

ASSESSMENT REPORTS

MAP No. 105K/5 TYPE OF WORK: Geol, Ground & Air EM & Ma. Surveys, DDH

REPORT FILED UNDER

Dynasty Explorations Ltd.

DATE PERFORMED

DATE FILED: January 1973

LOCATION - LAT.

62°25'N

LONG.

133°45'W

CLAIM Nos.

GRAN 1-24

LORNA 1-60

JEAN 1-28

ROTO 1-53

ARO 1-50

WORK DONE BY

W.J. Roberts

WORK DONE FOR

Dynasty Explorations Limited

REMARKS

Claim Map 1"-4 miles

Regional Geology Map 1"-1,320'

Airborne & Ground Geophysical Compilation Map 1"-1,320'

Proposed Grid Coverage Map 1"-1,320'

APPLICATION FOR NORTHERN MINERAL
ASSISTANCE GRANT

PROPOSED EXPLORATION REPORT

ROTO-GRAN-LORNA-JEAN-ARO CLAIMS

TINTINA PROJECT

Whitehorse Mining District
Yukon Territory

Longitude: 133°45'W

Latitude : 62°25'N

N.T.S. 105-K-5

By:

W. J. ROBERTS

DYNASTY EXPLORATIONS LIMITED

January, 1973

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- Figure 2 - Airborne and Ground Geophysical
Compilation Map - scale 1"=1320'
- Figure 3 - Proposed Grid Coverage - scale 1"=1320'

LIST OF CLAIMS

<u>Name</u>		<u>Grant Number</u>	<u>Recording Date</u>
GRAN	1-8	Y58253-Y58260	Sept. 2, 1970
	9-16	Y58261-Y58268	Sept. 3, 1970
	17-24	Y58135-Y58142	Aug. 31, 1970
LORNA	1-60	Y54099-Y54158	Aug. 10, 1970
JEAN	1-28	Y58803-Y58830	Sept. 14, 1970
ROTO	1-50	Y58143-Y58192	Aug. 31, 1970
	51-53	Y58788-Y58790	Sept. 11, 1970
ARO	1-40	Y59715-Y59754	Nov. 19, 1970
	49-50	Y59755-Y59756	Nov. 19, 1970

DYNASTY EXPLORATIONS LIMITED

330 MARINE BUILDING

355 BURRARD STREET

VANCOUVER 1, B. C.

APPLICATION FOR NORTHERN MINERAL ASSISTANCE GRANT

PROPOSED EXPLORATION REPORT ROTO-GRAN-LORNA-JEAN-ARO CLAIMS TINTINA PROJECT

INTRODUCTION

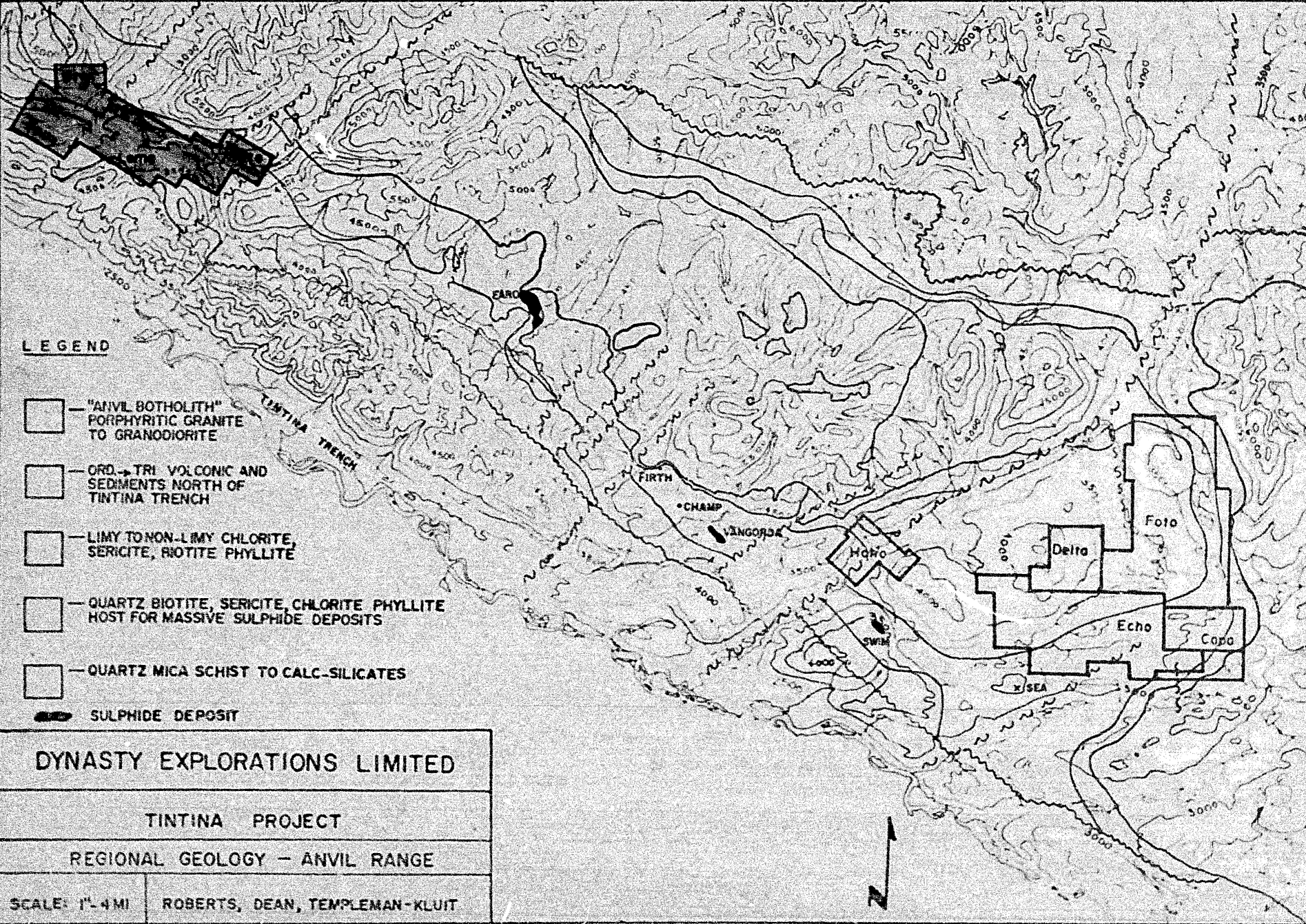
Dynasty Explorations Limited undertook a program of outlining and delineating airborne magnetic and electromagnetic anomalies in the northwestern portion of the Anvil phyllite belt. A total of 207 claims were staked in five contiguous groups covering prominent anomalies.

Ground magnetometer, geochemical and geological surveys, as well as diamond drilling, were conducted during the 1970 field program. During the 1971 field season the drill and associated equipment was moved off the property and the claims were mapped on one-quarter mile scale. A proposed airborne electromagnetic survey (Turair) was not attempted due to unsatisfactory operational techniques.

The proposed diamond drilling program for the 1972 field season was not initiated due to the lack of funds.

The favourable hosts for massive sulphides are not exposed in this area, which is mainly covered by overburden, but its proximity to the Faro deposit and stratigraphic position make these claims attractive for further exploration.

The 1973 proposed program includes further grid establishment accompanied by an electromagnetic (Turam) survey, followed by contingent diamond drilling. The estimated 1973 budget is \$120,000.



LEGEND

- "ANVIL BATHOLITH" PORPHYRITIC GRANITE TO GRANODIORITE
- ORD. → TRI. VOLCANIC AND SEDIMENTS NORTH OF TINTINA TRENCH
- LIMY TO NON-LIMY CHLORITE, SERICITE, BIOTITE PHYLLITE
- QUARTZ BIOTITE, SERICITE, CHLORITE PHYLLITE HOST FOR MASSIVE SULPHIDE DEPOSITS
- QUARTZ MICA SCHIST TO CALC-SILICATES
- SULPHIDE DEPOSIT

DYNASTY EXPLORATIONS LIMITED	
TINTINA PROJECT	
REGIONAL GEOLOGY — ANVIL RANGE	
SCALE: 1"=4 MI	ROBERTS, DEAN, TEMPLEMAN-KLUIT



LOCATION AND ACCESS

The Lorna-Roto-Gran-Jean-Aro claims are located along Anvil Creek, roughly centred at longitude $133^{\circ}45'W$ and latitude $62^{\circ}25'N$, approximately 18 miles northwest of Faro and 7 miles northwest of Rose Mountain. Access is by road to either Faro or the Anvil minesite, then by helicopter to the property.

REGIONAL GEOLOGY

The Anvil Range, located in the western portion of the Selwyn Basin, northeast of the Tintina Trench, consists of a 20-mile wide by 50-mile long belt of Proterozoic and Paleozoic strata. This succession of strata, dominated by Cambrian to Eocambrian quartz mica and phyllite, forms the Anvil Arch, a northwest-trending asymmetric antiform with an elongate intrusive, the Anvil Batholith, in the core. In the southeast portion of the district, the amplitude of the Anvil Arch diminishes, resulting in a shallow broad basin. A simplified geologic section consists of quartz mica schist and calc-silicates overlain by phyllite which, in turn, is unconformably overlain by late Paleozoic volcanics and sediments. Structurally, this area has had a complex history of at least five deformations during regional metamorphism.

The major massive sulphide deposits occur at the same stratigraphic level within the phyllite unit. Increasing metamorphic grade paralleled by an increase in sulphide grain size, increasing pyrrhotite content with metamorphism and elongation of deposits paralleling deformational fabrics, indicate that the sulphides were affected during regional metamorphism. The pre-metamorphic emplacement, coupled with similar average metal content, uniform lead-zinc ratios and similar textures and mineralogy, and stratigraphic control, may indicate a syngenetic origin.

GEOLOGY

The claims included in the Roto-Gran-Loran-Jean and Aro groups form a contiguous block centred on Anvil Creek. The Anvil Creek claims are underlain by favourable phyllite although previous mapping has not discerned between non-quartz and quartz-rich phyllite. The belt of phyllites, bordered on the north and south by intrusive, are largely covered by fluvial glacial material deposited in the Anvil Creek Valley. Overburden depths in excess of 200 feet are common. Lack of outcrop makes geologic interpretation and correlation with stratigraphy farther to the east difficult. During late 1970 a drill hole tested a coincident magnetic-gravity anomaly on the Lorna Group. Massive greenstone and chlorite schist belonging to Unit 3d was encountered throughout the hole. The total depth of the drill hole was 576 feet with the initial 150 feet being overburden.

Regional mapping carried out during the 1971 season was unsuccessful in tracing the quartz-rich phyllite northwest of the Anvil Mine. Between the mine and the Anvil Creek fault there is fair geologic correlation indicating the contact of Units 2b and 3b with the absence of Units 3a and 2d. Northwest of the Anvil Creek fault the overburden covered Anvil Creek Valley conceals much of the narrow belt of Units 2 and 3. Stratigraphically, the Anvil Creek claims cover Unit 3a, if indeed this unit does exist below the gravel deposits found throughout the Lower Anvil Creek area.

EXPLORATION SUMMARY

Lorna Group

This group, located on the south side of Anvil Creek, is underlain by southerly-dipping black phyllites and mica-quartz schist intercalated with minor amphibolite horizons. No mineralization apart from some pyrrhotite and specks of galena in quartz was found on the group. Sericitic alteration in the mica-quartz schist as well as alteration in greenstones were observed along the cliffs outcropping on Anvil Creek. Stratigraphically and structurally, the Lorna is well located since it overlies the phyllite-mica-quartz schist contact.

Limited geophysical surveys and one diamond drill hole have suggested that existing geophysical anomalies are caused by denser greenstone bodies. However, greenstone units have been mapped in close proximity to the Faro orebody as well as the Vangorda deposit. Further work is warranted to determine if the geophysical anomalies are caused by greenstone alone. An electromagnetic survey over magnetic and gravity anomalies will indicate the conductiveness of the causative mass.

Roto Group

Bedrock is exposed only in the northern part of the claim group, where massive horizons of amphibolite alternate with phyllite outcrop periodically. The stratigraphy dips gently to the south and under the main part of the claim group. Mineralization is confined to a few specks of pyrrhotite in the phyllite. The amphibolite is quite magnetic and its ubiquity in the area could explain the broad mag anomalies.

Present geophysical surveys have outlined the possible greenstone body within phyllitic units. Further deep penetrating E.M. is definitely warranted to assess this area.

Gran Group

The Gran mineral claims cover a quartz-mica schist unit contacting the Anvil Batholith. The geologic setting is similar to that of the Faro claims where quartz-mica schist is found above ore. Coincident airborne magnetic and electromagnetic responses have been defined on the property. Further ground follow-up geophysical surveys are required to better position drill targets.

Jean Group

No outcrop was observed on this property. However, mapping carried out along regional strike indicates that the claims could be underlain by phyllites. The proximity of the mica-quartz schist contact is unknown, however, it appears that the group may be too 'high' up in the phyllites.

Two lines of gravimetric survey were not sufficient to assess airborne geophysical targets within this claim group.

Aro Group

Much of the Aro group appears to overlie quartz biotite-sericite schist and possibly quartz-rich phyllite. Outcrop of quartz biotite-sericite schist in the Anvil Creek canyon is slightly altered by the nearby intrusive. Minor pyrite and pyrrhotite are disseminated throughout as well as traces of galena. This claim group is stratigraphically well located.

The Aro claims cover airborne magnetic and electromagnetic anomalies to the west and north of the Lorna claims.

CONCLUSIONS AND RECOMMENDATIONS

The Anvil Range is an area holding a high potential for discovery of massive lead-zinc deposits. The Lorna, Roto, Gran, Jean and Aro claims cover a portion of the belt on strike with the linear trend of known deposits; are stratigraphically well located; and contain several geophysical anomalies similar in character to others caused by the known sulphide deposits in the area.

To date Atlas and Dynasty has spent \$100,000 on geologic, geophysical and diamond drilling programs within the Lower Anvil Creek claims.

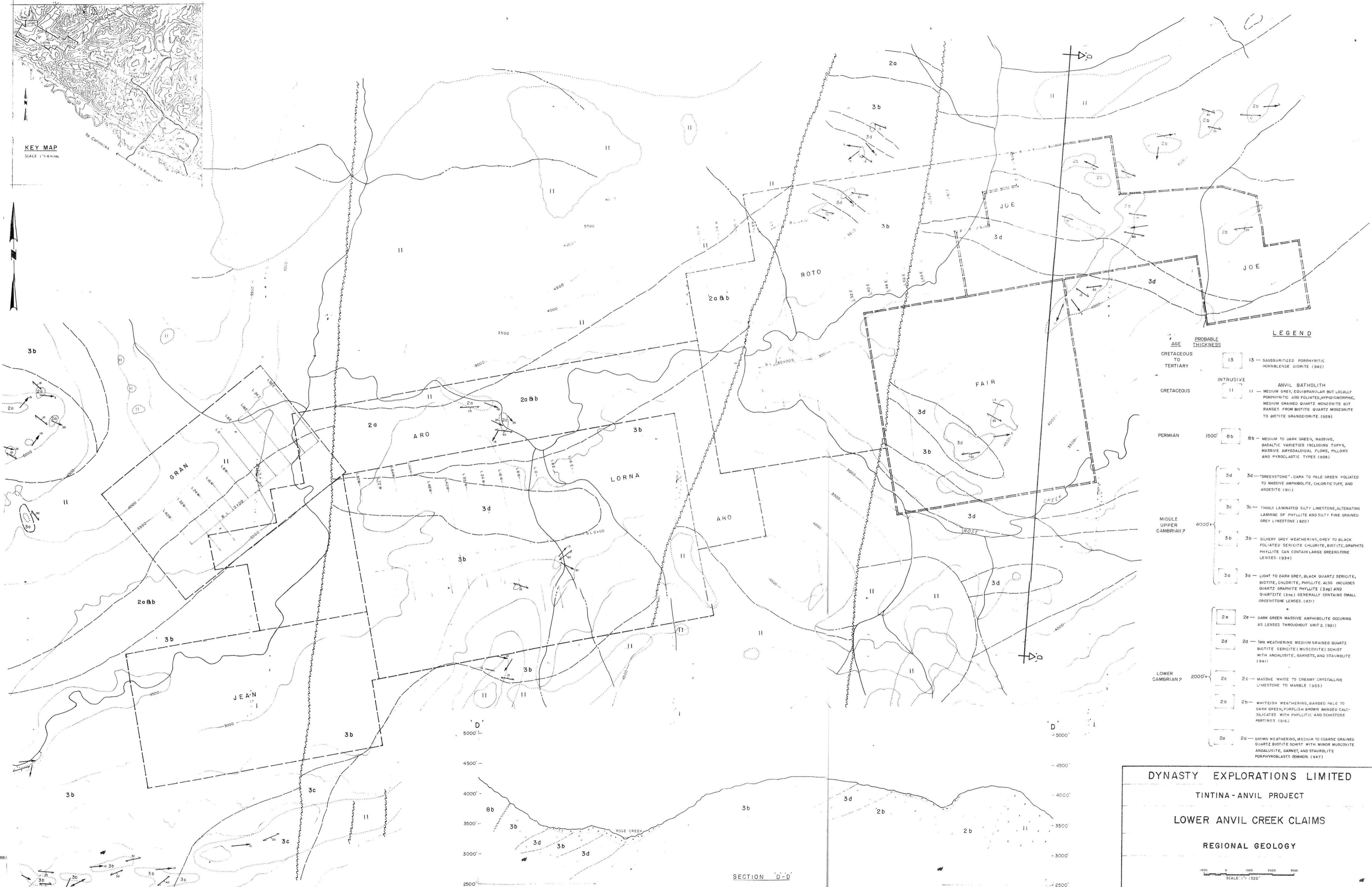
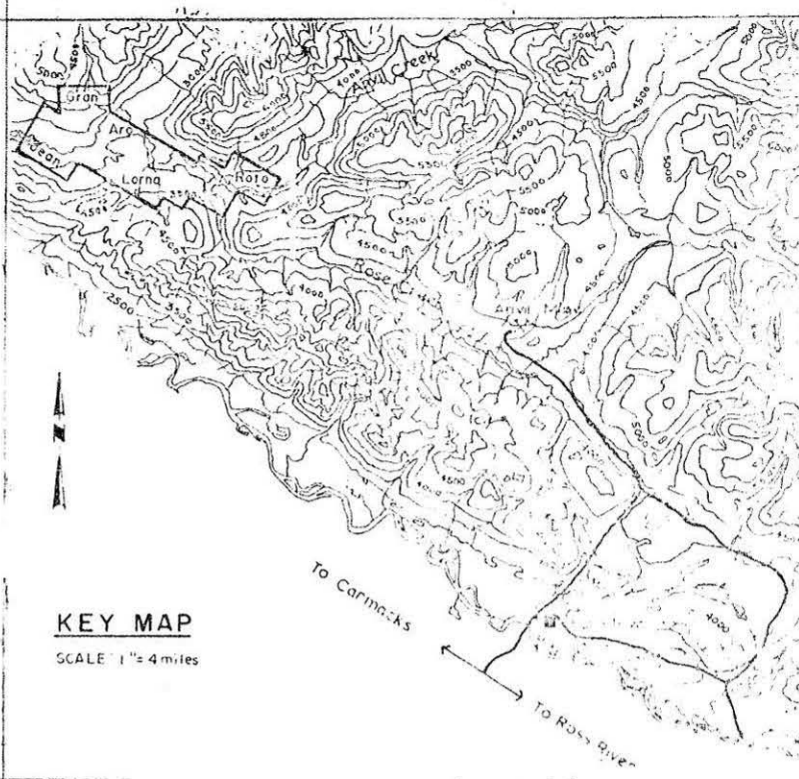
Further geologic and ground geophysical information is required to fully assess the potential of these claims.

It is recommended that further work consist of detailed geologic mapping, complete grid coverage accompanied by an electromagnetic (Turam) survey and contingent diamond drilling.

PROPOSED 1973 PROGRAM

The following approach is recommended for the 1973 exploration program:

1. Universal grid establishment throughout claim group area as proposed on accompanying map. Estimate 80 line miles of picket line grid.
2. Complete Turam E.M. coverage. Use of Turam because of deeper penetrating abilities and conductor discrimination. Estimate 60 line miles.
3. Ground magnetometer survey to outline aeromagnetic anomalies.
4. Emphasis on continued regional mapping to further define the limits of the favourable phyllite unit.
5. 3000 feet of contingent diamond drilling of geophysical targets within the stratigraphically favourable phyllite section.
6. Rock geochemical analysis of all overburden and core obtained.
7. Cost of the proposed 1973 program is estimated to be \$120,000.



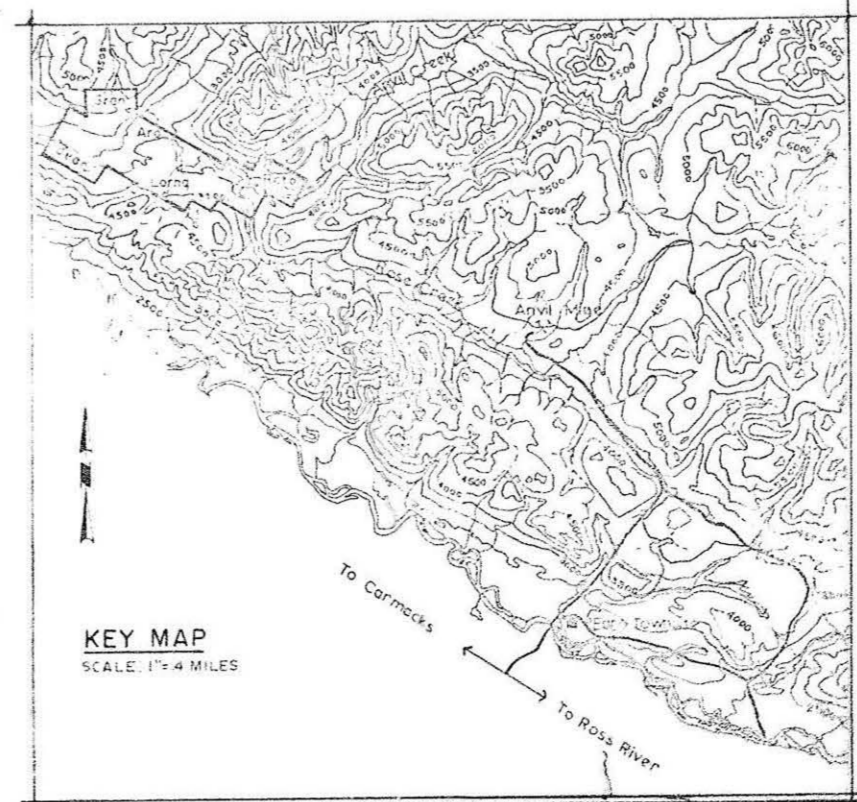
LEGEND

AGE	PROBABLE THICKNESS	DESCRIPTION
CRETACEOUS TO TERTIARY	13	13 - SAUSSURIZED PORPHYRIC HORNBLENDE GIORITE (942)
CRETACEOUS	II	II - ANVIL BATHOLITH 11 - MEDIUM GREY, EQUIBRANULAR BUT LOCALLY PORPHYRIC AND FOLIATED, HYPIDIOMORPHIC, MEDIUM GRAINED QUARTZ MONZONITE BUT RANGES FROM BIOTITE QUARTZ MONZONITE TO BIOTITE GRANDODIRITE (929)
PERMIAN	1500'	8b - MEDIUM TO DARK GREEN, MASSIVE, BASALTIC VARIETIES INCLUDING TUFFS, MASSIVE AMYGDALOIDAL FLOWS, FLOWS AND PYROCLASTIC TYPES (908)
MIDDLE UPPER CAMBRIAN?	4000'	3d - "GREENSTONE" - DARK TO PALE GREEN FOLIATED TO MASSIVE AMPHIBOLITE, CHLORITIC TUFF, AND ARDESITE (911) 3c - THINLY LAMINATED SILTY LIMESTONE, ALTERNATING LAMINAE OF PHYLITE AND SILTY FINE GRAINED GREY LIMESTONE (920) 3b - SILVERY GREY WEATHERING, GREY TO BLACK FOLIATED SERICITE CHLORITE, BIOTITE, GRAPHITE PHYLITE CAN CONTAIN LARGE GREENSTONE LENSES (934) 3a - LIGHT TO DARK GREY, BLACK QUARTZ SERICITE, BIOTITE, CHLORITE, PHYLITE ALSO INCLUDES QUARTZ GRAPHITE PHYLITE (309) AND QUARTZITE (308) GENERALLY CONTAINS SMALL GREENSTONE LENSES (931)
LOWER CAMBRIAN?	2000'	2e - DARK GREEN MASSIVE AMPHIBOLITE OCCURRING AS LENSES THROUGHOUT UNIT 2. (921) 2d - TAN WEATHERING MEDIUM GRAINED QUARTZ BIOTITE SERICITE (MUSCOVITE) SCHIST WITH ANDALUSITE, GARNETS, AND STAUROLITE (941) 2c - MASSIVE WHITE TO CREAMY CRYSTALLINE LIMESTONE TO MARBLE (903) 2b - WHITEISH WEATHERING, BANDED PALE TO DARK GREEN, PURPLISH BROWN BANDED CALC-SILICATES WITH PHYLITIC AND SCHISTOSE PARTINGS (916) 2a - BROWN WEATHERING, MEDIUM TO COARSE GRAINED QUARTZ BIOTITE SCHIST WITH MINOR MUSCOVITE ANDALUSITE, GARNET, AND STAUROLITE PORPHYROBLASTS COMMON. (947)

DYNASTY EXPLORATIONS LIMITED
TINTINA-ANVIL PROJECT
LOWER ANVIL CREEK CLAIMS
REGIONAL GEOLOGY

1000 0 1000 2000 3000
 SCALE: 1" = 1320'

SECTION D-D



DYNASTY EXPLORATIONS LIMITED
TINTINA-ANVIL PROJECT
LOWER ANVIL CREEK CLAIMS
COMPILATION MAP
 AIRBORNE GEOPHYSICS AND RESIDUAL GRAVITY

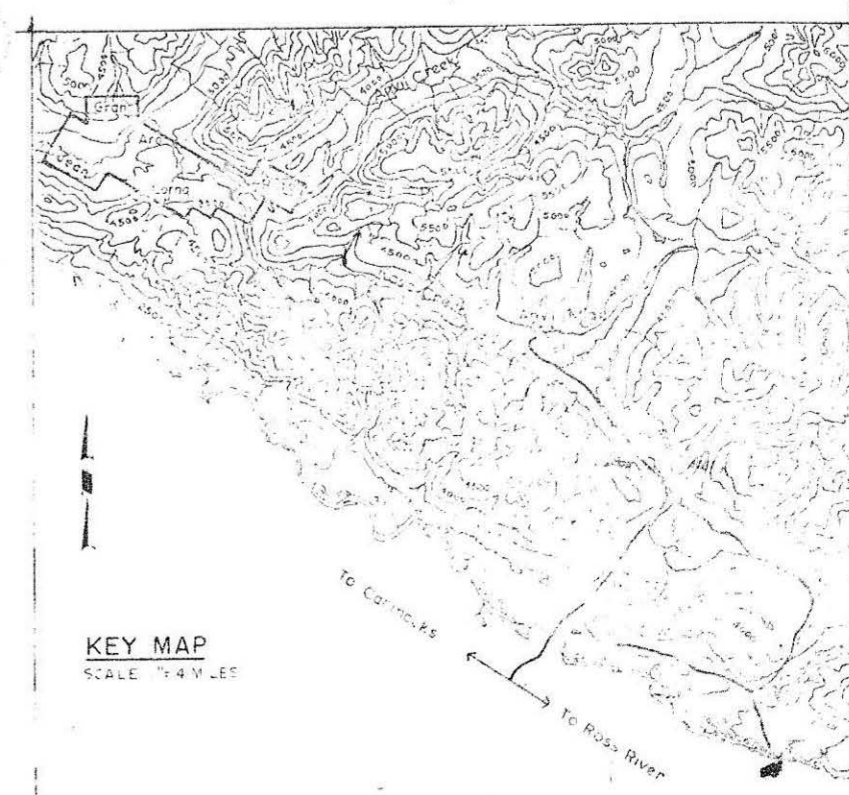
LEGEND

- ELECTROMAGNETIC ANOMALIES
- AEROMAGNETIC ANOMALIES
- RESIDUAL GRAVITY ANOMALIES

AIRBORNE SURVEYS BY: LOCKWOOD SURVEY CORP., 1965
 GRAVITY BY: OVERLAND EXPLORATIONS LTD., 1970
 DATA PLOTTED AT 1:1320 NOVEMBER, 1972

SCALE 1:1320

2 of 2



DYNASTY EXPLORATIONS LIMITED
 TINTINA-ANVIL PROJECT
 LOWER ANVIL CREEK CLAIMS
 PROPOSED GRID COVERAGE
 AIRBORNE GEOPHYSICS AND RESIDUAL GRAVITY

LEGEND

- ELECTROMAGNETIC ANOMALIES
- AEROMAGNETIC ANOMALIES
- RESIDUAL GRAVITY ANOMALIES

AIRBORNE SURVEYS BY LOCKWOOD SURVEY CORP. 1965
 GRAVITY BY OVERLAND EXPLORATIONS LTD. 1972
 DATA PLOTTED AT 1:1250 NOVEMBER, 1972

SCALE 1:1250