Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

FIGURE 1

GEOLOGY OF THE BUCK CREEK TERTIARY OUTLIER

GEOLOGY COMPILED BY B.N. CHURCH

SCALE – 1:100 000

LEGEND

BEDDED ROCKS

MIOCENE

- 11 **POPLAR BUTTES FORMATION**: COLUMNAR OLIVINE BASALT

EOCENE — FRANCOIS LAKE GROUP

BUCK CREEK FORMATION

- 10 *PARROTT MOUNTAIN MEMBER*: MAINLY ANDESITE BRECCIA
- 9 *SWANS LAKE MEMBER*: MAINLY BASALTIC LAVA
- 8 *HOUSTON MEMBER*: APHANITIC ANDESITE AND DACITE LAVAS AND VOLCANIC BRECCIA, MINOR BASALT
- 7 **GOOSLY LAKE FORMATION**: MAINLY FELDSPATHIC ANDESITE AND TRACHYANDESITE LAVAS; BRECCIAS, SILLS, AND STOCKS
- 6 **BURNS LAKE FORMATION**: CONGLOMERATE, SANDSTONE INCLUDING SHALE

UPPER CRETACEOUS

- 5 **TIP TOP HILL FORMATION**: MAINLY BIOTITE-HORNBLENDE ANDESITE AND ANDESITIC DACITE LAVAS AND PYROCLASTIC ROCKS
- 4 ACID VOLCANIC ROCKS, MAINLY RHYOLITE LAVA IN THE TCHESINKUT LAKE AND BULKLEY LAKE AREAS AND RELATED QUARTZ PORPHYRY INTRUSIONS ON OKUSYELDA HILL

LOWER CRETACEOUS

SKEENA GROUP ?

- 3/0 A MIXED ASSEMBLAGE OF CHERT PEBBLE AND POLYMICTIC CONGLOMERATE, SANDSTONE, AND FELSIC VOLCANIC FRAGMENTAL ROCKS; SHALE AND MASSIVE RHYOLITE LAVA FORM LOCAL DEPOSITS; INCLUDES CONGLOMERATE WITH SOME WEYLA-BEARING FRAGMENTS

JURASSIC

HAZELTON GROUP

- 2 UNDIVIDED FINE-GRAINED DACITIC ANDESITE, RHYOLITE, AND BASALTIC LAVAS AND VOLCANICLASTIC ROCKS AND DYKES
- 1 **TELKWA FORMATION**: INCLUDES MAROON TUFF AND TUFF BRECCIA
- 0 **MAXAN LAKE FORMATION**: WEYLA-BEARING BROWN SANDSTONES; MAY ALSO INCLUDE CHERT PEBBLE CONGLOMERATE AND ASSOCIATED BEDS ASSIGNED TO UNIT 3

IGNEOUS INTRUSIONS

- F **GOOSLY INTRUSIONS**: SYENOMONZONITE-GABBROIC STOCKS; INCLUDES THE PARROTT LAKE INTRUSION AND GOOSLY LAKE INTRUSION
- E **NANIKA INTRUSIONS**: EQUITY GRANITE STOCK AND QUARTZ FELDSPAR PORPHYRY AT DUNGATE CREEK

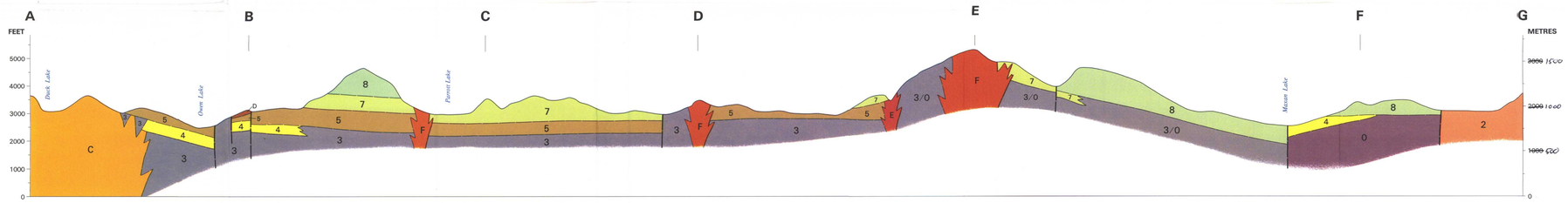
BULKLEY INTRUSIONS

- D MINE HILL MICRODIORITE SILLS AND DYKES
- C BIOTITE-PLAGIOCLASE PORPHYRY STOCK AT DUCK LAKE AND RELATED QUARTZ FELDSPAR PORPHYRY INTRUSIONS
- B BASIC AND INTERMEDIATE STOCKS AT BOB CREEK AND TSICHGASS LAKE
- A **TOPLEY INTRUSIONS:** INCLUDES THE GRANITIC STOCK NEAR BURNS LAKE

SYMBOLS

- BEDDING ATTITUDE
- GLACIAL STRIATION
- GEOLOGICAL CONTACT
- FAULT INTERPOLATED
- TOPOGRAPHIC CONTOUR (INTERVAL, 500 FEET)
- MINERAL SHOWING
- OUTCROP AREA
- FOSSIL LOCALITY
- ROAD

A PANORAMIC VIEW OF THE EQUITY SILVER MINE, OPEN PIT OPERATIONS, JULY 1984.



CROSS SECTION FROM OWEN LAKE THROUGH THE GOOSLY AREA, (LOOKING NORTHWEST)

CARTOGRAPHY BY P. CHICORELLI

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Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

GEOLOGY OF THE BUCK CREEK TERTIARY OUTLIER

GEOLOGY COMPILED BY B.N. CHURCH

SCALE – 1:50 000

LEGEND

BEDDED ROCKS

MIOCENE

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EOCENE

FRANCOIS LAKE GROUP

BUCK CREEK FORMATION

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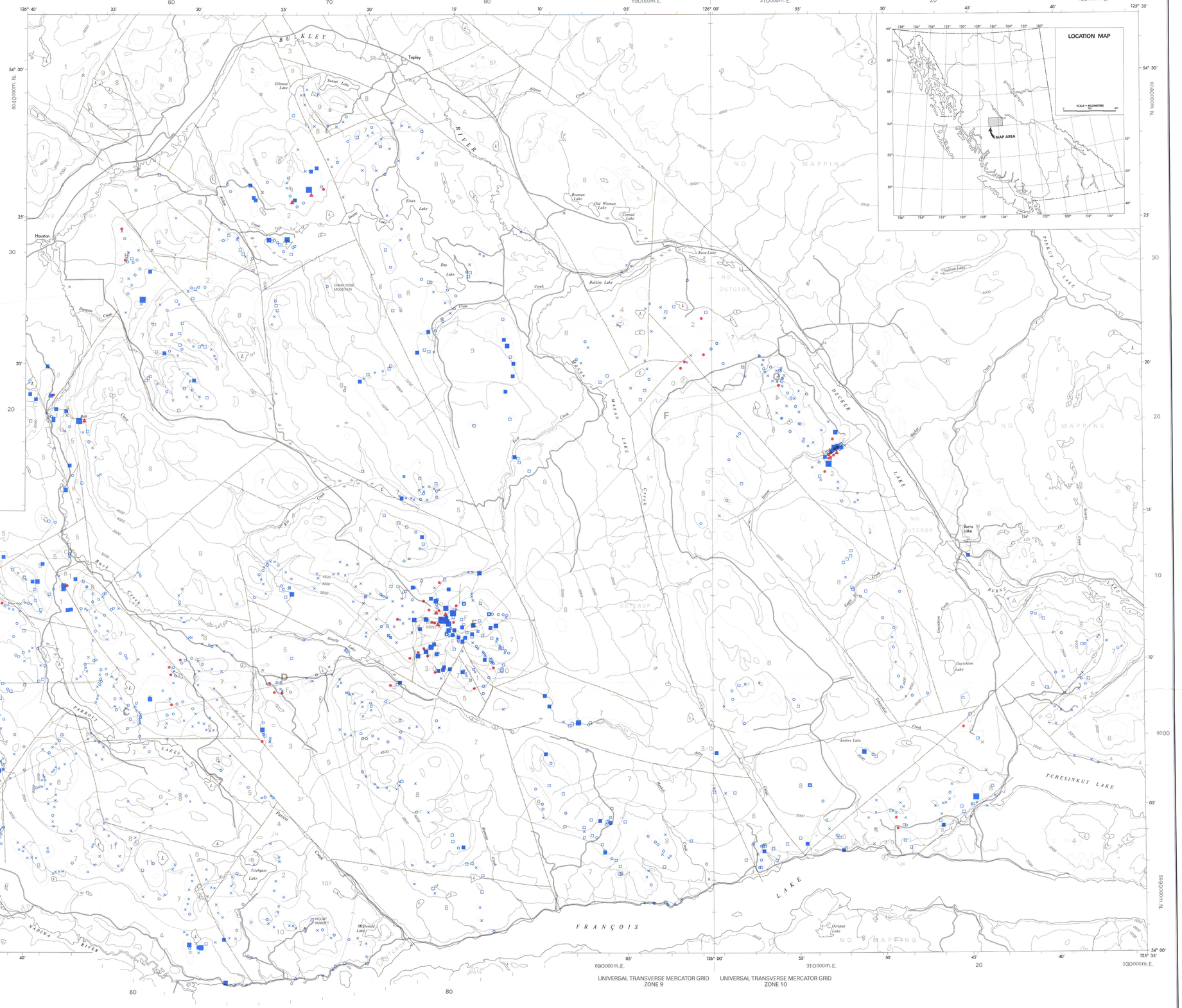
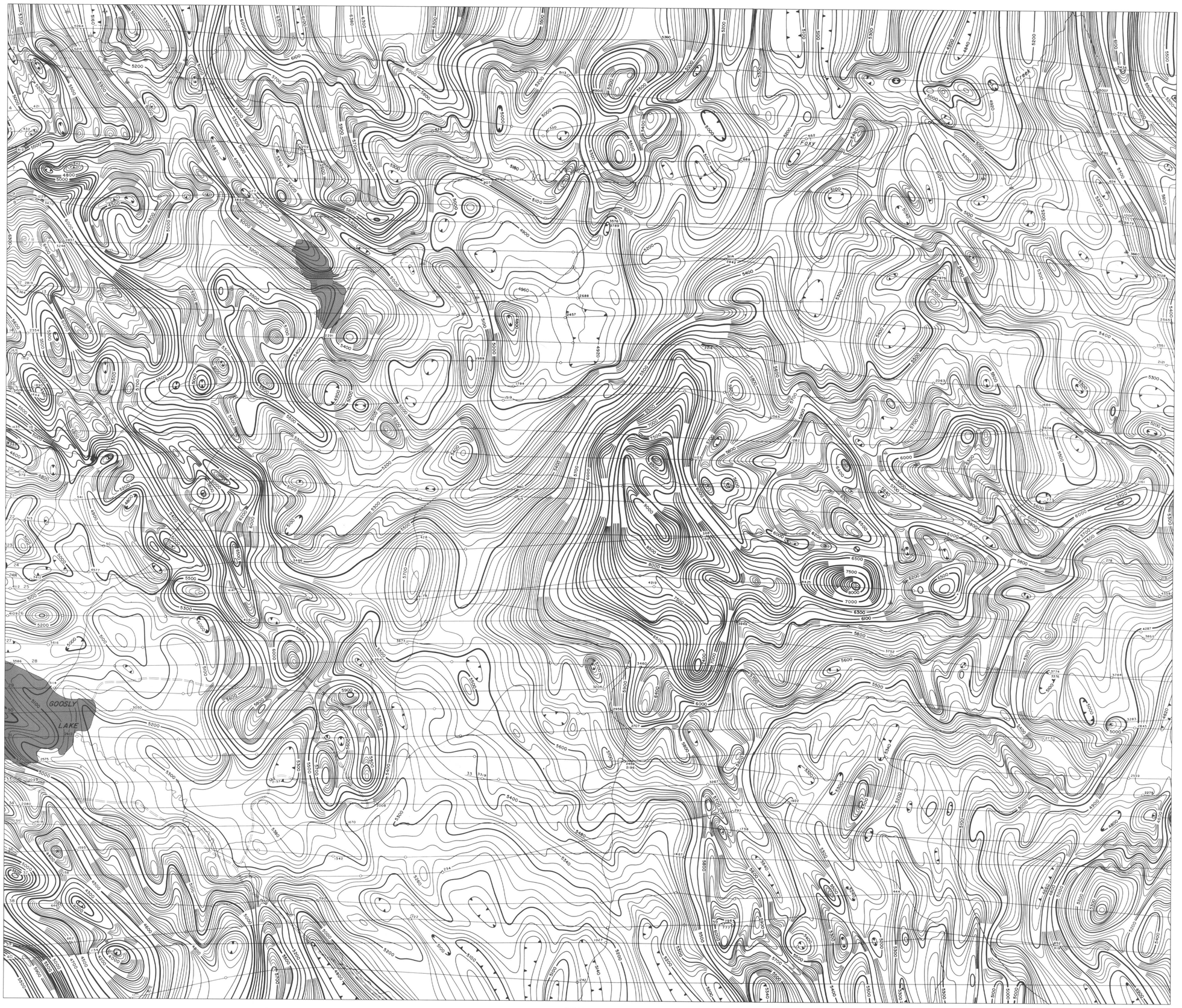
B BASIC AND INTERMEDIATE STOCKS AT BOB CREEK AND TSICHGASS LAKE

A **TOPLEY INTRUSIONS**: INCLUDES THE GRANITIC STOCK NEAR BURNS LAKE

SYMBOLS

BEDDING ATTITUDE
GLACIAL STRIATION
GEOLOGICAL CONTACT
FAULT, INTERPOLATED
TOPOGRAPHIC CONTOUR (INTERVAL, 500 FEET) 5500
MINERAL SHOWING
OUTCROP AREA
FOSSIL LOCALITY F
ROAD


LOCATION MAP
MAP AREA
SCALE – KILOMETRES
BULKLEY
RIVER
Topley
Houston
Bob
Burns Lake
BURNS LAKE
DECKER LAKE
PINKUT LAKE
TCHESINKUT LAKE
FRANÇOIS LAKE
MAXAN LAKE
PARROTT LAKES
NADINA RIVER
MORICE RIVER
NO MAPPING
NO OUTCROP
Gilmore Lake
Sunset Lake
Elwin Lake
Day Lake
Bulkley Lake
Rose Lake
Nathan Lake
Old Woman Lake
Anders Lake
Tsichgass Lake
McDonald Lake
Octopus Lake
Duck Lake
Pimpernel Lake
Fagnochan Lake
Fairlight Lake
Gooslyn Lake
Guzzihon Lake
Dungate Creek
Owen Creek
Parrott Creek
Burns Creek
Tsichgass Creek
Fulton Creek
Pipe Creek
Pipe Alock Creek
Pimpernel Creek
Fairlight Creek
Fulton Creek
Fulcrum Creek
Anders Creek
Tchesinkut Creek
Fulcrum Creek
Burns Creek
Decker Creek
Maxan Creek
Bulkley Creek
Crow Creek
Elwin Creek
Sunset Creek
Gilmore Creek
Aldson Creek
Bob Creek
Black Creek
Goosly Lake
Fairlight Creek
Parrott Creek
Tsichgass



CONTOUR INTERVAL ..... 20 GAMMA
MEAN FLIGHT LINE SPACING ..... 660 FEET
MEAN TERRAIN CLEARANCE ..... 200 FEET
500 GAMMA CONTOUR
100 GAMMA CONTOUR
20 GAMMA CONTOUR
MAGNETIC LOW
FIDUCIAL POINTS 3690
FLIGHT LINES

FIGURE B-1

AEROMAGNETIC MAP OF THE EQUITY MINE AREA

(TOTAL FIELD INTENSITY MAGNETIC MAP)

SCALE: 1 Inch to 1000 Feet

1000 FEET — 0 — 1000 — 2000 — 3000 FEET

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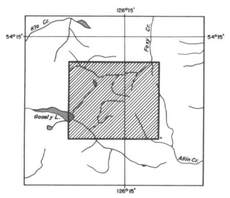

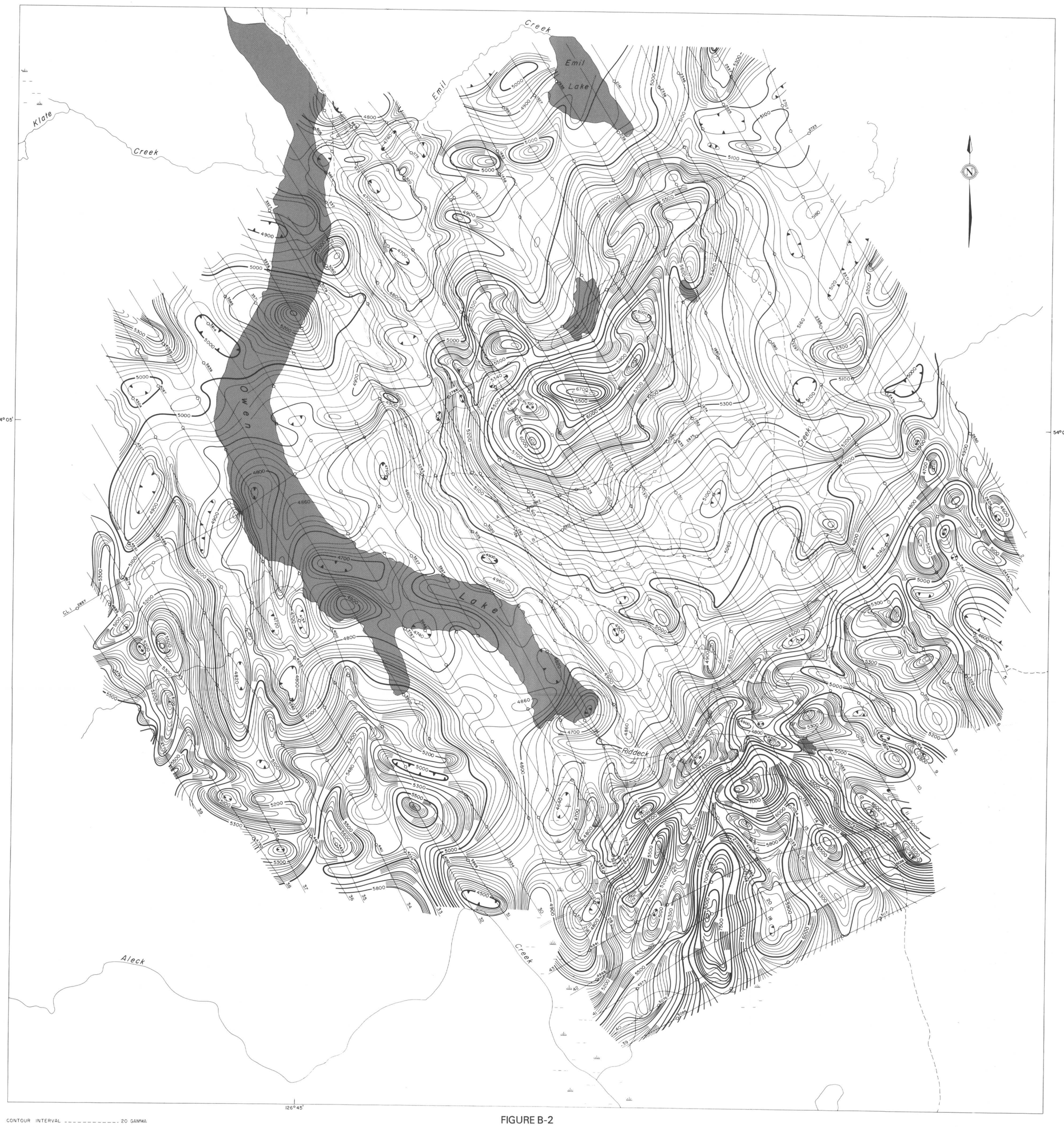

CONTOUR INTERVAL ..... 20 GAMMA
MEAN FLIGHT LINE SPACING ... 660 & 1320 FEET
MEAN TERRAIN CLEARANCE ..... 200 FEET
500 GAMMA CONTOUR .....
100 GAMMA CONTOUR .....
20 GAMMA CONTOUR .....
MAGNETIC LOW .....
FIDUCIAL POINTS 3690
FLIGHT LINES .....

FIGURE B-2

AEROMAGNETIC MAP OF THE SILVER QUEEN MINE AREA

(TOTAL FIELD INTENSITY MAGNETIC MAP)

SCALE : 1 Inch to 1000 Feet

1000 FEET 0 1000 2000 3000 4000 FEET

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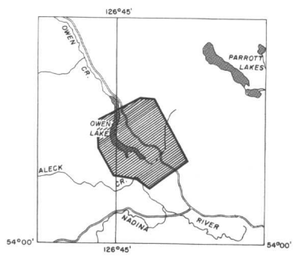
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