

RACKLA RIVER MINES LTD. (N.P.L.)
A Geochemical Report

on

The Con Group, Kathleen Lake
Claim Sheet No. 106-D-8 Mayo
Lat. $64^{\circ}15'$, Long. $134^{\circ}15'$

A. Allan, P. Eng.

Sept. 1972

WORK June 15 - Aug. 30/72

This report has been examined by the
Geological Evaluation Unit and is recom-
mended to the Commissioner to be consider-
ed as representation work in the amount of

\$ 28,487.48

Resident Geologist or
~~Resident Mining Engineer~~

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

Commissioner of Yukon Territory

CERTIFICATE

I, Andrew Allan, of 6677 Curtis St., Burnaby 2, in the Province of British Columbia, hereby certify that:

- (1) I am a geologist with offices at 6677 Curtis St., Burnaby 2, B.C.
- (2) I am a graduate of the University of British Columbia with a B.A. in geology, 1949.
- (3) I am a member of the Association of Professional Engineers of British Columbia and Manitoba.
- (4) I have no direct or indirect interest in the property or securities of Rackla River Mines Ltd., or its affiliates, nor do I expect to receive any such interest.
- (5) This report is based on personal knowledge of the property, personal examination and supervision of the work during 1972.

Dated at Burnaby, B.C.

September 11th, 1972.



Andrew Allan, P. Eng.

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ILLUSTRATIONS

Location Plan	1" = 3000'
Geological Plan	1" = 750'
General Plan (Geochem)	1" = 400'

Andrew Allan, P. Eng.

September 11th, 1972.

INTRODUCTION:

Work on the Kathleen Lake property commenced on the twenty third of June, 1972 and the camp was closed on the seventeenth of August.

The late start plus a forest fire in the immediate area precluded carrying out all of the recommendations made in an earlier report.

The basic geochemical survey was completed over all the claims. The survey outlined a major anomalous zone in a new area, the dimensions of the zone are approximately 1000' x 3400'. The boundaries of the zone are sharply defined.

A report on the work completed during the 1972 field season is submitted herewith for your information and consideration.

SUMMARY:

All claim lines were chained and stationed at 200' intervals. The claim lines were used as baselines for the subsequent geochemical soil sampling. The basic programme was set-up as a reconnaissance type survey, closer spacing on a 400' x 400' grid was utilized on the geologically favorable areas, i.e. underlain by limestone.

A packsack drill was sent to the property for the sole purpose of sampling, three holes were started but only one could be called successful. Water had to be hauled to the drill sites with a Bombardier. Mechanical problems and subsequent delayed delivery of parts with very high cost stopped this portion of the programme.

In accordance with the Yukon Quartz Mining Act, all

SUMMARY Cnt.:

claim tags were affixed to the proper claim posts. It was found that the Con 41 & 42 mineral claims completely overlapped the prior Bud 17 & 18 mineral claims. As a consequence, the Con group is comprised of 78 claims instead of 80.

CONCLUSIONS:

Examination of the initial mineralized zones on the Dago & Bud claims revealed that the known mineralization is confined to fractures which vary in width from less than an inch to several feet. The fractures are near vertical and have good continuity over a long strike length. No evidence of replacement in the underlying limestone was found.

In addition to the physical fracture pattern, the geochemical anomalies in the above area occur in a definite lineal pattern.

The geochemical anomaly outlined in 1972 covers a broad area extending across the Con 22, 36, 37 and 38 mineral claims. The major portion of the anomaly lies across a ridge of limestone and cannot be attributed to float. The pattern is suggestive of a replacement type source rather than a fracture control type.

The impressive dimensions and the high soil values in lead and zinc within the anomalous zone warrant further work. Overburden in the area is not deep and bulldozer stripping is probably the most effective method to determine the source of the lead-zinc values.

The high cost of obtaining supplies and/or spare parts by helicopter is prohibitive, a bulldozer trail to the lake

CONCLUSIONS Cont.:

would reduce the overall costs to a considerable extent as compared to the present helicopter charges. At present, the bulldozer would have to be on the property before break-up, the current tote road passes a number of swampy areas which would easily bog down a bulldozer during the spring and summer.

RECOMMENDATIONS:

1. Investigate the area of high samples along the Con 23 and 24 claim line.
2. Bulldozer trenching on the Con 36 anomaly.
3. Test drilling if warranted. Water is available near the boundary of Con 18 and 20 claims, one of the few places on the property that water for drilling is readily available.
4. Construct a tote road to the lake landing site.
5. Bulldozing would be effective along the strike of the mineralized zones on the Dago and Bud claims.

Any further work on the property would be dependant on the results of the above programme.

The camp was left in good shape with current accomodation for 6 men in comfort, it should be moved to the old camp site if at all possible. At present the camp is 1500' from the water supply, a decided inconvenience.

PROPERTY:

The property consists of 120 unpatented mineral claims, as follows:

Bud 1 - 24 inclusive

Tag No's Y14384 - Y 14405

PROPERTY Cont.:

Bud 33 - 48 inclusive	Tag No's Y14406 - Y14421.
Dago 3 & 5	Tag No's 803351 & 80353.
Con 1 - 40 inclusive	Tag No's Y57437 - Y57450 Y57701 - Y57726
Con 42 - 80 inclusive	Tag No's Y57729 - Y57766.

The Con claims were located on behalf of the Company in april 1972.

LOCATION & ACCESS

The property is located about 2 miles north from Kathleen Lake in the Mayo M.D., Y.T. and 70 miles northeast from Mayo.

There is a tote road to the property from McQesten Lake a distance of about 45 miles. This road is passable to a Bombardier during the late summer. Heavier tracked equipment would have to be moved in during the winter months.

Fixed wing aircraft can utilize Kathleen Lake on skis or floats. During the past season the property was serviced by helicopter from Mayo.

TOPOGRAPHY:

The area is characterized by rolling hills and some steep canyons along the creeks. The maximum elevation on the property is about 4500' with a relief of about 2000'.

The property is near timber line and has a dense cover of buckbrush, there is a good supply of spruce along the valley south of the camp.

Temperatures range from a high of about 75 deg in the

TOPOGRAPHY Cont.:

summer to minus 60 deg in the winter months. The snowfall is not excessive, ranging from 3 - 5 feet.

GEOLOGY:

The claims are underlain by a series of Paleozoic marine sediments, limestone, dolomite and shale. At the western boundary of the property there is a small intrusive body of diorite. The age of the principal carbonate zone on the property is given as Ordovician or Silurian; G.S.C. paper 62-7.

The limestone - dolomite sequence overlies a shale slate argillite series with an unconformity between the two.

In detail the geology of the claims is quite complex, there are numerous examples of faulting with steep dips together with flat thrust faults often along the bedding planes.

Immediately north of the anomalous zone isoclinal folds were observed in the limestone with a northwesterly axial trend. Prominent faulting was observed in an east-west and northeast direction. Other faults were observed as follows; $170^{\circ} / 70^{\circ} \text{ E}$, $315^{\circ} / \text{vertical}$, $120^{\circ} / 25^{\circ} \text{ S}$. There is a structural discordance between the limestones and shales to the west of the anomaly on Con 36 but whether this is due to an unconformity or to faulting is not clear.

Along the creek north of the camp outcrops were observed of Phyllite with much evidence of movement.

MINERALIZATION:

The principal minerals noted on the property were galena, sphalerite, manganese, siderite and pyrite. Most of the trenches on the Dago and Bud claims were sloughed in, all exhibited leaching and oxidation to a greater or lesser degree.

Where noted in place, the mineralization was associated with calcite filled fractures, however, some float was found which exhibited preferential replacement of fragments in a brecciated dolomite, the fragments were replaced by massive galena. Two specimens of this material were assayed as follows:

5176 D Au. Tr., Ag. 29.7 Oz., Pb. 66.73%, Zn. 2.88%.

5177 D Au. Tr., Ag. 31.7 Oz., Pb. 74.41%, Zn. 1.92%.

The above samples cannot be represented as other than high grade float, mineralization of this nature was not found in place.

Two samples of float material from the Con 18 and 20 claims may be indicative of the geochemical anomaly on Con 36, they assayed as follows:

5179 D Au. Tr., Ag. 7.7 Oz., Pb. 1.92%, Zn. 10.37%.

5181 D Au. --., Ag. 3.1 Oz., Pb. 7.14%, Zn. 0.65%.

The above samples lie north and downhill from the anomalous zone.

A sample of the total core from packsack drill hole 72-1 from 6 - 39 feet was assayed as follows:

5178 D Au. --., Ag. 0.4 Oz., Pb. 0.11%, Zn. 1.28%.

DRILLING:

A sampling programme utilizing a packsack drill was started on the property, principally to obtain samples below the level of the bulldozer trenches. This programme was not

DRILLING Cont.:

completed due to lack of water and a breakdown of mechanical and communications. The cost of continuing would have been prohibitive. Drill hole 72-1 was completed from surface to 39' in one of the main trenches. The hole was collared in high grade oxidized rotten galena, the drill log is as follows:

0-6' casing

6-11 dark brown oxidized material.

11-16 dark grey - grey dolomite breccia with fragments to 1".

16-39 Banded and brecciated dolomite with bands of sphalerite.

Hole mudding behind rods, stuck stopped and pulled out.

72-2 Long cut next west from above.

0-13 casing no bedrock, can't drill any farther.

72-3 0-9 Siliceous Limestone, grey fine grained.

Broke nipple on waterline to drill, no replacement stopped.

GEOCHEMICAL:

Where applicable and in areas of favorable geology soil samples were taken on a 400' x 400' grid, elsewhere the samples were taken along the claim lines and at greater spacing.

The samples were all taken at from 6" to 1' below the surface, all sample locations were flagged in the field and marked for identification in the laboratory.

The samples were analysed for the presence of lead and zinc, in the Whitehorse Assay Office. The results were plotted on the accompanying maps on a scale of 1"=400' and the anomalous zone outlined.

GEOCHEMICAL Cont.:

The anomalous area outlined across the Con 22, 36, 37 and 38 claims shows values in lead and zinc ranging from x5 to x20 background, most of the samples are in the higher category.

The broad nature of the 1972 anomaly is in marked contrast to the various anomalies indicated on the Dago and Bud claims which are mainly linear.

A previous anomaly along the Bud 41 and 43 claim line is due to the presence of syngenetic minerals in the shales, sufficient to cause an anomalous condition but not of any economic importance. Crystals of galena and sphalerite were observed on the bedding plane of a thin 1" shale band.

The geochemical results were not available until after the camp was shut down and the crew returned to Vancouver, there was no opportunity to investigate the anomalous zone in detail.

There are a few spectacular spot highs which are believed to be outwash from existing trenches and/or the presence of float, they are not considered important.

Comment:

The writer cannot stress the importance of an early start too much, it is almost imperative to get started before break-up to accomplish any worthwhile exploration in this area.

A forest fire in the vicinity of Kathleen Lake during the season necessitated evacuation of the camp and a total of 19 days were lost during July. During the fire season it is virtually impossible to obtain any type of aircraft for supplies etc., they are all commandeered by the Dept. of Forestry.

COMMENT Cont.:

The camp facilities were left on the property and there is about 30 drums of diesel fuel on the property and in a cache south of Kathleen Lake, on the tote road.

COST ESTIMATE:

The estimated cost of fulfilling the recommendations contained herein is as follows;

1. Bulldozing trenches.....	\$ 35,000.00
2. Camp & supplies.....	\$ 6,000.00
3. Road to Lake.....	\$ 2,500.00
4. Sampling & Assaying trenches.....	\$ 1,500.00
5. Supervision.....	<u>\$ 5,000.00</u>

Total	\$ 50,000.00
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Contingency 10%	<u>\$ 5,000.00</u>
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Say	\$ 55,000.00,
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Respectfully submitted,



A. Allan, P. Eng.

CREST LABORATORIES (B.C.) LTD.

1068 HOMER STREET
VANCOUVER 3, B.C.
PHONE 688-8586

CERTIFICATE OF ASSAY

TO Rockla River Mines Ltd.
605 - 535 Tharlow Street,
Vancouver, B.C.

August 29, 1972

Lab 4122

I hereby certify THAT THE FOLLOWING ARE THE RESULTS OF ASSAYS MADE BY US UPON THE HEREIN DESCRIBED SAMPLES.

MARKED	GOLD		SILVER	COPPER	LEAD	ZINC	SPECTRO					
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
5176 D	Trace	----	29.7	----	66.73	2.38	----	Float	Dago & Bud Claims			
5177 D	Trace	----	31.7	----	74.41	1.92	----	"	"	"	"	
5178 D	Trace	----	0.4	----	0.11	1.28		Core	Packsack 72-1	6-39'		
5179 D	Trace	----	7.7	0.01	1.92	10.37		Float	Con 18&20			
5180 D	----	----	----	----	----	----	TO FOLLOW					
5181 D	----	----	3.1	0.15	7.14	0.65	----	Float	Con 18&20			

NOTE:

Rejects Retained One Month
Pulps Retained Three Months
Unless Otherwise Arranged.

Gold calculated at \$ per ounce

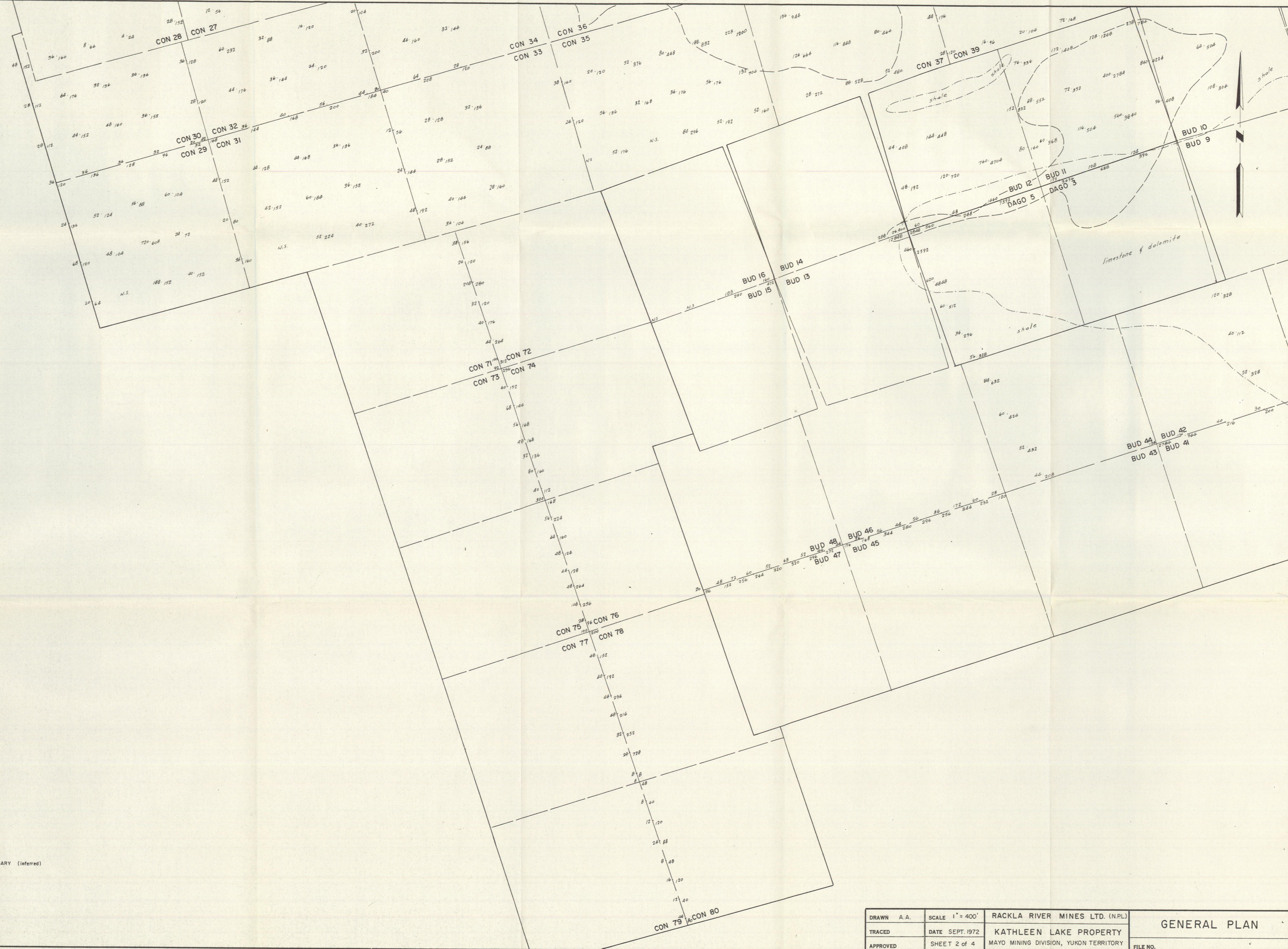

Registered Assayer; Province of British Columbia



LEGEND

- L.S. LIMESTONE
- SH. SHALE
- STRIKE & DIP
- GOSSAN
- FAULTS
- THRUST FAULT
- TRENCHES
- GEOCHEM ANOMALY
- BRECCIATION
- GEOLOGICAL BOUNDARY

DRAWN A. A.	SCALE 1" = 750'	RACKLA RIVER MINES LTD. (NPL)	GEOLOGICAL PLAN
TRACED	DATE SEPT. 1972	KATHLEEN LAKE PROPERTY	
APPROVED		MAYO MINING DIVISION, YUKON TERRITORY	
			FILE NO.



LEGEND

- Pb Zn ppm
- 45 204
- (Pb-Zn) ANOMALY
- GEOLOGICAL BOUNDARY (inferred)

DRAWN A.A.	SCALE 1" = 400'	RACKLA RIVER MINES LTD. (N.P.L.)	GENERAL PLAN
TRACED	DATE SEPT. 1972	KATHLEEN LAKE PROPERTY	
APPROVED	SHEET 2 of 4	MAYO MINING DIVISION, YUKON TERRITORY	
			FILE NO.



DRAWN A. A.	SCALE 1" = 400'	RACKLA RIVER MINES LTD. (NPL)	GENERAL PLAN
TRACED	DATE SEPT. 1972	KATHLEEN LAKE PROPERTY	
APPROVED	SHEET 1 of 4	MAYO MINING DIVISION, YUKON TERRITORY	
			FILE NO.

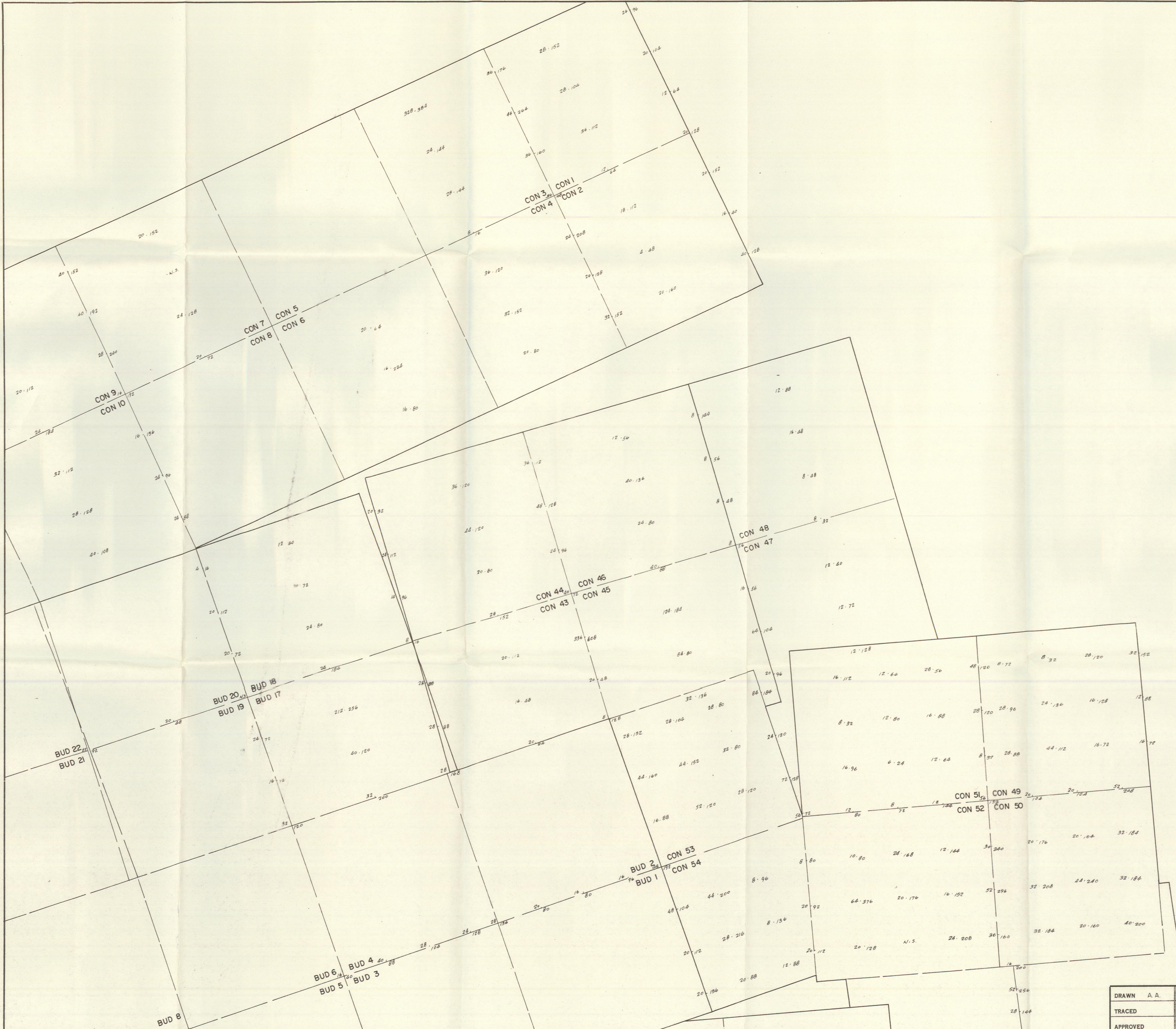


LEGEND

- Pb - Zn ppm
- 45 204
- (Pb-Zn) ANOMALY
- GEOLOGICAL BOUNDARY (inferred)



DRAWN	A. A.	SCALE	1" = 400'	RACKLA RIVER MINES LTD. (N.P.L.)
TRACED		DATE	SEPT. 1972	KATHLEEN LAKE PROPERTY
APPROVED		SHEET	4 of 4	MAYO MINING DIVISION, YUKON TERRITORY
				GENERAL PLAN
				FILE NO.



DRAWN	A. A.	SCALE	1" = 400'	RACKLA RIVER MINES LTD. (N.P.L.)	
TRACED		DATE	SEPT. 1972	KATHLEEN LAKE PROPERTY	
APPROVED		SHEET	3 of 4	MAYO MINING DIVISION, YUKON TERRITORY	FILE NO.

GENERAL PLAN