

APPLICATION FOR NORTHERN MINERAL
ASSISTANCE GRANT

PLATA MINERAL CLAIM GROUP

Mayo Mining District
Yukon Territory

Period - August 18, 1972 - March 31, 1973

Latitude: 63°35'N.
Longitude: 132°05'W

N.T.S. 105-N-9

By:

J. S. BROCK

DYNASTY EXPLORATIONS LIMITED

August 31, 1972

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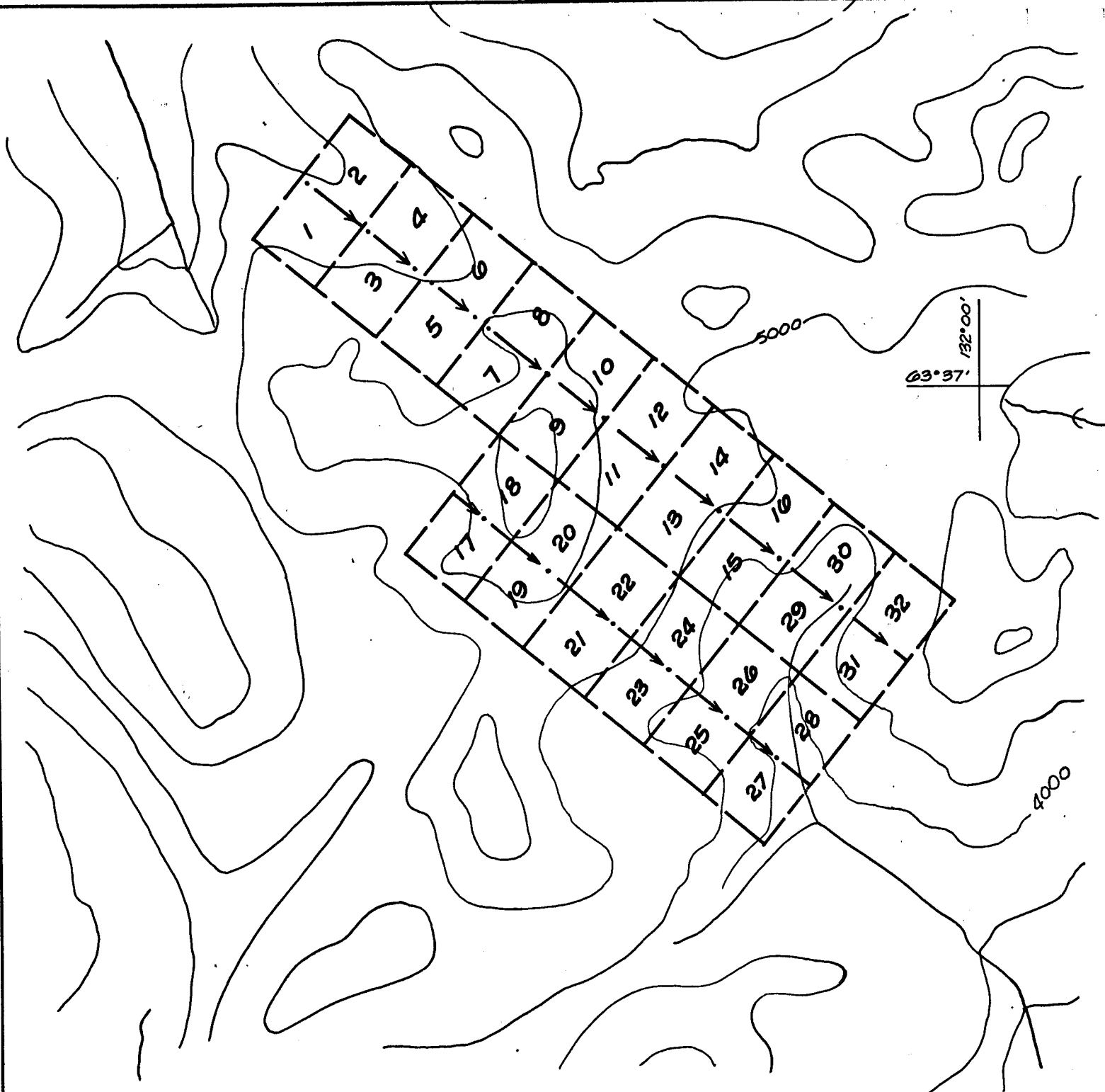
Appendix 1 - Geology - Plata Mineral Claims

Appendix 2 - Surface Geology - Plata Mineral Claims
Showing No. 4

LIST OF CLAIMS

<u>CLAIMS</u>	<u>DATE STAKED</u>	<u>DATE RECORDED</u>	<u>GRANT NUMBER</u>
PLATA 1-8	August 18, 1972	September 8, 1972	Y68588-Y68595
9-12	August 18, 1972	September 8, 1972	Y68596-Y68599
13-16	August 19, 1972	September 8, 1972	Y68600-Y68603
17-24	August 23, 1972	September 8, 1972	Y68604-Y68611
25-32	August 21, 1972	September 5, 1972	Y68580-Y68587

All of the foregoing claims are owned by Dynasty Explorations Limited and are subject to a 20% carried interest in favour of Atlas Explorations Limited, 300- 355 Burrard St., Vancouver, B.C.



KEY MAP OF
PLATA M.C. GROUP
105 N-9
MAYO MINING
DIVISION

SCALE: 1" = 1/2 MILE

DYNASTY EXPLORATIONS LIMITED

330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B. C.

APPLICATION FOR NORTHERN MINERAL ASSISTANCE GRANT

GEOLOGICAL REPORT PLATA MINERAL CLAIMS

INTRODUCTION

The 'Plata Area' first received attention as a result of a regional geochemical silt sampling program conducted by Atlas Explorations throughout the Hess Mountains area in 1968 and 1969.

Four galena vein occurrences were uncovered by follow-up prospecting of an area of stream sediment samples anomalous in lead. In July, 1969, the Greg Mineral Claims were staked and a program of hand trenching was subsequently recommended to further expose known mineral occurrences.

Recommended exploration was not carried out and the Greg claims were allowed to lapse on August 7th, 1970.

The showings were subsequently re-evaluated and further detailed prospecting proved the area to be of merit. In August, 1972, the Plata Mineral Claim Group was staked over the original Greg showing and a program of geologic evaluation commenced.

High-grade silver-lead-gold values, found over economic mining widths plus the discovery of several new silver-lead-gold occurrences has led to initiation of a major exploration program.

Diamond drilling, hand trenching and geochemical surveys on the Plata Group are scheduled for the month of September, 1972.

LOCATION AND ACCESS

The claim group lies in the Hess Mountain, between the Rogue and Hess River, 24 miles east of Swan Lake. The claims are found on the eastern flank of a mountain four miles due east of Mt. Aho, Peak 6866. This claim group is in a remote area and is virtually inaccessible except by helicopter. The nearest lake suitable for float-equipped aircraft - Narrow Lake - is 12 miles to the south. All but eight of the claims lie above tree line. Ross River, 110 miles to the south, is the nearest settlement.

GENERAL GEOLOGY

Rocks in the area belong to three major sequences:

- (a) Mississippian-Devonian sequence (dominant)
- (b) Proterozoic(?) rocks (older)
- (c) Tertiary intrusive rocks.

Bedding in the vicinity of the claim group is generally east-west or slightly northwesterly-southeasterly and dips are usually moderate ($45-70^{\circ}$) to the south. A buff weathering limy unit in the northeast corner of the map area dips to the north. Graded bedding was found in two different limy quartzite beds and these beds had not been overturned.

TABLE OF FORMATIONS

CENOZOIC

Tertiary	15	<u>Granitic Intrusives</u> : quartz muscovite porphyry "aplite"
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MESOZOIC

Mississippian	11a	Quartz and interbedded grey slate
	10a	Graphitic argillite, slate and cherty carbonaceous or pyritic argillite
	10b	Limestone, limy argillites and quartzites, dolomite

PRECAMBRIAN

Proterozoic	3a	Red, green and grey slate, with minor quartzite and limestone
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GEOLOGY OF CLAIM GROUP AREA

Outcrop is plentiful as most of the area is above tree line. However, there is much talus on the sidehills and in the vicinity of the showings most of the outcrops are buried.

The Tertiary intrusives consist of one quartz-muscovite porphyry or "aplite" dyke which cuts through black slates and cherts in the north-central parts of the map area. This dyke is generally poorly exposed and varies in width from about 5 to 30 ft. It can be followed for one-half to three-quarters of a mile.

The Mississippian sequence contains four separate map units, black slates, black cherts and argillites, grey weathering, black quartzites and both grey and buff weathering limestones and limy quartzites.

The black slates are the dominant rocks in the area. They are quite fissile and weather from grey to black. They often contain cherty interbands. In several places, small lenses (up to 3 ft.) of black fine grained crystalline limestone can be found within the slates.

The black cherts and argillites are found in three major bands, passing through the area. The cherts are bedded and both rocks normally weather a shiny grey to black.

Grey to buff weathering fine grained black quartzites form mappable units in three areas. The size of the quartz grains can range up to 2 mm. diameter.

Buff weathering limestones and limy quartzites are found in the northeast corner of the map area. Quartz grains up to 3 mm. diameter are found in the limy quartzites, some of

which are graded. These rocks dip oppositely to all other rocks in the map area. A fault contact with the rocks to the south has been inferred as it does not appear that the rocks could be the limb of a fold. One fine grained black crystalline limestone band is found in the central portions of the map area. This band appears to pinch-out to the east. Another similar limestone is found at the south end of the map area. The extent of this band is not known. Portions of this band are fetid, while at other localities graded limy quartzites are interbedded with black crystalline limestone.

The most prominent map unit is the red slate unit which is found in the central part of the map area. This unit probably cuts across the entire map area, but continuous exposure could not be found. Layers of green slate are present in the red slates and these layers may represent original colour. Numerous small and large lenses of light reddish grey fine grained quartzites are found in the red slates. The slates are usually contorted around these lenses which range in size from inches to several hundred feet in length. They are generally fairly narrow. This unit is probably Proterozoic in age, and folding has been inferred to explain its presence between Mississippian rocks.

STRUCTURAL GEOLOGY

When viewed on cliff faces, bedding is somewhat undulatory and no large scale folding could be seen. Small scale folding was seen in two places. On the ridge east of showing #4 the black slates have been tightly folded and faulted over a distance of about 500 ft. The slates appear to have been squeezed together by directed forces from either the south or the north. On the ridge one-half mile north of showing #1, the black cherts outcropping on the ridge top have been folded in various directions but this is of little extent.

In the vicinity of showing #2, the black cherts and argillites appear to be in fault contact with the red and green slates. The extent of this fault is not known. The black cherts and argillites in the northeast are in fault contact (?) with the buff weathering limestones and limy quartzites to the north. Large scale folding has been inferred to explain age relationships.

ECONOMIC GEOLOGY

Mineralization at the Plata Group is vein-type. The most interesting, from an economic point of view, are the Pb-Ag veins. Only minor copper mineralization was seen on the property.

A detailed description of each of the showings is given below:

Showing #1

Discovered by R. Etzel while prospecting a creek containing galena float. Massive galena and minor sphalerite was found in a dark, dirty and deeply weathered rock containing much limonite. No mineralized rock could be found in place but the talus overlay a finely crystalline limestone bed about 30 ft. thick and was in turn overlain by the red slates. The showing was about 30 ft. long and 10-15 ft. wide. Two assays indicated 9.45% lead and 8.76 oz Ag/ton, and 36.92% lead, 35.6 oz Ag/ton and 1.54% zinc.

Showing #2

Discovered by M. Ladue while soil soil sampling and prospecting. The host rock is similar to showing #1 with minor galena and sphalerite. The showing again overlies a limestone bed which appears to be in fault contact with the red and green slates. Black cherts overlies the showing. This showing is

somewhat larger than showing #1. Grab sample assays have indicated:

	Au. oz/ton	Ag. oz/ton	Pb.	Zn.	Cu.
Showing #2 - Sample 5	Tr.	1.2	1.35	4.20	.01
Sample 6	.01	53.40	52.2	2.04	.02

This showing has not been adequately studied or prospected.

Showing #3

Discovered by R. Etzel while prospecting along the main anomalous creek. He found several fist-sized pieces of pure galena in the creek before uncovering a vein of massive galena and minor sphalerite. The vein is at least three ft. long and from four to twelve inches thick. Any further extensions of the vein are buried in talus. The vein lies in a shear zone at the edge of a light reddish weathering quartzite lens (200 by 50 ft.) in red slates. The vein itself has been sheared as the galena is layered. Small blebs and eyes of tetrahedrite are found along the shear planes in the galena. Minor quartzite and malachite stain can be found around the vein. Two assays indicated 87.15% lead, 0.41% zinc, 0.18% copper and 90.2 oz Ag/ton, and 70.20% lead, 0.72% copper and 205.9 oz Ag/ton.

Showing #4

Showing #4 is the only mineral occurrence found below tree line and has the greatest exposure of all other known occurrences in the area. The mineralization found to date appears to be localized on the south flank of an anticlinal structure whose core consists of impure rusty to dolomitic quartzite, dolomite, red and green slates and minor dark grey limestone; its flanks being overlain by cherts, slates and also sections of the above rocks. The anticline contains a quartz porphyry sill, is intruded along its north flank by two granitic stocks of the Mackenzie arc, is cut by steeply dipping N30°W faults with

right lateral movement, is cut by NE linears (probably faults), shows some axial plane faulting (90-110°) and minor N-S quartz-carbonate veining. It is not yet known which of these fracture sets localize mineralization since none of the float localities has been opened up by trenching.

Showing #4 has been traced by mineralized outcrops and float occurrences over a strike length in excess of 700 ft. True widths are from 5 to 18 feet where exposed.

Grab samples taken to date from various random exposures along the strike length of the vein have given the following assays:

<u>Sample No.</u>	<u>Au.</u> oz/ton	<u>Ag.</u> oz/ton	<u>Pb.</u>	<u>Zn.</u>	<u>Cu.</u>
AH-1	Tr	.86	-	-	.02
AH-2	.02	18.0	-	-	-
AH-3	.02	326.2	73.2	-	-
AH-4	.005	.38	-	-	-
AH-5	-	97.7	83.6	-	-
AH-6	-	68.7	63.7	-	-
AH-7	-	5.8	9.8	27.2	-
AH-8	.54	147.3	11.2	-	-
AH-9	.18	15.9	10.2	-	-
AH-10	.21	52.5	1.50	-	-
AH-11	.22	40.2	3.10	-	-
AH-12	.17	17.52	24.1	-	-
AH-13	.61	105.0	-	-	-
AH-14	.16	58.5	14.8	.34	.17
AH-15	.22	201.7	20.2	-	-
AH-16	.24	7.64	1.25	-	-
AH-17	.14	11.5	1.90	2.28	-

Showing #5

Discovered by G. Sanford while geological mapping. The showing consists of bornite, covellite and malachite in quartz veins in a quartzite lens within the red slates. This showing has no economic significance. An assay showed 28.5% copper and 4.26 oz Ag/ton.

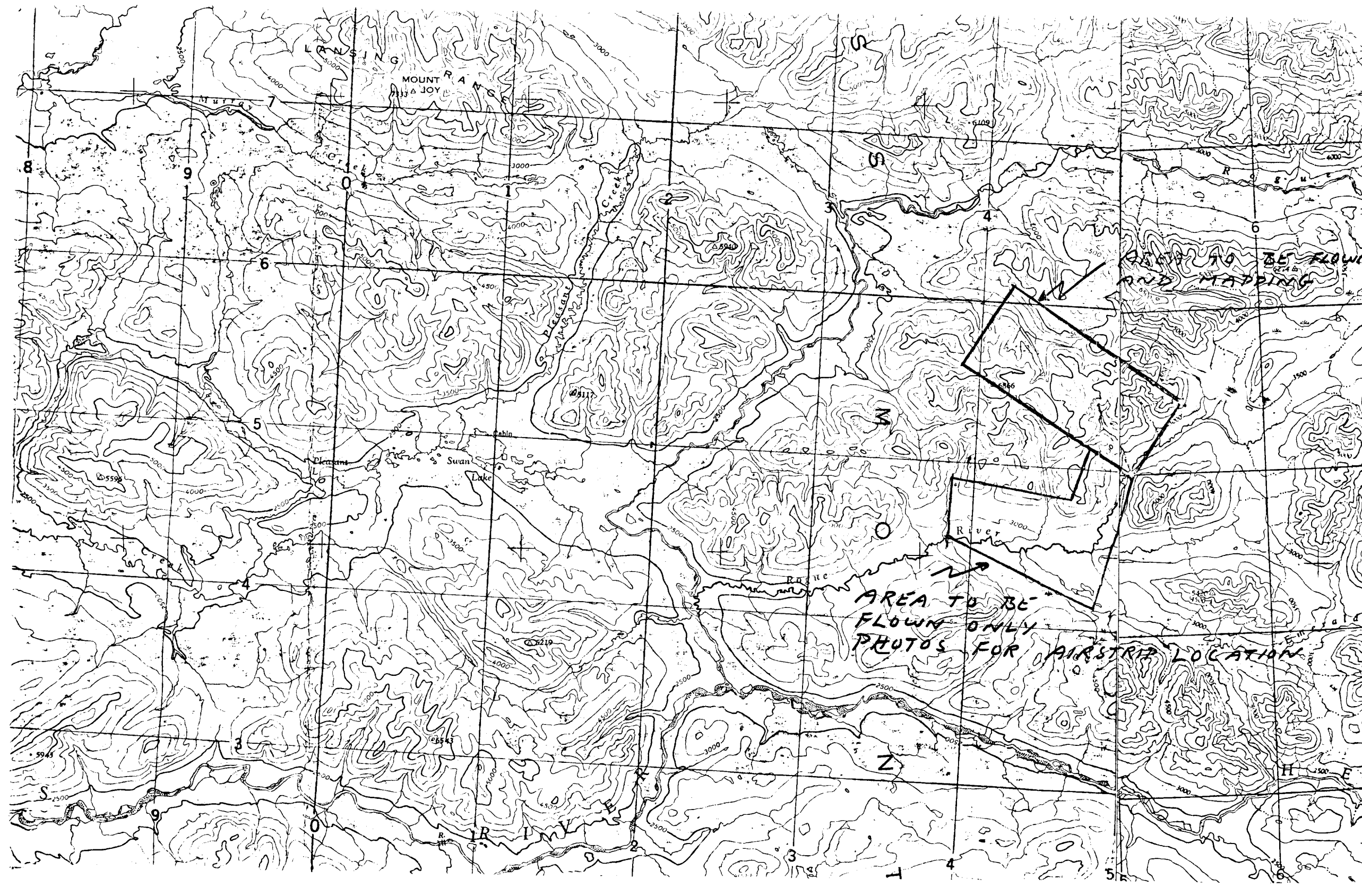
Showing #6

Galena in vein quartz float was found on the sidehill two miles north of showing #1 and also on the sidehill 1½ miles northeast of the same showing. No prospecting has been done in these areas, however, the following assays of grab samples have indicated:

	<u>Au.</u> <u>oz/ton</u>	<u>Ag.</u> <u>oz/ton</u>	<u>Pb.</u>	<u>Zn.</u>	<u>Cu.</u>
Showing #6	-	94.02	85.1	.02	.04
	.02	681.86	71.8	3.23	.14
	.01	11.44	15.8	3.36	.16
	TR.	1.56	.31	.44	.15
	.01	115.71	4.40	3.30	.75

CONCLUSIONS

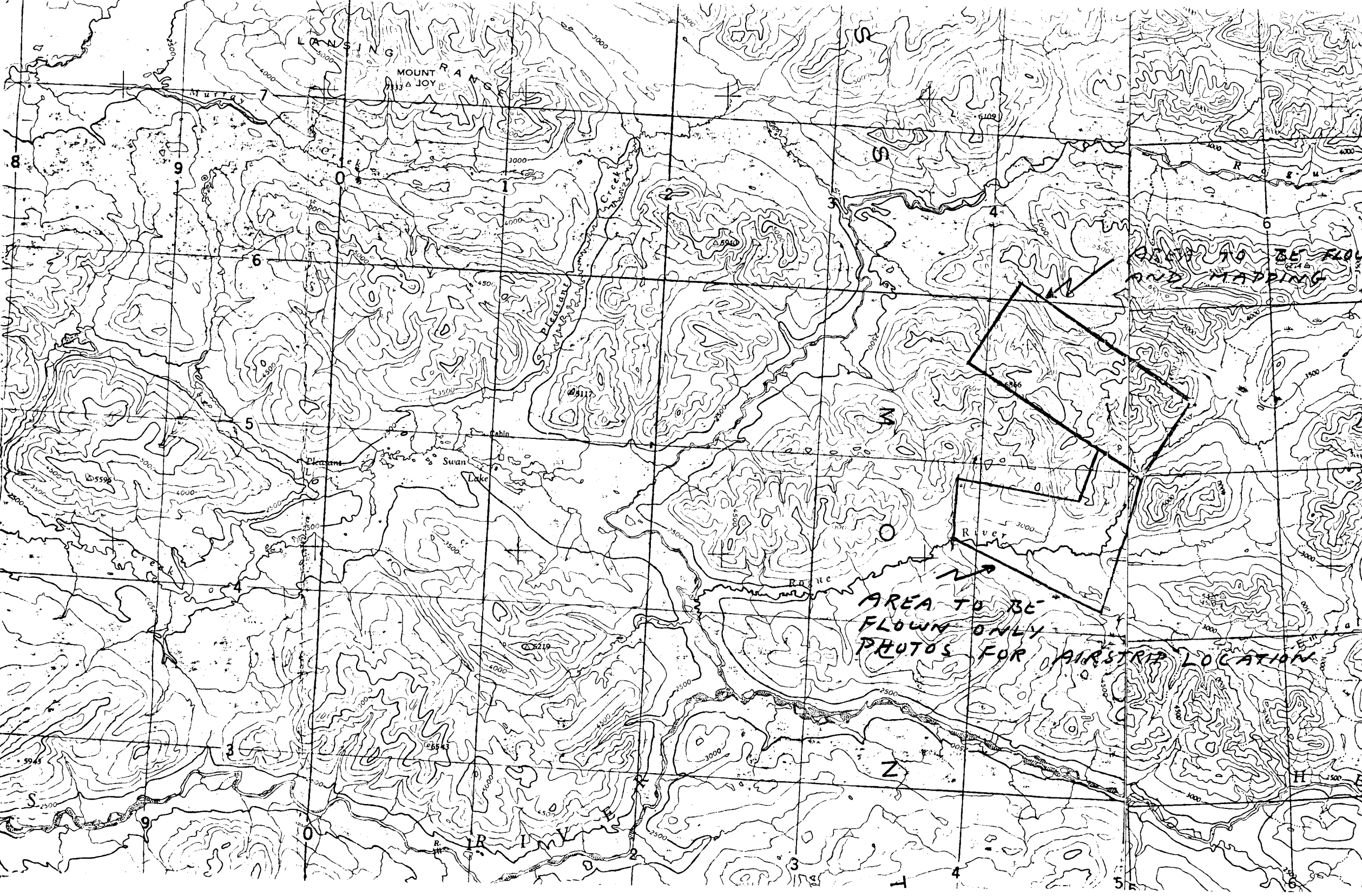
- (1) The discovery of the mineralization which resulted in the staking of the Plata Group was a direct consequence of a regional silt sampling program.
- (2) The Plata area is more highly mineralized and higher in silver than indicated by previous work, and it appears to be a mineral district rather than a few related veins.
- (3) The geologic setting and silver content are analogous in many ways with the Keno Hill district which lies along the same regional arc.
- (4) The abundance of mineralization and the geologic setting suggest good economic possibilities for high grade veins in brittle rocks or replacements in limy sections.
- (5) The main showing and other localities could prove much more promising when opened up by trenching and down dip extensions tested by diamond drilling.



LANSING MOUNT RANGS
MOUNT JOY

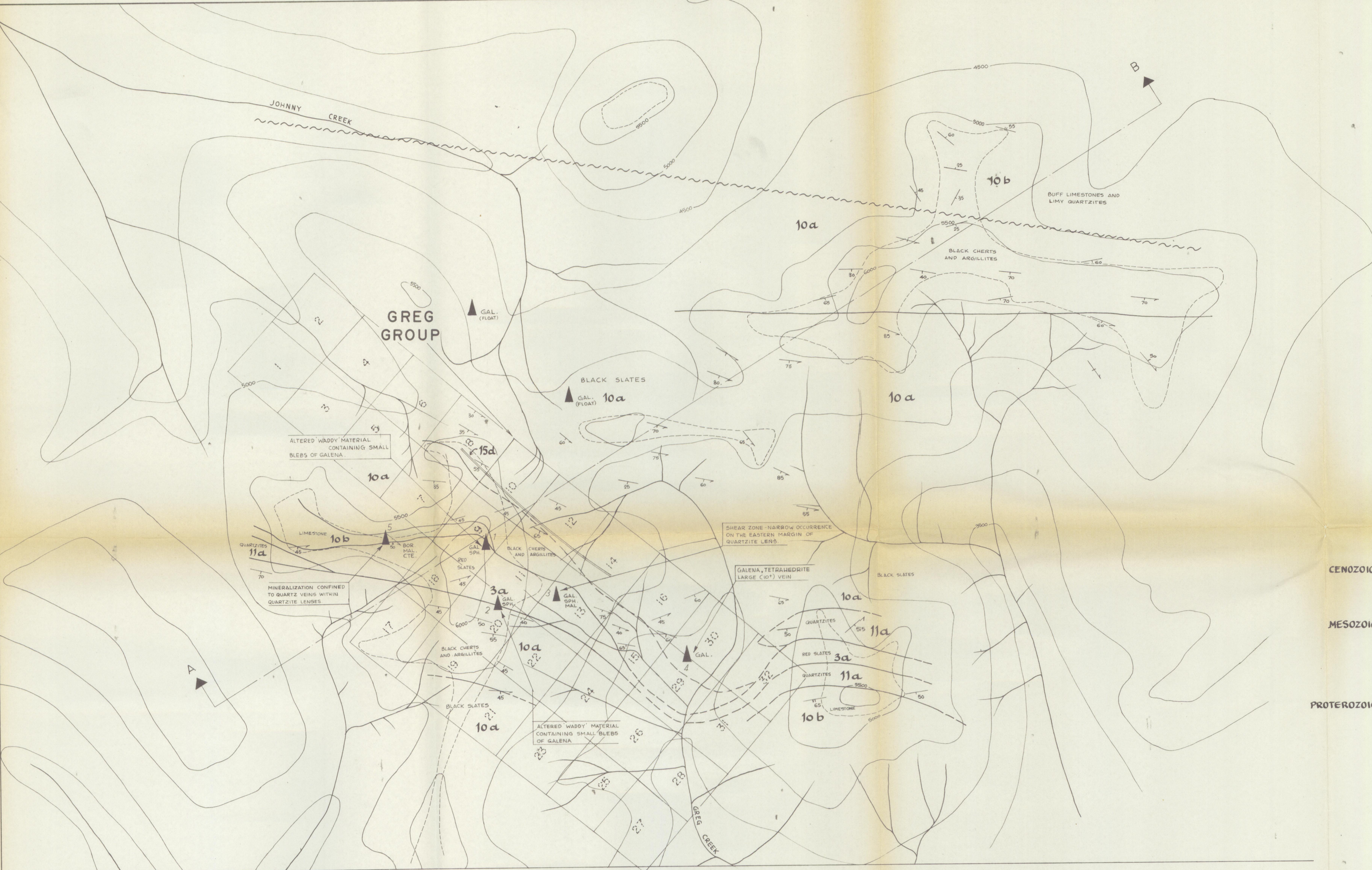
AREA TO BE FLOWN
AND MAPPING

AREA TO BE
FLOWN ONLY
PHOTOS FOR AIRSTRIP LOCATION





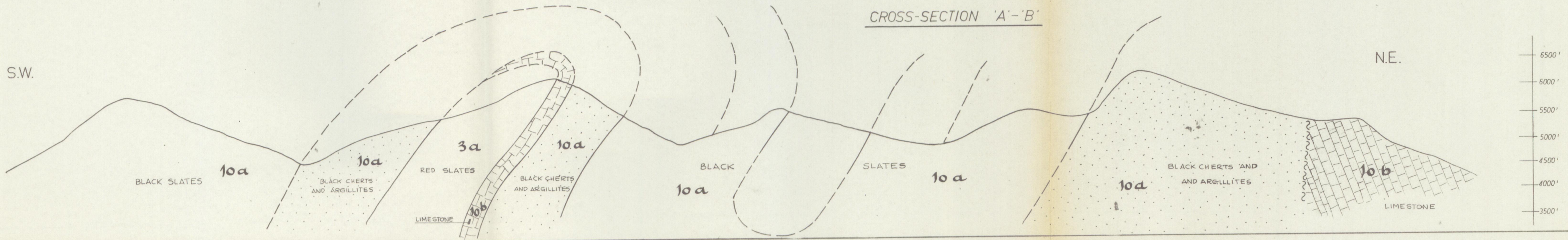
WINTER ROAD LOCATION
North Canol Road to Plata Camp
Scale 1 inch to 4 miles



- SYMBOLS**
- OUTCROP AREA
 - GEOLOGICAL CONTACT; OBSERVED, INFERRED
 - BEDDING; TOPS UNKNOWN, KNOWN
 - DIKE
 - FAULT
 - SLATY CLEAVAGE
 - MINERAL OCCURRENCE

- LEGEND**
- | | | | |
|-------------|-------------------|-----|--|
| CENOZOIC | TERTIARY | 15d | QUARTZ MUSCOVITE PORPHYRY; "APLITE" |
| | | 11a | QUARTZITE-INTERBEDDED-GREY SLATE |
| MESOZOIC | MISSISSIPPIAN (?) | 10a | GRAPHITIC ARGILLITE, SLATE AND CHERTY CARBONACEOUS OR PYRITIC ARGILLITE. |
| | | 10b | LIMESTONE, LIMY ARGILLITES AND QUARTZITES, DOLOMITE. |
| PROTEROZOIC | | 3a | RED, GREEN AND GREY SLATE, MINOR QUARTZITE AND LIMESTONE. |

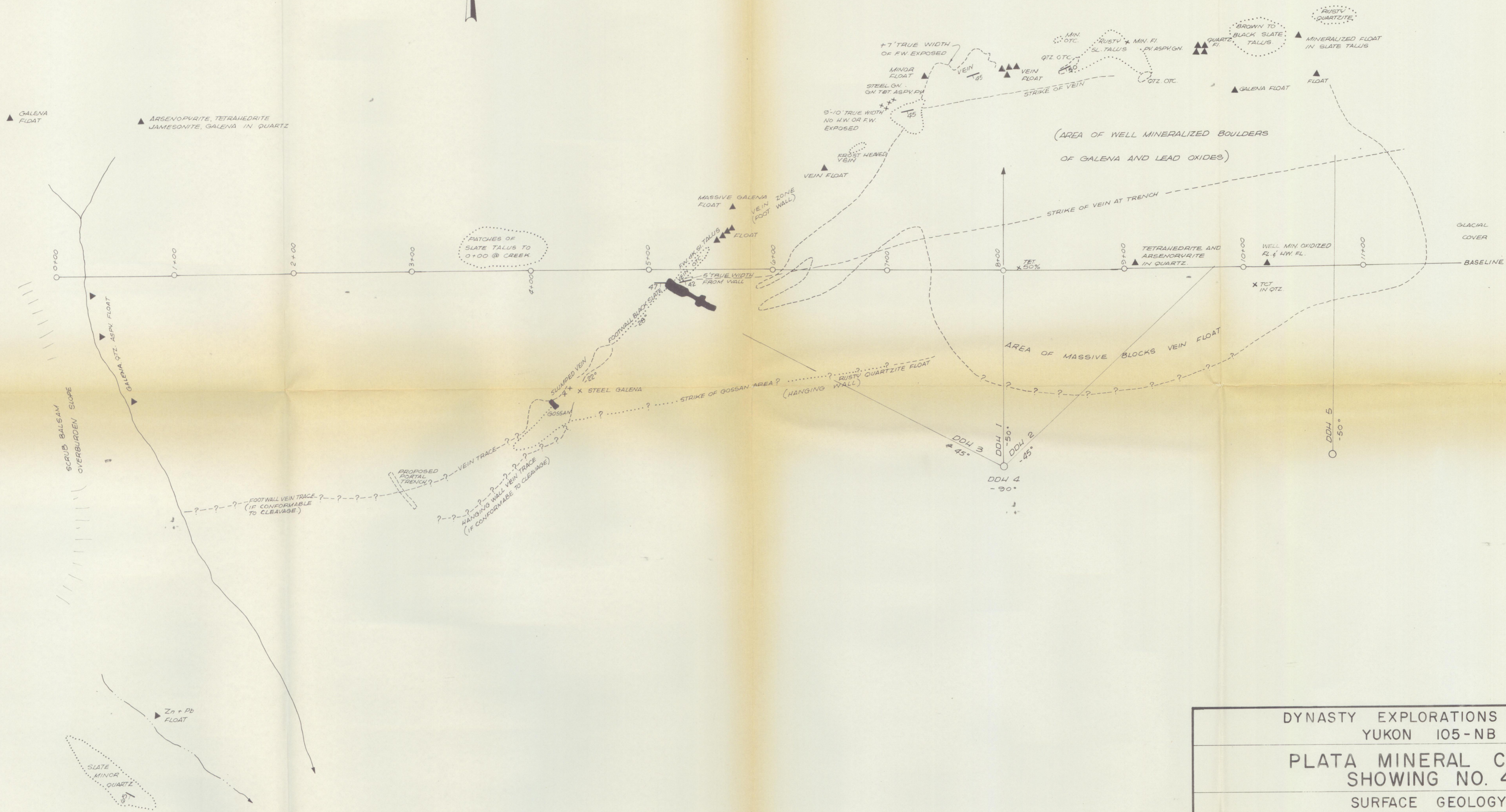
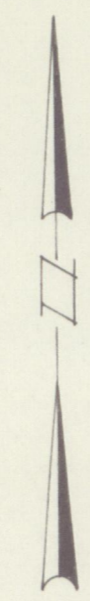
CROSS-SECTION 'A'-'B'



ATLAS EXPLORATIONS LIMITED
 ROSS RIVER Y.T.
 HESS REGION
 PLATA MINERAL CLAIMS AREA
 105 N-9
GEOLOGY

GEOLOGY BY: G SANFORD DRAWN BY: P.J.FVLASVELD

SCALE IN MILES: 1/4 0 1/4 1/2



DYNASTY EXPLORATIONS LIMITED
YUKON 105-NB

**PLATA MINERAL CLAIMS
SHOWING NO. 4**

SURFACE GEOLOGY

LEGEND

- MINERALIZATION IN PLACE ——— x
- MINERALIZED FLOAT OCCURANCE ——— Δ
- OUTCROP LOCATION ——— ○
- PROJECTED CONTACTS ——— - - - - -
- HAND TRENCH ——— ———
- PROPOSED DIAMOND DRILL SET-UP ——— ○ DDH 4

MAPPED BY: A.E. AHO DATE: AUGUST, 1972

SCALE: 1" = 50'