92P/10E

OREQUEST EXPLORATION SYNDICATE

GEOLOGICAL
GEOCHEMICAL & GEOPHYSICAL REPORT
ON THE
ELLEN CLAIMS

CLINTON-KAMLOOPS M.D.

DECEMBER 1972

4365

GEOLOGICAL, GEOCHEMICAL, AND GEOPHYSICAL

REPORT ON THE ELLEN-GIZELLE CLAIMS

Clinton-Kamloops Mining Division

N.T.S. 92P/10W

Lat. 51° 32' N Long 120° 35' W

OREQUEST EXPLORATION

R. Wares

A.L.J. MacDonald P.Eng.

Vancouver, B.C. December, 1972

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1 GENERAL INFORMATION

1:1 LOCATION

The Ellen and Gizelle groups of claims are located near Bridge Lake (Fig. 1) and about 40 miles east of 100 Mile House.

1:2 ACCESS

Access to the property is from Highway 24 (93 Mile House to Little Fort) by gravel road from Lac Des Roches.

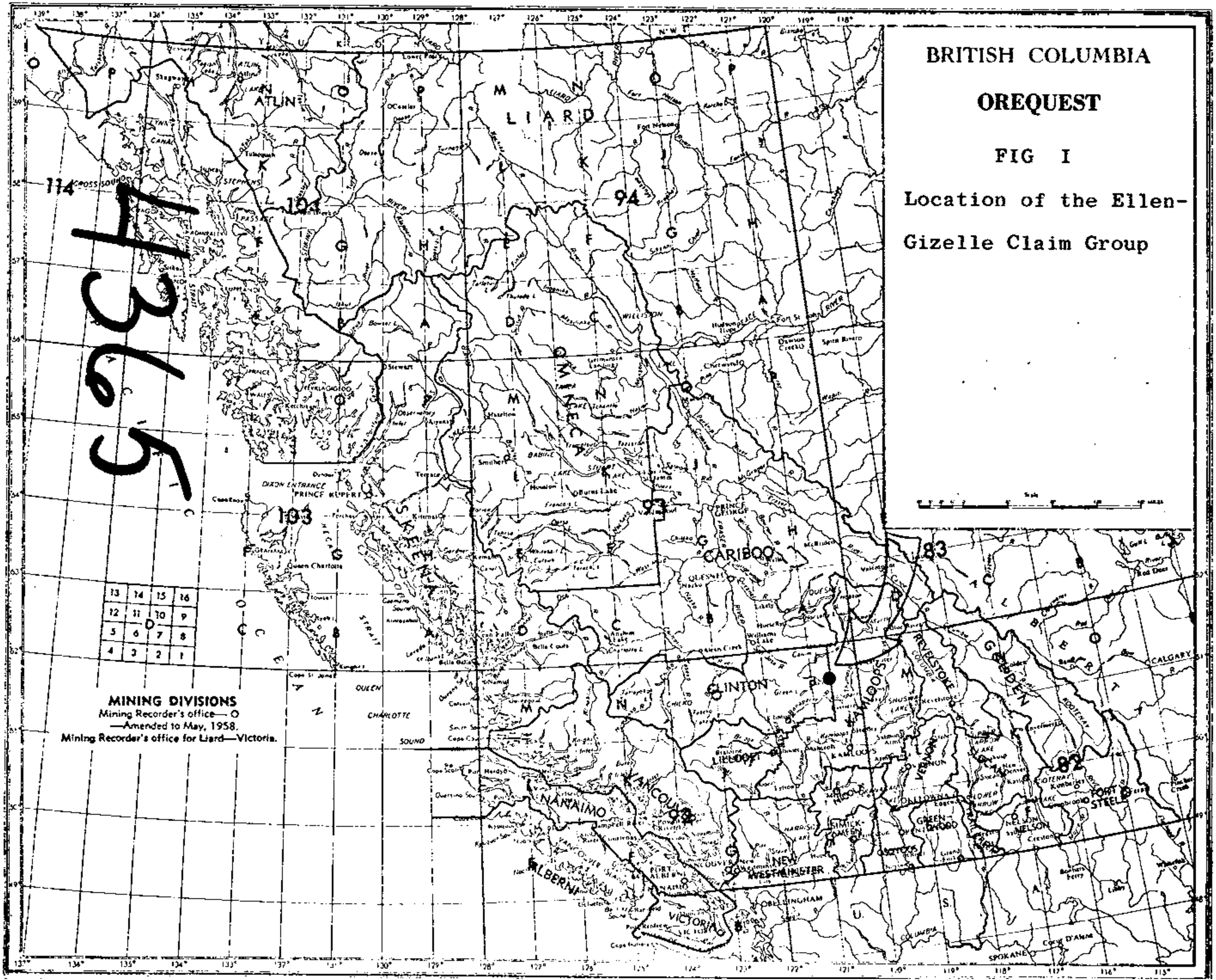
1:3 TOPOGRAPHY

The property is located at an elevation of from 3900' to 4600', in an area of moderate relief. A number of deeply incised valleys are present on the property. These are overflow channels of late glacial age, where preglacial valleys have been re-excavated by melt water.

1:4 CLAIM STATUS

The property comprises a total of 80 claims staked in March and June, 1972 (Fig. 2).

Ellen 1- 4	27914-27917	March 29, 1972
Ellen 5-16	108023-108034	March 29, 1972
Ellen 17-64	27918-27965	March 29, 1972
Gizelle 1-12	119619-119630	June 12, 1972
Gizelle 13-16	28530-28533	June 12, 1972



BRITISH COLUMBIA

OREQUEST

FIG I

Location of the Ellen-Gizelle Claim Group

Department of
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ASSESSMENT REPORT
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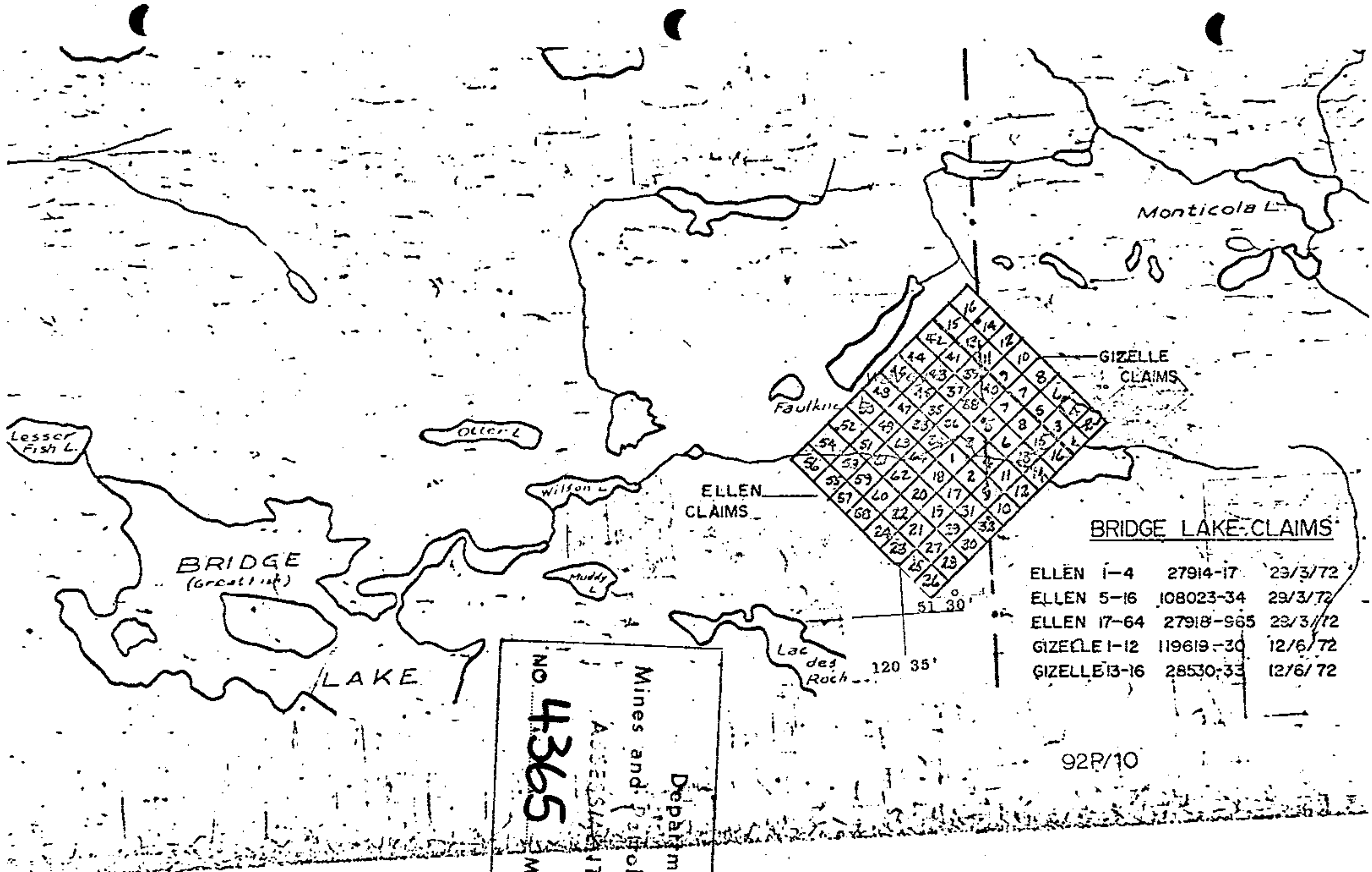

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CLAIMS SKETCH

FIG. 2 1" = 7500'

1:5 PREVIOUS WORK

There is no record of any systematic exploration work on the property though some old claim posts were observed.

2 REGIONAL INFORMATION

2:1 REGIONAL GEOLOGY

The Ellen group of claims is located at the northern flank of a large granodiorite intrusion, termed the Thuya batholith (Fig. 3). The area has been mapped by the G.S.C.[1], with an area to the north-west mapped by the B.C. Department of Mines[2]. The rocks flanking the Thuya batholith comprise intercalated sediments and volcanic rocks of Triassic age, overlain by Jurassic sediments and, to the west, overlain by Tertiary lavas.

Mineralization in the area occurs in several environments. Copper, lead, zinc and silver mineralization occurs in skarn deposits, peripheral to leucogranitic stocks related to the Thuya batholith and which cut the Triassic rocks. Copper mineralization also occurs in shear zones in altered volcanics and in addition also occurs in stockworks in the Thuya batholith. The area is characterized by a strongly developed set of north-northwesterly-trending fault zones that appear to control some of the mineralization of economic interest.

2:2 REGIONAL GEOPHYSICS

The Ellen claims are located near the eastern margin of a broad

1 Geology of Bonaparte Map Area, B.C., by R.B. Campbell and H.W. Tipper Geological Survey of Canada, Memoir 363, 1971

2 B.C. Dept. of Mines and Petroleum Resources, 1970 Annual Report, p. 307

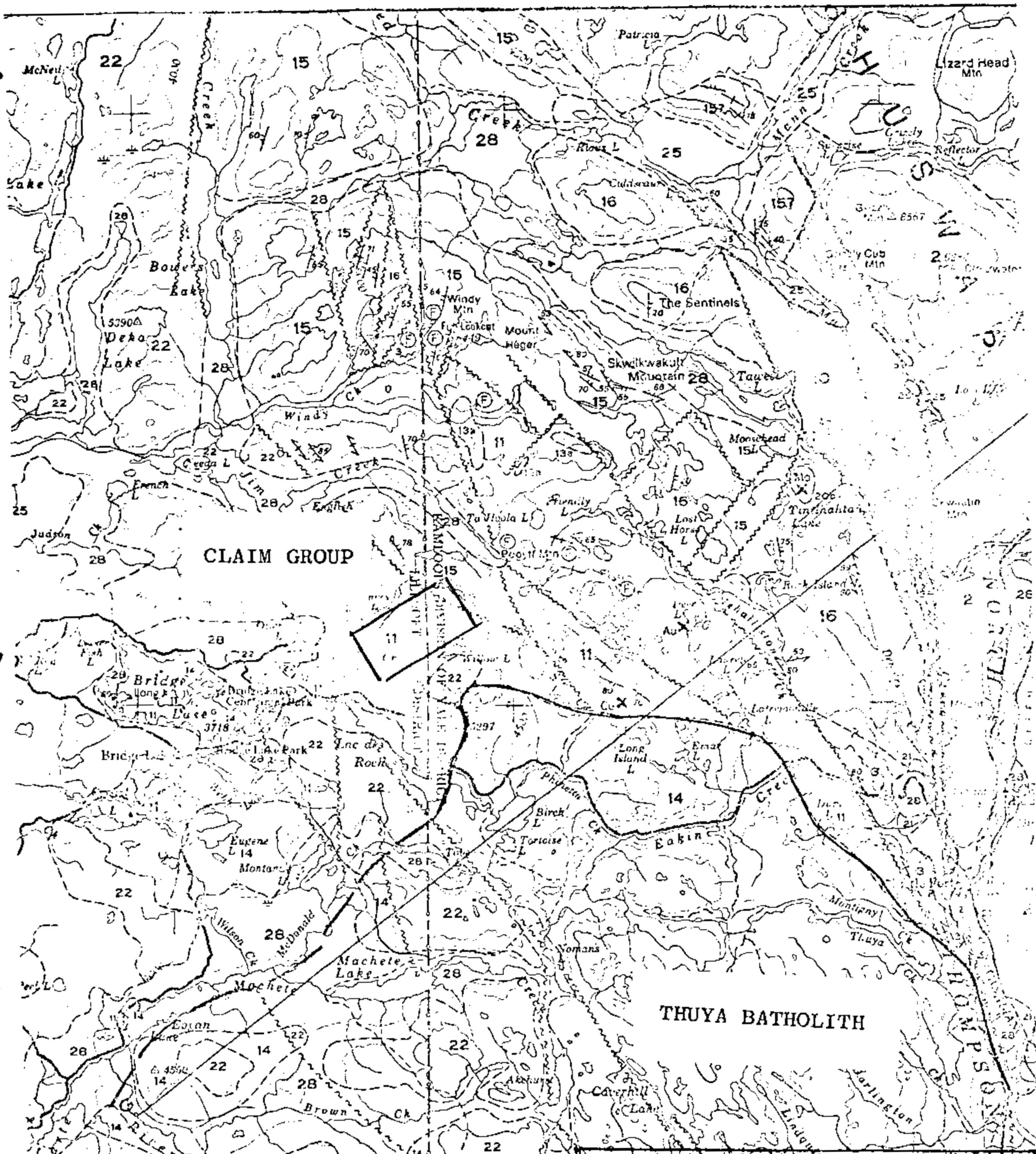


Fig. 3 Regional Geology, Bridge Lake (from Campbell, 1971)

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #3

area of high magnetic response, trending north-northwesterly. Strong breaks trend east-northeasterly through Wavey and Willow Lakes (Fig. 4) and are probably fault zones.

The magnetic high between Wavey and Willow Lakes is probably caused by a small intrusive mass, to which the diorite and andesite dykes are probably related.

3 GEOLOGY

3:1 GEOLOGY OF THE PROPERTY

The Ellen group of claims consists essentially of a heterogeneous suite of dykes and intrusions emplaced into a strongly faulted and intercalated series of metasediments and metavolcanics.

The intrusions range from diorite to monzonite in character. A dioritic stock is present in the northeast of the property (132N, 136E), as well as in the south (76N, 100E). This stock ranges in character from an equigranular, medium-grained diorite to a porphyritic hornblende that occasionally exhibits a weak igneous foliation, especially near contact zones. The andesitic dykes present in portions of the property are probably consanguinous with the dioritic rocks above. The dioritic rocks are generally fresh, not significantly fractured, and carry trace molybdenite and pyrite.

Monzonite and quartz monzonite dykes are ubiquitous in the area mapped. Tkey are especially prominent at 128N, 116E; 112N, 132E; and 92N, 62E where the dykes trend west-northwesterly. The dykes comprise medium-grained equigranular monzonite, which exhibits some carbonate alteration. The monzonites are not strongly fractured but carry up to 2% pyrrhotite. The dykes may be up to 150' wide.

Sedimentary rocks comprise the greater portion of the area mapped, especially the western portion of the grid. The sediments consists predominantly of dark grey/black siltstones which carry 1% to 2% pyrite. Siliceous mudstones and cherts are less prominent with rare greywacke and sedimentary breccias. Sedimentary structures are frequent. Carbonate is apparently quite widespread in the sediments, becoming more prominent in the vicinity of the monzonite dykes where contact alteration is present.

Minor limestone units, too small to be mapped individually, were observed in the area.

Volcanic rocks are present, both in separate fault blocks and intercalated in the meta-sediments. The volcanic rocks are predominantly of andesitic affinities with subordinate tuffs, agglomerates, and dacitic flows. Some of the andesitic units are probably sill-like masses emplaced in the sediments. The margins of these sills carry a screen of sedimentary xenoliths, not always separable from agglomeratic units. Epidotic and carbonate alteration of the andesite units is widespread. The dacitic units also exhibit a comparable alteration pattern. Several minor rhyolitic units were observed, but these are frequently too small to be mapped individually.

3:2 STRUCTURAL GEOLOGY

The regional structural pattern of the Lac Des Roches area has been described by Campbell (ibid). The fault system (Fig. 60 is related to the North Thompson fault system which appears to be a wrench fault system with secondary and tertiary faults developed in the Eakin Creek-Canim Lake area.

Fig. 4 Regional Magnetic Pattern, Bridge Lake Area

The Ellen claim group appears to be characterized by a strongly developed set of east-west and north-east-southwest faults (Fig 5) though the relative movement between the blocks cannot be guaged by the lack of any distinctive stratigraphic or lithologic units. A synoptic stereonet (Fig. 7) of minor structures on the property reveals a concentration of fractures trending N70°E, N23°E and N20°w. Though some rotation of the structures is probable, a tentative suggestion is that the A1 and A2 structures form conjugate shears with the A3 and A4 fracture concentrations forming a system of shear joints. If this is correct, the A5 concentration would form a set of tension joints. The monzonitic dykes and small stocks appear essentially to parallel the inferred tension joint system.

Measurement of fracture concentrations (Fig. 5) indicates an increastd fracture density in the meta-sediments, but with a probable spatial concentration near fault zones.

A study of air photographs of the area (Fig. 20) indicates a strongly developed linear pattern trending N20°W, with, in the Ellen claims, a strongly trending N70°E pattern. Few oval or circular structures that are possibly related to intrusions were identified. There were none on the Ellen claims.

3:3 DISTRIBUTION OF SULPHIDES

Sulphide minerals are present over the whole area mapped but exhibit a clear distribution in both grain size and type that can be correlated with known geology (Figs. 5, 19).

Pyrite is widespread and is especially concentrated in the argillaceous sediments where it comprises from ½ to 2% by volume. In

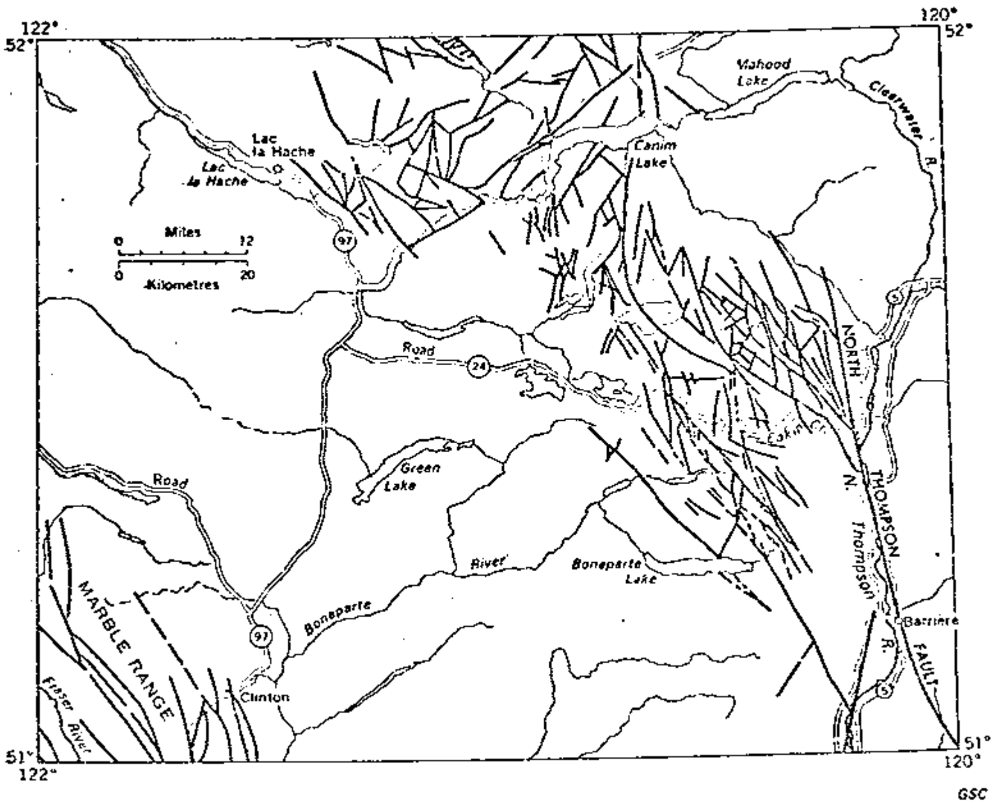


FIGURE 5. Pattern of block faulting in Eakin Creek region (northest part) and normal faults in Marble Range (southwest part).

Fig. 6 Regional Fracture Pattern, Bridge Lake Area (from Campbell, 1971) the sediments, the pyrite is characteristically fine-grained and disseminated. Pyrite is present in the volcanic units but tends to be more erratically distributed. The pyrite exhibits a marked increase in grain size in the vicinity of monzonite dykes and small diorite stocks where, though the overall volume does not change, the pyrite is up to ½" in diameter. Pyrite is also replaced by pyrrhotite in the vicinity of the dykes. The pyrrhotite forms disseminated blebs in the dykes and the diorite stocks. In the latter, minor amounts of molybdenite are observable while traces of chalcopyrite were observed in the monzonite dykes. Correlative with the areal change in sulphide form is an increase in carbonate content.

4 GEOCHEMISTRY

4:1 SOILS

The soils on the property comprise ferrohumic podzols and gleyed humic podzols, developed over stony lodgement till and lacustrine silts and sands, overlying the till, and which developed at the margins of a late glacial lake.

Drumlinoid features are present in the area, indicative of a southeasterly flow of ice with the outcrop pattern reflecting in part the distribution of the drumlins. The greater portion of the outcrop is in the steeper northwesterly-facing slopes.

The topography of the property is dominated by at least nine strand lines or beach deposits developed at the margins of a waning late glacial lake (Fig. 8). The strand lines are not present above 4550'. Deeply incised overflow channels were apparently developed during the later stages of this late glacial lake. It appears that drainage of the lake was blocked by dead ice near Bridge Lake and, in consequence, outwash channels were developed during the later stages of this lake with southeastwards drainage towards Lac Des Roches. One prominent outflow channel stretches from 68N, 84E to 124N, 112E.

The lacustrine silts and sands are up to 4' - 5' thick with some resorting in the environment of the overflow channels. Drainage in the environment of the lake benches is somewhat sluggish with a thick development of humic layers up to 2' thick overlying the lacustrine silts.

Soil profiles were dug on various anomalies to examine the soil structure. The humic layers ranged from 2" to 15" in thickness. The humic layers are strongly developed on the flat lake deposits where there is sluggish drainage. The lacustrine deposits comprise yellow sandy loams overlying a reddish stony till with a sandy clay loam matrix. Leached horizons are sporadically developed on the lacustrine deposits, characteristically being best developed where the humic layers are greater than 6" thick.

Where the till is not overlain by lacustrine deposits, the soils are somewhat immature with poor development of iron-enriched zones. All profiles over outwash fans, lacustrine silts and till had pH values of from 5.5 to 6.0 (measured using a slurry with distilled water, and pH papers).

The response of bedrock mineralization is affected by four factors. These are:

1. Dispersion caused by glacial movement, resulting in a downstream tail" of weak anomalies.

2. The thinning of the till at the northern end of the drumlinized features with a probable better geochemical expression than in more deeply buried zones.

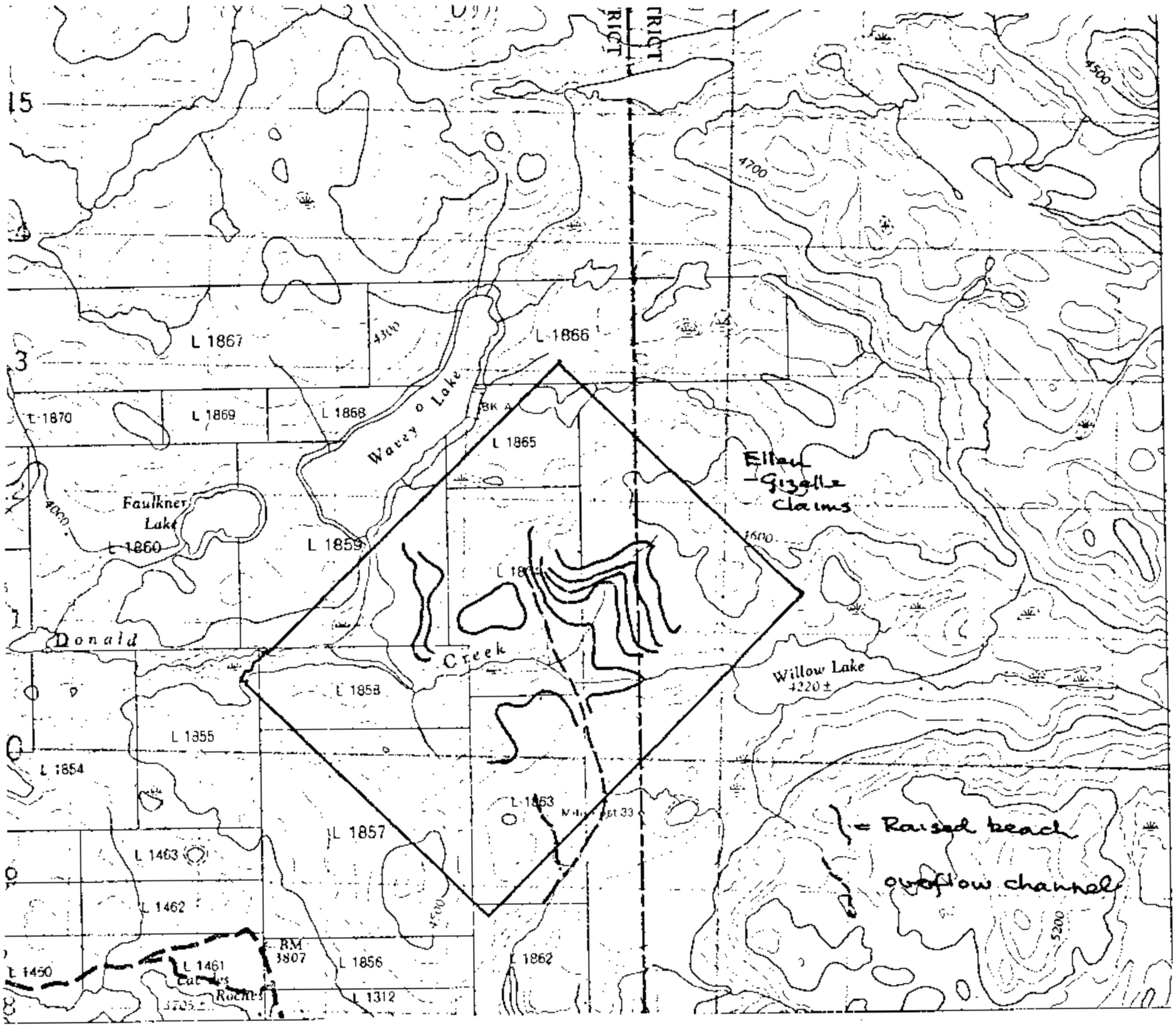


Fig 8 Glacial Deposits in the Ellen-Gizelle Claim Group.

3. Blanketing by lacustrine silts and sands in the lower topographic areas where any potential response is further subdued.

4. Development of thick humic layers on the lake benches, giving rise to organic and hydromorphic anomalies not correlative with significant geological and geophysical features.

Not all of these four factors are clearly separable in the anomalous zones.

On the basis of statistical analyses of the geochemical data, the following parameters are present (620 samples):

	Cu	Mo	Zn	Ag
Regional Background	< 40	< 3	< 150	< 1.5
Local Background	40-120	3-4	150-250	1.5-2.5
Possibly Anomalous	120-140	4-6	250-350	2.5-3.0
Probably Anomalous	> 140	> 6	> 350	> 3.0
Range	12-375	1-300	50-450	0-4.5

4:2 DISTRIBUTION OF CU

The anomalous range for copper values is those greater than 120 p.p.m. The anomalous values do not form a coherent pattern with the anomalous range forming small period anomalies.

The areas of anomalous values in copper that appear to have significance are 124N, 20E; 128N, 126E; 140N, 104E; 96N, 136E; 104N, 68E; 92N, 62E; all these locations are characterized by relatively thin till cover, a relative abundance of outcrop and a thin or non-existent lacustrine silt cover over the till. The anomalies above are all close to monzonitic dykes or possible extensions of these dykes.

The anomalous areas that appear to be of little significance are 132N, 146E; 100N, 112E to 92N, 118E; 112N, 96E; 112N, 68E; 88N, 72E; these anomalies are located in drainage areas with thick humic horizons or in outwash deposits near overflow channels (eg. 104N, 98E) with little or no geophysical response.

One anomaly at 140N, 104E, is not correlative with known mineralization but exhibits a fan-shaped molybdenum dispersal pattern typical of glacial "smearing".

4:3 DISTRIBUTION OF MO

Anomalous molybdenum in the soils is taken as values in excess of 4 p.p.m. One spot sample at 104+50N, 100+50E ran 300 p.p.m. Mo.

The dispersion of molybdenum appears to be complex in this area. Only 2 areas appear to be of significance. These are 124-128N, 118E; and 140N, 104E. These areas show a correlation between Cu and Mo values and magnetic anomalies. The other areas are humic accumulations in lacustrine deposits or outwash deposits, not accompanied by a geophysical response.

Profiles in the area of 104N, 98E reveal biotite-rich outwash deposits, altered to a kaolinotic complex, with probable Mo accumulation in the clay minerals and hydrous iron oxides.

4:4 DISTRIBUTION OF AG

Silver values greater than 3.0 p.p.m. are considered anomalous in the area sampled (Fig.12).

Anomalous areas considered significant are 92N, 62E; 124N, 120E; 128N, 128E; 96N, 136E; these anomalies occur, with the exception of the last, near monzonitic dykes and accompanied by nearby anomalous copper zones and a high to moderate positive magnetic response. The last anomaly is not correlative with known mineralization but should any further work in the area be of interest, the last anomaly should be investigated. The other silver anomalies appear to be related to humic accumulation along sluggish drainage areas.

4:5 DISTRIBUTION OF ZN

Anomalous zinc values are considered to be those greater than 250 p.p.m.

The only significant zinc anomaly is that from 128N, 118E to 112N, 116E where there appears to be a reasonable correlation with a weak magnetic response and wlth zones of conductivity. The other areas are clearly correlative with humic horizons accumulated in sluggish drainage areas, a situation paralleled by Mo and Ag distribution.

5 GEOPHYSICS

5:1 MAGNETIC DATA

The magnetic response of the area examined is relatively subdued over a large area. It is only in the eastern portion of the property that there is any significant response, roughly in a zone running from 132N, 136E to 84N, 122 to 138E (Figs. 13, 19).

The extreme anomalies range from -2500 to +3500 gammas but form generally discrete zones rather than large zones of geological significance. The high magnetic zones are correlative with conductors (Figs. 17, 18, 19) and generally with the areal distribution of pyrrhotite (Fig. 19) with its fringe of coarser-grained pyrite, in both the sediments and volcanics. The monzonitic dykes have a generally weak but recognizable response (Figs. 17, 18).

The rapid alternation of magnetic values in the southeast around

84N, 140E is of undetermined cause but is probably caused by magnetic reversals in flows of different lithology or by small skarn pyrrhotite deposits not recognized on surface. This area does not have a significant geochemical response.

The anomalies near 124N, 132E appear to be caused by pyrrhotite concentrations in or adjacent to monzonite dykes or sheared diorite contacts. The area of monzonitic dykes may be more extensive than suspected from the surface mapping, if the correlation is correct. The anomaly at 128N, 62E is unexplained.

5:2 EM-16 DATA

An extensive EM-16 survey was carried out on the Ellen claims, using the Seattle station (NPG, 18.6 kHz). This station is relatively powerful and, in consequence, a number of overburden conductors also give a response.

The EM-16 data is distorted by the combination of slope effects, overburden conductors, and the varying thickness of the overburden. Though the interpretation of EM-16 data is largely qualitative,[1] several zones in the property appear to be of merit (Fig. 14).

West of the baseline, the EM-16 response is generally subdued, with most conductive zones giving a subdued response and a reverse trend of the quadrature component, indicating a strongly conductive overburden. The strong quadrature response at 116N, 100 to 80E is caused by a thick deposit of lacustrine silts and sands. Strong topographic effects are present at 88N, 92E; 108N, 72E; and 100N, 72E, where the strong in-phase response is caused by the steep topography.

1 Five Years of Surveying with VLF-EM,
Paterson, N.R. and Ronka, V.
Geo-exploration 9 (1971) p. 7

East of the baseline, there is a broad conductive zone from 132N, 116 to 128E, to 104N, 118 to 140E, where the weak positive inflections in the quadrature component and associated with the in-phase "cross-overs", indicate a poorly conductive overburden with relatively weakly conducting zones. The sharp cross-overs at 116N, 140E and 120N, 138E appear to be caused by fault zones. The conductive zones at 124N, 116E and 128N, 118E correlate (Figs. 17, 18) with a weak magnetic response and a good Cu, Mo, Zn and Ag geochemical response. These correlate closely with the monzonitic dykes on the property though the axes of the conductive zones do not correlate precisely (possibly caused by hidden dykes, not exposed at surface).

The interpretative rules used by Paterson and Ronka (ibid.), if applied to the anomalies at 124N, 114E and 128N, 117E, (using the case of a steeply dipping half sheet) suggest the depth to center of the disturbing body of from 100' to 200'. (For a steeply dipping sheet, depth = ½ the horizontal distance between the points of maximum and minimum inclination.)

The correlation of geochemical values with these conductors is relatively good and warrants further investigation.

5:3 FILTERED EM-16

Filtering of EM-16 in EM-16 data is a technique whereby the in-phase data is transformed into contourable data, rendering interpretation of the EM-16 data easier.[1]

The filtered data (Fig. 15) reveal a zone of narrow elongate

1 VLF-EM Data Processing
Fraser, D.C.
C.I.M.M. Bull. 74 (1971) p. 39

zones of conductive material. Distortions in the data make interpretation in this area somewhat complex. In addition to the distortions inherent in contouring such rapidly varying data, varying thicknesses of water-soaked till and lacustrine silts cause small period anomalies of low amplitude.

Topographic effects also mask the ground response giving rise to spurious anomalies, which are not always discernible from structural effects.

Some systematic trends are apparent from the map. Anomalous zones appear to be systematic from 68N, 122E to 132N, 118E; 68N, 104E to 104N, 111E; 76N, 146E to 108N, 144E; 116N, 132E to 140N, 135E; 96N, 64E to 104N, 66E.

As a rule of thumb, the filtered in-phase response greater than 30% appears to be corelative with geological features while areas below this arbitrary figure are not separable from outburden effects.

Of the anomalous areas of conductivity, the most significant appears to be the zone from 128N, 118E to 120N, 116E where a partial correlation exists between a weak magnetic response and copper and molybdenum soil anomalies. A broad areal correlation exists between the high magnetic response areas and conductivity but not a precise correlation.

6 SUMMARY AND CONCLUSIONS

1. The Ellen-Gizelle claims groups comprise variably deformed meta-sediments and meta-volcanics cut by small monzonitic and dioritic stocks.

2. Pyrite is widespread on the property with the development of pyrrhotite and coarse-grained pyrite near the mozonitic stocks. Minor chalcopyrite and molybdenite occurs sporadically in these stocks.

3. The geochemical results reveal only one zone of possible economic interest (at 128N, 118E to 120N, 116E) with a number of spurious anomalies developed on late glacial strand lines.

4. The geophysical data reveals a complex pattern of conductive and magnetic anomalies but the zone of possible economic interest is the one from 128N, 118E to 120N, 116E.

5. Though the above area cannot be classified as a high-priority target; a small programme of percussion drilling is warranted to test the above area.

7 BUDGET PROPOSAL

The limited programme of percussion drilling would be to test the zone outlined above. Minor road building would be required but the area is one of relatively easy access and total road costs would be low. Estimated programme time would be 12 days.

R. Ware

A. M. MACDONALD
BRITISH COLUMBIA
ENGINEER

BUDGET PROPOSAL

Percussion Drilling	
(3 x 300' holes)	$3,000.00
Mobilization, Demobilization	500.00
Road Building	
(6 hours at $30.00 per hour)	180.00
Assays	600.00
Salaries	
(1 geologist and helper)	850.00
Room and Board	
(say 50 man-days)	500.00
Report Preparation	150.00
SUBTOTAL	$5,780.00
10% Contingency	578.00
TOTAL	$6,358.00
Say	$6,400.00

The areas that should be tested are 128N, 118E; 124N, 117E; and 128N, 122E.

OREQUEST EXPLORATION

711, 850 W. Hastings St.,
Vancouver 1, B.C.

June 13, 1973.

Mr. E.J. Bowles,
Chief Gold Commissioner,
Department of Mines & Petroleum Resources,
Victoria, B.C.

Re: File 166, Clinton & Kamloops

Dear Sir:

I acknowledge receipt of your letter dated 15/5/73. In reply to your enquiry about geochemistry and geophysics, the following comments are pertinent:

1) The Mo sample referred to, which ran 300 ppm Mo, was a reconnaissance sample collected before any systematic sampling. The sample was collected at a depth of 10", on a Bf horizon. The location was at 103 N, 101 + 50E.

The sampling depth of the systematic soil survey varied from 10" to 30", depending on the soil conditions and the profile development. The areas of humic accumulation had organic accumulations up to 25" thick.

2) The tilt direction of the Em-16 was towards the east of the grid (i.e. towards ~~S~~NE true). The tilt direction was omitted in error from the maps.

I trust the above answers the points raised. I apologize for any inconvenience I may have caused you.

D.M.
C.G.C. ✓

Yours truly,

R. Wares

R. Wares

A;1 Geophysics

The magnetic data was obtained using anMF-2 fluxgate magnetometer (see attached specifications).The readings were taken on 100 foot centres on grid lines cut 400 feet apart.Diurnal variations were established by looping back to an established base station at regular intervals.

The EM-16 data was obtained using the Seattle station(18.6kHz., Station NPG).The data was collected on 100 foot centres along the grid lines 400 feet apart.The data was filtered[1] to make interpretation easier.The filtering was carried out on the data at 100 foot station intervals.

A:2 Geochemistry

The soil samples from the property were analysed for Cu,Mo,Zn and Ag(see attached reference).Profile samples were collected over anomalous areas.Cumulative histograms of the distribution of values on the Ellen claim group are enclosed.

---

1 Fraser D.C. VLF Data Processing,CIMM Bull.24,(1971) p.39.

FLUXGATE MAGNETOMETER MF-2 -- Specifications

	Ranges	Sensitivity
Standard:	Plus or Minus	
	1,000 gammas f.sc.	20 gammas/div.
	3,000 gammas f.sc.	50 gammas/div.
	10,000 gammas f.sc.	200 gammas/div.
	30,000 gammas f.sc.	500 gammas/div.
	100,000 gammas f.sc.	2,000 gammas/div.
Optional:	100 gammas f.sc.	2 gammas/div.
	300 gammas f.sc.	5 gammas/div.

Meter:	Taut-band suspension 100 gamma scale 2.1" long--50 div. 300 gamma scale 1.9" long--60 div.
Accuracy:	1000 to 10,000 gamma ranges ± 0.5% of full scale
Operating Temperature	-40° C. to +40° C. -40° F. to + 100° F.
Temperature Coefficient	Less than 1 gamma per °C. (½ gamma per °F.)
Noise Level:	Less than 1 gamma P-P
Bucking Adjustments: (Latitude)	-20,000 to +80,000 gammas 9 steps of 10,000 gammas plus fine control of 0-10,000 gammas by ten turn potentiometer Reversible for southern hemisphere
Recording Output:	Optional
Electrical Response:	D.C. to 0.3 cps (3db down) on 100 gamma range with meter in circuit. D.C. to 20 cps with meter network shorted for recording purposes
Connector:	Cannon KO2-16-10SN for plug Cannon KO3-16-10PN and cover KO6-16-3/8
Batteries	Internal 3 x 6V-1 amp/hour. Sealed Lead Acid rechargeable Centralab GC 6101; recharge time 8 hours
Consumption:	60 milliamperes--GC 6101 batteries are rated for 16 hours continuous use
Dimensions:	6¼" x 2 3/4" x 10" instrument 161mm x 71 mm x 254 mm

GEOCHEMICAL ANALYTICAL PROCEDURE

1. Sample Preparation

a) Geochemical soil, silt and rock samples were received in the laboratory in wet-strength 3½ x 6½ Kraft Paper bags.

b) The wet samples were dried in a ventilated oven.

c) The dried soil and silt samples were sifted, using an 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

d) The dried rock samples were crushed and pulverized to minus 80-mesh. The pulverized sample was then put in a new bag for later analysis.

2. Methods of Digestion

a) 1.00 gram or 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.

b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).

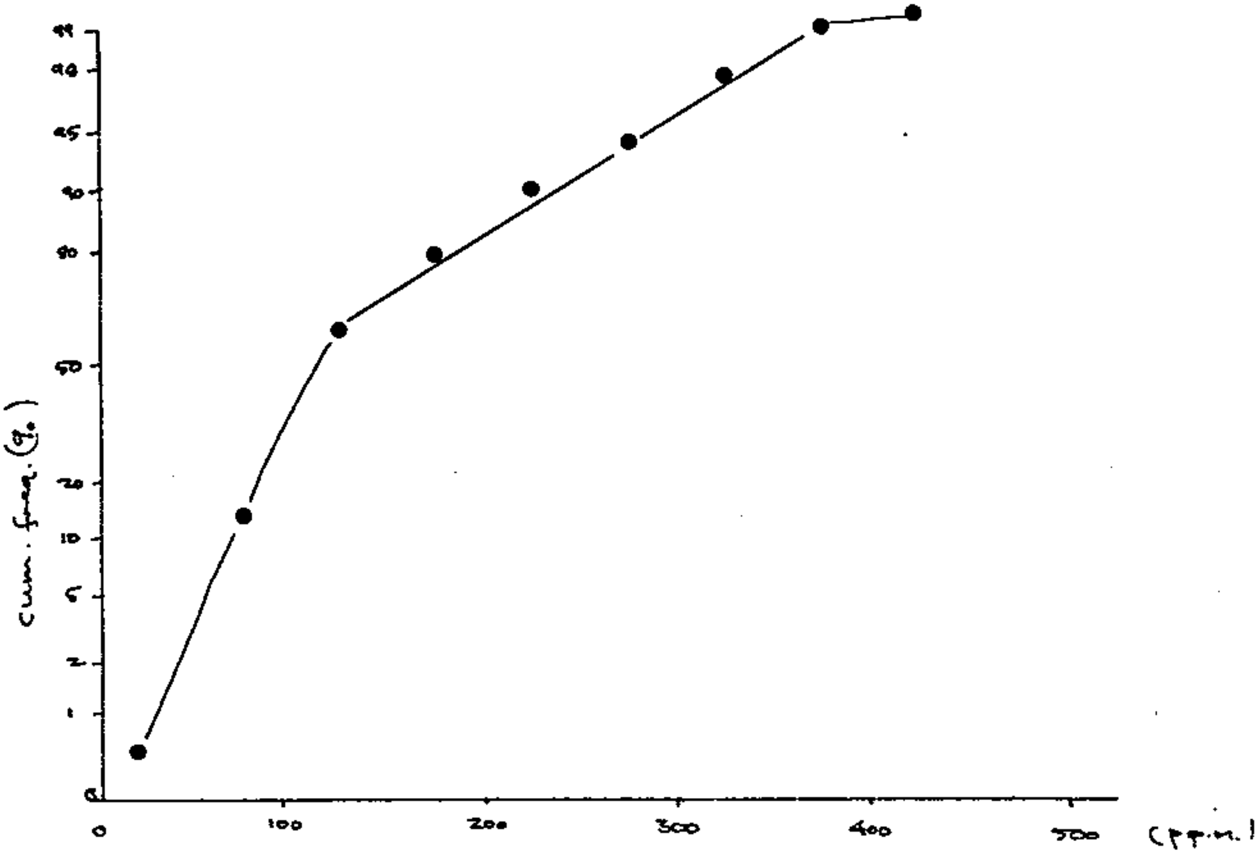
c) The digested samples were diluted with demineralized water to a fixed volume and shaken.

3. Methods of Analyses

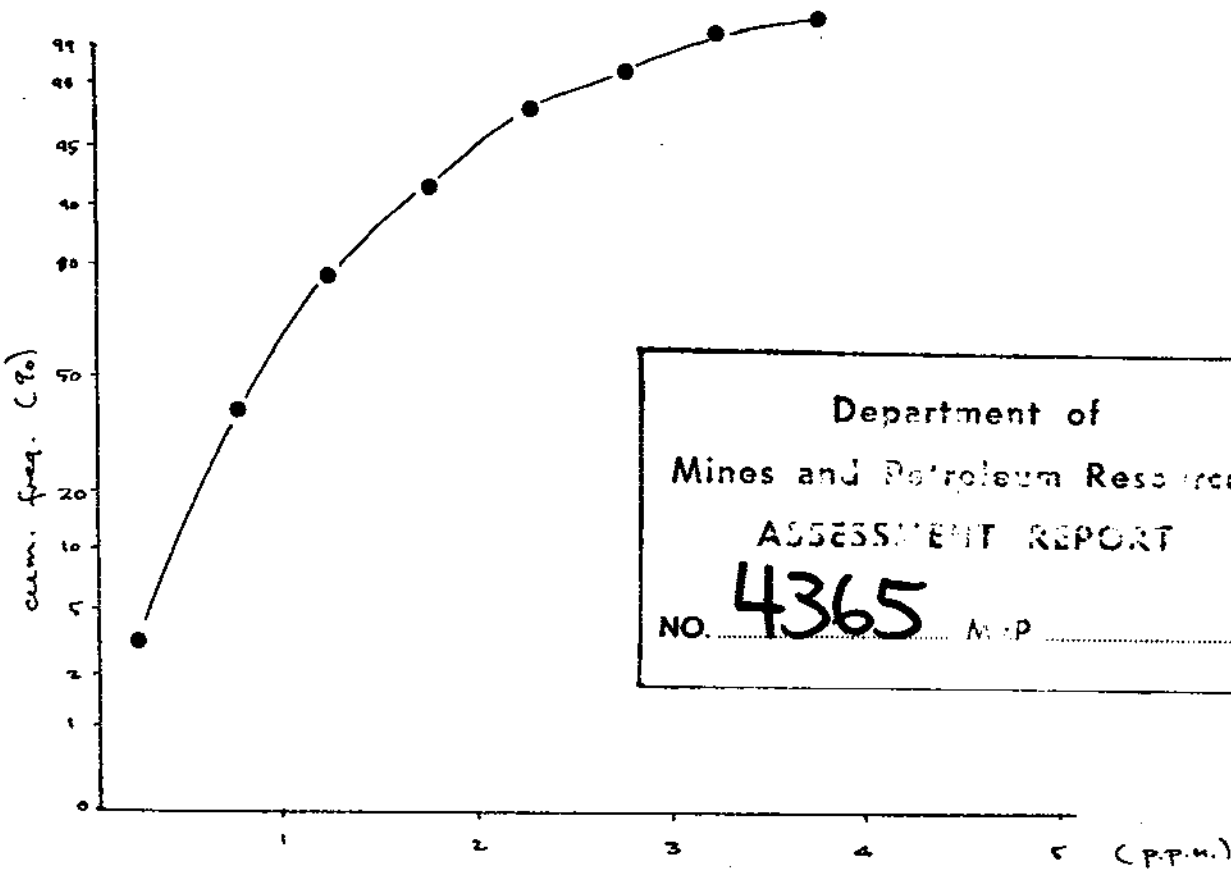
a) Molybdenum analyses:
Molybdenum analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 with a molybdenum hollow cathode lamp. The digested samples were aspirated directly into a nitrous oxide, acetylene flame. The results were read out on a Photovolt Varicord Model 43 chart recorder. The molybdenum values, in parts per million, were calculated by comparing a set of molybdenum standards.

b) Copper, zinc, silver and lead analyses:
The above element analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 or Model AA5 with their respective hollow cathode lamps. The digested samples were aspirated directly into an air acetylene flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit.

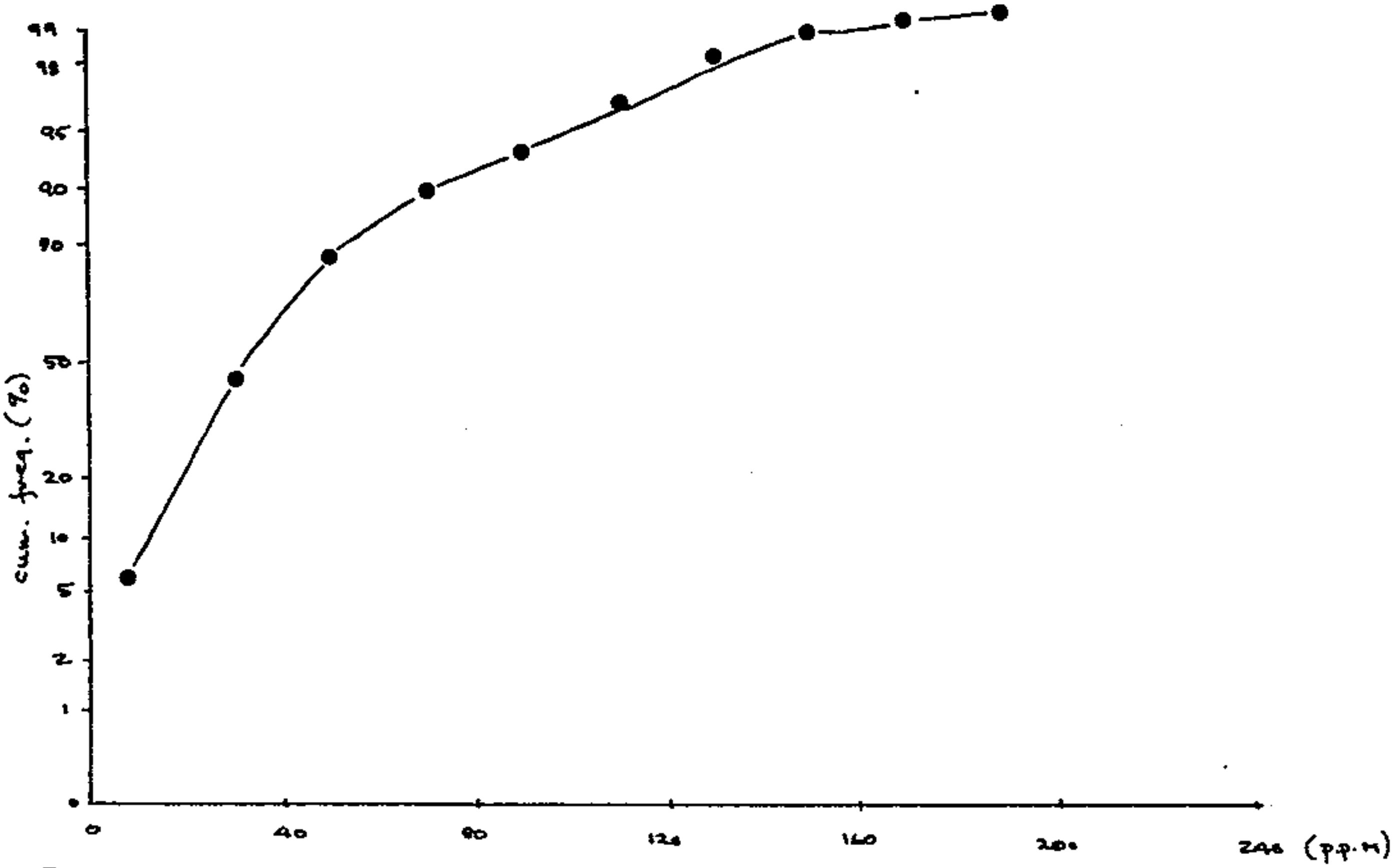
4. The analyses were supervised or determined by Mr. Conway Chun or Mr. Laurie Nicol, and their laboratory staff.



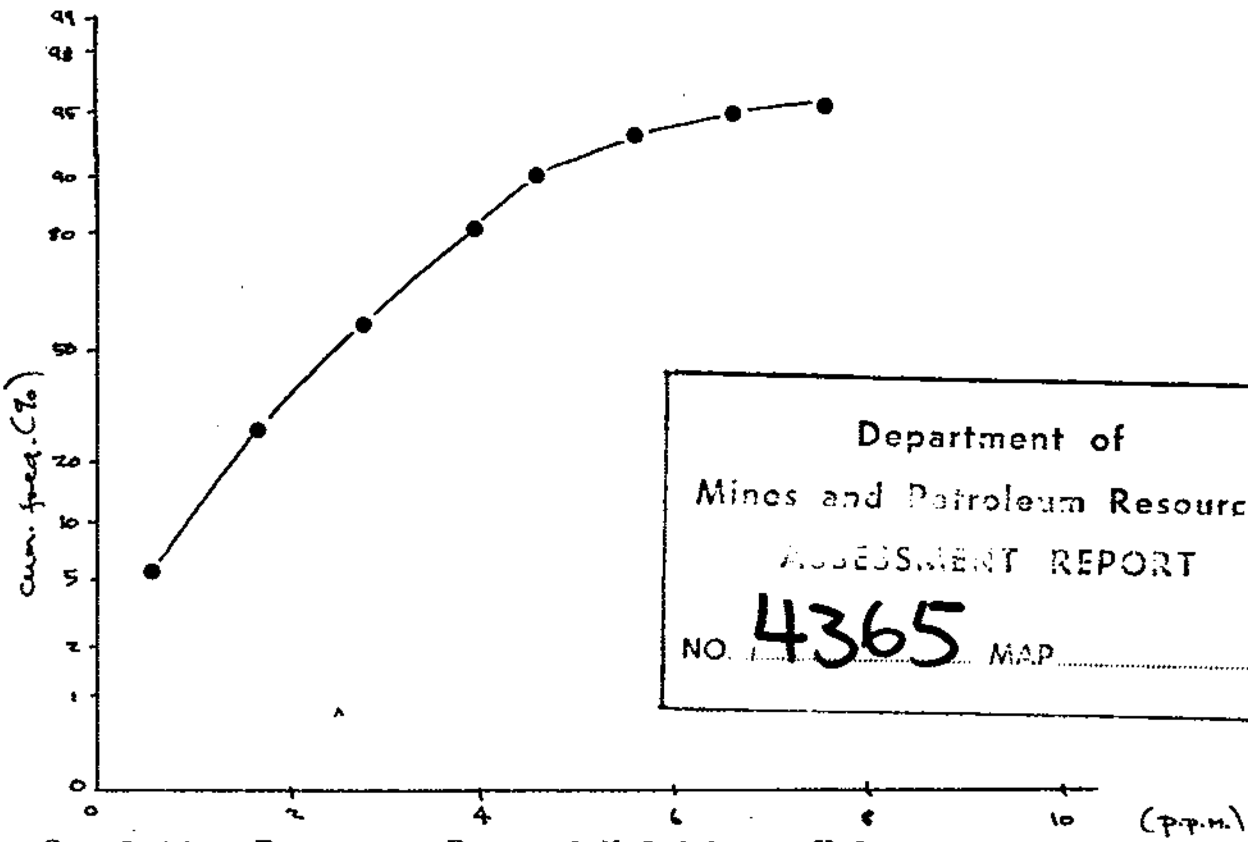
Cumulative Frequency Plot of Zinc Values



Cumulative Frequency Plot of Silver Values



Cumulative Frequency Plot of Copper Values



Cumulative Frequency Plot of Molybdenum Values

COST BREAKDOWN

A. Linecutting	
i) 46 man-days @ $35.00/man-day	$1610.00
B. Geochemistry	
i) 17 man-days @ $35.00/man-day	$595.00
ii) Analysis 644 samples for Cu.,Mo.,Ag., Zn.	$2467.00
iii) Data Processing 3 man-days @ $50.00/man-day	$150.00
C. Magnetometer Survey	
i) 10 man days @ $50.00/man-day	$500.00
D. E-M 16 Survey	
i) 10 man-days @ $40.00/man-day	$400.00
ii) Data Processing 2 man-days @ $45.00	$90.00
E. Geology	
i) 12 man-days @ $60.00/man-day (Wares)	$720.00
ii) 10 " " " $35.00/ " " (Dodd)	$350.00
iii) 2 man-days @ $30.00/ " " (Murray) (Humphreys)	$60.00
F. General	
i) Mag rental - EM-16 rental ½ month @ $200.00/month each	$200.00
ii) Board Loss 107 man days @ $10.00/man-day	$1070.00
iii) Truck rental 1½months @ $400.00/month	$600.00
iv) Mobilization 600miles @ $.15/mile	$90.00
10 man-days @ $35.00/man-day	$350.00
v) Suprevision 5 man days @ $100.00 man-day	$500.00
vi) Report Preparation a) Wares 5 days @ $60.00/day	$300.00
b) Forshaw 6days @ $50.00/day	$300.00
MacDonald 2days @ $100.00/day	$200.00
TOTAL	**$10,552.00**

A. J. MACDONALD
BRITISH COLUMBIA
ENGINEER

STATEMENT OF QUALIFICATIONS

MacDonald, A., B.A., Geologist, P.Eng. Engaged in mineral exploration since 1955 while employed by Farwest Mining, United Keno Hill, Peso Silver, Kerr Addison, New Jersey Zinc, Manager of Meridian Syndicate and Orequest Syndicate.

Wares, R., M.Sc.,Geologist, engaged in mineral exploration while employed by the Ontario Department of Mines, Falconbridge, and since 1971 as a geologist for Orequest Syndicate.

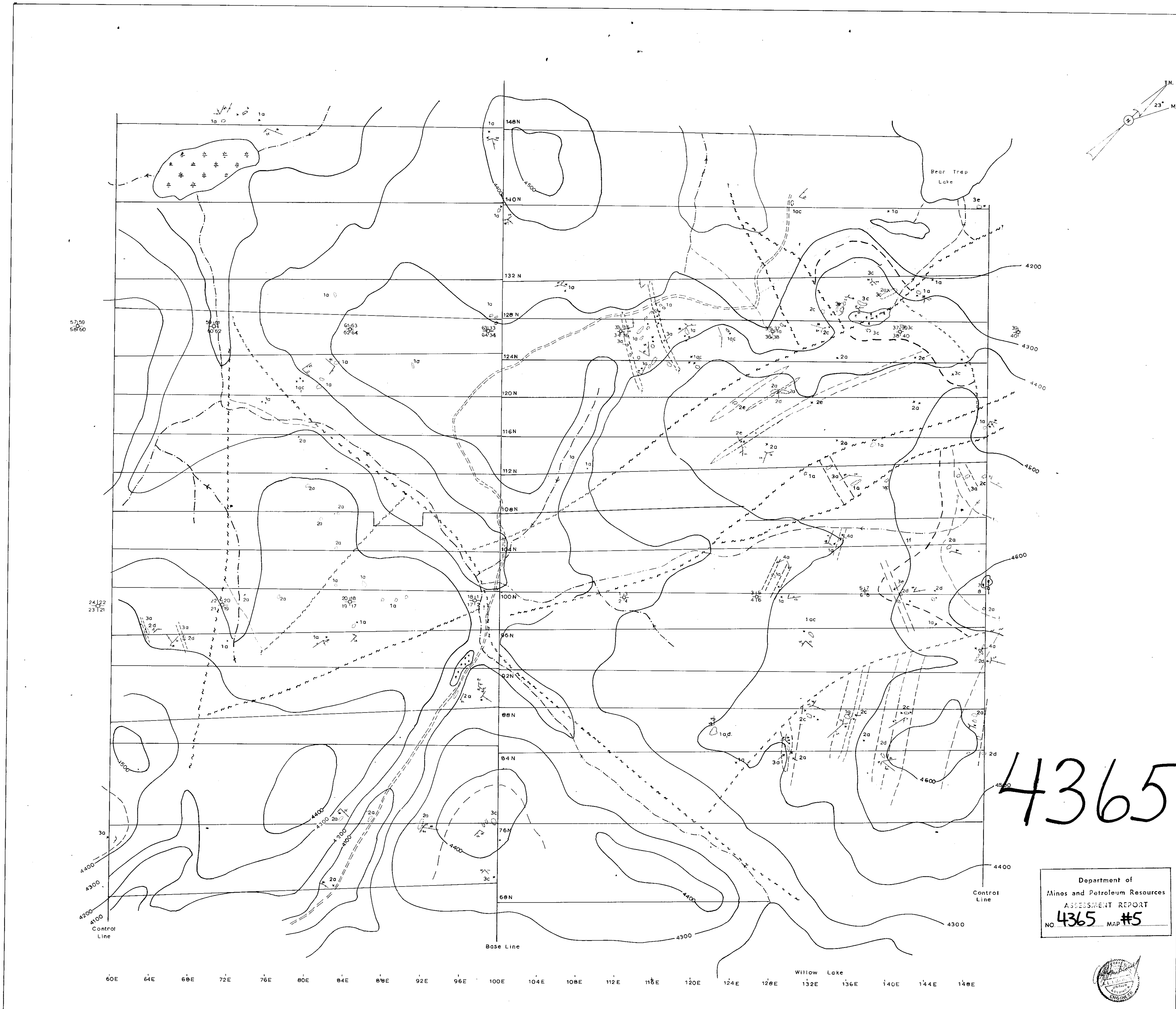
Forshaw, R.T., Instrument operator, has been employed in various phases of mineral exploration for seven years while employed by Huntec Ltd., The Granby Mining Co., San Jacinto Mines, and since 1969 by Orequest Syndicate.

Hutton, J.A., B.Sc., Geophysicist, employed as a student in 1970 and 1971 by Orequest Syndicate and as a Geophysicist by Orequest since May 1972.

Dodd, G., B.Sc., Geologist, engaged in mineral exploration as a student by Orequest, the G.S.C. and Newmont Mining, and as a Geologist by Newconex and since May 1972 by Orequest Syndicate.

Murray, J.S., student, employed in mineral exploration by Falconbridge and since May 1972 by Orequest Syndicate.

Humphreys, D.R., Student, employed summers since 1970 by Orequest Syndicate.

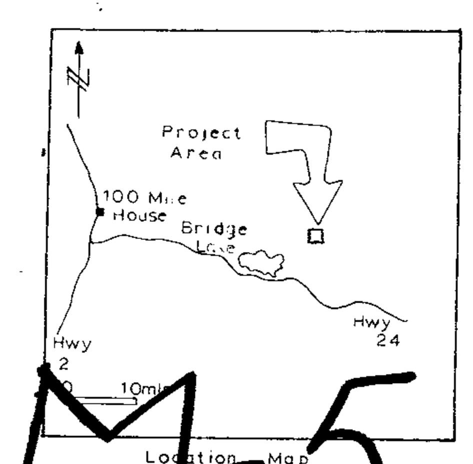


LEGEND

~~	Fault assumed
— — —	Contact assumed
	Outcrop boundary
×	Small outcrop
	Road
	Creek
	Swamp
	Bedding
	Bedding (Tops identified)
	Joint or cleavage inclined / vertical
	Lineation
	Joint or cleavage length proportional to intensity
	1 fracture per foot
	2 " " "
	4 " " "
	8 " " "
	Claim post

- 4a andesite dyke
- 3a monzonite
- 3b quartz monzonite
- 3c diorite
- 3d porphyritic diorite
- 3e porphyritic hornblende diorite
- 2a andesite
- 2b porphyritic hornblende andesite
- 2c dacite
- 2d andesitic tuff
- 2e dacitic tuff
- 2f rhyolite
- 2g rhyolitic tuff
- 1a siltstone
- 1b sandy siltstone
- 1c siliceous mudstone
- 1d chert
- 1e greywacke
- 1f breccia
- 1j tuffaceous siltstone

suffix "x" denote xenoliths

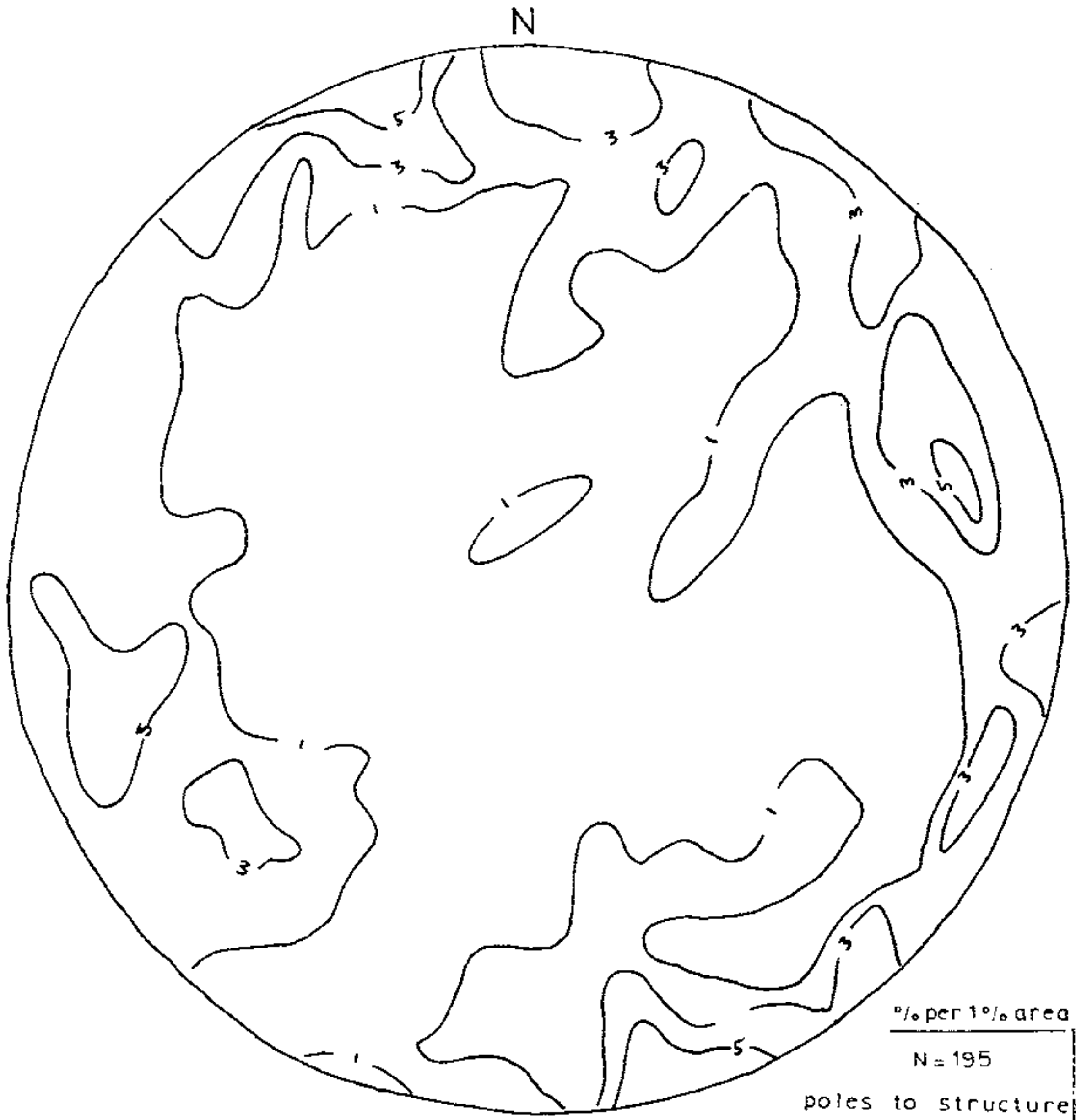


Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #5

OREQUEST EXPLORATION

Project	Bridge Lake Project
Location	Bridge Lake, B.C.
N.T.S.	92 P 10W
Fig. No.	BL-72-5
Type of Map	Geological
Field Work	R.W., G.D., J.H.
Drawn by	R.W.
Date	July 1972

0 200' 400' 800' 1200'
Scale :- 1" = 400 feet

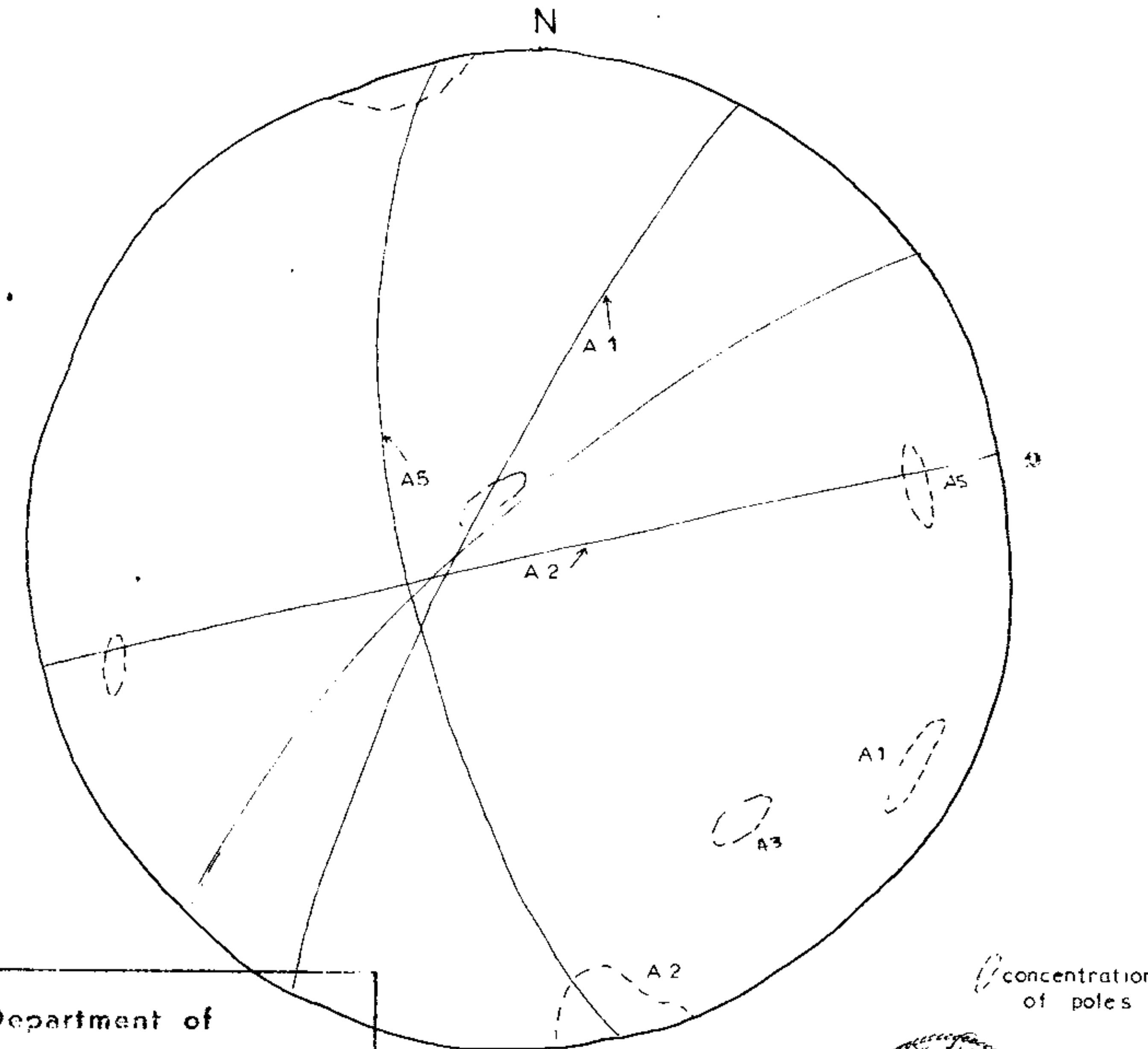


%/o per 1%/o area

N = 195

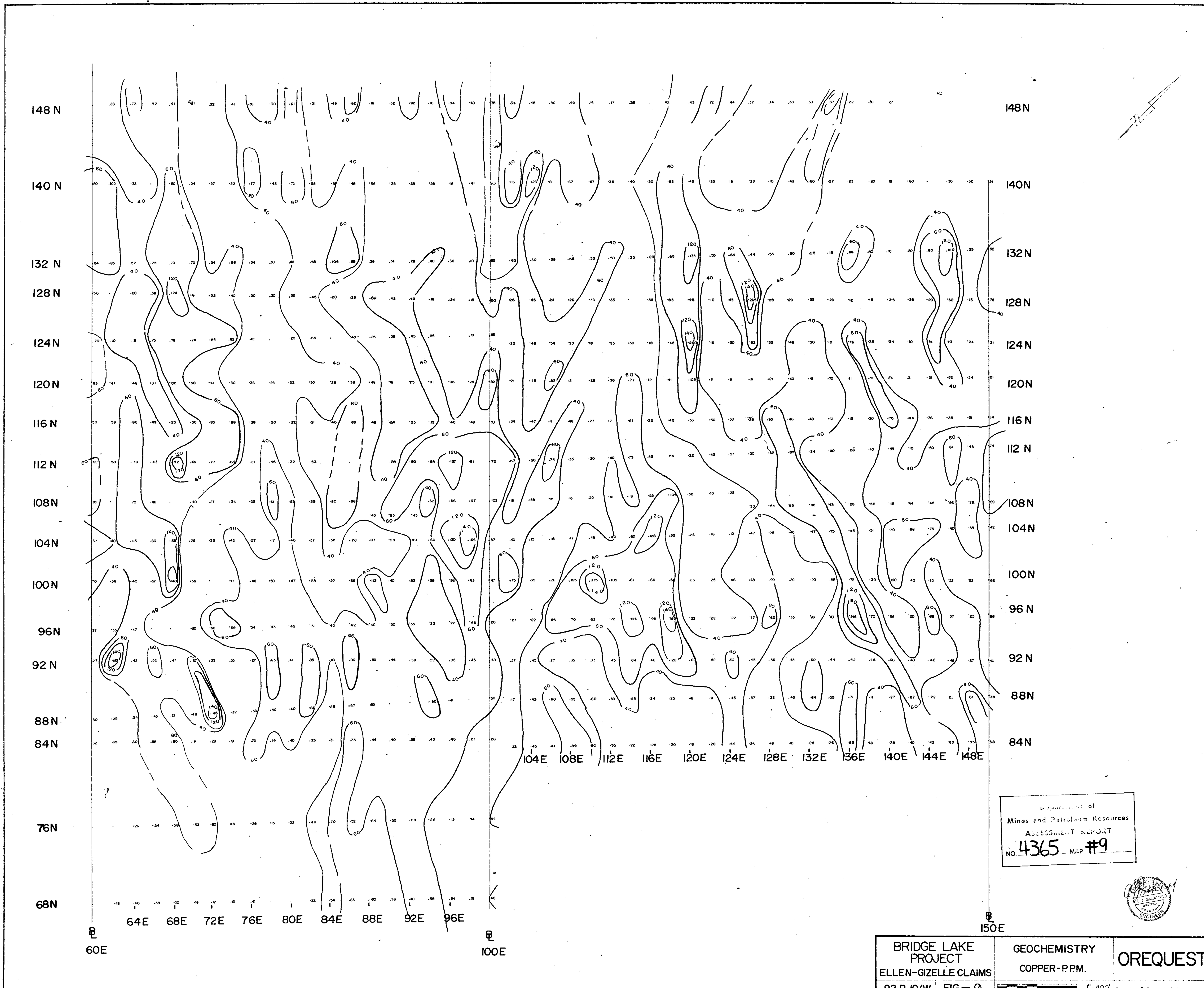
poles to structures,
lower hemisphere plot

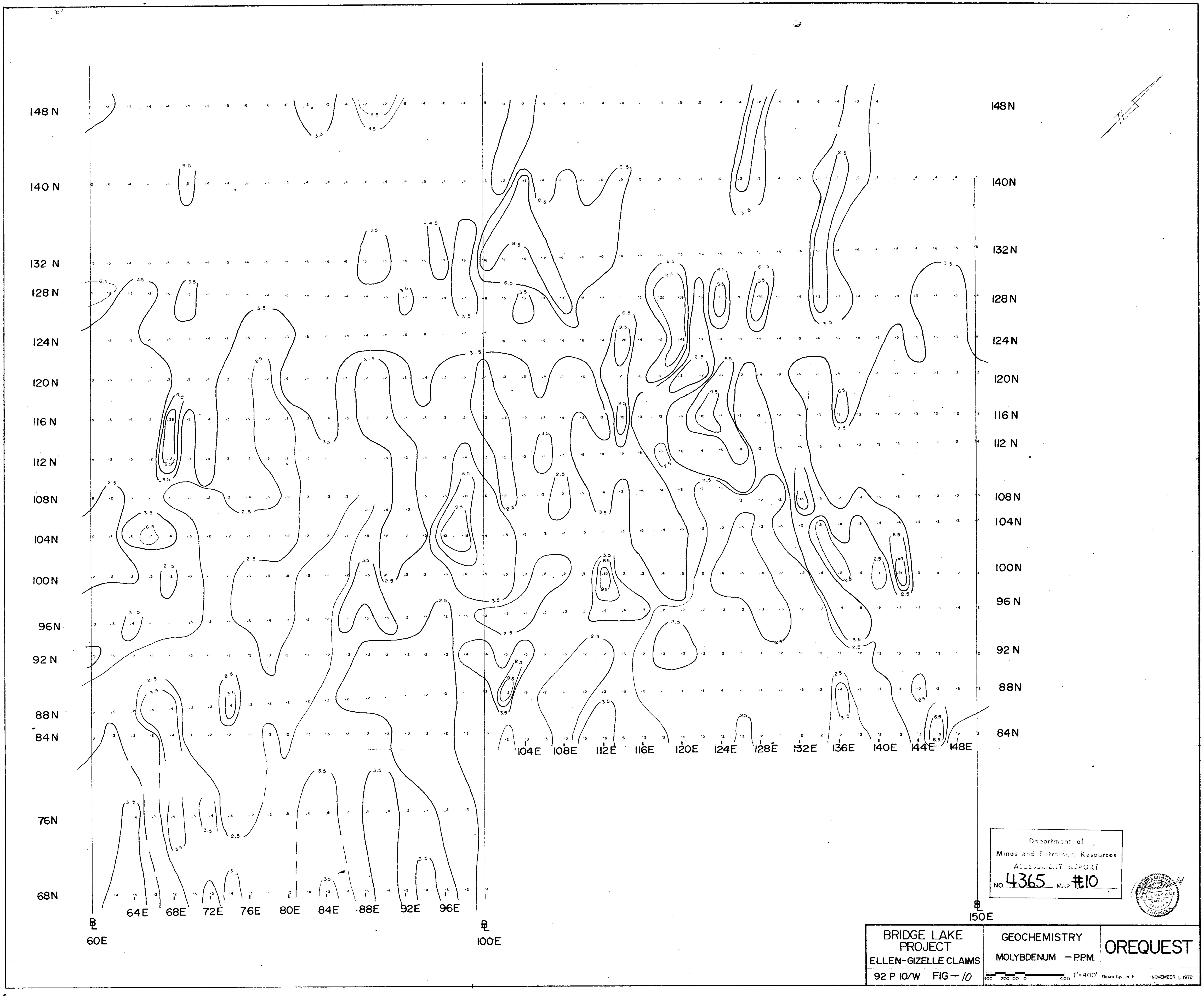
SYNOPTIC STEREONET
(minor structures)

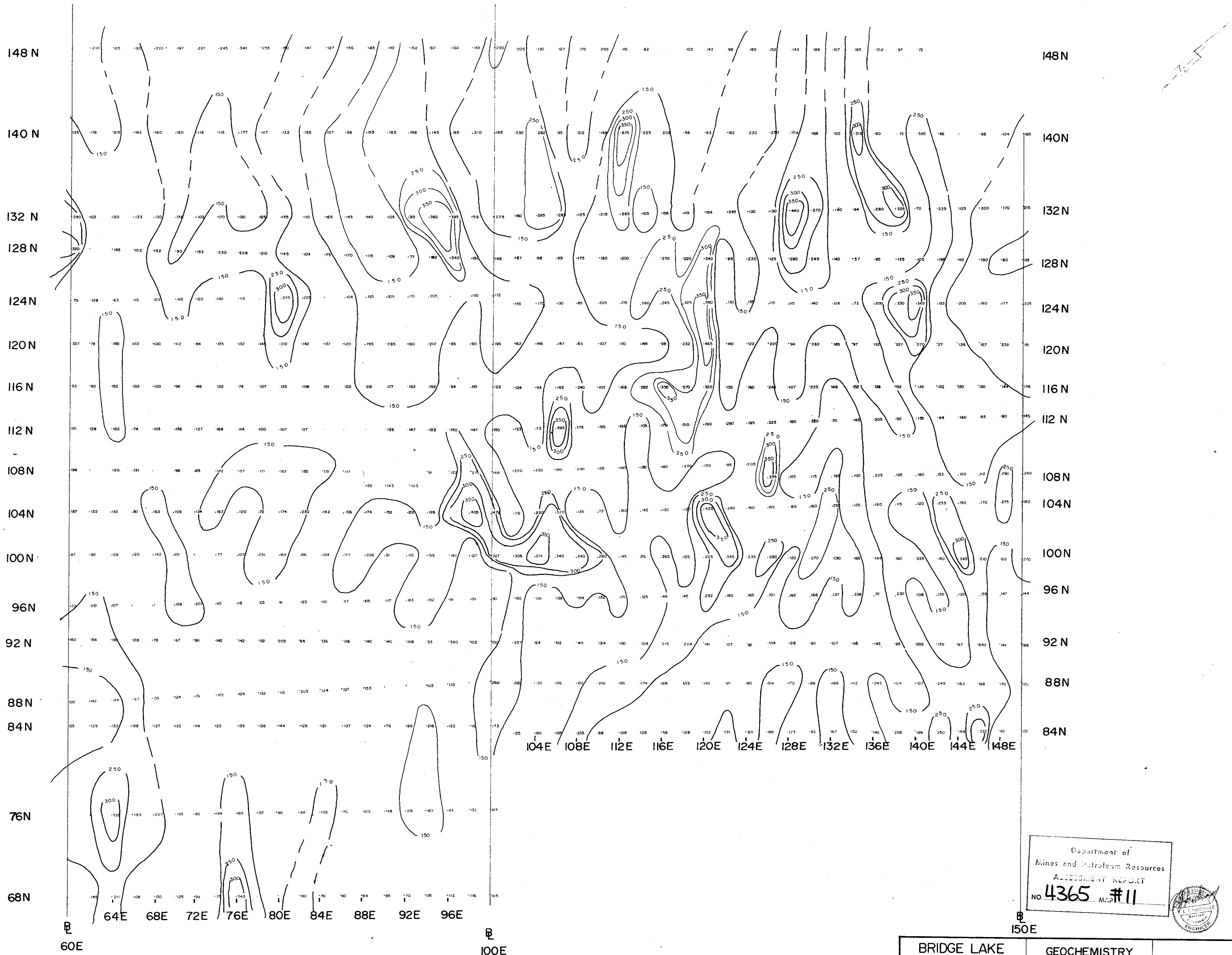


Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #7

BRIDGE LAKE PROJECT ELLEN-GIZELLE CLAIMS	STRUCTURE	OREQUEST
92 P/10 W — FIG 7		R.W. — NOV 1972


148 N
140 N
132 N
128 N
124N
120 N
116 N
112 N
108N
104N
100 N
96N
92 N
88N
84N
76N
68N
64E 68E 72E 76E 80E 84E 88E 92E 96E
BL 60E
BL 100E
104E 108E 112E 116E 120E 124E 128E 132E 136E 140E 144E 148E
BL 150E
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #9
BRIDGE LAKE PROJECT
ELLEN-GIZELLE CLAIMS
92 P 10/W
FIG - 9
GEOCHEMISTRY
COPPER - P.P.M.
1" = 400'
OREQUEST
Drawn by R.F.
NOVEMBER 1, 1972


148 N
140 N
132 N
128 N
124N
120 N
116 N
112 N
108N
104N
100N
96N
92 N
88N
84N
76N
68N
60E
64E
68E
72E
76E
80E
84E
88E
92E
96E
100E
104E
108E
112E
116E
120E
124E
128E
132E
136E
140E
144E
148E
150E
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #10
BRIDGE LAKE
PROJECT
ELLEN-GIZELLE CLAIMS
92 P 10/W
FIG — 10
GEOCHEMISTRY
MOLYBDENUM — P.P.M.
1" = 400'
OREQUEST
Drawn by: R.F.
NOVEMBER 1, 1972

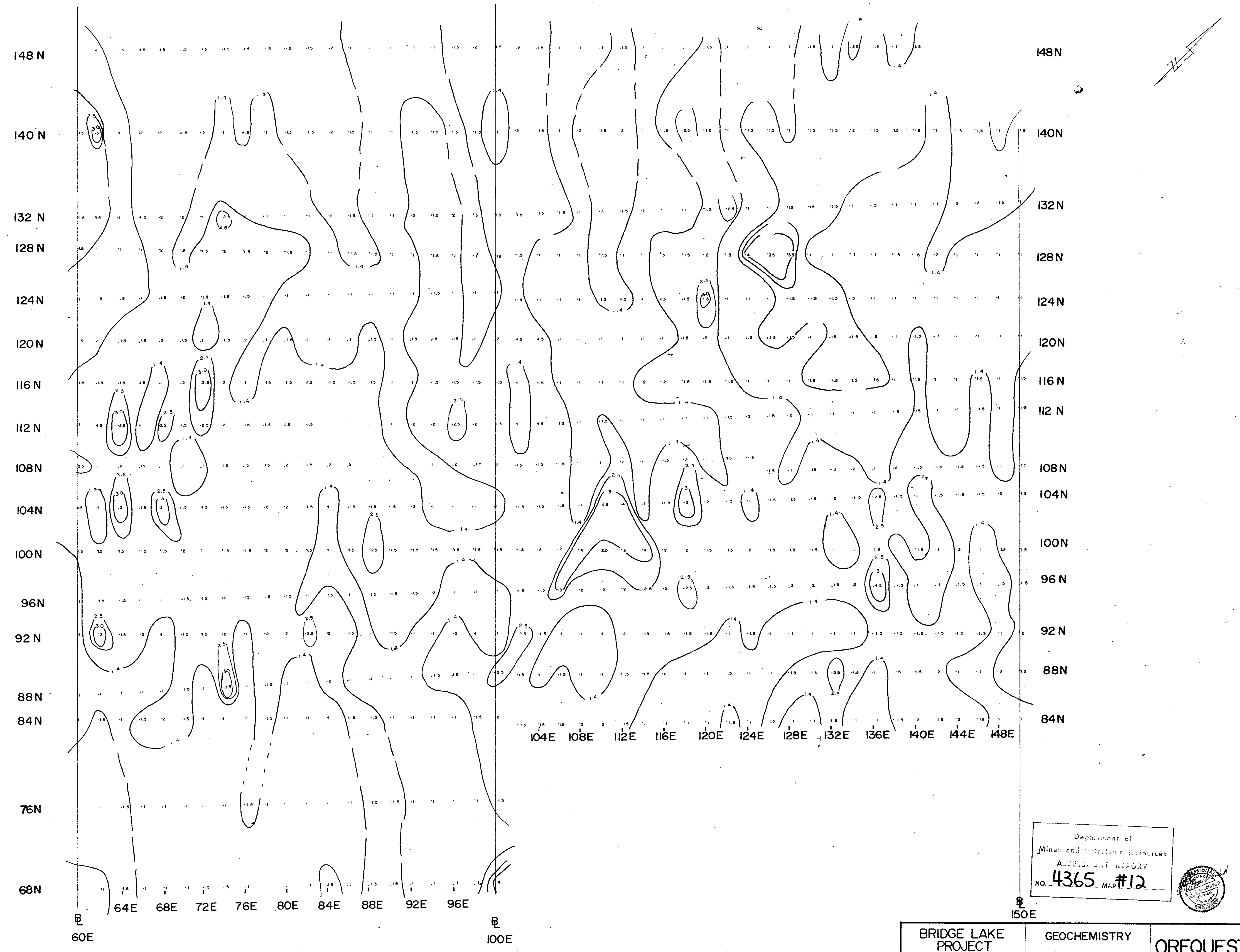


BRIDGE LAKE PROJECT
ELLEN-GIZELLE CLAIMS
92 P 10/W | FIG - 11

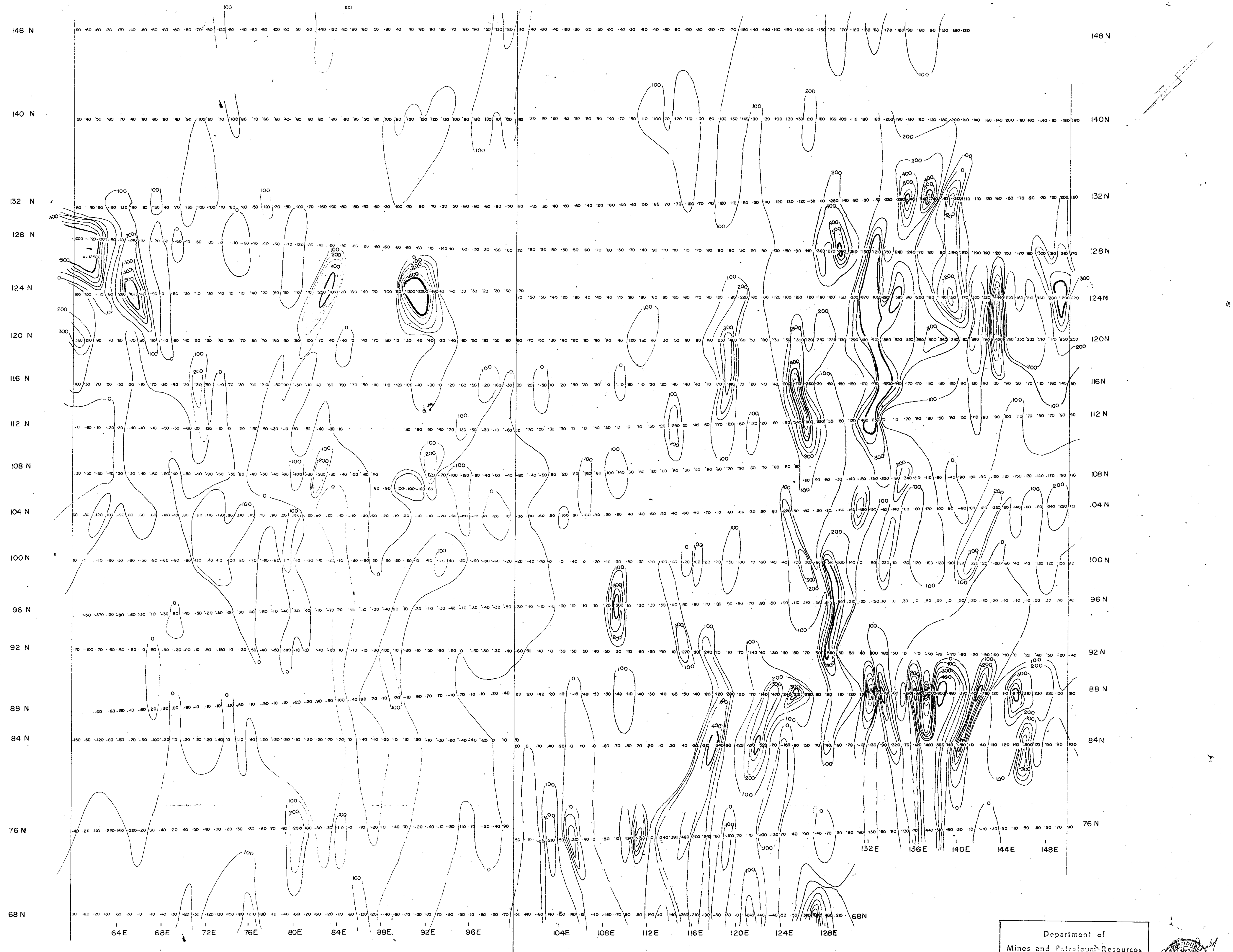
GEOCHEMISTRY
ZINC - P.P.M.
1" = 400'

OREQUEST

Drawn by: R.F. | NOVEMBER 1, 1972

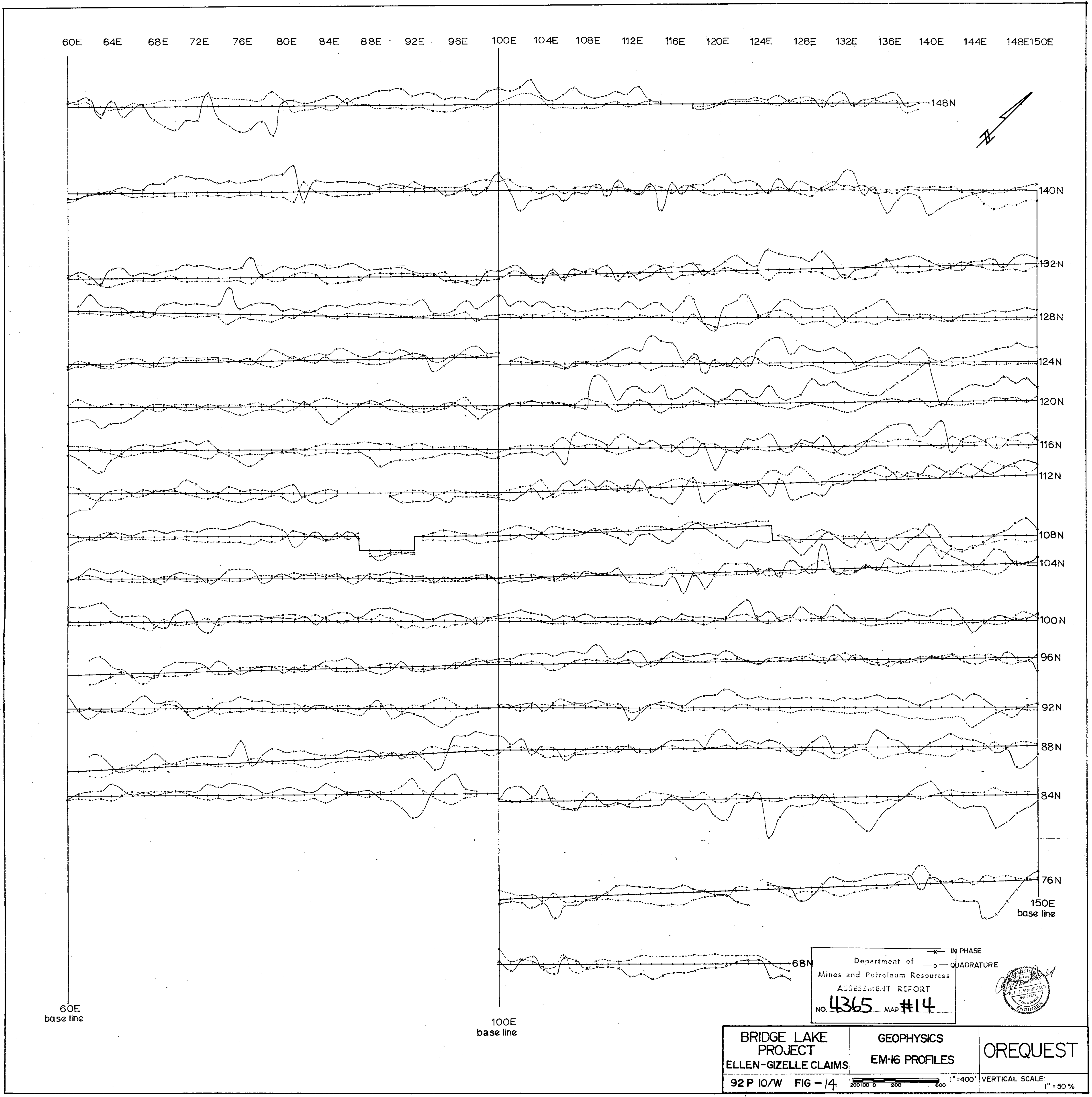


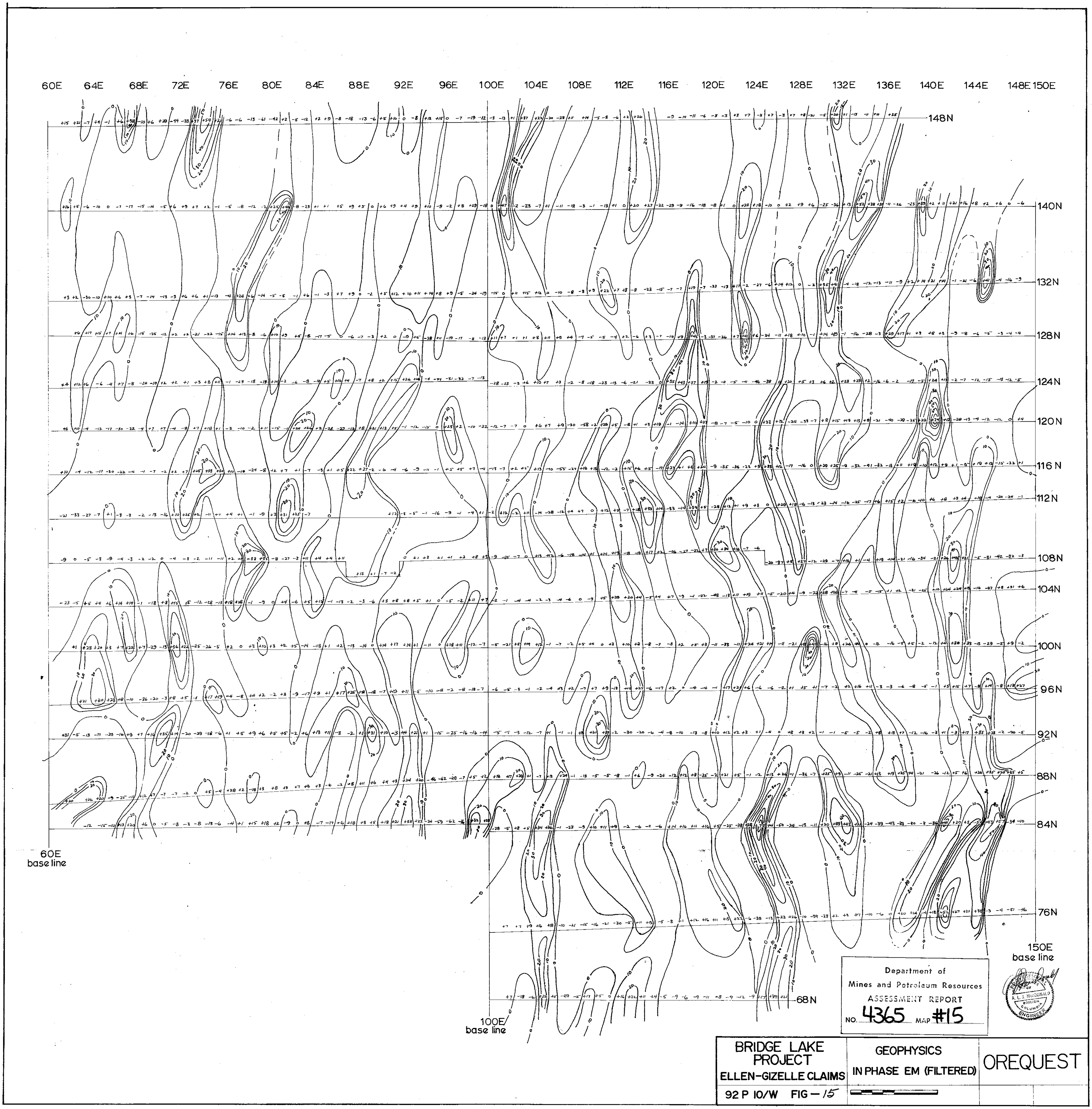
BRIDGE LAKE PROJECT ELLEN-GIZELLE CLAIMS	GEOCHEMISTRY SILVER — P.P.M.	OREQUEST
92 P 10/W FIG — 12	400 200 100 0 400 1" = 400'	Drawn by R.F. NOVEMBER 1, 1972

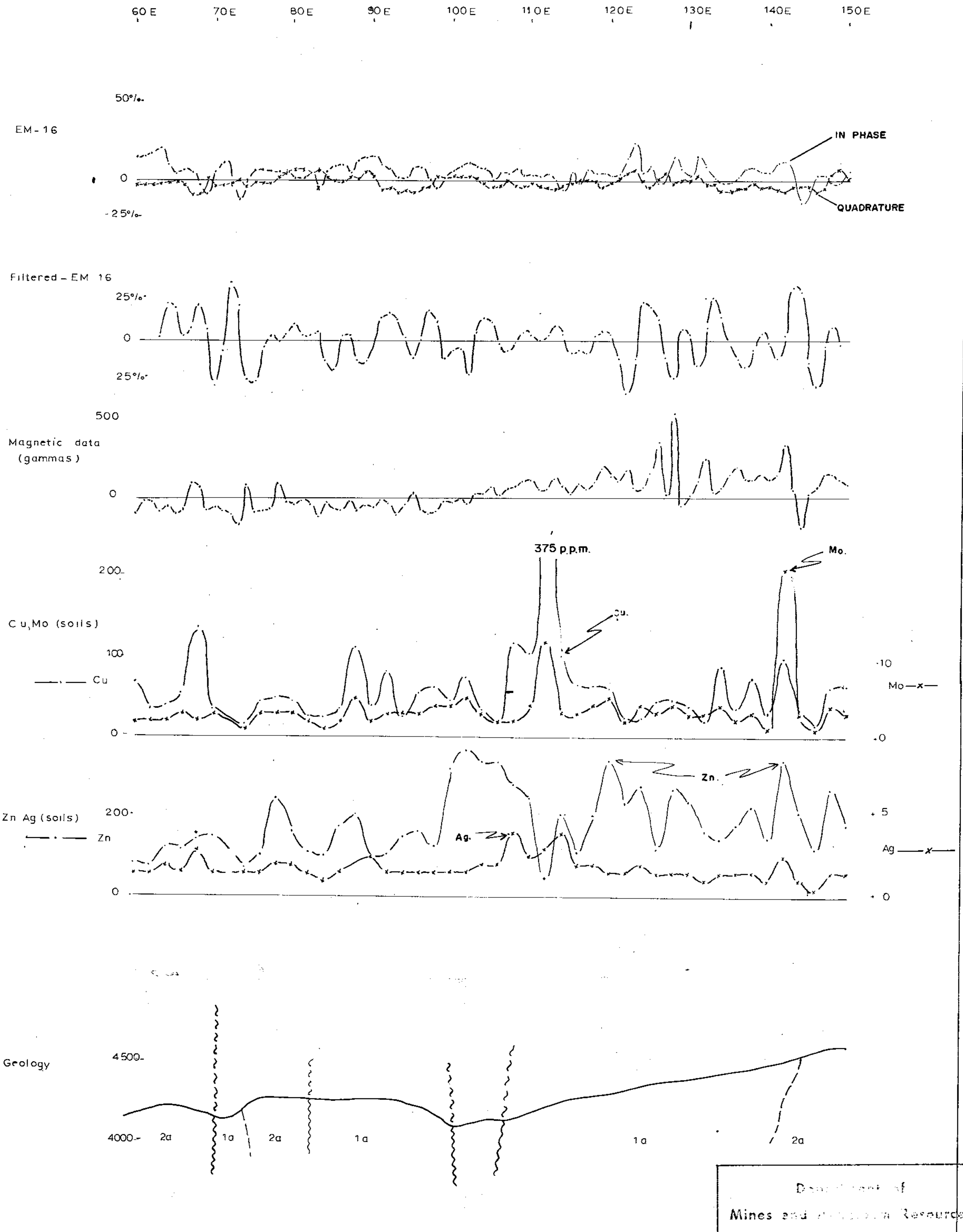


Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #13

BRIDGE LAKE PROJECT ELLEN-GIZELLE CLAIMS	GEOPHYSICS MAGNETOMETER VALUES ISOMAGNETIC PLAN	OREQUEST
92 P 10/W FIG- 13	400 200 100 0 400 1" = 400'	


60E 64E 68E 72E 76E 80E 84E 88E 92E 96E 100E 104E 108E 112E 116E 120E 124E 128E 132E 136E 140E 144E 148E 150E
148N
140N
132N
128N
124N
120N
116N
112N
108N
104N
100N
96N
92N
88N
84N
76N
68N
150E
base line
60E
base line
100E
base line
IN PHASE
QUADRATURE
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #14
BRIDGE LAKE PROJECT
ELLEN-GIZELLE CLAIMS
92 P 10/W FIG - 14
GEOPHYSICS
EM-16 PROFILES
200 100 0 200 600
1" = 400'
OREQUEST
VERTICAL SCALE: 1" = 50%

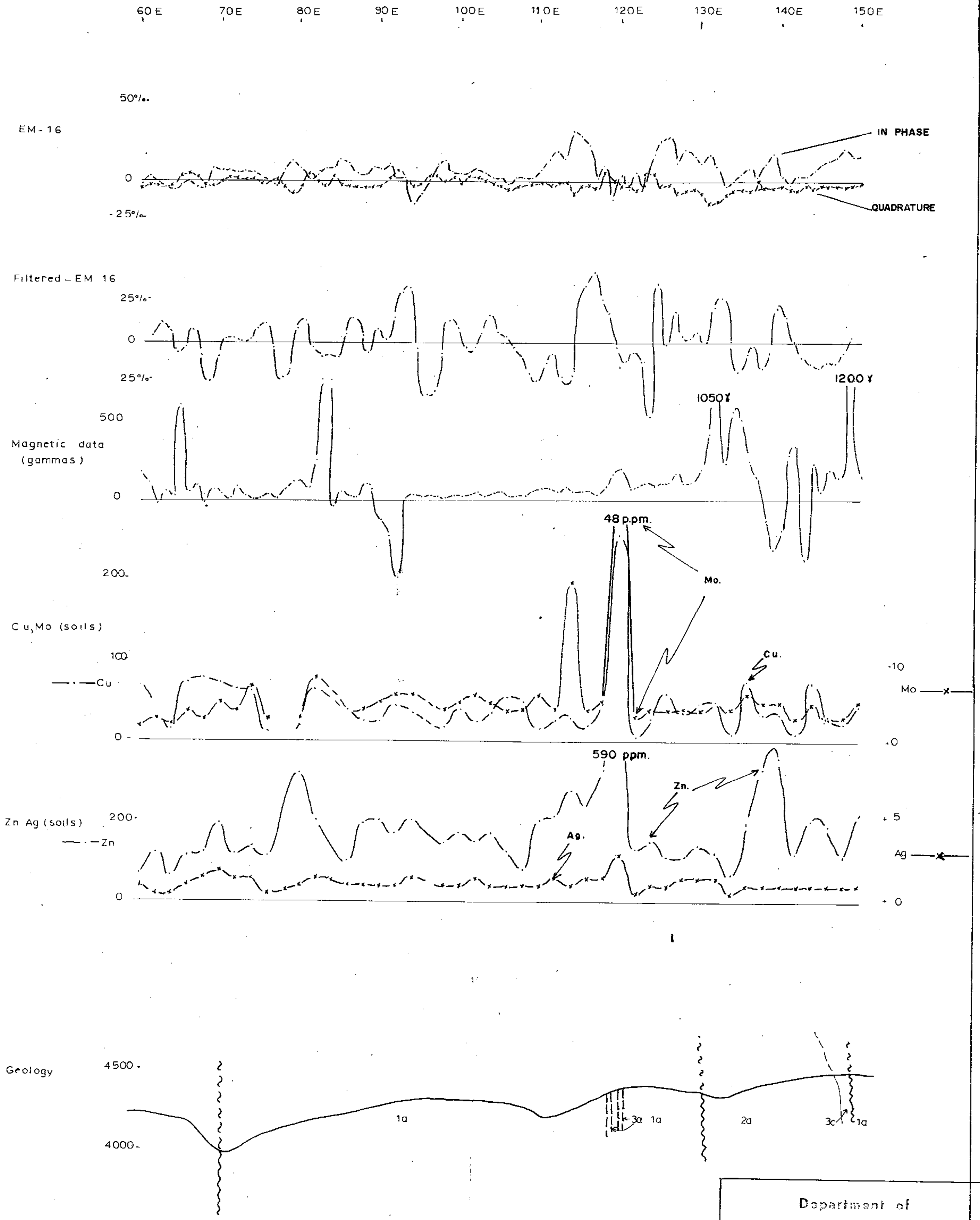

60E
64E
68E
72E
76E
80E
84E
88E
92E
96E
100E
104E
108E
112E
116E
120E
124E
128E
132E
136E
140E
144E
148E
150E
148N
140N
132N
128N
124N
120N
116N
112N
108N
104N
100N
96N
92N
88N
84N
76N
68N
60E base line
100E base line
150E base line
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #15
BRIDGE LAKE PROJECT
ELLEN-GIZELLE CLAIMS
92 P 10/W FIG — 15
GEOPHYSICS
IN PHASE EM (FILTERED)
OREQUEST



NOTE: GEOLOGICAL LEGEND AS IN FIG. 5 (GEOLOGICAL PLAN)

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 4365 MAP #16

BRIDGE LAKE PROJECT ELLEN-GIZELLE CLAIMS	SECTION 100 N	OREOUEST
92 P 10 W · FIG.-16		Rw. · Nov. 1972

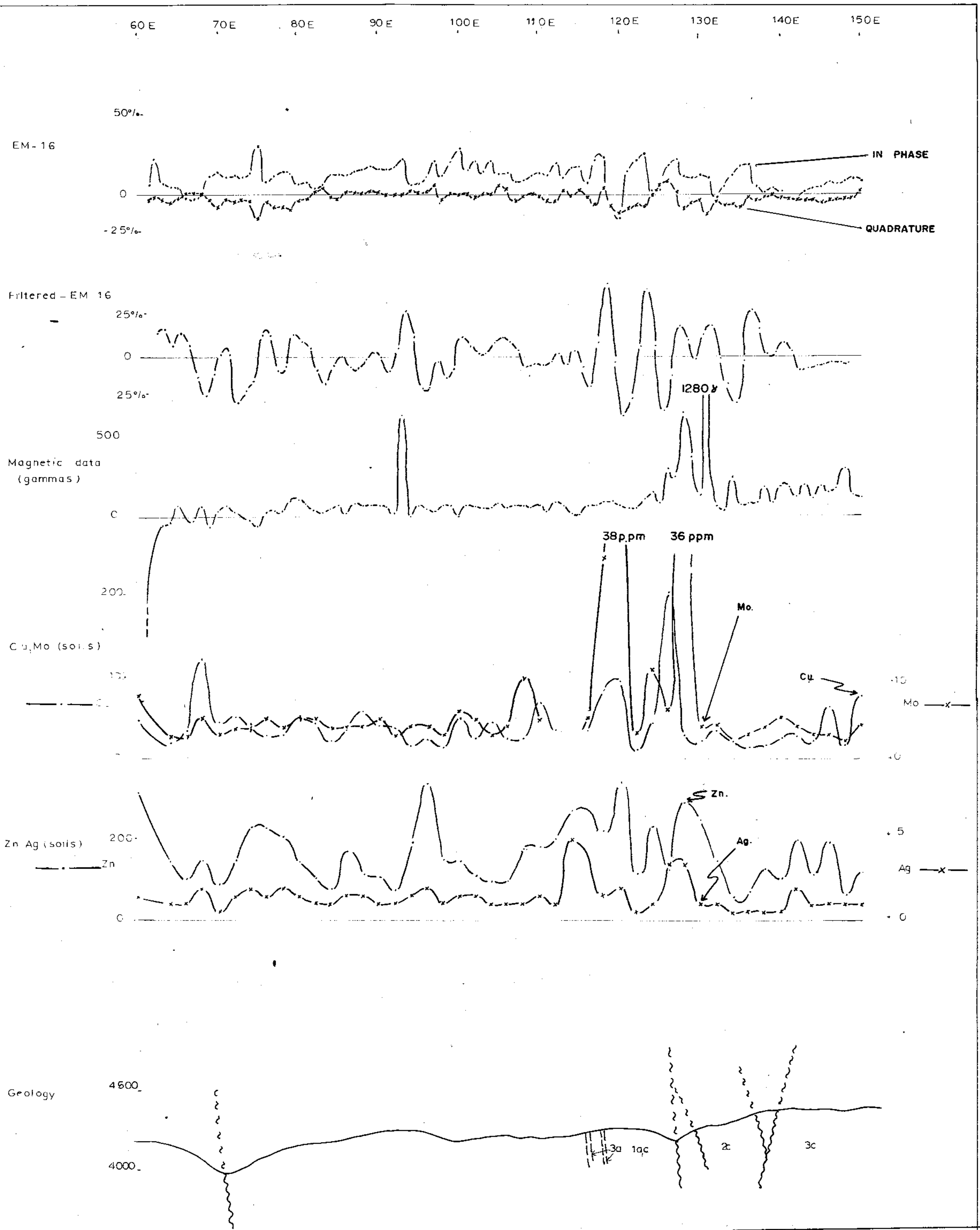


NOTE: GEOLOGICAL LEGEND AS IN FIG. 5 (GEOLOGICAL PLAN)

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #17

BRIDGE LAKE PROJECT ELLEN-GIZELLE CLAIMS	SECTION 124 N	OREQUEST
92P 10W / FIG.-17		R.W. / Nov. 1972

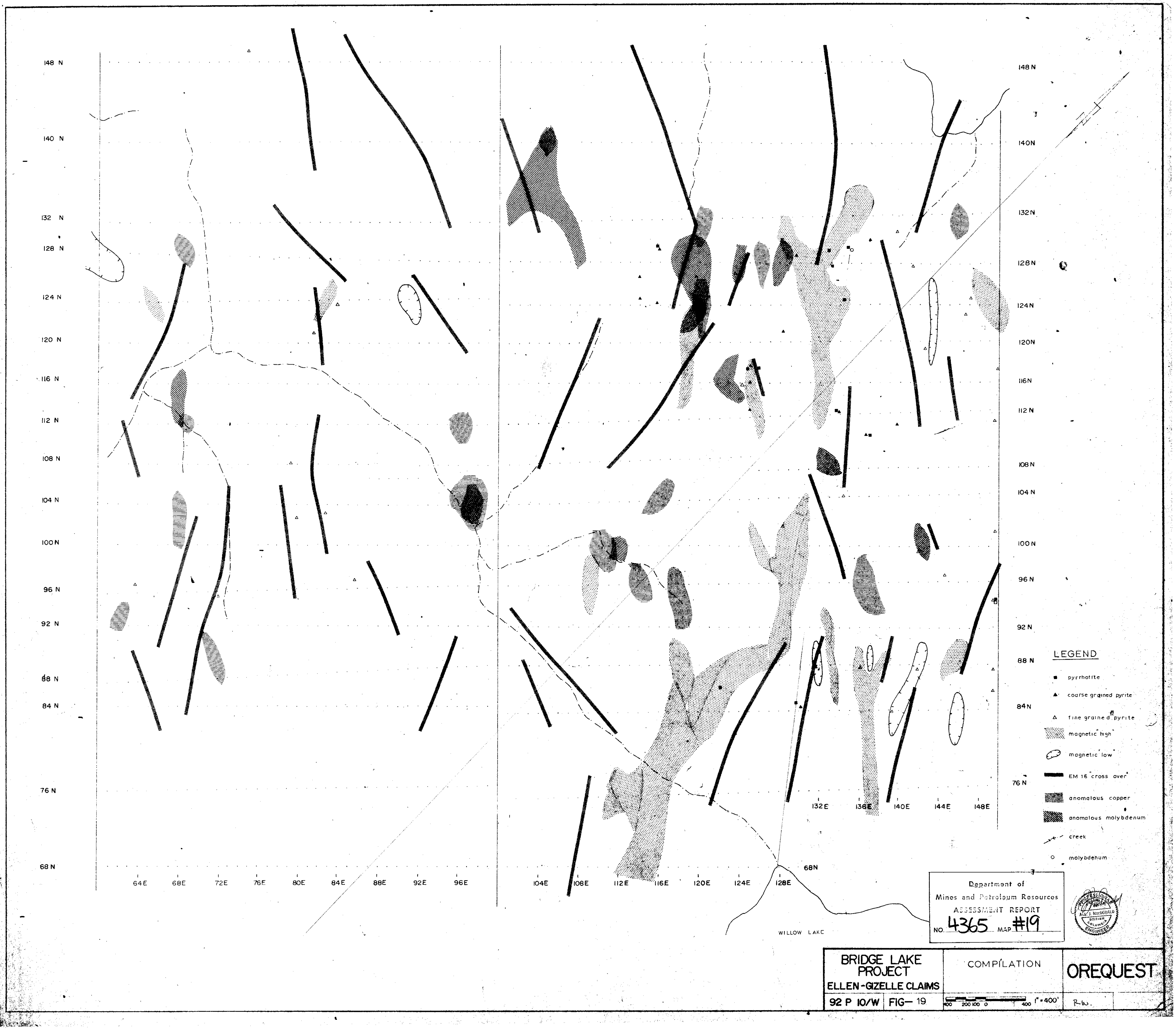
L. J. MACDONALD, BRITISH COLUMBIA, ENGINEER



NOTE: GEOLOGICAL LEGEND AS IN FIG. 5 (GEOLOGICAL PLAN)

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #18

BRIDGE LAKE PROJECT ELLEN-GIZELLE CLAIMS	SECTION 128 N	OREOUEST
92 P 10 W / FIG.-18		R.W. / Nov. 1972


148 N
140 N
132 N
128 N
124 N
120 N
116 N
112 N
108 N
104 N
100 N
96 N
92 N
88 N
84 N
76 N
68 N
64E
68E
72E
76E
80E
84E
88E
92E
96E
104E
108E
112E
116E
120E
124E
128E
132E
136E
140E
144E
148E
WILLOW LAKE
LEGEND
pyrrhotite
coarse grained pyrite
fine grained pyrite
magnetic high
magnetic low
EM 16 cross over
anomalous copper
anomalous molybdenum
creek
molybdenum
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #19
BRIDGE LAKE PROJECT
ELLEN-GIZELLE CLAIMS
COMPILATION
OREQUEST
92 P 10/W
FIG— 19
1" = 400'
R.W.

BRIDGE LAKE PROJECT

Air Photograph Interpretation

= linear

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4365 MAP #20

Location	Lac des Roches
N.T.S	92 P 10W
Type of Map	Air Photograph Interpretation
Fig No.	20
Drawn by	RW
Date	May 1972

1320 760 0 1320 2640

20