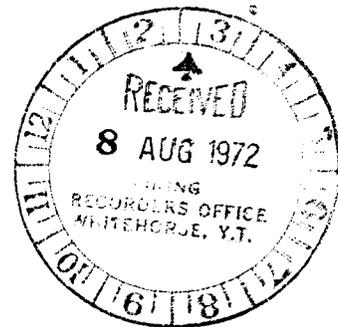


GEOLOGIC, GEOCHEMICAL AND
GEOPHYSICAL INVESTIGATIONS
ECHO-DELTA AND CAPA
MINERAL CLAIMS

July 30, 1971 - July 30, 1972

Latitude: 62°12'N
Longitude: 132°45'W



N.T.S. 105-K-2

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

\$60,620.72

J.B. Craig

Resident Geologist or
Resident Mining Engineer

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

[Signature]
Commissioner of Yukon Territory

By:

J. S. BROCK
P. DEAN

DYNASTY EXPLORATIONS LIMITED

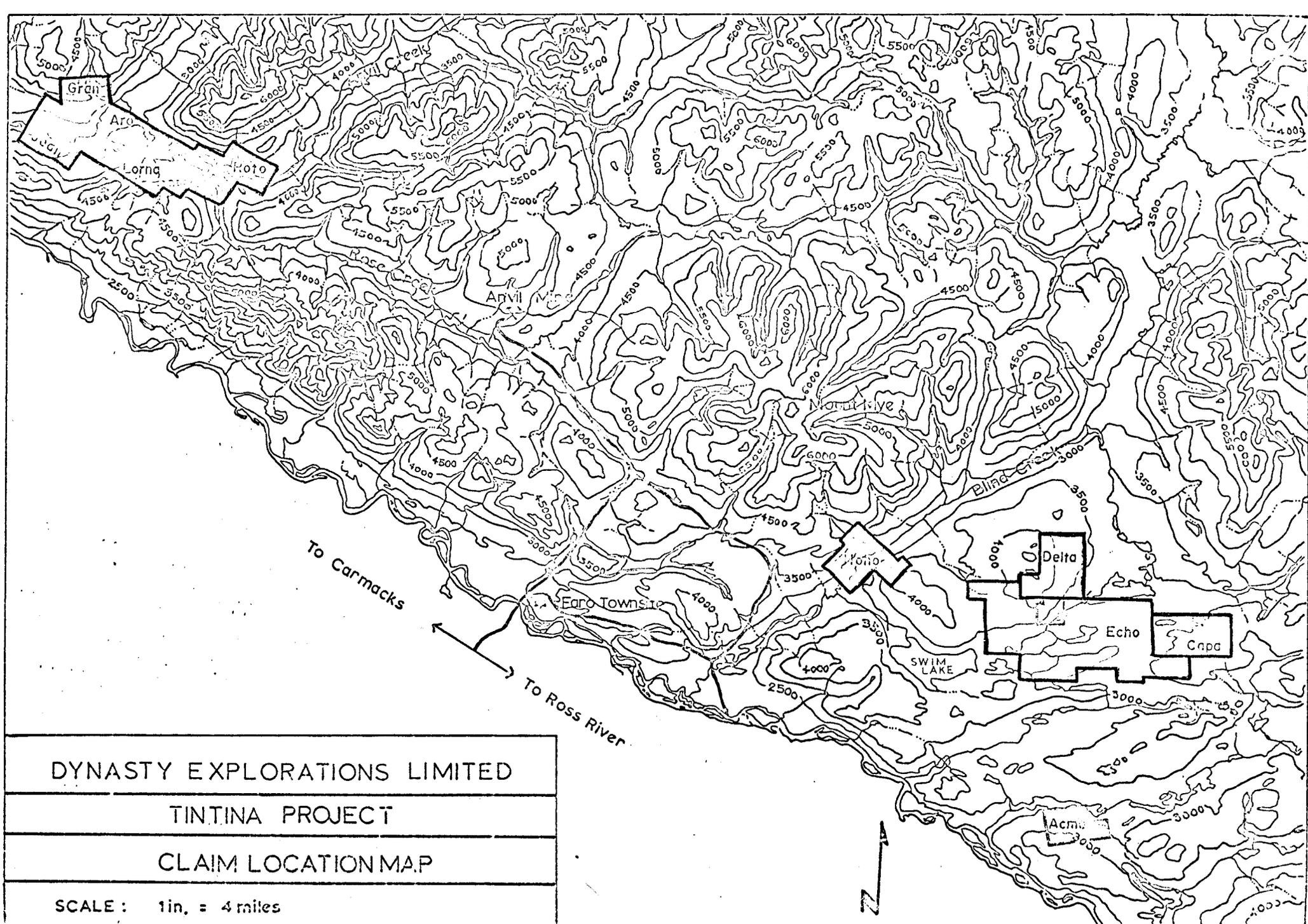
July, 1972

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DYNASTY EXPLORATIONS LIMITED

TINTINA PROJECT

CLAIM LOCATION MAP

SCALE: 1in. = 4 miles

CLAIM Nos.	GRANT Nos.	DATE RECORDED	CLAIM Nos.	GRANT Nos.	DATE RECOR.
Capa 1 to 8	Y61509 - Y61516	JULY 30, 1971	Echo 73 to 80	Y61829 - Y61836	AUGUST 27, 1971
9 to 16	Y61517 - Y61524	— do. —	81 88	Y61837 - Y61844	do.
17 to 24	Y61733 - Y61740	AUGUST 27, 1971	89 to 96	Y61845 - Y61852	do.
25 to 32	Y61741 - Y61748	— do. —	97 to 104	Y61853 - Y61860	do.
33 to 36	Y61541 - Y61544	JULY 30, 1971	105 to 112	Y61861 - Y61868	do.
37 to 44	Y61749 - Y61756	AUGUST 27, 1971	113 to 120	Y61869 - Y61876	do.
Delta 1 to 8	Y67023 - Y62080	SEPT. 17, 1971	121 to 128	Y61877 - Y61884	do.
9 to 16	Y62081 - Y62088	— do. —	129 to 136	Y61885 - Y61892	do.
17 to 24	Y62089 - Y62096	— do. —	137 to 144	Y61893 - Y61900	do.
25 to 31	Y62097 - Y62103	— do. —	144 to 147	Y61901 - Y61903	do.
32 to 39	Y61725 - Y61732	AUGUST 27, 1971			
Echo 1 to 8	Y61757 - Y61764	— do. —			
9 to 16	Y61765 - Y61772	— do. —			
17 to 24	Y61773 - Y61780	— do. —			
25 to 32	Y61781 - Y61788	— do. —			
33 to 40	Y61789 - Y61796	— do. —			
41 to 48	Y61797 - Y61804	— do. —			
49 to 56	Y61805 - Y61812	— do. —			
57 to 64	Y61813 - Y61820	— do. —			
65 to 72	Y61821 - Y61828	— do. —			



DYNASTY EXPLORATIONS LTD.
 TINTINA - ANVIL PROJECT
 LOCATION MAP
 N. T. S. 105-K-2
 DELTA, CAPA, ECHO
 MINERAL CLAIMS
 DATE: NOVEMBER 1971
 1000 0 1000 2000 3000
 SCALE: 1:1320

DYNASTY EXPLORATIONS LIMITED

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

GEOLOGIC, GEOCHEMICAL AND
GEOPHYSICAL INVESTIGATIONS
ECHO-DELTA AND CAPA
MINERAL CLAIMS

INTRODUCTION

The Echo-Delta-Capa mineral claims, situated at the southeast end of the Anvil Range, were staked in July, 1971, over an area of phyllitic rocks bearing quartzose sections similar to those hosting sulphide deposits in the Anvil area. The staked area exhibits numerous conductive and magnetic structures as derived from both airborne and ground geophysical surveys carried out in 1965 by Dynasty over the former Cub and Nasty Claim Groups.

Previous work in the area, between 1964 and 1969, by Dynasty Explorations, as well as Anvil Mining Corporation, involved airborne geophysical surveys, limited gravimetric, ground magnetic and soil sampling surveys as well as drilling of 7 rotary drill holes on geophysical targets.

A large-scale detailed regional mapping program carried out by Dynasty in 1970 and 1971, coupled with a re-evaluation of all previous exploration work, contributed to Dynasty's renewed interest in the area. New interpretations involving the position and extent of the quartzose-phyllite host north of Swim Lakes led to the staking of the Echo-Delta and Capa Claims.

The quartzose-rich sequence of phyllite are in part masked by overburden cover and overlying phyllites. Deep penetrating electromagnetic surveys were therefore completed during 1971 to aid in mapping structure and positioning deep conductors.

This survey information, coupled with former gravity, magnetic, geochemical and drill data, outlined 6 targets requiring drill testing.

Further electromagnetic and magnetic 'fill-in' surveys were completed during June and July of 1972. Gravimetric survey work, involving a total of 40 line miles, was also completed during that period.

Drilling for stratigraphic positioning of the meta-sedimentary sequences is required as well as testing of geochemical anomalies. This work will commence in August, 1972.

CLAIMS LOCATION AND ACCESS

The Capa-Delta-Echo claims are immediately adjacent to each other and are considered as one group.

Original claim staking was carried out in 1971 by Dynasty personnel and residents of Ross River, specifically hired for staking purposes.

Where possible, claim lines were oriented along former 'cat' survey baselines originally cut in the area for earlier geophysical work in 1965 and 1966.

The property is centred amongst the Swim Lakes, 18 miles east of Faro and 20 miles northwest of Ross River. Access to the area is best made by float-equipped aircraft from Ross River to any of five lakes in close proximity to the property. Alternatively, helicopter charters can usually be arranged from either Faro or Ross River to the claim groups.

Access within the area is good. Numerous tote trails exist, all of which are passable by 'bombardier' type tracked vehicles. It is possible to use such vehicle support for transport to Faro, however, the distance and time involved makes fixed-wing aircraft support from Ross River less expensive and time-consuming.

EXPLORATION HISTORY

During 1964 and 1965 Dynasty Explorations carried out a mineral exploration program over an area of approximately 250 square miles, located in the Anvil-Vangorda Creek area of east-central Yukon, 125 miles northwest of Whitehorse. The Vangorda deposit, a massive lead-zinc sulphide body discovered in 1953, was centred in the area proposed for exploration, a northwest trending belt located between the southwestern flank of the Anvil Range and Pelly River. To effectively explore this area, a combination of geophysical and geochemical methods were essential due to extensive overburden cover varying in depth from a few feet to over 300 feet.

In 1964 Dynasty staked the Nasty and Cub claim groups over much of the area now covered by the Echo-Delta-Capa claims. In 1964 aeromagnetic surveys were flown over most of the claim group and surrounding area. Ground magnetic and geochemical soil sampling surveys were completed on the Nasty claims. In 1965 ground magnetic and gravity surveys were completed on the Cub Claims. At the same time 3 rotary drill holes were drilled on targets on the Nasty claims and 5 holes were drilled on the Cub claims. Additional ground magnetic, electromagnetic and soil sampling surveys were done north of the original Nasty Claims, now Delta claims, during 1966 and 1967 by Anvil Mining Corporation.

Geophysics and rotary drill programs were also carried out in 1965 on the Sea Claims south of the Echo-Capa-Delta area and the Beta Claims north of the Echo-Capa-Delta area. Records of this exploration were also used in present evaluation of the currently held claims.

A review of all the mineral exploration completed in the southeast Anvil area up to 1971 has been carried out in conjunction with recent exploration findings from a detailed regional mapping program and a program of deep penetrating E.M. surveys. Previous

exploration efforts in the area are now considered to have been inadequate as the regional geology of the district was not understood and contributed little to the locating of drill targets. Geophysical techniques were not as refined and deep-reaching as present applications. Out of 8 rotary holes attempted within the area of the presently located claims, only 6 were successful in reaching bedrock. These holes were drilled to test major gravimetric anomalies and, in certain cases, magnetic anomalies. Recent geophysical surveys have indicated major structures that have not yet been drilled.

Exploration work carried out between 1970 and 1972 by Dynasty is summarized below:

Geology - Completion of regional mapping to scale 1:1320 for claim group area plus surrounding district including Swim Lakes and Blind Creek.

- Logging of all diamond drill holes and rotary borehole cuttings for previous drilling on claim group and surrounding area.

Prospecting - Locating of minor sulphide occurrences, gossans and rust seepages.

Geochemical Surveys - Soil sampling of gridded areas over geophysical anomalies.

- Recce. contour soil sampling.
- Stream sediment sampling.
- Lakeshore bottom silt sampling.
- Rock geochem sampling of outcrops and all available diamond drill core and rotary drill cuttings.

- Geophysical Surveys - deep penetration electromagnetic survey was carried out over the entire area of the three claim groups using the newly-developed Crone C.E.M. equipment.
- magnetometer surveys were carried out over two portions of the Echo claims that were not adequately covered by previous surveys.
 - magnetometer surveys of south Capa Grid.
 - Gravity surveys of all Capa-Echo Grids.

TABLE OF GEOLOGIC FORMATIONS

AGE	PROBABLE THICKNESS		
TERTIARY	14b	14b - FINELY LAMINATED, LIGHT GREY, RHYOLITIC TUFF. (913)	
	14a	14a - APHANITIC, LIGHT GREENISH TO REDDISH QUARTZ FELDSPAR PORPHYRY. (926)	
CRETACEOUS TO TERTIARY	13	13 - SAUSSURITIZED PORPHYRITIC HORNBLende DIORITE. (942)	
	INTRUSIVE 12	12 - WEATHERING RUSTY BROWN, MEDIUM GRAINED, DARK GREEN-GREY, EQUIGRANDULAR ALTERED PYROXENITE AND HORNBLende DIORITE. (928)	
CRETACEOUS	INTRUSIVE 11	ANVIL BATHOLITH	11 - MEDIUM GREY, EQUIBRANULAR BUT LOCALLY PORPHYRITIC AND FOLIATED, HYPIDIOMORPHIC, MEDIUM GRAINED QUARTZ MONZONITE BUT RANGES FROM BIOTITE QUARTZ MONZONITE TO BIOTITE GRANODIORITE. (929)
TRIASSIC	300'	10a	10a - THIN BEDDED, PLATY, MEDIUM GREY CALCAREOUS SLATE, WITH LOCALLY INTERBEDDED FINE GRAINED ARGILLACEOUS LIMESTONE.
TRIASSIC	2000'	10	10 - BROWN WEATHERING CONGLOMERATE WITH QUARTZITE, SCHIST GRANITE GNEISS, BASALT, CHERT AND LIMESTONE PEBBLES. (944)
U. PERMIAN TO TRIASSIC	9	9 - DARK GREEN TO BLACK SERPENTINITE AND RELATED PERIDOTITE. (907)	
U. PERMIAN	8c	ANVIL RANGE GROUP	8c - ORIGINALLY LIGHT GREY CRINOIDAL OR BIOCLASTIC LIMESTONE, NOW RECRYSTALLIZED. WEATHERS BUFF, CONTAINS MINOR QUARTZ, ESSENTIALLY A SPARITE. (906)
PERMIAN	1500'	8b	8b - MEDIUM TO DARK GREEN, MASSIVE, BASALTIC VARIETIES INCLUDING TUFFS, MASSIVE AMYGDALOIDAL FLOWS, PILLOWS AND PYROCLASTIC TYPES. (908)
L. PERMIAN	2000'	8a	8a - PALE GREEN, GREENISH BROWN, LIGHT GREY MASSIVE TO THIN BEDDED ARGILLACEOUS AND TUFFACEOUS CHERT, WEATHERS OFF-WHITE, LOCALLY BRICK RED DUE TO HEMATITE (JASPER), LOCALLY BRECCIATED. (925)
U. DEVONIAN TO MISSISSIPPIAN	7	7 - DARK GREY TO BLACK, MASSIVE TO THICK BEDDED, GRAPHITIC CHERT, ASSOCIATED DARK GREY GRAPHITIC CHERTY ARGILLITE AND ARGILLACEOUS SILTSTONE, MINOR ARGILLACEOUS LIMESTONE, GREYWACKE AND CHERT PEBBLE CONGLOMERATE. (918)	
M. DEVONIAN	100'	6	6 - THIN BEDDED, PLATY, BLACK, CARBONACEOUS FETID CRINOIDAL LIMESTONE TO MASSIVE BUFF WEATHERING GREY BIOCLASTIC DOLOMITE. (905)
SIL. DEVONIAN	50'	5	5 - MASSIVE MED. TO LIGHT GREY, MED-COARSE GRAINED ORTHOQUARTZITE. (927)
ORDOVICIAN SILURIAN	400'	4	4 - GRAPTOLITIC BLACK CARBONACEOUS SLATE, BLACK SILTY SHALE, ARGILLITE, MINOR BLACK CHERT BANDS, MINOR PYRITE. (949)
MIDDLE UPPER CAMBRIAN?	4000'+	3d	3d - "GREENSTONE" - DARK TO PALE GREEN FOLIATED TO MASSIVE AMPHIBOLITE, CHLORITIC TUFF, AND ANDESITE. (911)
		3c	3c - THINLY LAMINATED SILTY LIMESTONE, ALTERNATING LAMINAE OF PHYLLITE AND SILTY FINE GRAINED GREY LIMESTONE. (920)
		3b	3b - SILVERY GREY WEATHERING, GREY TO BLACK FOLIATED SERICITE CHLORITE, BIOTITE, GRAPHITE PHYLLITE. CAN CONTAIN LARGE GREENSTONE LENSES. (934)
		3a	3a - LIGHT TO DARK GREY, BLACK QUARTZ SERICITE, BIOTITE, CHLORITE, PHYLLITE. ALSO INCLUDES QUARTZ GRAPHITE PHYLLITE (3ag) AND QUARTZITE (3aq). GENERALLY CONTAINS SMALL GREENSTONE LENSES. (931)
LOWER CAMBRIAN?	2000'+	2e	2e - DARK GREEN MASSIVE AMPHIBOLITE OCCURRING AS LENSES THROUGHOUT UNIT 2. (921)
		2d	2d - TAN WEATHERING MEDIUM GRAINED QUARTZ BIOTITE SERICITE (MUSCOVITE) SCHIST WITH ANDALUSITE, GARNETS, AND STAUROLITE. (941)
		2c	2c - MASSIVE WHITE TO CREAMY CRYSTALLINE LIMESTONE TO MARBLE. (903)
		2b	2b - WHITEISH WEATHERING, BANDED PALE TO DARK GREEN, PURPLISH BROWN BANDED CALC-SILICATES WITH PHYLLITIC AND SCHISTOSE PARTINGS. (916)
		2a	2a - BROWN WEATHERING, MEDIUM TO COARSE GRAINED QUARTZ BIOTITE SCHIST WITH MINOR MUSCOVITE, ANDALUSITE, GARNET, AND STAUROLITE PORPHYROBLASTS COMMON. (947)
PROTEROZOIC	1	"GRID UNIT" GRIT	1 - GREY WEATHERING MEDIUM-DARK GREY, MUSCOVITE METAQUARTZITE LOCALLY COLOUR BANDED, MINOR CHLORITE, TOURMALINE AND CARBONATE. INTERFOLIATED BLACK GRAPHITIC QUARTZITE COMMON. (946)

GEOLOGY

The claims are situated at the southeast end of the Anvil Range, an elongate, doubly plunging antiform consisting predominantly of late Proterozoic to early Cambrian age meta-sediments and volcanics. The core of the antiform is intruded by the Anvil batholith of probable Cretaceous age, for most of its length.

The meta-sediments consist of a reasonably simple sequence of pelitic to limey sediments that have been regionally metamorphosed to skarny schists, micaceous to quartzose schists, and sericitic to calcareous phyllites. Amphibolite lenses of probable extrusive volcanic origin occur throughout the section but are thickest and most extensive near the top of the sequence. The sediment pile is divided into two units, based on differences in composition, texture and metamorphic grade. The lower unit (Unit 2), thought to be about 2000 feet thick, consists of coarse-grained, sericite-biotite quartz schists with garnet, staurolite and andalusite porphyroblasts, distinctive green and purple banded skarn, massive lenticular beds of recrystallized grey limestone and lenses of amphibolite. The upper unit (Unit 3), consists of phyllitic rocks which are very quartzose at the base of the unit and very limey at the top. Amphibolite lenses make up a small but significant proportion of the rock. Unit 3 is probably at least 3000 feet thick and appears to overlie Unit 2 conformably.

The Anvil, Vangorda and Swim ore deposits, plus several less significant mineral occurrences, all occur in the quartzose rocks at the base of Unit 3. This close stratigraphic control of the ore deposits, coupled with the close correlation between the metamorphic grade of the ores and the metamorphic grade of their enclosing host rocks, suggest a syngenetic or very early epigenetic origin for the mineralization. The exact genetic relationship between the ore deposits and the enclosing host strata

is not known but there is no doubt whatever that some relationship does exist and therefore, the advisability of concentrating exploration in the quartzose phyllite member is obvious.

At the southeast end of the Anvil Range, the Anvil Batholith outcrops are not restricted to the core of the Anvil antiform but occur instead in a roughly subcircular pattern about 12-15 miles in diameter. The emplacement of these intrusions was accompanied by a considerable amount of local uplift and, as a result, a basin-like structure has been superimposed on the older geometry of the rocks in this area. Faults and other deformational events have not altered the regional geometry of the rocks significantly, so the present outcrop pattern, with older rocks outcropping in a somewhat circular pattern and younger rocks in the middle, is a result of the combined influence of the SE-plunging Anvil antiform and local uplifts associated with the emplacement of the Anvil batholith.

Structure

The structure of the Anvil Range meta sediments is simple in its regional aspects but highly complex in detail. Work in the vicinity of the Anvil mine has indicated that at least five different phases of deformation have effected the Cambrian and older rock units. Not all of these deformational events have had significant effects on the fabric and geometry of the rocks but evidence for all can be found throughout the Anvil Range.

The oldest deformational structure visible in the rocks is a strong penetrative foliation which characterizes the phyllitic and schistose members of the sequence. This planar structure, S₂, is marked by the strong preferred orientation of mica plates, and is the dominant foliation along which the rocks break. It is parallel to the axial plane of numerous small, rootless, isoclinal folds which are outlined by quartz-rich bands and probably represents an axial plane cleavage.

The older planar structure, marked by compositional layering and by preferred orientation of mica minerals between the S₂ planes, may be a relic bedding structure or could be an older foliation. In general, all evidence of original bedding lamination within rock units has been destroyed by the S₂ foliation. Where firm evidence of bedding orientation does exist, such as at contacts between limestone lenses and more schistose rocks, the S₂ foliation seems to be subparallel to the bedding, at least on a large scale. Quartz-rich bands within massive, recrystallized limestone beds parallel bedding and the S₂ foliation; these may reflect original compositional bands in the limestone but more likely were formed later, during the metamorphism of the sediment pile. The greenstone lenses tend to have a strong S₂ foliation (resulting from chlorite orientation) close to their contacts with enclosing strata, but are more

massive and structureless near the cores. A lineation resulting from the parallel alignment of amphibole prisms occurs in the internal zones of some greenstone lenses.

The S_2 foliation surface everywhere in the Anvil Range is deformed by small crenulations which trend at about 150° and are usually less than 1 or 2 mm. high. These crenulations, L_3 , show up best in the phyllites because of the finer grain size but they occur in the schists of Unit 2 as well. The L_3 crenulations do not seem to be related to any of the larger deformational features of the Anvil Range.

The S_2 foliation and the Cambrian rock units as a whole were deformed by a period of gentle folding, F_4 , which is thought to have occurred at some time prior to the intrusion of the batholith and the formation of the Anvil Antiform. The axis of these folds in the southeast part of the Anvil range trend at approximately 270° to 290° and spacing of anticlinal crests is on the order of 1 or 2 miles. These folds have second and third order minor folds associated with them and in some places a nearly vertical S_4 axial plane cleavage is present. This cleavage shows up best in the greenstone lenses. In the schist unit it may be outlined by the preferred orientation of large biotite flakes. It always seems to cut the main S_2 foliation at a high angle.

The later deformational events, including the uplift, faulting and folding related to the emplacement of the Anvil Batholith and faulting related to the Tintina Fault System, have had the major effect on the present outcrop pattern and orientation of the Cambrian rock units but seem to have done little to alter the internal fabric of the rocks. The exact genetic relation between the emplacement of the Anvil Batholith and the formation of the major antiformal structures associated with it can be interpreted in two ways. Since the granitic rocks outcrop in

the core of the antiform it can be suggested that they intruded the zone of dilation and fracturing along the apex of the fold structure. This implies that the Anvil Antiform is older than the Cretaceous intrusions. It can be argued with equal support that the Anvil Antiform was produced at the same time as the batholith, as a result of uplift by the actively intruding plutonic rocks. In general the contacts of the batholith tend to be sub-parallel to the bedding of the rocks it intrudes and xenoliths don't seem to be very common, so perhaps the second explanation is the better of the two. In any case, the end result is an outcrop pattern in which the oldest rocks, those of Unit 2, tend to be close to the granitic core of the Anvil Range, while the younger rocks tend to be farther out.

The known mineral deposits in the Anvil Range are tabular structures that conform closely to the S_2 foliation and tend to be elongated in a NW-SE direction, parallel to the general strike of the Anvil Antiform. The relative importance of original bedding, metamorphism and deformation in determining the present orientation of the orebodies is difficult to evaluate. It seems likely that structure and metamorphism have had a profound effect on the ore deposits and their present forms are probably due to these factors more than to primary attitude. In evaluating geophysical anomalies, the orientation of known deposits relative to the S_2 structures must be kept in mind.

Summary of Geology on the Capa-Delta-Echo Claims

Outcrops are uncommon on most of the area covered by the claims, but a reasonably reliable conception of bedrock geology can be obtained by projecting geologic contacts into the claim groups from surrounding areas that are better exposed. The 1965 rotary drill holes on the Capa and Echo claims, the geophysical surveys and photointerpretation, have all aided in mapping the claim group area.

Virtually all of the Capa and Echo claim groups are underlain by the quartz-rich lower member of the phyllite unit. Graphite-rich beds in Units 3a and 3b show up well on the electromagnetic surveys. The location and relative strike slip movement of some of the faults, as well as the position of other structures on the claims, have been postulated on the basis of electromagnetic information. The western part of the Echo claims, north of Moose Lake, is on strike with the quartz-rich phyllite band that encloses the copper-zinc mineral showings on the Sea claims, south of Swim Lake.

The surface bedrock geology on the Delta claims consists of phyllitic rocks that are higher in the section than the favourable quartz phyllite unit. However, the presence on the claim group of a prominent NE trending fault and east-west syncline, both with associated geophysical and geochemical anomalies, makes the claim group interesting. It seems possible that mineralization could have been mobilized upward along the fault from mineralized sections of the underlying Unit 3a. Minor mineral showings related to shear zones occur on the Sea claims about 4 -miles to the south.

The northwest portion of the Echo claims is probably underlain by Unit 3b. Unit 3a may underly 3b at reasonably shallow depths on the topographically lower areas near Echo and Nasty Lakes.

The relative location of the contact between Unit 3a and 3b is uncertain on this part of the claim group and will only be elucidated when more drill hole information is available.

Drill Logs and Lithochemical Profiles

In the course of mapping the Capa-Delta-Echo claims, all previous drill hole logs were evaluated and, in some cases, the holes were re-logged. Geochemical samples were taken for each 10 foot interval on two of the rotary drill holes on the property and for each 25 foot interval on five of the drill holes on the Sea claims, one mile west of the property.

GEOCHEMICAL SURVEYS

Geochemical work in the Capa-Delta-Echo area included soil sample surveys, stream silt sampling, lake bottom silt sampling, and rock geochemical sampling of diamond drill core and rotary drill chip samples. Much of the geochemical work was experimental in nature and was intended to evaluate the effectiveness of various geochemical methods in the Anvil Range.

(a) Soil Sampling Surveys

In general, the presence of permafrost and deep transported overburden in much of the Anvil Range makes soil sampling surveys unreliable. Over both the Anvil and Vangorda ore bodies the geochemical response was very spotty. For these reasons soil sampling is not considered to be a reliable exploration method in the Anvil Range.

Soil sampling was carried out over two small areas, one on the Echo claims south of Cub Lake and one on the Delta claims northwest of Cub Lake. Previous soil sampling surveys were carried out over various parts of the Echo and Delta claims and over areas north and east of Cub Lake. For the 1971 survey, samples were taken from the "B" or "B+C" soil horizons and were analyzed using an HClO_4 (total extraction) leach. Sampling and analysis methods used for the previous surveys is not known.

No good, extensive geochemical anomalies were discovered by our soil sampling work or by previous surveys. All anomalies indicated on the "Geochem Interpretation" maps are either very weak or very spotty, involving at most a few samples. The highest value encountered on any survey was a 1300 ppm Zn. that occurred on the former Nasty claims.

Occasional values for Cu and Zn tend to be quite high in a band that begins on the slopes north of Nasty Lake and extends around the hillside over much of the Delta claims. Some copper values in this area range up to over 200 ppm. It is probable that these generally higher values are a result of the high metal content of the graphitic bedrock underlying this region. However, some of the highest values on the Delta claims occur in close association with the projected intersection of an F_4 fold axis and a major NE trending fault, so some structurally-controlled concentration of mineralization may be indicated.

(b) Silt Sampling Surveys

In an attempt to avoid some of the limitations of soil sampling, a new silt sampling geochemical method was tried. Silt samples were collected from most streams and also from below the water surface along the shores of all lakes and ponds throughout the Swim Lakes area. There are several advantages to the silt sampling as opposed to the soil sampling geochemical approach:

- (1) The chemical environment for all the samples is very uniform.
- (2) The sample material itself is more uniform - the problem of obtaining all samples from the same soil horizon is avoided.
- (3) Fewer samples must be collected and analyzed, and the collecting of the samples is easier.

Lakes and streams are well distributed throughout the Swim Lakes area. Samples were collected at about 1000 foot intervals. Deep organic muds were encountered in some streams and ponds, and these were not sampled. A small boat was found to be useful for much of the lake shore sampling. The -80 mesh size fraction of the samples was analyzed using an $HClO_4$ (total extraction) leach.

Histograms were drawn for the results and were used to determine the threshold values. Four areas with anomalous values were discovered on the Capa-Delta-Echo claims:

- (1) Two anomalous lake samples at the southwest end of Moose Lake occur in close proximity to a coincident ground magnetic and C.E.M. anomaly. This combined geochem-geophysical anomaly is on strike with the copper-zinc mineralization on the Sea claims one mile to the west. This should be regarded as a very high priority area to be tested with a drill hole.

A single stream silt, anomalous in copper, which occurs near the end of Moose Lake is downslope from some mineralized shear zones on the Sea claims and probably is related to those.

- (2) A single sample on the north shore of a small lake east of Echo Lake is anomalous in zinc. It is near a gravity anomaly which is coincident in part with a long C.E.M. conductor. This area also warrants testing with at least one drill hole.
- (3) Two stream silt samples at the east end of Moose Lake are anomalous for lead and zinc. The stream from which these samples were taken drains a swampy area which contains a weak magnetic anomaly. The samples are on strike with a long C.E.M. anomaly that lies a few hundred feet to the west.
- (4) Two samples on the south shore of Cub Lake were anomalous in copper. These are close to an old camp location and could possibly be the result of contamination from garbage or other junk left at the site

from previous years. They do not coincide well with any geophysical anomalies but they are on strike with a long C.E.M. conductor which lies to the southwest.

As a test of the method, lake-bottom silts were taken around the shoreline of Swim Lake to see if the Swim Deposit or the Sea claims mineral showings would have been discovered by a geochem survey of this type. The main drainage off the Swim orebody is into Swim Creek rather than into Swim Lake but nevertheless some anomalous samples do occur at the southwest corner of Swim Lake. Similarly, the main drainage from the Sea mineral showings is to the south, yet here as well some anomalous samples occur. These results indicate that lake bottom silt sampling may be a reliable geochemical method in the Anvil Range.

(c) Rock Geochemical Surveys

Rock chip samples were analyzed from a total of seven drill holes in the vicinity of the Capa-Delta-Echo claims. The holes for which geochemical profiles were determined included one hole on the Capa claims, one on the Nasty claims, and five on the Sea claims, one-half mile west of the property. The purpose of the rock analyses was to try to establish geochemical background values for different rock units which would aid in logging future rotary drill holes in the area. Samples were taken for every 10 foot interval for the two rotary holes sampled, Cub RH #2 and Nasty RH #3. The Sea diamond drill holes were analyzed over 25 foot intervals, each sample consisting of chips taken from the core at about every foot. This phase of the geochemical work was a distinct success in that the three members of the phyllite unit analyzed

were found to have distinctly different geochemical backgrounds for copper, lead and zinc. The following table summarizes the background geochemical data obtained from the two rotary holes:

<u>Rock Type</u>	<u>Mean Values</u>		
	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>
Non-graphitic 3b:	40 ppm	25 ppm	75 ppm
Graphitic lenses in 3b:	60	45	175
Graphitic,qtzose 3a:	120	30	300

The data from the Sea holes was not used in producing this table because all these holes are in mineralized zones, however, the analyses from unmineralized portions of the holes fit well with the data given for the "3a" rock type in the table. Geochemical data for greenstones is variable but tends to be high in copper, around 100 ppm, and about average in lead and zinc, around 30 and 100 ppm, respectively. The change in background geochemical values is very sharp at the contact between Unit 3b and 3a, even though there is not a significant change in the appearance of the drill cuttings.

Rock geochemical analysis should definitely be carried out on all rotary holes drilled in this area in the future. It should be a reliable aid in logging the holes and, as well, as more information becomes available, it may be possible to follow geochemical trends within the individual rock units.

GEOPHYSICS

Previous geophysical work carried out between 1964 and 1968 throughout the area now covered by the Capa-Delta-Echo claims has included electromagnetic and aeromagnetic surveys, ground J.E.M. surveys, ground magnetic surveys and gravity surveys. Subsequent to recent compilation of these results, two main deficiencies were discovered. The original surveys were laid out with almost no regard to geology and, as a result, much potentially favourable ground was never covered by any ground geophysical survey. Secondly, the instruments used for both the A.E.M. and the ground E.M. were of limited depth penetration, less than 200 feet for both survey methods. However, of the numerous anomalies that were discovered through previous geophysical surveys, only four have ever been investigated with drill holes. To obtain a more complete geophysical picture, Dynasty, in 1971, completed ground magnetic surveys over all parts of the Capa-Delta-Echo claims that had not been covered previously either by air or ground magnetic surveys. In addition, Dynasty carried out a ground E.M. survey over virtually the entire area of the claims using a deeper penetrating Crone C.E.M. instrument.

Geophysical surveys were completed in July, 1972, at which time complete magnetic, electromagnetic and gravity coverage of the Capa-Echo grids was achieved.

Recent geophysical surveys, coupled with new interpretations of previous geophysical results, have indicated significant anomalies and major structures that require drill testing.

(a) Magnetic Survey

The ground magnetic survey was done with a Sharpes MF-1 fluxgate magnetometer. This instrument is hand-held and measures the vertical component of the magnetic field. Gamma values and profile maps have been prepared for the areas surveyed.

A compilation map shows all magnetic anomalies outlined on the claim group. The most significant features are located on Capa L136E, 12S. These anomalies are also reflected by the aeromagnetic survey as well. Another anomaly is centred in a marshy area of probable deep overburden near Capa 16E, 8 S, and is on strike with C.E.M. and gravimetric anomalies that lie about 3000 feet to the west. A third anomaly is at the west end of Moose Lake and coincides with a small C.E.M. conductor as well as some geochemical anomalies in silts. This anomaly is on strike with the pyrrhotite-rich mineralized zones on the Sea claims and may indicate an extension of those deposits.

(b) Electromagnetic Surveys

The Crone C.E.M. instrument is an improved version of the reliable and well known Crone J.E.M. instrument. It consists of two coils which can be utilized in a variety of configurations. For the survey, the "horizontal shootback" method was used, with the coils transmitting and receiving in a horizontal position. The depth penetration capability of the C.E.M., as with the J.E.M., is a function of the coil separation. Under conditions of low background noise, the C.E.M. is capable of detecting conductors at 600 foot depths with a coil separation of 800 feet. Under the high noise conditions that prevailed while during the course of the survey, the maximum possible coil separation was 500 feet thus theoretically resulting in a depth penetration of just under 500 feet. In a trial run over the Faro orebody, the C.E.M. clearly detected sulphides at depths in excess of 300 feet.

The C.E.M. survey detected the presence of numerous electromagnetic anomalies on the Capa-Delta-Echo claims. Most of these anomalies are very long, narrow, formational-looking conductors which can probably be correlated with

graphite-bearing lenses in Units 3a and 3b. This does not make these anomalous areas any less interesting however, since both the Vangorda and the Swim ore deposits are located within similar large E.M. conductors reflecting graphitic horizons. The axis of most of these conductors tends to conform with the strike of the S_2 foliation of the underlying phyllite bedrock. Most of these conductors showed up on the A.E.M. survey as well.

As can be seen from the compilation map, a major band of E.M. conductors begins on the Echo claims east of Swim Lake, extends discontinuously along the hillside north of Nasty Lake, and then curves around through the Delta claims in a N-NW orientation. This series of conductors is correlated tentatively with graphitic phyllites in Unit 3b. Another major anomaly begins in Echo Lake and extends to the northeast for at least $2\frac{1}{2}$ miles. Two subparallel conductors lie to the south of this one. These anomalies probably reflect graphitic lenses in Unit 3a. The main E.M. anomalies on the south and east parts of the Capa claims as well are most certainly within Unit 3a.

In addition to these major conductors, many smaller anomalies occur. The most interesting of these is a small conductor at the west end of Moose Lake, which coincides with magnetic and geochem anomalies. A minor anomaly between Echo Lake and Nasty Lake is interesting in that its longest dimension is oriented perpendicular to the regional strike of the rocks in this area. Another small anomaly at the southern end of Line 64E on the Capa claims is close to a rust-stained creek. Several other minor C.E.M. anomalies occur over potentially favourable Unit 3a phyllite.

Several conductors were discovered during the 1965 A.E.M. survey in areas peripheral to the claims. At least one of these anomalies warrants further investigation. This anomaly, which lies just north of Cub Lake, is very intense and is partly coincident with some weak geochemical and aeromagnetic anomalies.

None of the numerous large and small E.M. anomalies on the Capa-Delta-Echo claims were tested by the 7 rotary drill holes drilled in the area in 1965. Only two of the rotary drill holes were close to E.M. anomalies, and even these missed the main axis of the conductive zone.

All maximum field strength ratios and resultant dip angle anomalies are recommended for drill testing. All conductive axis coincident or partially coincident with magnetic, gravity or geochemical anomalies will be drilled as well.

(c) Gravity Surveys

Gravity surveys over the Capa-Echo grids and southern portions of the Delta grid were completed by July 28th, 1972. Approximately 40 line miles of gravimetric survey were contracted to Airborne Geophysical Surveys of Calgary, Alberta. As final interpretations of gravity data has not yet been received from the contractor, an appendix including the contractors report will be added to this report at a later date.

The horizontal and vertical survey was conducted with a T-1A Theodolite. Stations were located and elevated along each of the grid lines. The elevation where possible, was then closed across the extremities of the grid lines,

all of the closures thus formed were under 0.6 feet. The gravity readings were taken with a La Coste meter and stations were metered on a two and one-half hour run from base to base interval. The base station plots were used for graphing the diurnal gravity drift which in turn was applied to all station readings. Each gravity station run had several repeat stations from preceding runs in order to prove the repeatability of the gravity meter. The repeats were all within a 0.00 to 0.08 milligal range. All gravity readings were corrected for diurnal tidal drift, Bouguer Free-Air-Correlation, latitude correction and terrain correction. A density factor of 0.060 for a surface density of 2.65 has been used in this interpretation.

A Residual Gravity Map was derived from a regional gravity gradient through the gravity profiles of the Capa-Delta-Echo claims. The "regional" has been constructed to incorporate the dominant gravity positive which trends through the area and subsequent interpretations are therefore looking for local gravity features superimposed upon this regional high.

All gravity anomalies in excess of 0.5 milligals are considered of interest and can possibly be due to subsurface sulphide masses. All such anomalies will be drilled and are discussed under the section, 'Proposed Exploration'.

PROPOSED EXPLORATION

Drilling of numerous geophysical targets and specific areas for geological information is recommended for a continued exploration program through 1972.

Five diamond drill holes have been proposed on the basis of existing geophysical information, additional targets will be drilled as geophysical survey information is completed over the eastern area of the grid.

Rock geochemical analysis will be carried out on all holes drilled to aid in core logging of phyllite members as well as to define significant geochemical trends and halos within individual units. Overburden samples will also be taken for geochemical analysis, in anticipation of discovery of subsurface sulphide float trains not geochemically obvious from surface sampling.

D.D.H. 72-1 - Location - Moose Lake Grid L88W 3S
Target - 0.6 milligal gravity anomaly
- weak C.E.M. conductor
- weak 20 gamma magnetic anomaly

The main target is a residual gravity anomaly, calculated to be due to a causative structure 60 feet thick, 320 feet deep. The gravity anomaly is on strike with both an H.E.M. conductor and C.E.M. conductor located immediately to the east.

Rock types are probably lower phyllite, as projected from outcrop about 2000 feet southwest of the hole location.

Depth of hole, about 400 feet.

D.D.H. 72-2 - Location - Nasty Grid L72W 12S
Target - 9 milligal gravity anomaly
- C.E.M. conductor
- broad ground magnetic anomaly .30 gammas

This target is interpreted as a denser mass, calculated to be a southerly dipping slab, 100 feet thick, its near surface top about 180 feet from surface. C.E.M. conductivity response confirms this interpretation. The target could be close to 3a-3b phyllite contact and in fact might be an expression of a fault contact.

Depth of hole, about 300 feet.

- D.D.H. 72-3 - Location - Nasty Grid L104W 8N
Target - .5 milligal gravity anomaly
- 200 gamma magnetic anomaly

This target is a well defined magnetic gravity anomaly coincidence flanked by a conductor to the south. Depth to middle of structure is calculated to be 390 feet, the structure is estimated to be 35 feet thick. Nearest outcrop is unit 3b, middle member phyllite.

- D.D.H. 72-4 - Location - Echo Grid L130W
Nasty Grid L132W 9S
Target - broad .5 milligal gravity anomaly
flanked by strong C.E.M. conductor.

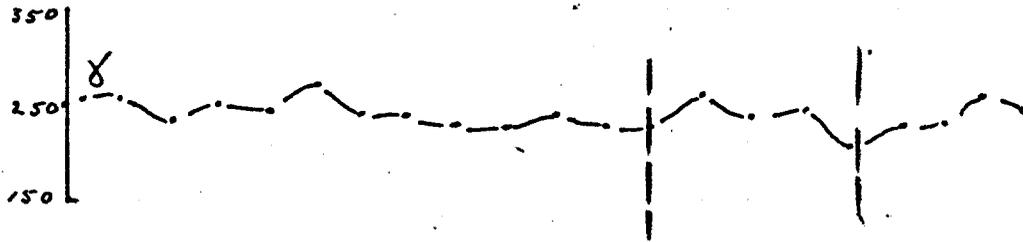
The final location of this drill hole will depend on completion of C.E.M. and magnetic surveys in the area. The hole is within the vicinity of two aeromagnetic anomalies.

- D.D.H. 72-5 - Location - Delta Grid L108N
40E
Target - strong conductor coincident with
soils geochemical anomaly.
- no gravity coverage completed

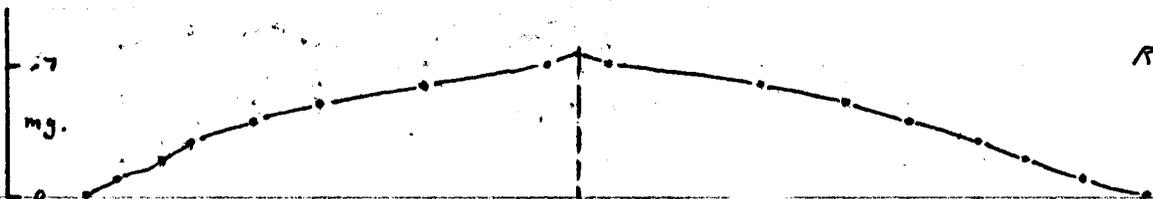
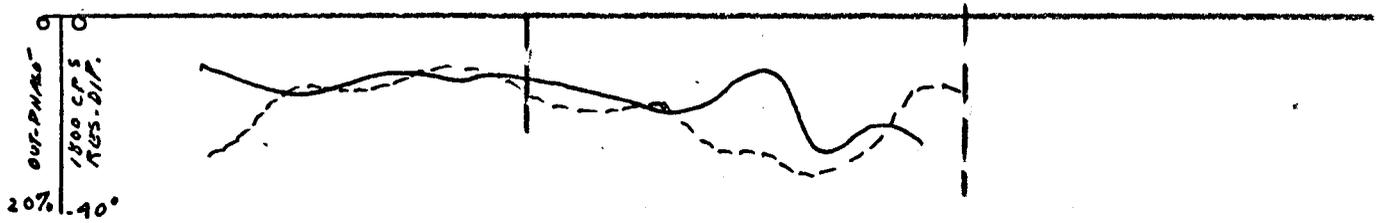
CAPA - DELTA - ECHO
CLAIMS

LOCATION MOOSE GRID L. 88W
3S

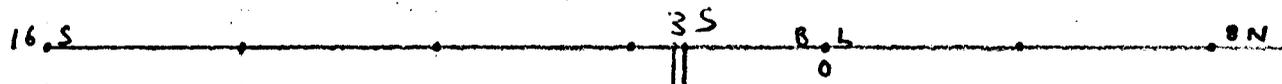
D.D.H 72-1



GROUND MAG



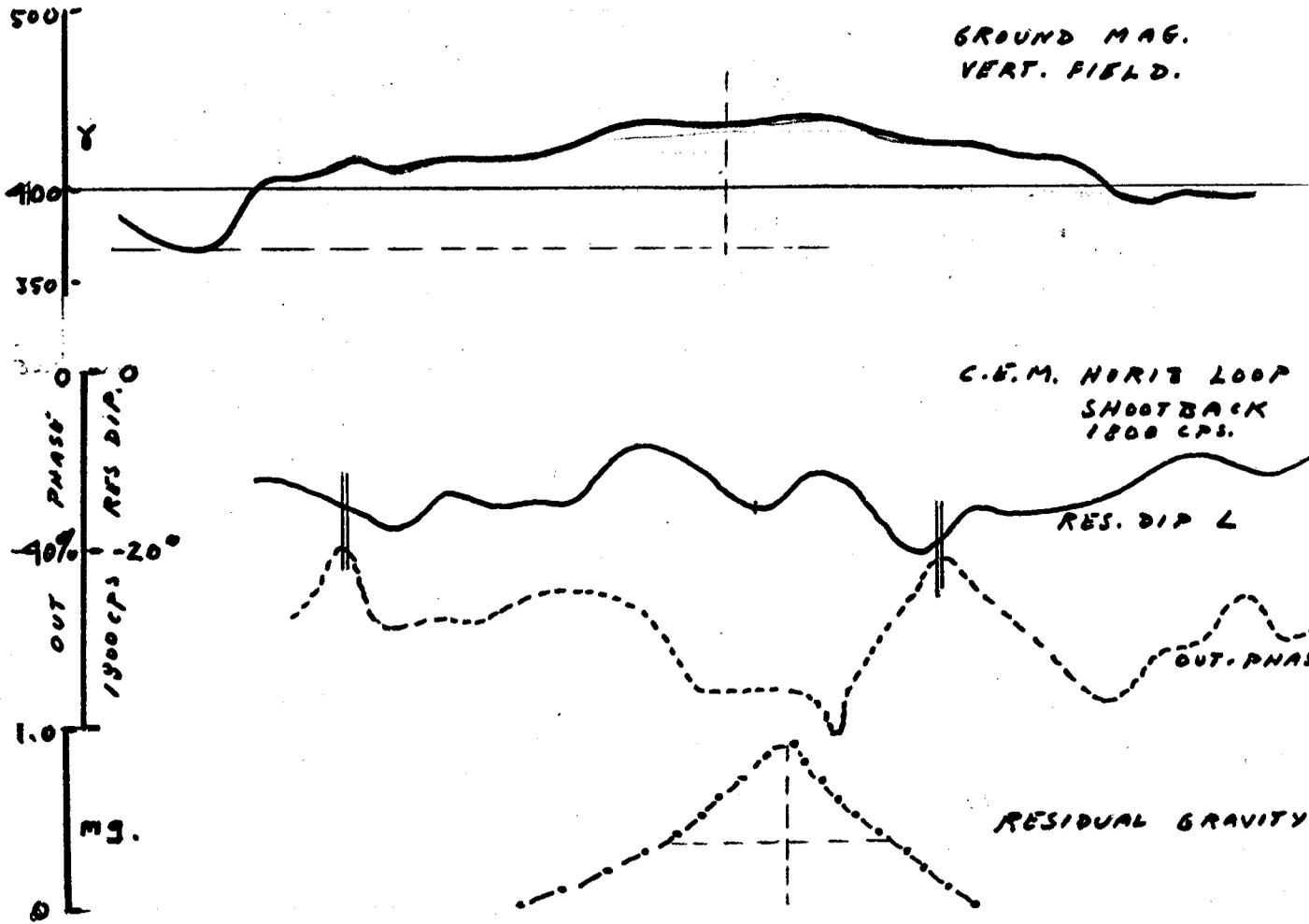
RESIDUAL GRAVITY



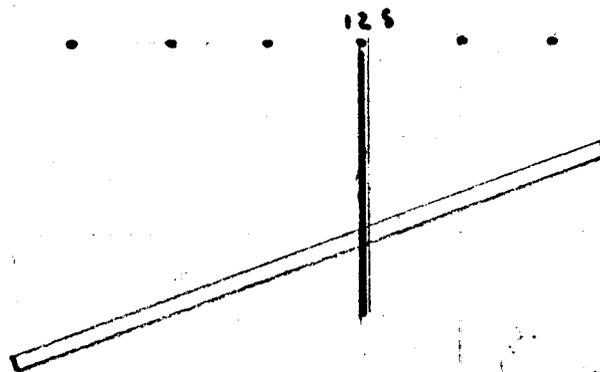
~ 400'

CAPA-DELTA-ECHO
CLAIMS

D.D.H. 72-2
LOC. NASTY GRID L. 72W
12 S



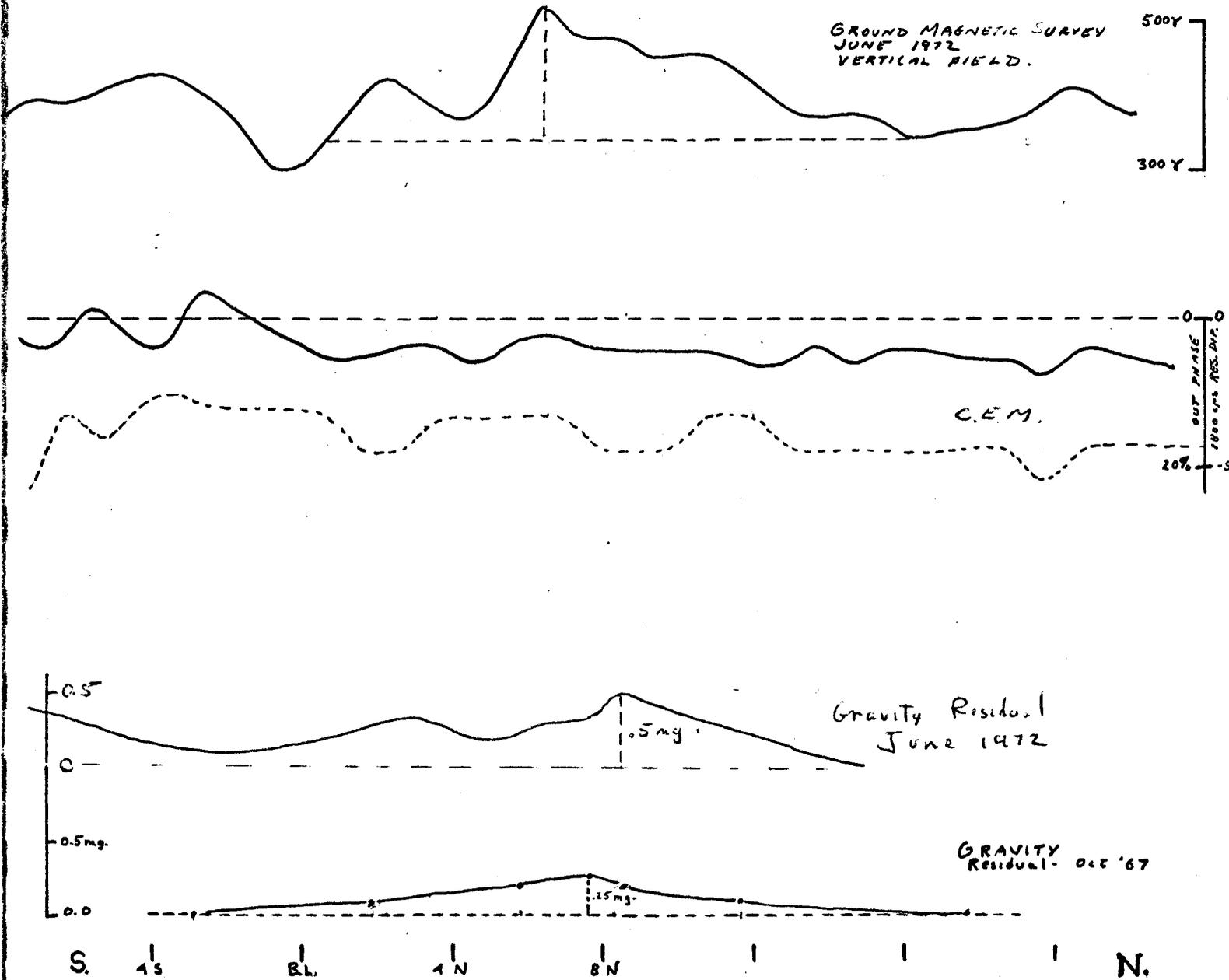
B.L.
1005E
GRID



B.L.
NASTY
GRID

CAPA-DELTA-ECHO
CLAIMS

DPH 72-3
LOC. NASTY GRID L 104 W
8 N



ECHO - NASTY GRID L 104 W.

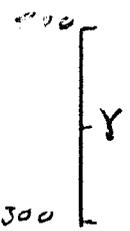
CAPA DELTA-ECHO

CLAIMS.

DDH 72-4

LOC. NASTY GRID.

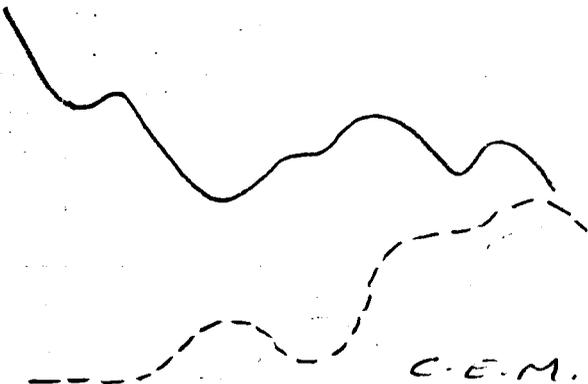
146 L. 132 W
95



To be surveyed.

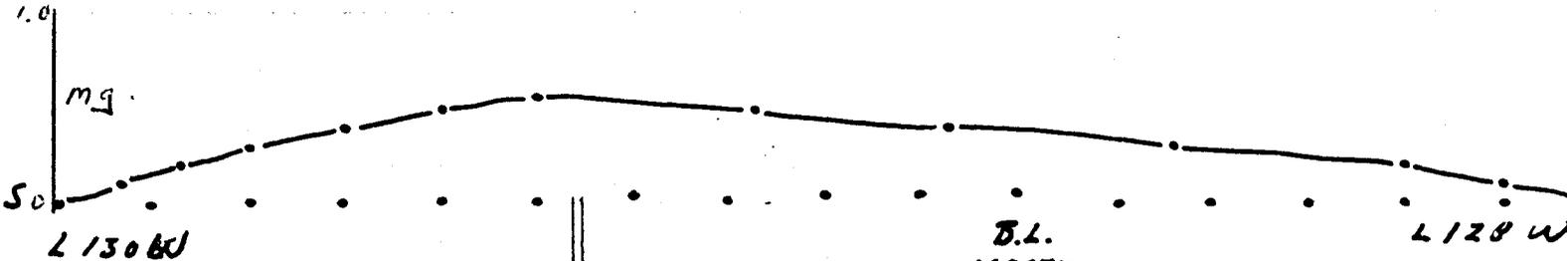


Ground Magnetic Survey



To be surveyed.

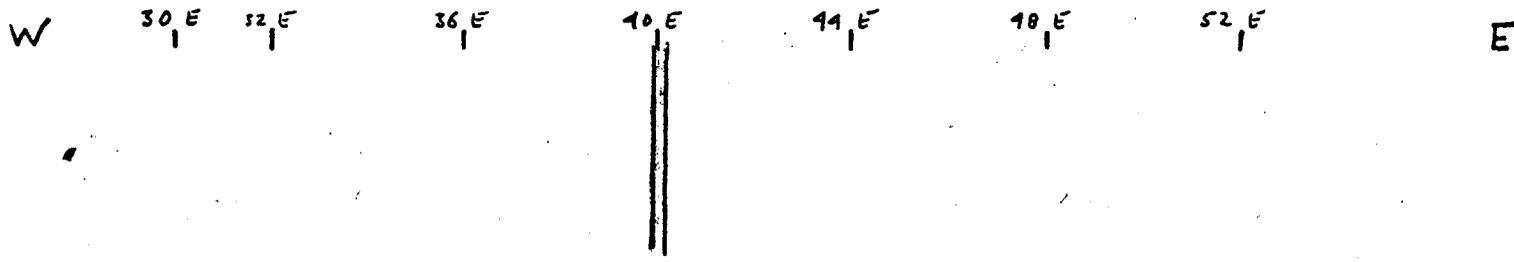
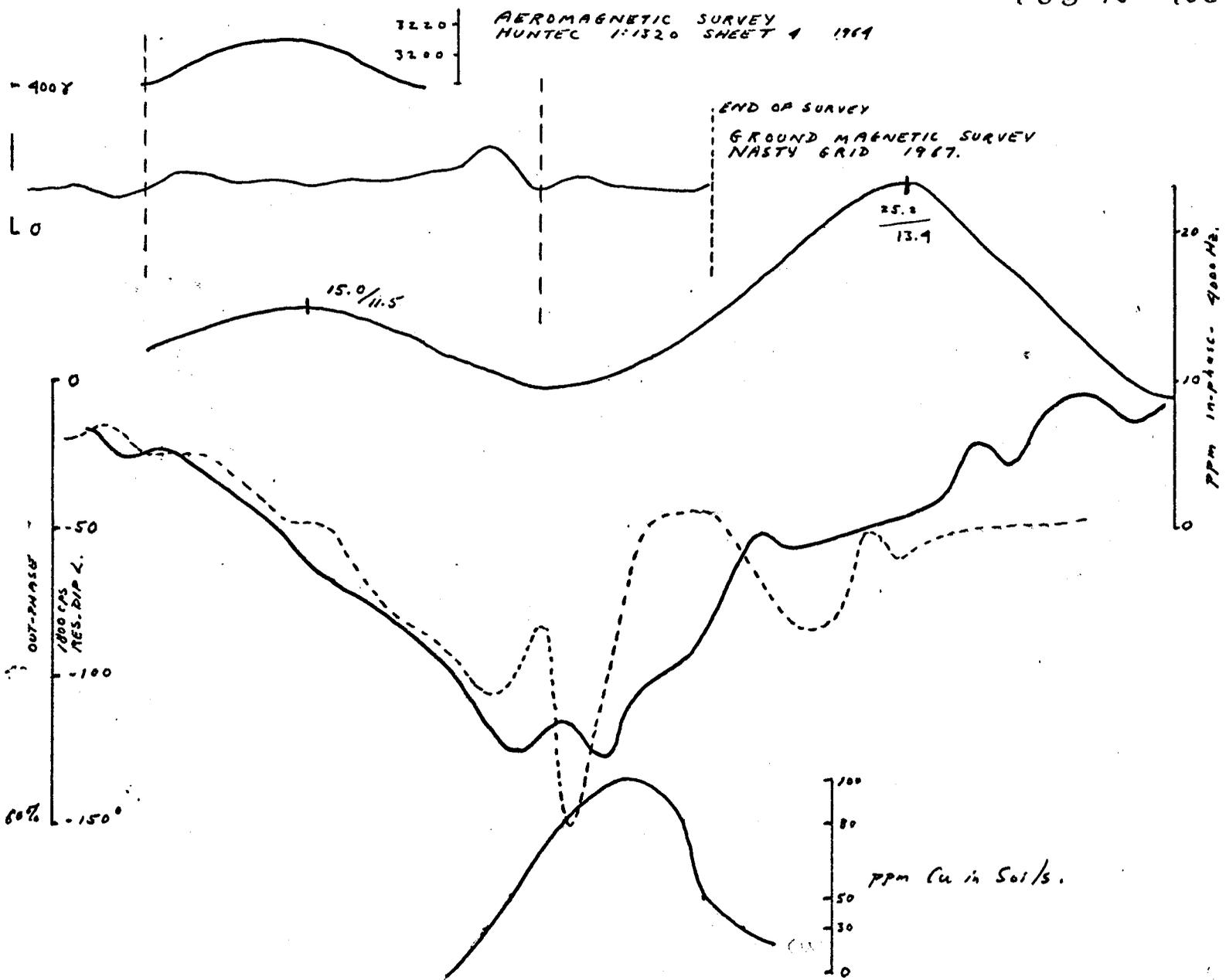
C.E.M.



CAPA-DELTA-ECHO CLAIMS.

DDH 72-5

LOC. DELTA GRID
108 N 406



DELTA 108 N

CAPA-DELTA-ECHO CLAIMS

BUDGET NOTES

Summary

Claims 03 - Staking (20 claims)	\$ 120	
31 - Acquisition (20 clms.)	230	
33 Maintenance (250 claims)	<u>4,600</u>	\$ 4,950
Geology: - 06		6,600
Geophysics: 07 - Gravity		14,500
Diamond Drilling: 09		78,000
Camp Operations: 21 - Gravity -	\$900	
General -	<u>700</u>	1,600
Freight & Transportation - Gravity	900	
Drilling	2,500	
General	<u>600</u>	40,000
		<hr/>
		\$ 109,650

Expediting and Non-direct charges

Administration 10%

Drilling

Contract \$78,000
Transpntn. 2,500
\$80,500

Gravity

Contract \$14,500
Camp 900
Transpntn. 900
\$16,300

FINAL SUMMARY

Direct Costs	\$112,805
Van.Expl Office	5,640
Admin.	<u>11,280</u>
	\$129,725
Wages	11,855
Supplies	<u>100,950</u>
Direct Costs	<u>\$112,805</u>

CONCLUSIONS

The Anvil Range is an area holding a high potential for discovery of massive lead-zinc deposits. Although the source and process of mineralization is still unknown, all major zinc-lead mineralization is apparently stratigraphically controlled. The Faro orebodies, the Swim, Vangorda, Champ and Firth deposits, as well as the Sea showings, occur in quartzite within Unit 3a, the quartz rich phyllite. Pre-metamorphic emplacement is proposed since the deposits have features common to metamorphosed ores. Structural controls of ore deposition, if any, have been obliterated by metamorphism. Only through recent exploration has the extent and potential of the quartz rich phyllite host been realized. Detailing of such areas with geophysics and follow-up drilling will be an integral part of continued exploration as based on previous success with similar programs.

The success of the exploration leading to the discovery of the Faro orebodies was based on thorough prospecting of 'elephant country' for geophysical anomalies of a certain size and particular type. Further exploration of the area is warranted. Other major deposits can be discovered at depth in the district with recent better-developed and improved exploration techniques because the known discoveries all occur at the present fortuitous bedrock erosion surface, sizeable areas therefore remain relatively unexplored. Numerous, more subtle geophysical targets, have not been investigated by more detailed interpretations and drilling. Refinements in geologic, geochemical and geophysical approach using previous methods as a base will undoubtedly reveal other deposits in the area. Modifications of the electromagnetic method both for airborne and ground surveys, to allow greater depth penetration and conductor discrimination coupled with gravimetric detailing of all conductors, has been found to be the best method of continued geophysical

exploration in selected geologic environments of the Anvil area. All targets will have to be systematically drilled without exception since the most obvious massive sulphide targets would appear to have been found.

Respectfully submitted,



J. S. Brock,

July, 1972



30+00 N

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L 40 E

L 48 E

L 56 E

L 64 E

L 72 E

L 80 E

L 88 E

L 96 E

L 104 E

L 112 E

L 120 E

L 128 E

L 136 E

L 144 E

L 152 E

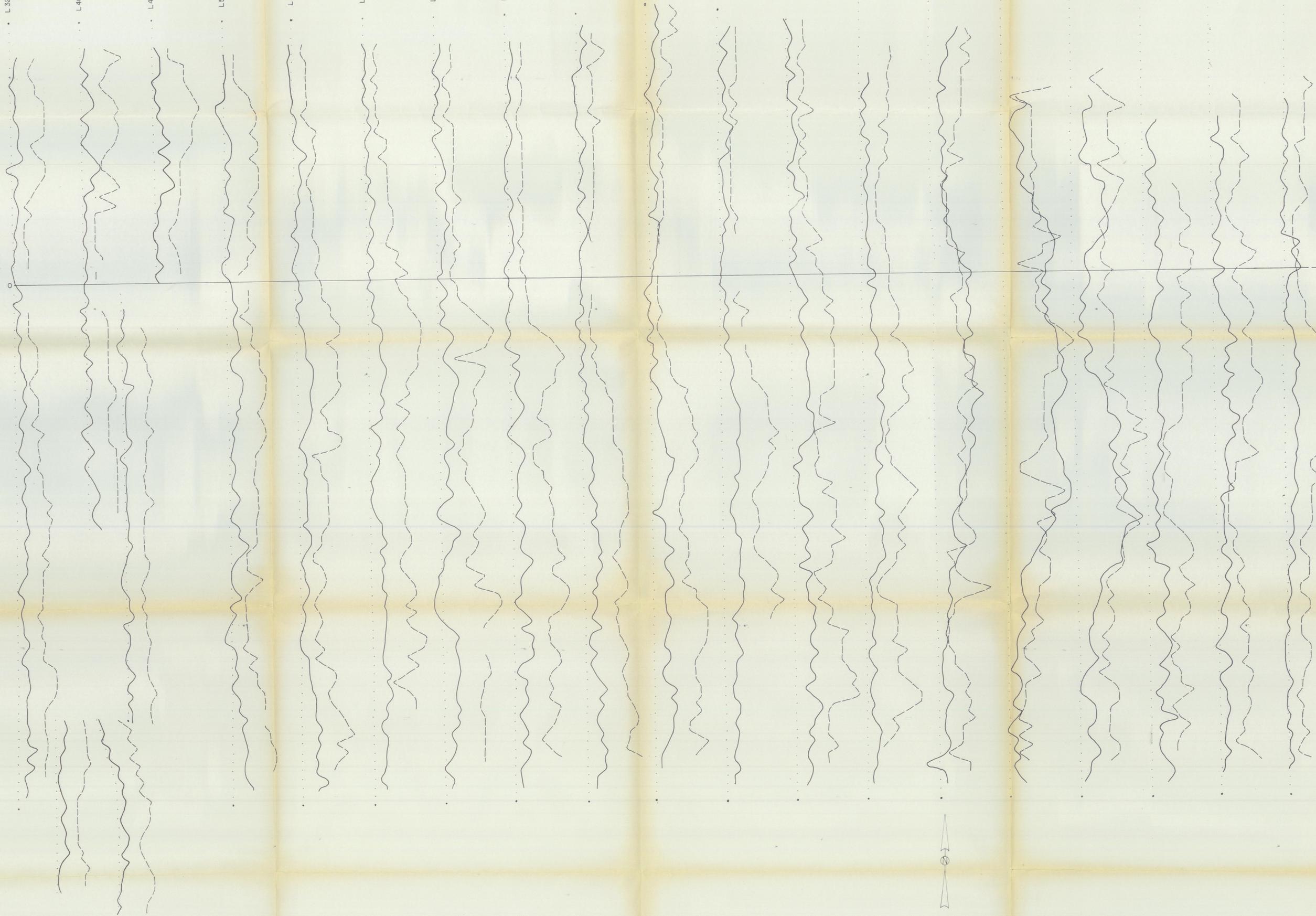
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L 168 E

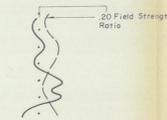
L 176 E

BASE LINE 0

60+00 S



LEGEND



+50° Resultant Dip Angle -50° Resultant Dip Angle

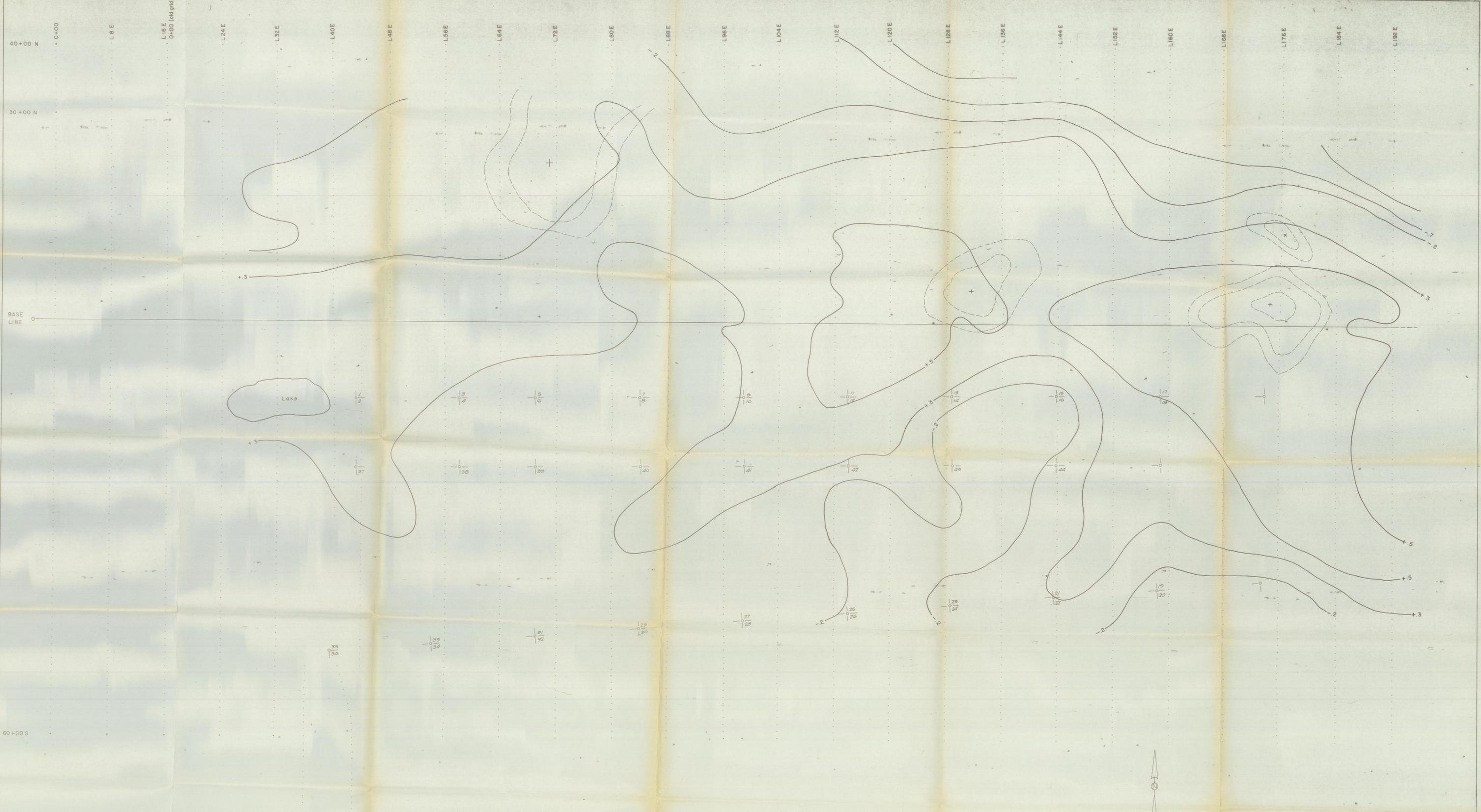
DYNASTY EXPLORATIONS LIMITED

TINTINA - ANVIL PROJECT

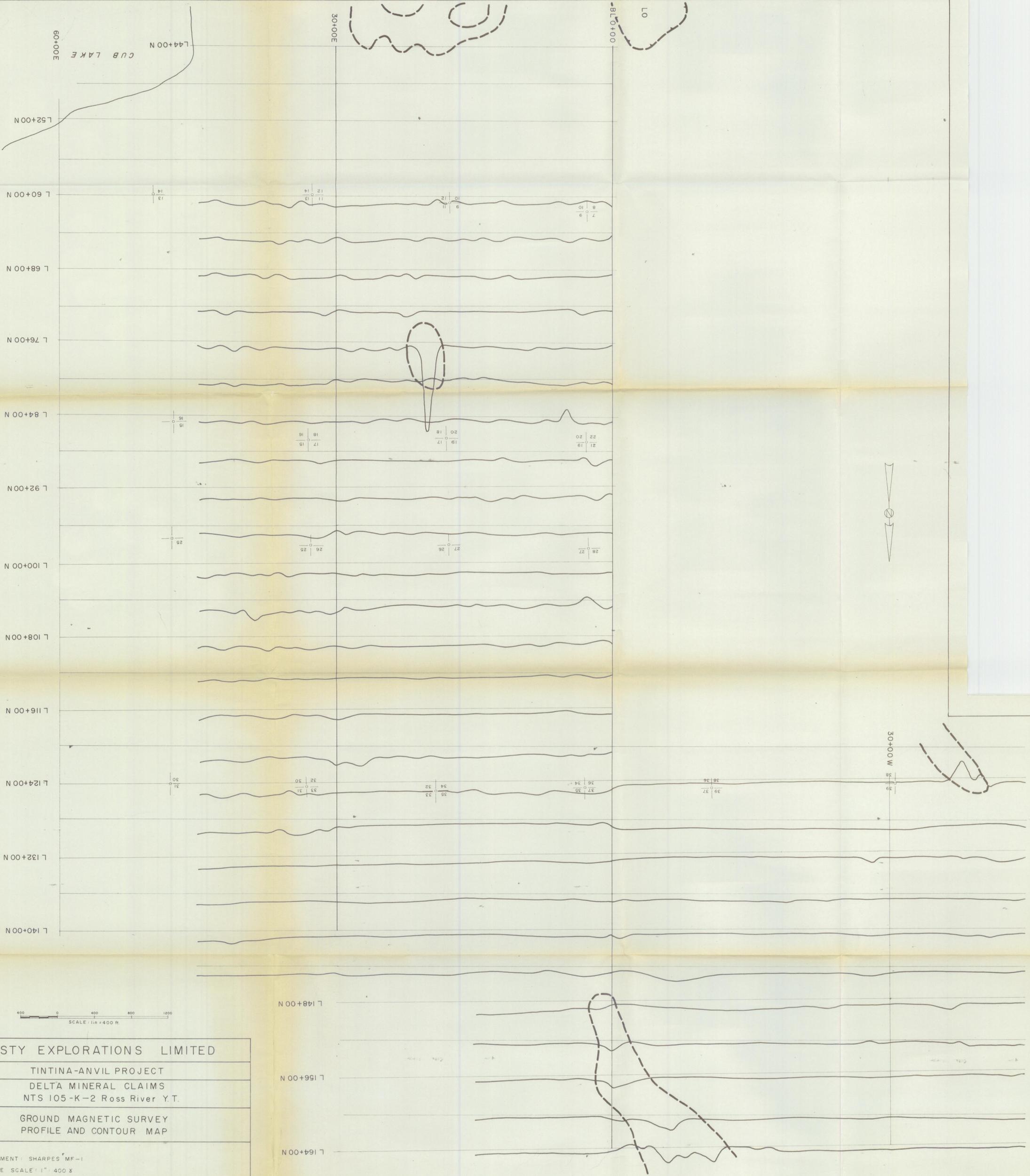
CAPA MINERAL CLAIMS
NTS 105 K-2

C.E.M. ELECTROMAGNETIC SURVEY
1800 C.P.S. RESULTANT DIP ANGLES AND
AND FIELD STRENGTH RATIOS VALUES PROFILE MAP

OPERATORS: T. YOACHIM, J. BRITTON
SURVEY DATE: JULY, 1971
INSTRUMENT: CRONE C.E.M.
COIL CONFIGURATION: HORIZONTAL LOOP - SHOOTBACK METHOD
COIL SEPARATION: 500 FEET



DYNASTY EXPLORATIONS LIMITED	
* TINTINA - ANVIL PROJECT	
CAPA MINERAL CLAIMS	
NTS 105 K-2	
GRAVITY CONTOUR MAP	
RESIDUAL GRAVITY CONTOURS	
CONTOUR INTERVAL 0.1 mg	
INTERPRETATION: J.G. WEBSTER	
BOUGUER GRAVITY ANOMALIES	
INTERPRETATION: J.S. BROCK	
SURVEY BY: UNITED GEOPHYSICAL CO. OF AMERICA	
DATE: MAY, 1965	
REPLOTTED ON TO 1971 CAPA GRID DEC. 1971	



60+00E
L44+00N
CUB LAKE

30+00E

BL0+00

L0

L 52+00 N

L 60+00 N

L 68+00 N

L 76+00 N

L 84+00 N

L 92+00 N

L 100+00 N

L 108+00 N

L 116+00 N

L 124+00 N

L 132+00 N

L 140+00 N



30+00 W

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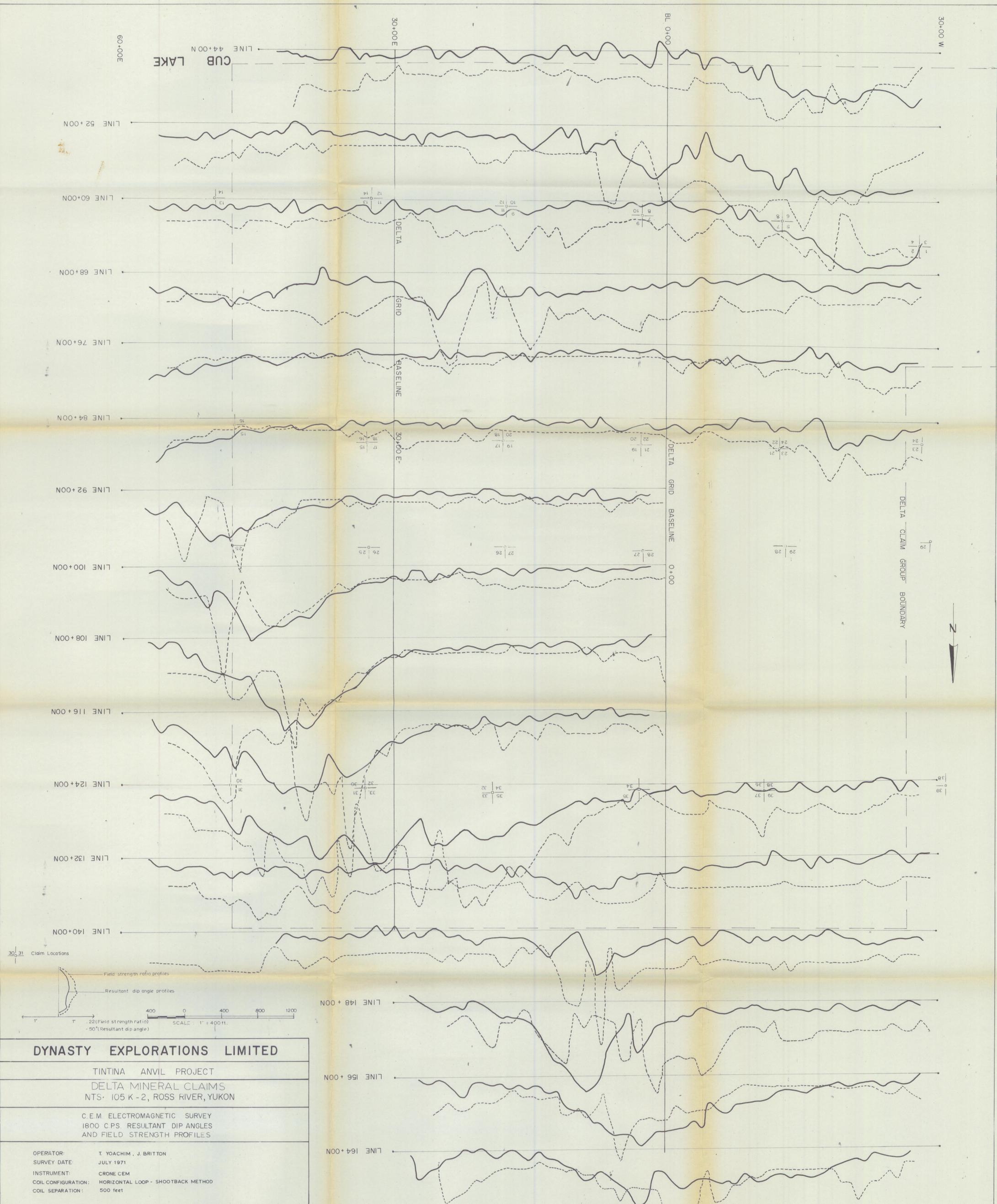
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DYNASTY EXPLORATIONS LIMITED

TINTINA ANVIL PROJECT
 DELTA MINERAL CLAIMS
 NTS- 105 K - 2, ROSS RIVER, YUKON

C. E. M. ELECTROMAGNETIC SURVEY
 1800 C.P.S. RESULTANT DIP ANGLES
 AND FIELD STRENGTH PROFILES

OPERATOR: T. YOACHIM, J. BRITTON
 SURVEY DATE: JULY 1971
 INSTRUMENT: CRONE CEM
 COIL CONFIGURATION: HORIZONTAL LOOP - SHOOTBACK METHOD
 COIL SEPARATION: 500 feet

30+00 W

BL 0+00

30+00 E

80+00 E

CUB LAKE

LINE 52+00N

LINE 60+00N

LINE 68+00N

LINE 76+00N

LINE 84+00N

LINE 92+00N

LINE 100+00N

LINE 108+00N

LINE 116+00N

LINE 124+00N

LINE 132+00N

LINE 140+00N

DELTA

GRID

BASELINE

30+00 E

DELTA

GRID

BASELINE

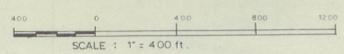
0+00

DELTA CLAIM GROUP BOUNDARY



31 32 Claim Locations

Contour Interval: -10' above -20' Resultant dip angle

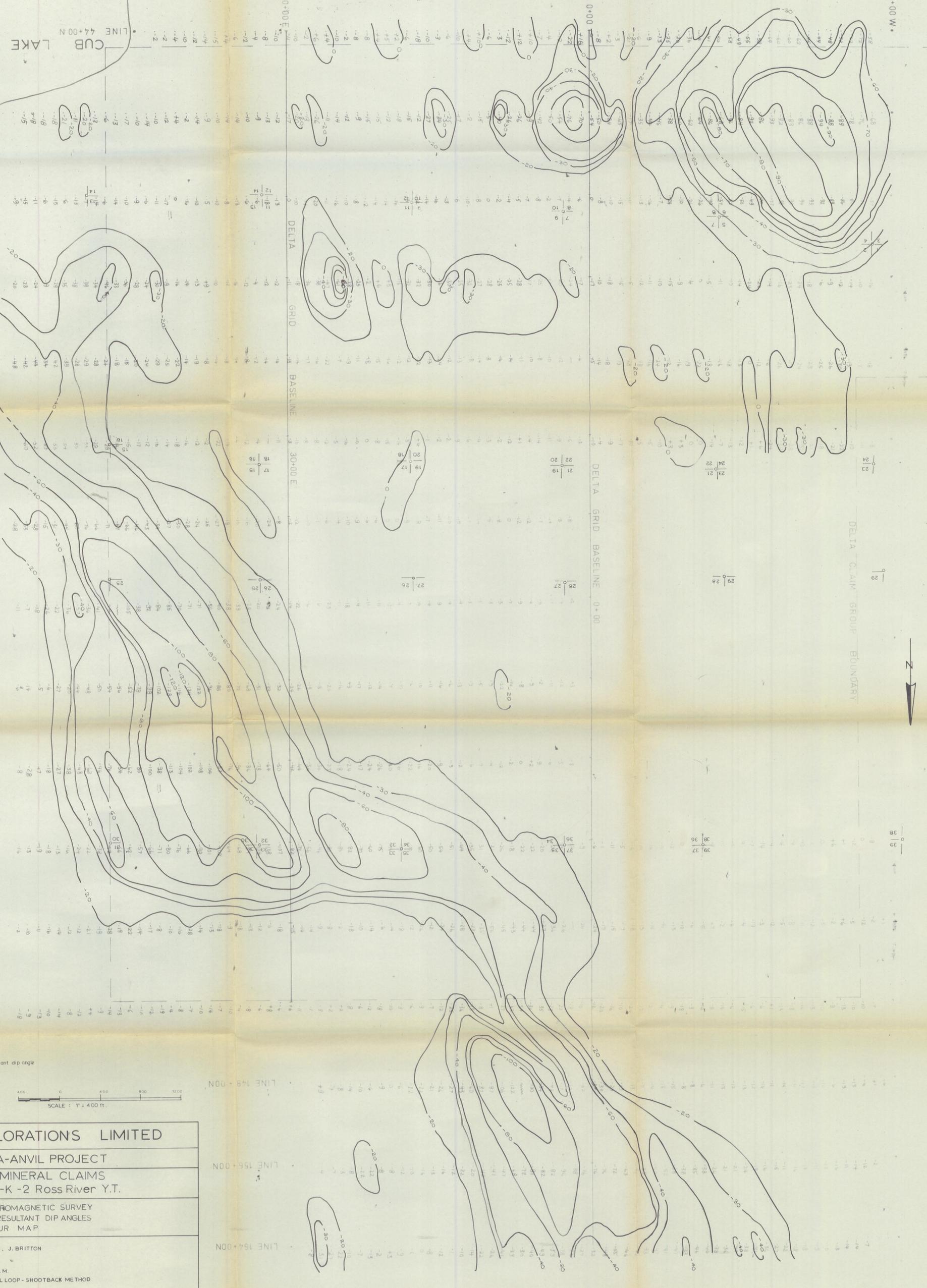


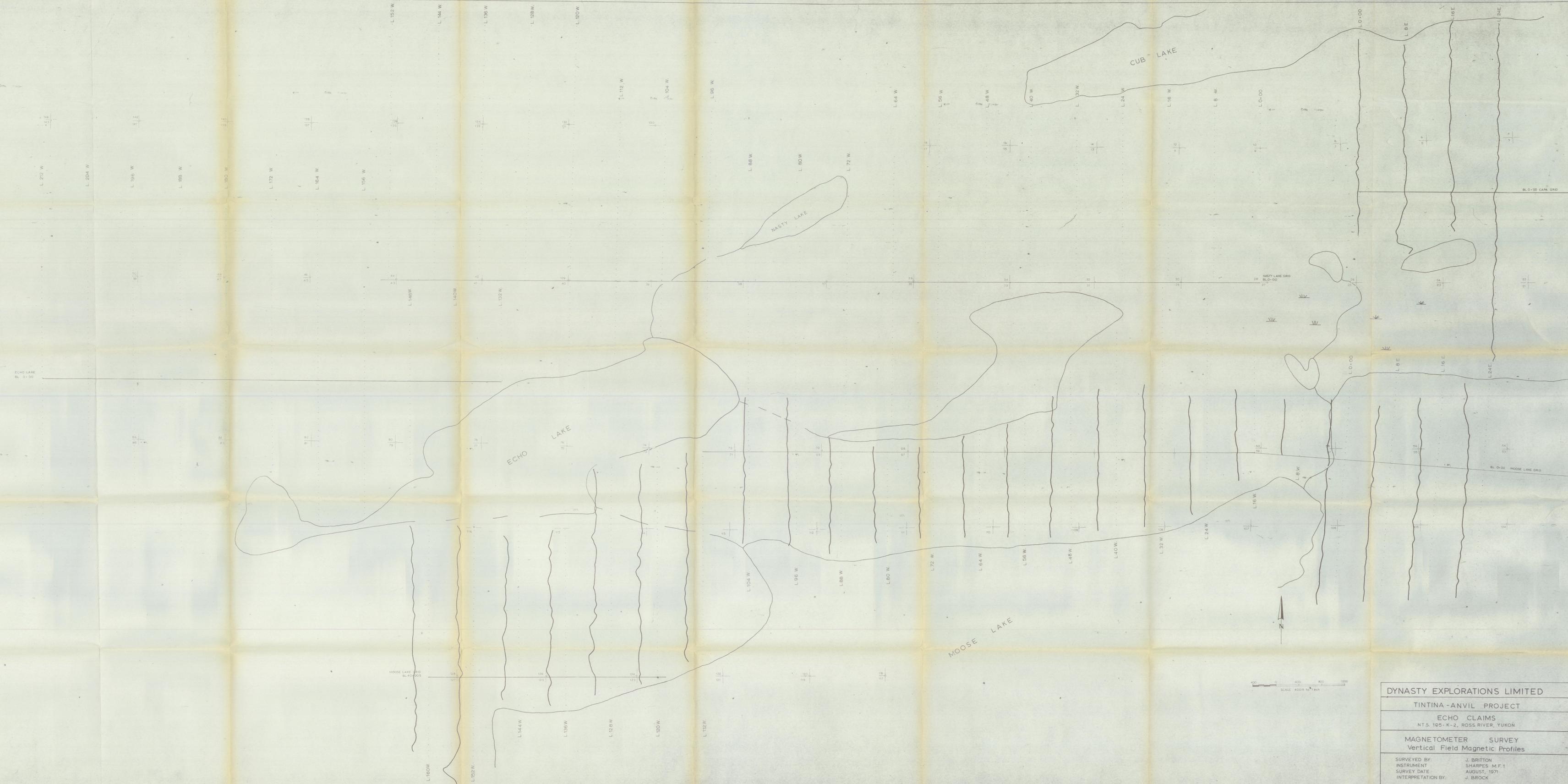
DYNASTY EXPLORATIONS LIMITED	
TINTINA-ANVIL PROJECT	
DELTA MINERAL CLAIMS	
NTS 105-K -2 Ross River Y.T.	
C.E.M. ELECTROMAGNETIC SURVEY	
1800 C.P.S. RESULTANT DIP ANGLES	
CONTOUR MAP	
OPERATOR :	T. YOACHIM, J. BRITTON
SURVEY DATE :	JULY, 1971
INSTRUMENT :	CRONE C. E. M.
COIL CONFIGURATION :	HORIZONTAL LOOP- SHOOTBACK METHOD
COIL SEPARATION :	500 feet

LINE 148+00N

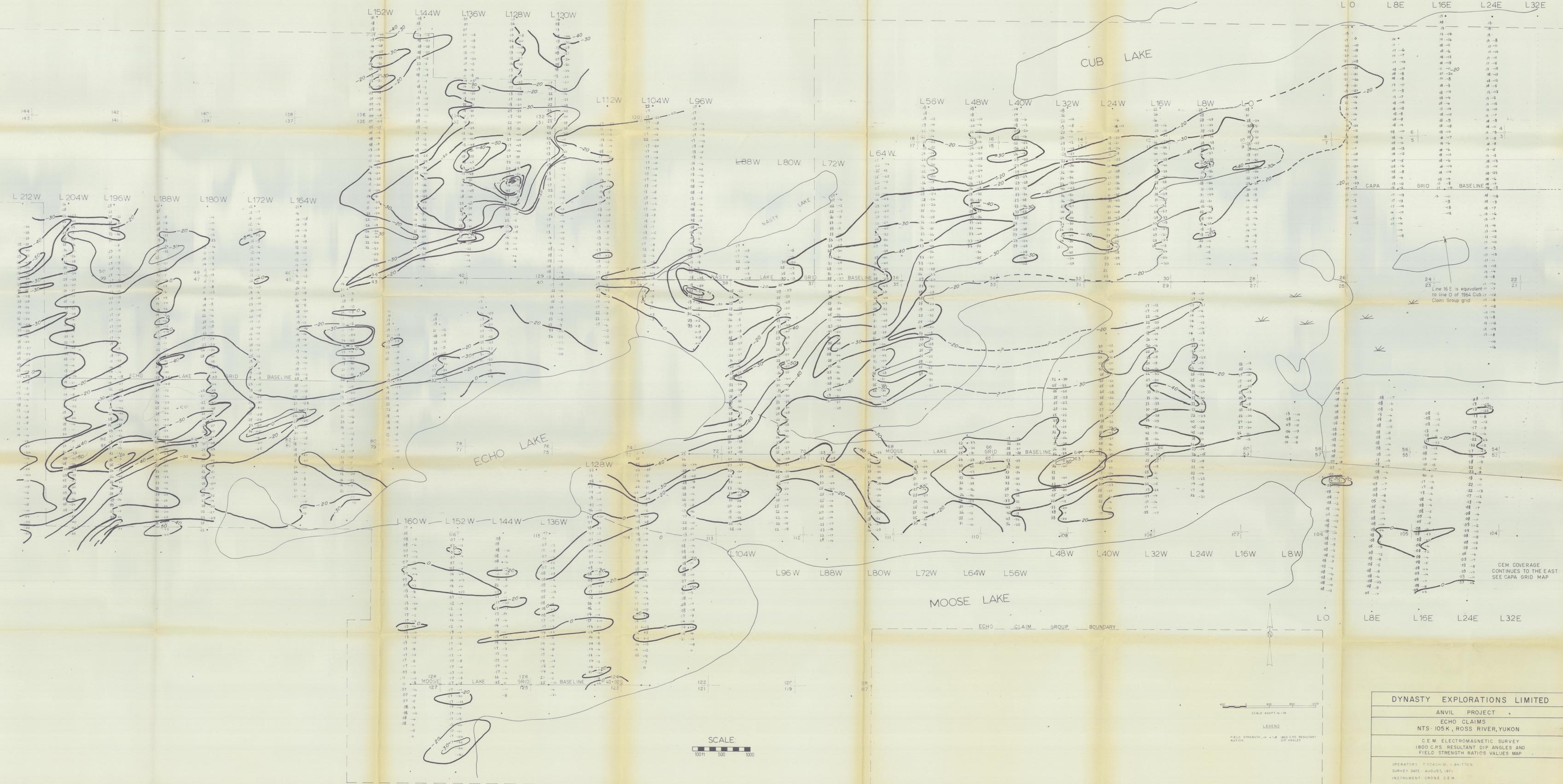
LINE 155+00N

LINE 164+00N





DYNASTY EXPLORATIONS LIMITED
 TINTINA-ANVIL PROJECT
 ECHO CLAIMS
 N.T.S. 105-K-2, ROSS RIVER, YUKON
 MAGNETOMETER SURVEY
 Vertical Field Magnetic Profiles
 SURVEYED BY: J. BRITTON
 INSTRUMENT: SHARPES M.F. 1
 SURVEY DATE: AUGUST, 1971
 INTERPRETATION BY: J. BROCK



L 0 L 8E L 16E L 24E L 32E

CUB LAKE

NASTY LAKE

ECHO LAKE

MOOSE LAKE

ECHO CLAIM GROUP BOUNDARY

L 0 L 8E L 16E L 24E L 32E

SCALE
100ft 500 1000

LEGEND
FIELD STRENGTH 100 CPS RESULTANT DIP ANGLES AND FIELD STRENGTH RATIOS VALUES MAP

DYNASTY EXPLORATIONS LIMITED
ANVIL PROJECT
ECHO CLAIMS
NTS - 105 K, ROSS RIVER, YUKON
G.E.M. ELECTROMAGNETIC SURVEY
1800 CPS RESULTANT DIP ANGLES AND FIELD STRENGTH RATIOS VALUES MAP
OPERATORS: T. YOACHIM, J. BRITTON
SURVEY DATE: AUGUST, 1971
INSTRUMENT: CRONE G.E.M.
CIRCUIT CONFIGURATION: HORIZONTAL LOOP, SHOOTBACK METHOD
CIRCUIT SEPARATION: 500 FEET

CEM COVERAGE CONTINUES TO THE EAST. SEE CAPA GRID MAP

Line 16 E is equivalent to line O of 1964 Cub Claim Group grid

CAPA GRID BASELINE

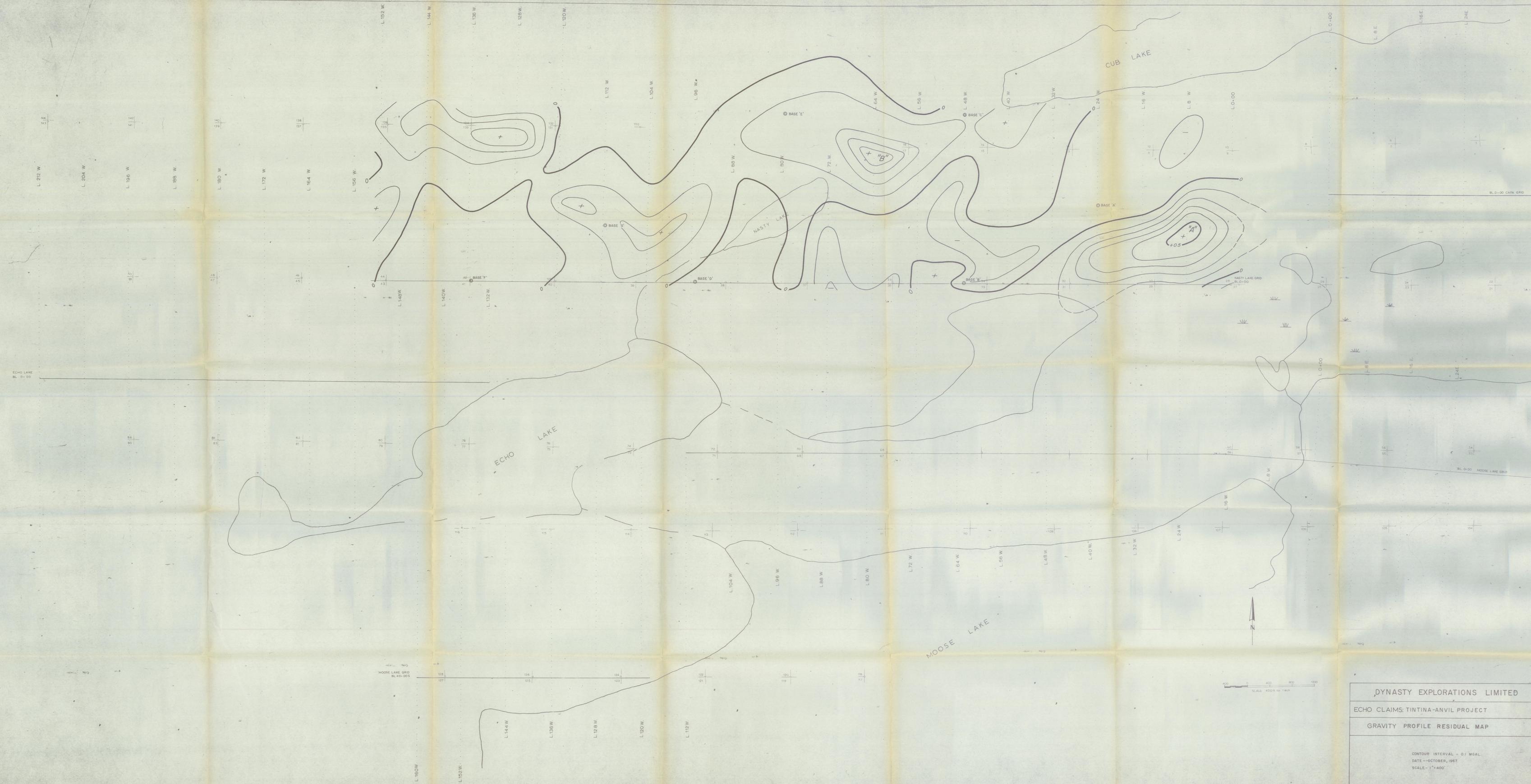
144 142 140 138 136 135 134 133 132 131 130 129 128 127 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112 111 110 109 108 107 106 105 104 103 102 101 100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0

L 212W L 204W L 196W L 188W L 180W L 172W L 164W

ECHO LAKE GRID BASELINE

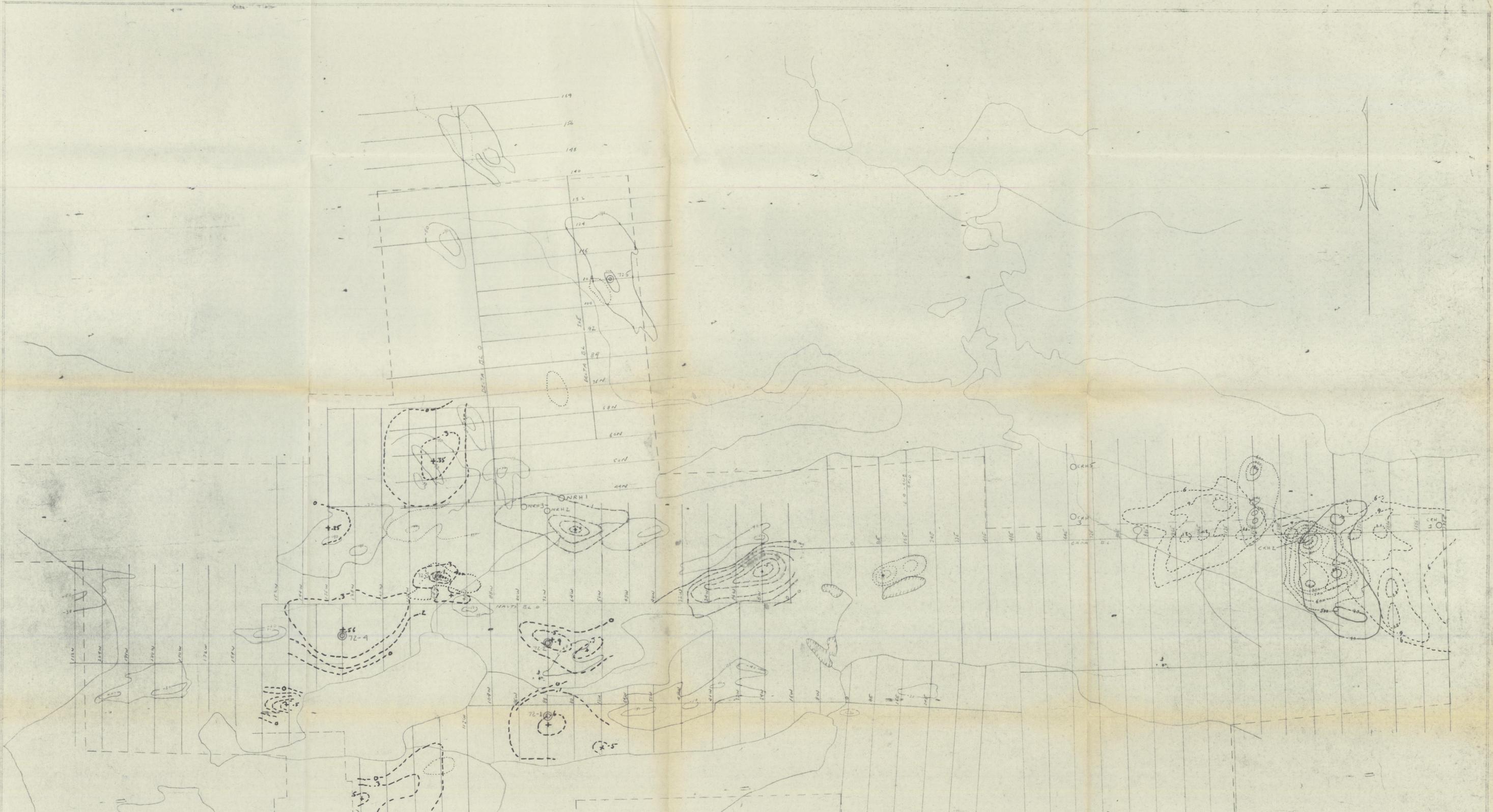
L 160W L 152W L 144W L 136W

MOOSE LAKE GRID BASELINE



DYNASTY EXPLORATIONS LIMITED
 ECHO CLAIMS TINTINA-ANVIL PROJECT
 GRAVITY PROFILE RESIDUAL MAP

CONTOUR INTERVAL - 0.1 MGAL
 DATE - OCTOBER, 1967
 SCALE - 1" = 400'



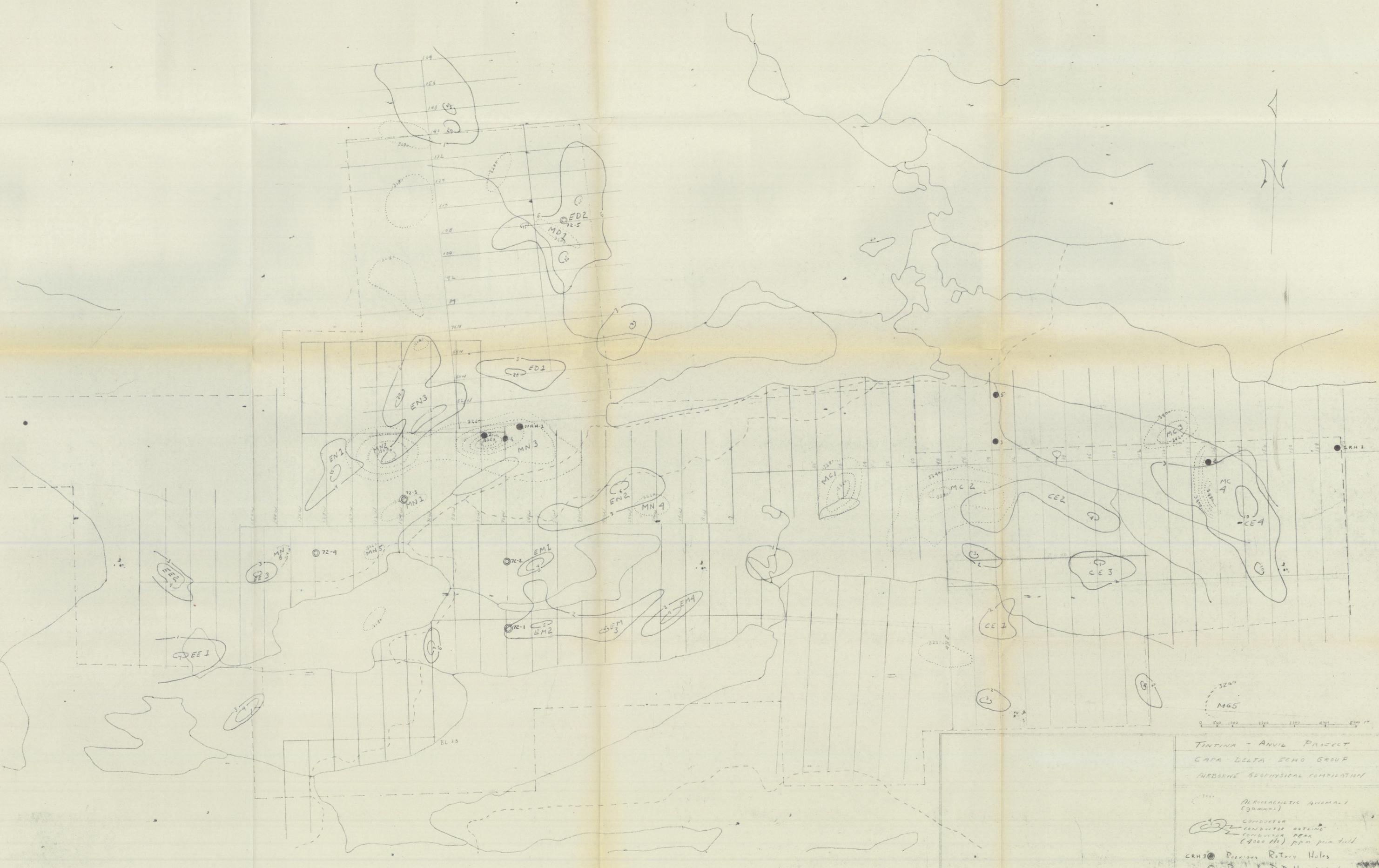
GROUP	GRAVITY	CURVES	CONTOUR	NOT PLOTTED
CAPE DELTA ECHO	GRAVITY	CAPE 1965	CAPE 1971	CAPE 1971 CONTOUR
ECHO	GRAVITY	AVILE 1967	DIMASTY 1971	ECHO 1971 PROFILES
DELTA	CEM	DELTA 1971	DELTA 1971	DELTA 1971 CONTOUR
	MAG	NASTY 1967	NASTY 1967	NASTY 1967 PROFILE

1000 2000 3000 4000 FT

TINTINA ANVIL PROJECT
CAPE DELTA ECHO GROUP
GROUND GEOPHYSICAL COMPILATION

MAGNETIC ELLIPSE
 MAGNETIC ANOMALY (gamma) GRAVITY ANOMALY (mgals)
 CEM CONDUCTOR
 CONDUCTOR OUTLINE
 CONDUCTOR PEAK

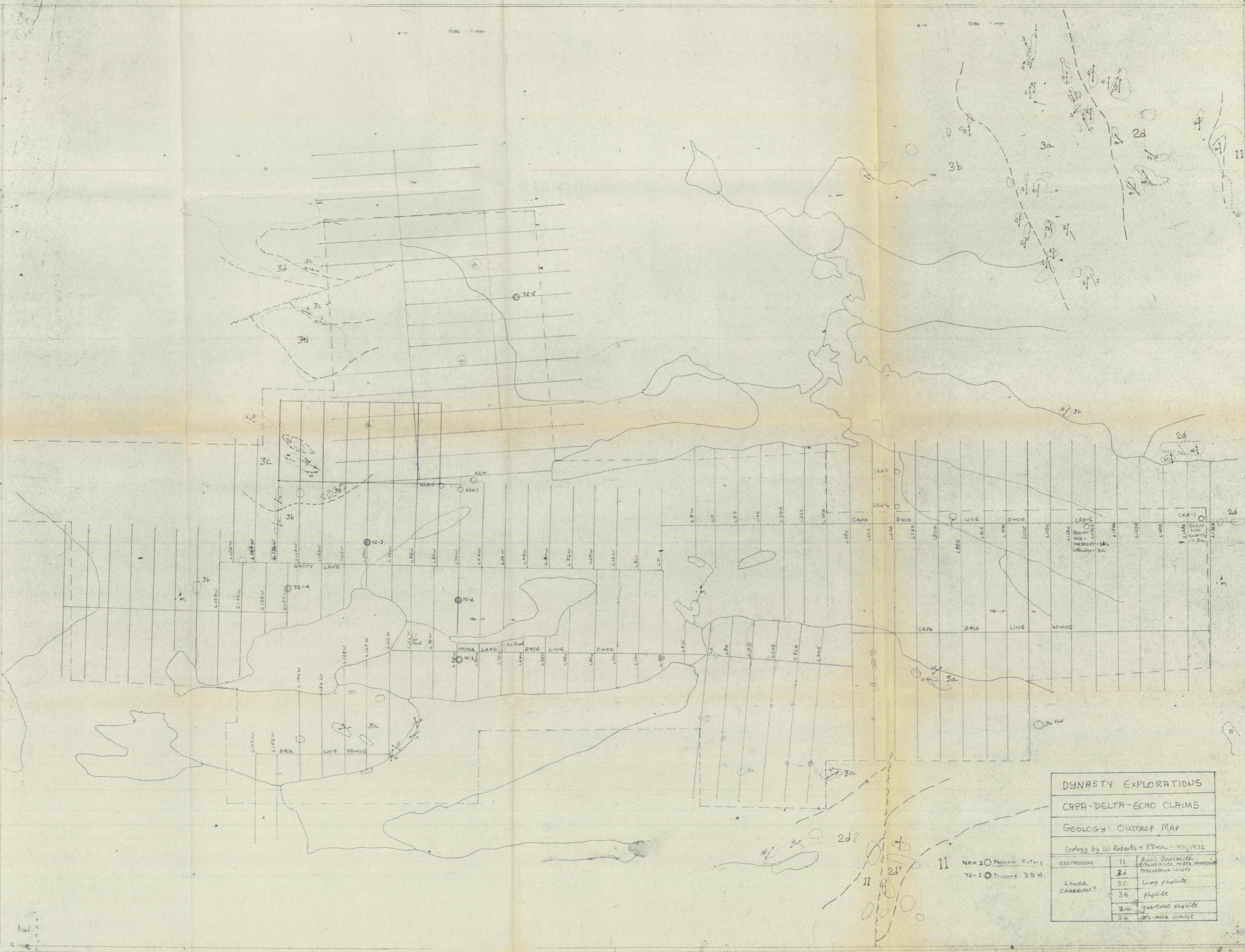
72-1 Prepared by DDH
 FIELD PRELIMINARY COMPILATION ONLY
 REVISED JUNE 20, 1972
 JSB



TINTINA - ANVIL PROJECT
 CAPA DELTA ECHO GROUP
 AIRBORNE GEOPHYSICAL COMPILATION

- MAGNETIC ANOMALY (gamma)
- CONDUCTOR
- CONDUCTOR PEAK (4000 H) ppm p.m. full
- CRH: Previous Rotary Holes
- 72-1: Proposed DDH 1972

FIELD COMPILATION ONLY
 REVISED JUNE 20, 1972 JS



DYNASTY EXPLORATIONS		
CAPA-DELTA-ECHO CLAIMS		
GEOLOGY: OUTCROP MAP		
Geology by W. Roberts & P. Dean - 1971, 1972		
CRETACEOUS	11	Arctic Batholith medialite to grey massive greenstone lenses
LOWER CAMBRIAN?	3d	limestone
	3c	limy phyllite
	3b	phyllite
	3a	quartzose phyllite
	2d	qtz-mica schist

NRH 10 Previous Rotary
72-1 Proposed DDH

LIST OF PERSONNEL

J. S. Brock	1971-72	Vice-President Exploration	Vancouver, B.C.
W. Roberts	1972	Party Chief	Vancouver, B.C.
P. Dean	1971-72	Party Chief	Vancouver, B.C.
J. Britton	1971	Geochem Field Assistant	Vancouver, B.C.
B. Gislason	1971	Geophysical Field Asst.	Arborg, Man.
D. Pastro	1971	Cook	New Westminster B.C.
B. Wooley	1971	Geophysical Field Asst.	Snow Lake, Man.
T. Yoachim	1971	Geophysical Field Asst.	Vancouver, B.C.
C. George	1971	Draftsman	Vancouver, B.C.
W. Horstman	1971	Draftsman	Vancouver, B.C.
W. Tompson	1972	Labourer	Vancouver, B.C.
G. Sargent	1972	Geophysical Field Asst.	Vancouver, B.C.
B. Prochnicki	1972	Geophysical Field Asst.	Vancouver, B.C.
T. Skonseng	1971	Prospector	Ross River, Y.T.

SUMMARY OF COSTS
(Echo - Capa - Delta Claims)
to July 31, 1972

APPENDIX XIII

	<u>Sched.</u>	<u>Total</u>	<u>Prosp.</u>	<u>Line-</u> <u>cutting</u>	<u>Geology</u>	<u>Geophys.</u>	<u>Geochem</u>	<u>Diamond</u> <u>Drilling</u>	<u>Support</u> <u>Cost</u>
Wages									
-General	"A"	\$17,061.61	\$707.56	\$ 829.38	\$5,806.35	\$ 5,490.76	\$1,873.14	\$	\$ 2,354.42
-Report writing	"B"	1,096.82			750.59	112.00	234.23		
Contract Charges	"C"	29,976.50		6,067.50		12,559.00	1,350.00	10,000.00	
Assays	"D"	2,783.87					2,783.87		
Rotary Wing	"E"	1,977.02							1,977.02
Fixed Wing	"E"	2,306.90							2,306.90
Field Cost	"E"	12,706.62							12,706.62
Expediting	"F"	<u>9,727.24</u>							<u>9,727.24</u>
		77,636.58	707.56	6,896.88	6,556.94	18,161.76	6,241.24	10,000.00	29,072.20
10% Admin.		<u>7,763.66</u>	<u>70.76</u>	<u>689.69</u>	<u>655.69</u>	<u>1,816.18</u>	<u>624.12</u>	<u>1,000.00</u>	<u>2,907.22</u>
TOTAL		<u>\$85,400.24</u>	<u>\$778.32</u>	<u>\$7,586.57</u>	<u>\$7,212.63</u>	<u>\$19,977.94</u>	<u>\$6,865.36</u>	<u>\$11,000.00</u>	<u>\$31,979.42</u>

DYNASTY EXPLORATIONS LIMITED

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

AFFIDAVIT SUPPORTING SUMMARY OF COSTS

I, CLIFFORD MALISH, Accountant, Dynasty Explorations Limited, of Vancouver, British Columbia, do hereby state that, to the best of my knowledge and belief, the statement of cost presented in this report (Geologic, Geochemical and Geophysical Investigations Echo-Delta and Capa Mineral Claims) is both correct and true


Clifford Malish

Aug 4, 1972
Date


Notary Public in and for
Yukon Territory

Claim No.	Grant No.	No. of Claims	Staked by	Recording Date	Transfer Information		Due Date	Assessment Work and Remarks
					To	Date		
1-8	Y61509-Y61516	8	T. Skonseng	July 30/71	Dynasty	Dec. 20/71	July 30/72	
9-16	Y61517-Y61524	8	D. Pastro	July 30/71	"	"	July 30/72	
17-24	Y61733-Y61740	8	G. Strarrup	Aug. 27/71	"	"	Aug. 27/72	
25-32	Y61741-Y61748	8	S. Cromwell	Aug. 27/71	"	"	Aug. 27/72	
33-36	Y61541-Y61544	4	R. Gislason	July 30/71	"	"	July 30/72	
37-44	Y61749-Y61756	8	P. Rolls	Aug. 27/71	"	"	Aug. 27/72	

Claim No.	Grant No.	No. of Claims	Staked by	Recording Date	Transfer Information		Due Date	Assessment Work and Remarks
					To	Date		
1-8	Y61757-Y61764	8	J.S. Brock	Aug. 27/71	Dynasty	Dec.20/71	Aug. 27/72	
9-16	Y61765-Y61772	8	M. Rolls	Aug. 27/71	"	"	Aug. 27/72	
17-24	Y61773-Y61780	8	I.H.S.Vandenbos	Aug. 27/71	"	"	Aug. 27/72	
25-32	Y61781-Y61788	8	Eric Phillips	Aug. 27/71	"	"	Aug. 27/72	
33-40	Y61789-Y61796	8	W. C. Carson	Aug. 27/71	"	"	Aug. 27/72	
41-48	Y61797-Y61804	8	Jack Rolls	Aug. 27/71	"	"	Aug. 27/72	
49-56	Y61805-Y61812	8	H. Carson	Aug. 27/71	"	"	Aug. 27/72	
57-64	Y61813-Y61820	8	Judy Carson	Aug. 27/71	"	"	Aug. 27/72	
65-72	Y61821-Y61828	8	Bea Rolls	Aug. 27/71	"	"	Aug. 27/72	
73-80	Y61829-Y61836	8	L. Romfo	Aug. 27/71	"	"	Aug. 27/72	
81-88	Y61837-Y61844	8	Lee Carson	Aug. 27/71	"	"	Aug. 27/72	
89-96	Y61845-Y61852	8	N. Andrews	Aug. 27/71	"	"	Aug. 27/72	
97-104	Y61853-Y61860	8	M. J. Wood	Aug. 27/71	"	"	Aug. 27/72	
105-112	Y61861-Y61868	8	T. Churchill	Aug. 27/71	"	"	Aug. 27/72	
113-120	Y61869-Y61876	8	E. Churchill	Aug. 27/71	"	"	Aug. 27/72	
121-128	Y61877-Y61884	8	B. George	Aug. 27/71	"	"	Aug. 27/72	
129-136	Y61885-Y61892	8	R. McDonnell	Aug. 27/71	"	"	Aug. 27/72	
137-144	Y61893-Y61900	8	D. Atkinson	Aug. 27/71	"	"	Aug. 27/72	
145-147	Y61901-Y61903	3	T. Charlie	Aug. 27/71	"	"	Aug. 27/72	