 should be followed.
2. Additional soil sampling should be carried out as follows:-
 - a) At the alternate 200 foot stations not sampled in the initial program — on Lines 530E to 580E inclusive.
 - b) On the 500 foot lines between those already sampled, from 535E to 575E inclusive.
3. Further field checking, including closer traversing, to attempt to obtain more geological information.

Respectfully submitted,

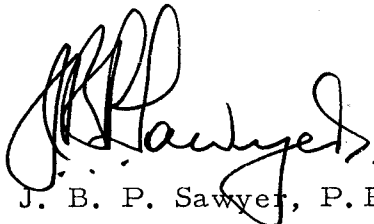


J. B. P. Sawyer, P. Eng.

CERTIFICATE

I, J. B. P. Sawyer, of 3212 Connaught Avenue, North Vancouver, British Columbia DO HEREBY CERTIFY:

- (1) That I am a consulting geologist with a business office at 1 - 425 Howe Street, Vancouver, B.C. V6C 2A9.
- (2) That I am a graduate in geology of Manchester University (B.Sc. - 1953) and of the University of Western Ontario (M.Sc. - 1957).
- (3) That I am a Registered Professional Engineer (geological) in the Association of Professional Engineers of the Province of British Columbia, and have non-resident status with the Association of Professional Engineers of Manitoba, with permission to practice in that Province.
- (4) That I am a Fellow of the Geological Association of Canada (1965) and a Member of the Canadian Institute of Mining and Metallurgy (1960).
- (5) That I have practiced my profession as a geologist for the past twenty-two years.
- (6) That the work programs on the Mal, Bar and Tenas Claim Groups described in the attached reports were under my general supervision.
- (7) That the information, opinions, and recommendations in the attached reports are based on personal knowledge of the properties gained from work in the field in the period May 30th to August 31st, 1975 and on general knowledge of the Anvil Range Lead Zinc District gained over the past nine years.
- (8) That I hold no interest, nor do I expect to receive any interest, in the shares or securities of Boliden Preussag Exploration nor of Welcome North Mines Limited.


 J. B. P. Sawyer, P. Eng.

DATED at Vancouver, British Columbia this 5th day of September, 1975.

7/22/75



BARRINGER RESEARCH Limited

Boliden Preussag Exploration
 c/o J. B. P. Sawyer
 1-425 Howe Street
 Vancouver, British Columbia
 V6C 2A9
 Attention: Mr. J. B. P. Sawyer

304 Carlingview Drive
 Rexdale, Toronto, Canada
 Phone: 677-2491
 Cable: Baresearch

Geochemical
 Laboratory
 Report

DATE
 July 22nd, 1975

REPORT NUMBER 33-A

CORR.

Q.F

SAMPLE NUMBER	HClO ₄		HClO ₄		HClO ₄					
	Cu ppm		Pb ppm		Zn ppm					
530E 110N	6		3		9					
112N	31		12		140					
114N	25		15		92					
116N	16		11		68					
118N	16		3		96					
120N	34		11		86					
122N	59		11		140					
124N	NS		NS		NS					
126N	54		69		220					
128N	46		55		180					
130N	68		29		220					
132N	40		34		145					
134N	40		34		150					
136N	81		14		135					
138N	16		2		9					
140N	21		7		91					
142N	25		25		84					
144N	24		29		190					
146N	21		16		170					
148N	15		15		185					

Texas

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
540E 138N	93	13	220						
140N	13	4	39						
142N	15	14	250						
144N	17	22	140						
146N	44	135	500						
148N	40	18	77						
150N	36	870	1800						
152N	92	42	450						
154N	53	65	300						
156N	27	635	630						
158N	23	28	105						
160N	36	27	190						
162N	21	8	140						
164N	29	14	450						
166N	25	23	130						
168N	6	8	29						
170N	47	10	64						
550E 110N	31	10	195						
112N	29	18	135						
114N	14	14	200						
116N	18	17	155						
118N	25	4	73						
120N	17	6	140						
122N	51	12	390						
124N	14	17	120						
126N	33	17	240						
128N	23	10	570						

News

Sample No.	CORR.		HClO ₄ Zn ppm						
	HClO ₄ Cu ppm	HClO ₄ Pb ppm							
550E 130N	17	2	110						
132N	NS	NS	NS						
134N	NS	NS	NS						
136N	NS	NS	NS						
138N	NS	NS	NS						
140N	65	27	430						
142N	26	45	530						
144N	21	41	220						
146N	28	19	160						
148N	54	20	625						
150N	18	36	180						
152N	29	31	185						
154N	44	22	785						
156N	23	10	400						
158N	6	2	15						
160N	36	18	540						
162N	33	28	530						
164N	35	14	300						
166N	200	29	385						
168N	135	12	150						
170N	50	2	170						
560E 110N	32	19	135						
112N	14	7	150						
114N	18	7	70						
116N	22	6	63						
118N	44	2	120						
120N	28	9	66						

Geochemical Laboratory Report /

33-A

PAGE 5

Tena

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
560E 122N	26	6	190						
124N	21	6	105						
126N	19	2	150						
128N	15	8	410						
130N	43	3	120						
132N	41	9	120						
134N	21	13	115						
136N	25	2	115						
138N	18	8	105						
140N	28	4	82						
142N	50	15	115						
144N	61	23	240						
146N	55	15	230						
148N	58	21	190						
150N	63	21	210						
152N	23	16	240						
154N	46	30	230						
156N	43	15	140						
158N	87	24	200						
160N	71	14	150						
162N	54	14	140						
164N	96	10	89						
166N	295	5	71						
168N	52	12	130						
170N	25	2	150						
570E 110N	32	2	110						
112N	32	14	140						

Texas

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
570E 114N	20	9	65						
116N	26	14	105						
118N	27	8	54						
120N	35	11	135						
122N	33	2	105						
124N	22	10	92						
126N	20	12	76						
128N	34	10	150						
130N	49	8	81						
132N	23	2	84						
134N	145	5	21						
136N	13	8	88						
138N	22	17	110						
140N	20	2	110						
142N	NS	NS	NS						
144N	21	2	120						
146N	43	2	140						
148N	40	19	160						
150N	34	35	240						
152N	24	12	220						
154N	32	19	370						
156N	90	400	760						
158N	48	415	650						
160N	78	295	635						
162N	135	6	170						
164N	150	7	140						
166N	31	7	54						

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
570E 168N	33	4	65						
170N	25	3	79						
580E 110N	29	11	180						
112N	13	11	275						
114N	15	13	200						
116N	35	12	105						
118N	31	6	76						
120N	32	10	115						
122N	18	5	87						
124N	57	4	145						
126N	17	2	110						
128N	70	10	115						
130N	21	2	59						
132N	25	6	110						
134N	14	2	150						
136N	12	7	120						
138N	19	5	81						
140N	25	2	110						
142N	NS	NS	NS						
144N	12	2	44						
146N	18	2	46						
148N	15	2	33						
150N	315	73	220						
152N	49	22	225						
154N	71	22	160						
156N	42	12	190						
158N	18	3	83						

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
580E 160N	57	36	1900						
162N	23	2	77						
164N	86	4	260						
166N	24	5	70						
168N	61	9	110						
170N	28	2	55						
590E 110N	26	6	175						
112N	46	11	300						
114N	17	10	125						
116N	16	12	255						
118N	25	10	265						
120N	23	8	280						
122N	22	2	55						
124N	69	9	38						
126N	25	3	48						
128N	33	2	41						
130N	48	2	17						
132N	77	2	52						
134N	30	2	55						
136N	19	2	17						
138N	27	3	33						
140N	20	3	15						
142N	16	4	22						
144N	19	2	62						
146N	21	13	165						
148N	26	16	200						
150N	30	17	140						

Lucas

Sample No.	CORR.			HClO ₄ Zn ppm					
	HClO ₄ Cu ppm		HClO ₄ Pb ppm						
590E 152N	21		10	165					
154N	31		3	82					
156N	26		2	71					
158N	16		2	23					
160N	24		2	235					
162N	47		7	190					
164N	50		11	185					
166N	24		14	155					
168N	63		13	200					
170N	51		9	115					
600E 110N	18		11	81					
112N	15		5	94					
114N	74		3	76					
116N	27		2	150					
118N	30		2	35					
120N	38		10	345					
122N	54		6	150					
124N	18		4	36					
126N	24		13	41					
128N	33		12	140					
130N	27		13	360					
132N	27		23	410					
134N	12		21	140					
136N	15		3	15					
138N	35		13	230					
140N	18		17	145					
142N	12		8	37					

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
600E 144N	28	10	54						
146N	69	22	150						
148N	34	21	180						
150N	67	26	135						
152N	18	16	140						
154N	12	2	220						
156N	21	8	125						
158N	24	2	30						
160N	8	2	14						
162N	10	2	61						
164N	14	2	50						
166N	17	19	70						
168N	25	26	71						
170N	62	18	250						
610E 110N	21	10	310						
112N	18	17	120						
114N	12	5	35						
116N	16	12	44						
118N	29	13	40						
120N	56	13	34						
122N	36	11	120						
124N	16	16	23						
126N	61	10	22						
128N	21	4	47						
130N	54	14	170						
132N	89	5	250						
134N	41	8	135						

CORR.

Sample No.	HC10 ₄ Cu ppm	HC10 ₄ Pb ppm	HC10 ₄ Zn ppm						
610E 136N	20	10	74						
138N	41	2	110						
140N	42	11	150						
142N	34	9	100						
144N	38	4	110						
146N	22	8	33						
148N	21	3	35						
150N	27	12	61						
152N	46	28	180						
154N	135	32	120						
156N	31	10	130						
158N	34	16	125						
160N	30	9	24						
162N	36	4	82						
164N	41	8	120						
166N	46	10	110						
168N	55	17	120						
170N	21	13	65						
620E 110N	32	9	130						
112N	38	20	110						
114N	47	4	40						
116N	49	16	62						
118N	39	17	72						
120N	22	6	70						
122N	45	17	85						
124N	19	17	67						
126N	49	12	140						

7/2/01

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
620E 128N	57	13	150						
130N	77	10	275						
132N	31	8	150						
134N	52	20	120						
136N	59	21	175						
138N	67	9	200						
140N	94	9	225						
142N	61	10	170						
144N	63	6	160						
146N	64	10	160						
148N	26	6	135						
150N	23	10	120						
152N	20	11	19						
154N	73	7	35						
156N	50	21	135						
158N	130	19	290						
160N	53	16	160						
162N	53	11	140						
164N	43	18	150						
166N	42	9	75						
168N	56	16	150						
170N	39	8	110						
630E 110N	41	6	170						
112N	73	15	250						
114N	49	19	150						
116N	21	18	110						
118N	15	21	78						

Texas

CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
630E 120N	25	11	120						
122N	82	11	82						
124N	41	16	140						
126N	45	4	135						
128N	65	15	125						
130N	42	16	145						
132N	34	17	64						
134N	38	2	80						
136N	52	8	225						
138N	50	3	120						
140N	19	6	15						
142N	72	25	210						
144N	75	24	170						
146N	76	11	160						
148N	38	3	130						
150N	82	13	65						
152N	44	9	50						
154N	38	3	140						
156N	35	5	73						
158N	33	7	25						
160N	57	2	62						
162N	58	6	110						
164N	58	16	140						
166N	69	9	220						
168N	46	9	115						
170N	63	17	130						
640E 116N	48	8	170						

Texas

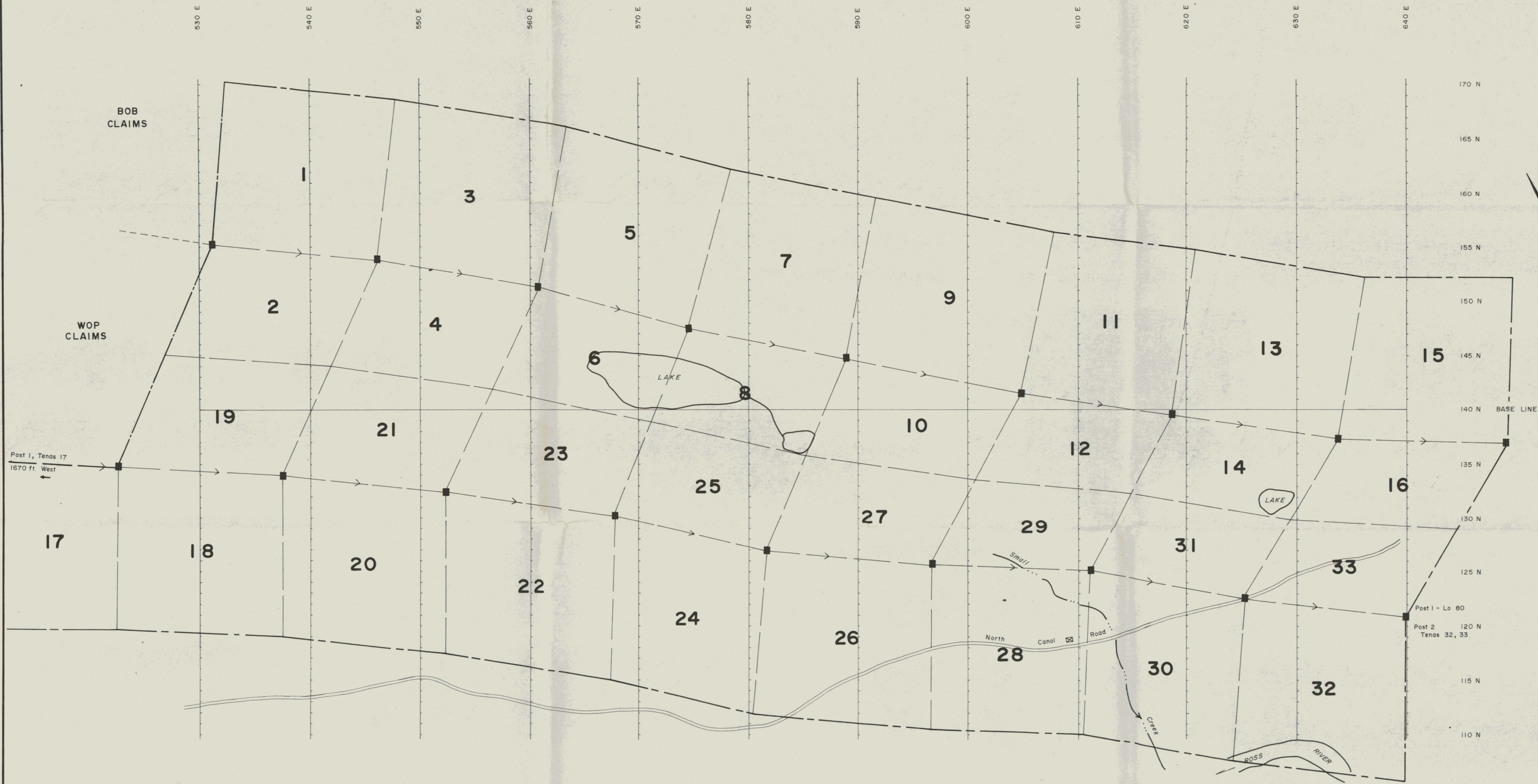
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CORR.

Sample No.	HClO ₄ Cu ppm	HClO ₄ Pb ppm	HClO ₄ Zn ppm						
640E 118N	32	6	110						
120N	27	7	115						
122N	35	2	79						
124N	17	22	145						
126N	19	14	120						
128N	64	16	180						
130N	63	2	110						
132N	33	12	135						
134N	26	9	160						
136N	25	13	250						
140N	26	13	280						
142N	31	2	24						
144N	85	9	37						
146N	180	9	280						
148N	81	2	270						
150N	72	8	120						
152N	195	11	70						
154N	310	7	205						
156N	66	5	51						
138N	31	18	130						
158N	22	8	46						
160N	15	2	43						
162N	34	4	135						
164N	14	8	140						
166N	20	4	110						
168N	19	8	135						
170N	52	10	240						



- LEGEND
- CLAIM POST LOCATION
 - > CLAIM LOCATION LINE
 - - - PROPERTY BOUNDARY

BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

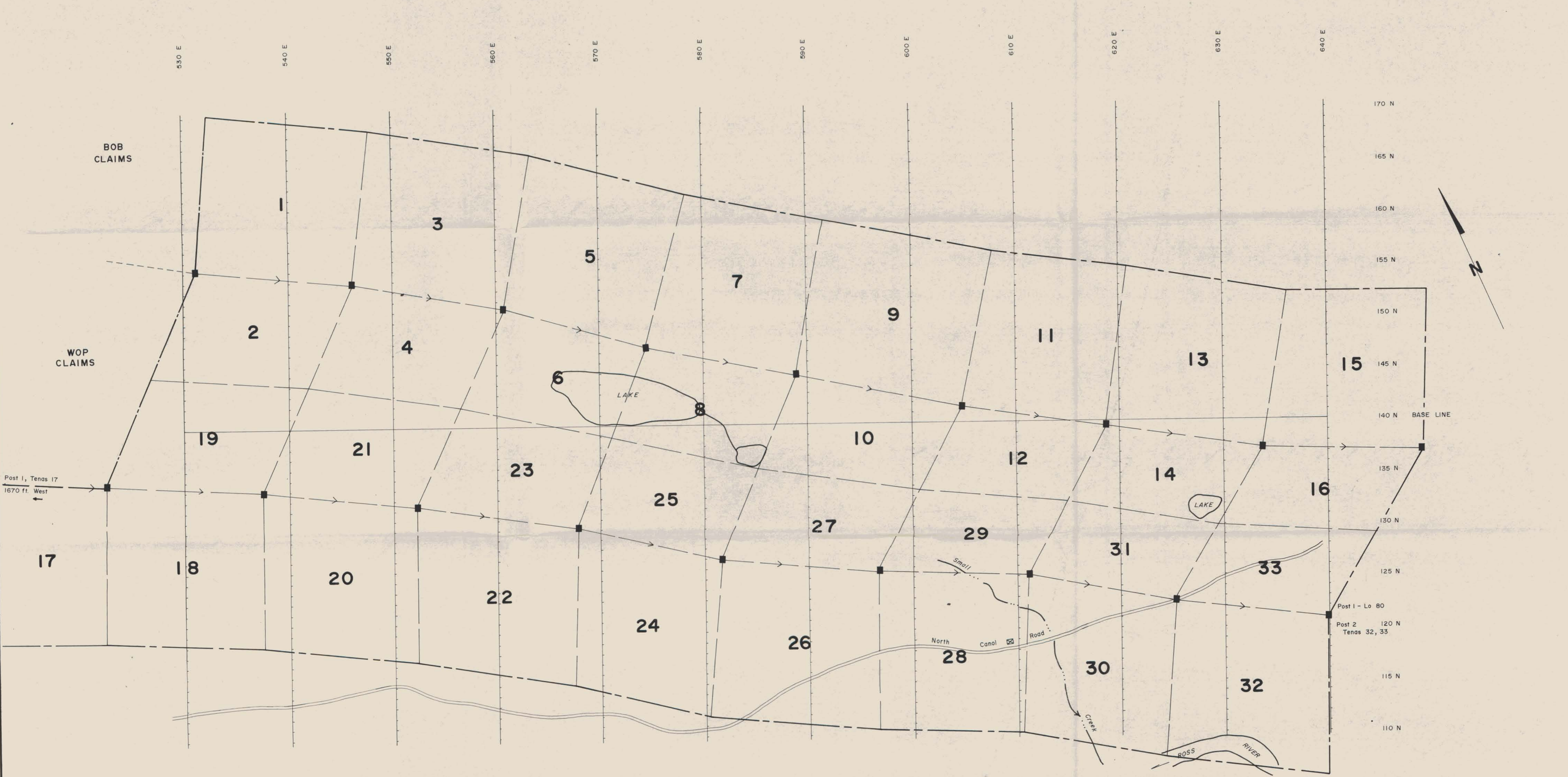
**TENAS CLAIM GROUP
 CLAIMS AND GRID**

Scale: 1 inch = 500 Feet
 500 0 500 1000

DRAWN BY: C. L. C.

TO ACCOMPANY REPORT
 BY J. B. P. SAWYER, P. ENG.,
 DATED Sept. 5th 1975





LEGEND

- CLAIM POST LOCATION
- > CLAIM LOCATION LINE
- - - PROPERTY BOUNDARY

BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

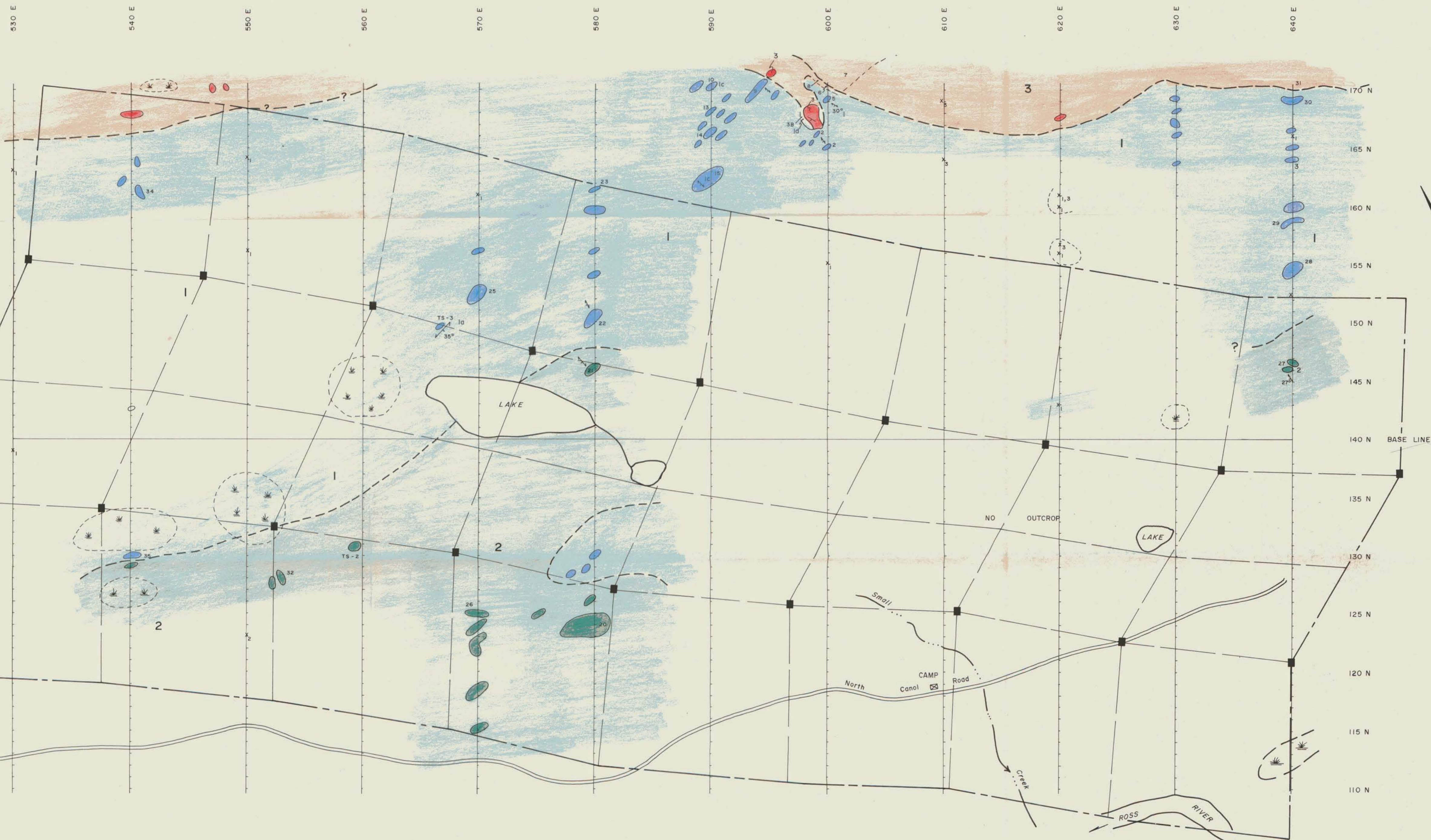
**TENAS CLAIM GROUP
 CLAIMS AND GRID**

Scale: 1 Inch = 500 Feet

DRAWN BY: C. L. C.

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LEGEND

- | | | |
|--|---|--|
| <p>CRETACEOUS or YOUNGER</p> <p>4 Coarse grained granodiorite, occur as dykes cutting phyllite and greenstone units.</p> <p>CRETACEOUS - Anvil Batholith</p> <p>3 Medium to coarse grained granite granodiorite.</p> <p>MISSISSIPPIAN - "Greenstone Unit"</p> <p>2 Dark green, grey green to grey andesitic volcanics generally medium to medium coarse grained, in places foliated; probably includes minor phyllite, or argillite.</p> <p>"Phyllite / Quartz Sericite Schist Unit"</p> <p>1 Grey to grey green phyllite, quartz - sericite schist, quartz sericite - biotite schist and phyllite, in places chloritic - 1a, and/or graphitic - 1b, locally calcareous and/or quartzose, quartzose granuillite - 1c, Minor crystalline limestone - 1d, calcareous argillite.</p> | <p>Geological Boundary, defined, approximate, inferred</p> <p>Bedding, strike and dip</p> <p>Foliation, strike and dip</p> <p>Jointing, strike and dip</p> <p>Fold axis, direction and angle of plunge</p> <p>Fault, defined, assumed</p> <p>Outcrop</p> <p>Float, rock unit 2</p> <p>Area of Discontinuous outcrop and/or boulders in situ</p> <p>Location Number, observation point, sample and/or outcrop number</p> <p>Stream, direction of flow</p> <p>Claim Post</p> <p>Road or trail</p> | |
|--|---|--|

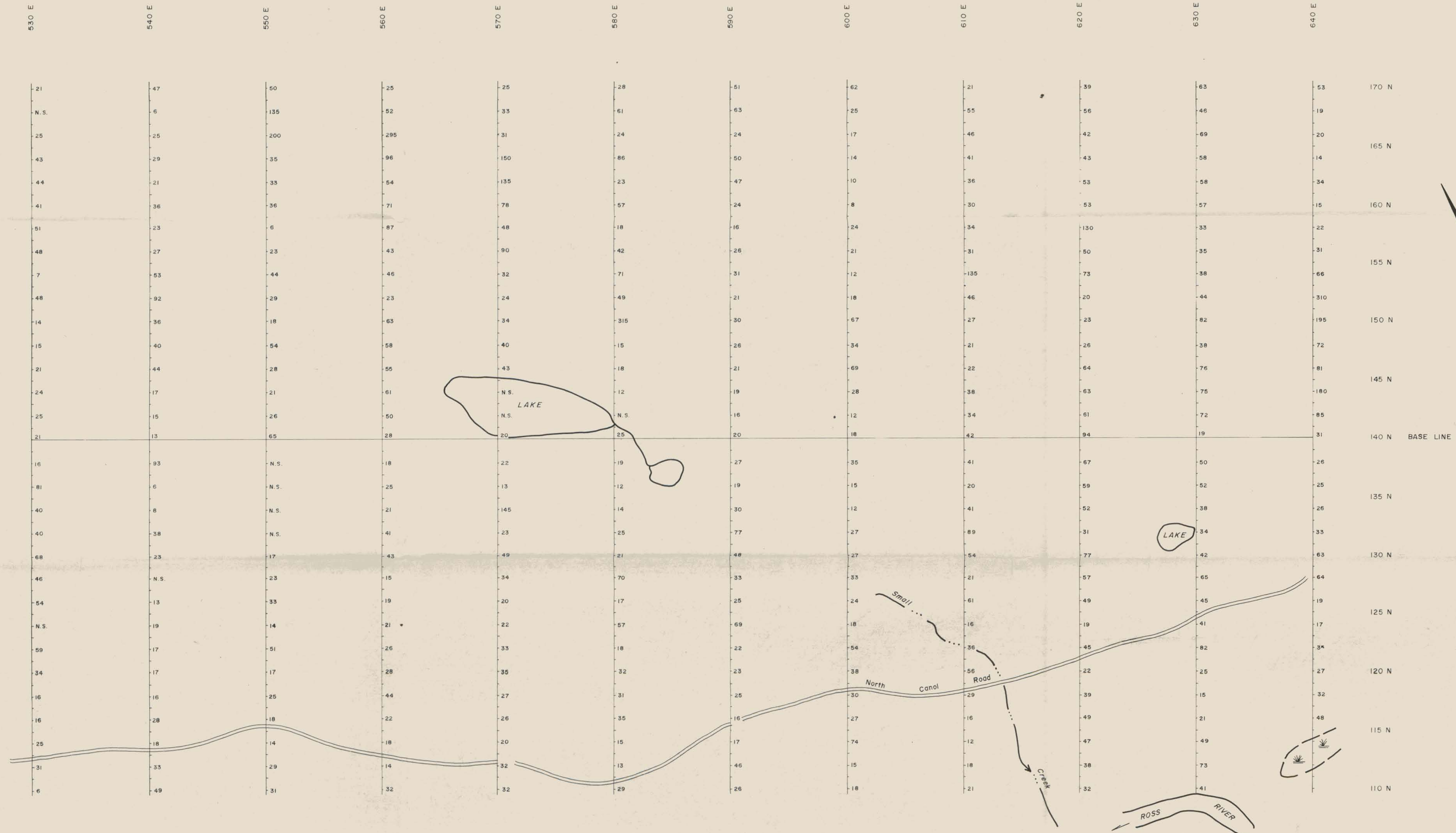
BOLIDEN - PREUSSAG EXPLORATION
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**GEOLOGY
TENAS CLAIM GROUP**

Scale: 1 Inch = 500 Feet

DRAWN BY: C. L. C. DATE: SEPT, 1975

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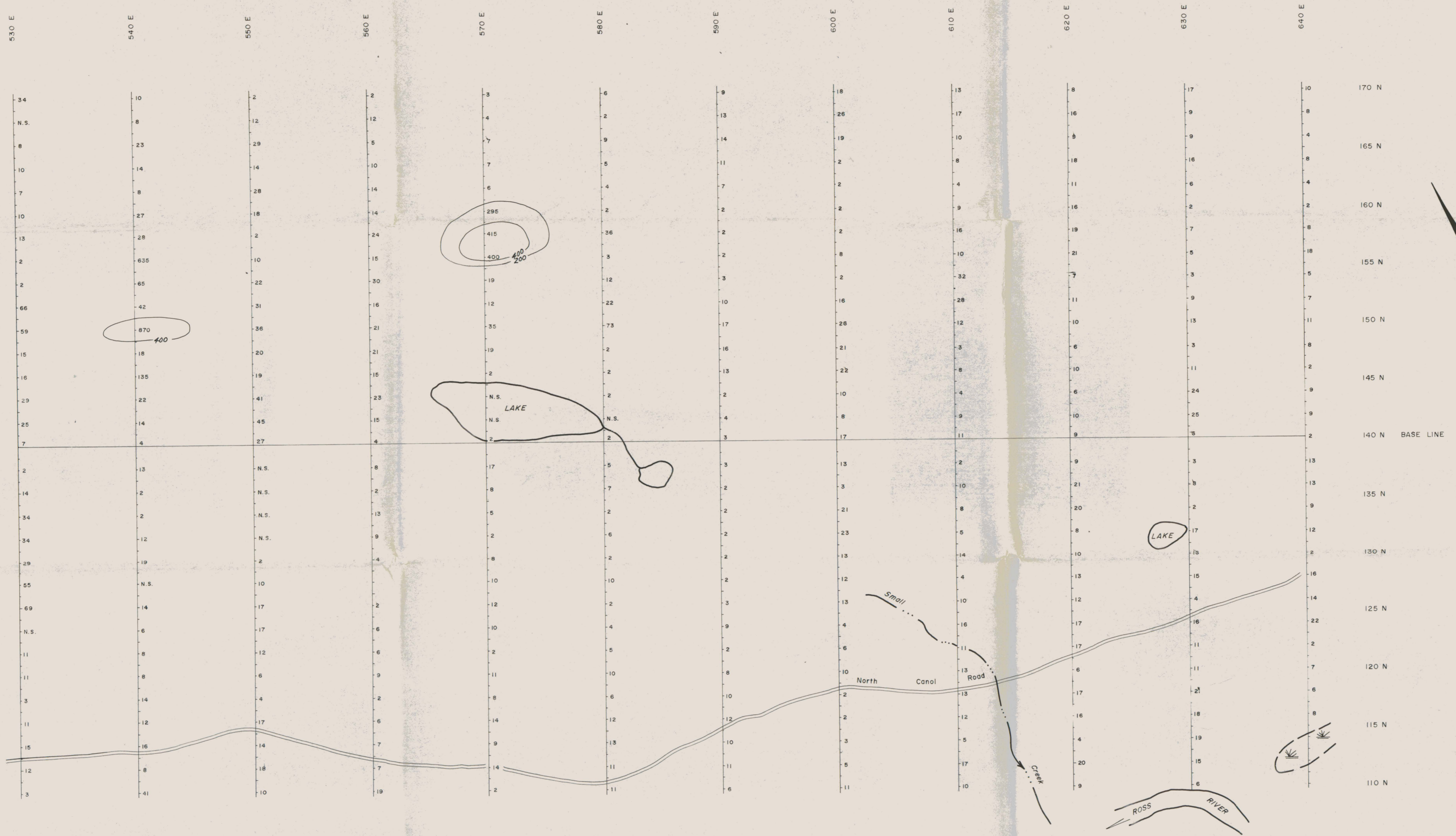


67 = ppm Total Copper
 Calculated Threshold = 114 ppm

BOLIDEN - PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

SOIL SAMPLING PLAN - COPPER
 TENAS CLAIM GROUP

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10 = ppm Total Lead
 Calculated Threshold = 80 ppm

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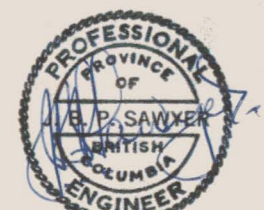
**SOIL SAMPLING PLAN - LEAD
 TENAS CLAIM GROUP**

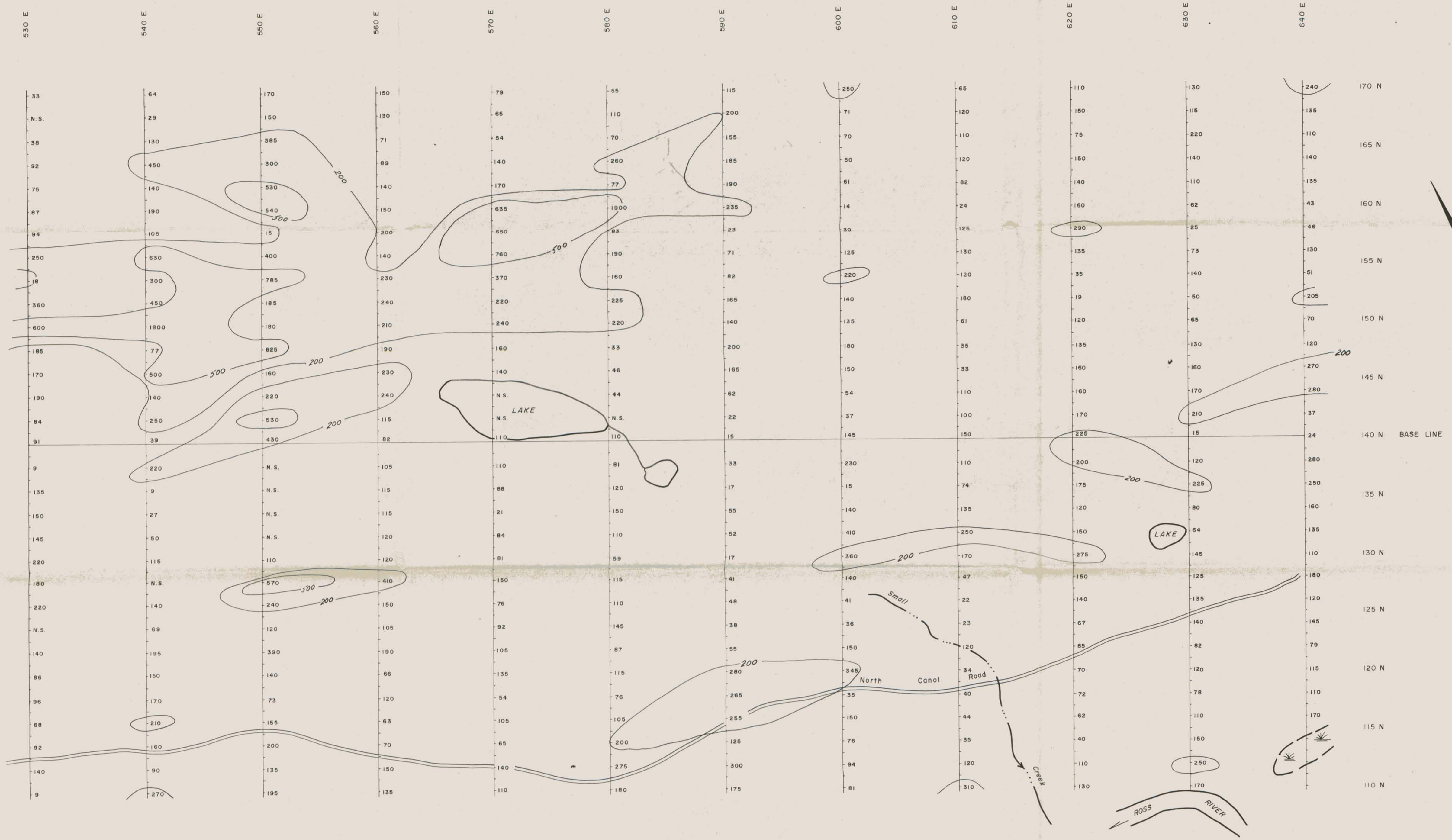
Scale: 1 Inch = 500 Feet
 500 0 500 1000

DRAWN BY: C.L.C.

DATE: JULY, 1975

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120 = ppm Total Zinc
 Calculated Threshold = 262 ppm

BOLIDEN- PREUSSAG EXPLORATION
 WELCOME NORTH MINES LIMITED OPTION
 Ross River Area, Yukon

**SOIL SAMPLING PLAN - ZINC
 TENAS CLAIM GROUP**

Scale: 1 inch = 500 Feet
 DRAWN BY: C. L. C. DATE: JULY, 1975

TO ACCOMPANY REPORT
 BY J.B.P. SAWYER, P. ENG.,
 DATED Sept. 5/1975

