

STIKINE EAST GROUP

C O N T E N T S

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ATTACHMENTS

Statement of Qualifications - Ralph D. Falconer

Evidence of Expenditures

1 Topographic Map - 1" = 500'

2 Magnetic Contour Map - 1" = 500'

1049/3W

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>593</u> MAP.....
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3 December 1964

GEOPHYSICAL REPORT

(MAGNETOMETER SURVEY)

ON

MINERAL CLAIMS BIK 1-86 AND BIK 221-226 (Inclusive)  
(herein called the Stikine East Group)

57° 131° S.E.

SUMMARY

A magnetometer survey, covering approximately 17 line miles was carried out on the claims comprising the Stikine East Group during the period July 21 - August 14, 1964. Readings were taken at 100' intervals over lines cut for the survey, existing claim lines and the East Galore Creek glacier. Results are presented on a transparent overlay to the topographic map of the area, scale 1" = 400'. Contour interval is 200 gammas total field.

The results show, generally, zones of higher magnetic readings surrounding a featureless central area, interpreted to be contact or skarn zones bordering a syenite intrusive.

INTRODUCTION

The claims of the Stikine East Group located at approximately 131°24'W, 57°09'N in Northern B.C., as shown on Map #1, were staked in February and August, 1964, the area being adjacent to the claims of Stikine Copper Company (Kennco) and in a favourable location for an extension of the Galore Creek Stock.

A magnetometer survey over approximately 17 line miles was carried out during the period July 21 - August 14, covering the more accessible part of the claims and some of the adjacent Kennco claims. About 10 miles of line was cut for the survey. The remainder was on the Copper Canyon glacier and along existing claim location lines. Helicopter transportation was used to get to some of the survey lines from the base camp located on the East Fork of Galore Creek.

Weather during the survey period was cool and wet, with several days being unsuitable for field work due to rain and fog.

The results are presented on an overlay (Map #1) to the topographic map (Map #2) from Gale's report dated 22 December 1964, on the geology of the area.

#### WORK PERFORMED

The magnetometer survey was carried out, taking readings at 100' intervals on the lines shown on the accompanying topographic map. Coverage amounted to approximately 1.3 miles per field day. This low figure is due to the rugged topography, heavy bush and waiting for helicopter transportation.

The instrument used was a Barringer GM-102 nuclear precession magnetometer, measuring the absolute total magnetic field to an accuracy of 10 gammas. Diurnal corrections were not applied as there is no instrument drift and a base reading station was not used. Traverses were adjusted to match at common points; in no case was the adjustment required greater than 40 gammas. Normally an adjustment of 20 gammas or less was required.

#### INTERPRETATION

Anomalies discussed are located on the overlay (Map #1) by corresponding numbers. The interpretation is made with reference to the report filed as assessment work by Kennco Explorations (Western) Limited, titled "Geophysical Report on the Magnetometer Survey, Part of the G.C., Hob and Buy Claim Groups, Galore Creek, Liard Mining Division, B.C.", and the geological map from Gale's report on the Stikine East Group.

Kennco's report shows a syenite intrusive (Galore Creek Stock) as a magnetically low, fairly featureless area surrounded by higher magnetic readings believed to represent skarn or contact zones around the intrusive.

The Stikine East magnetics show about the same picture, with the central low, featureless zone (1) conforming to a syenite sill as mapped by Gale. A possible extension of this sill, not seen in outcrop, occurs in area (2). As it is a considerable distance between survey lines in this area, this extension should be considered as a possibility only. The area of intrusive is surrounded by higher readings (3), probably

representing contact zones. It is not known if the highs (4) represent contact zones, or inclusions of magnetite in the intrusive, as outcrop of diorite with some visible magnetite occur on the south side of East Galore Creek near here.

On the north side, the magnetically indicated contact zones appear to be cut off by "Camp Fault". This fault also appears to be the north boundary of the syenite intrusive, as shown by the geologic mapping. The lack of any contact magnetic zone at (5) suggests a different type of rock on the north side of the fault than that which surrounds the syenite intrusive south of the fault, or possibly, the fault may be post-intrusive.

The featureless magnetics north of the Camp Fault do not suggest any intrusive underlying the surface cover, but the magnetic coverage in this area was not very extensive.

#### CONCLUSIONS AND RECOMMENDATIONS

The magnetics outline fairly well the syenite intrusive as mapped geologically. A possible extension is indicated in area (2). There are no indications of the intrusive extending north of Camp Fault.

Respectfully submitted,

*Ralph D. Falconer*  
Ralph D. Falconer.

RDE:sm

5 March 1965

TO ACCOMPANY Geophysical Report (Magnetometer Survey)  
on Mineral Claims BIK 1-86 - and BIK 221-226  
Inclusive, herein called the Stikine East Group, Liard Mining  
Division, British Columbia.

BY: Ralph D. Falconer

DATED: 3 December 1964

RALPH D. FALCONER, Geophysicist

- (1) Division Geophysicist, American Smelting & Refining Company - one year.
- (2) Geophysicist, Sherritt Gordon Mines Limited, four and one-half years.
- (3) Associate Member, Society of Exploration Geophysicists (Application submitted for active membership)
- (4) Academic Requirements for M.S. in Geophysics completed; Thesis not completed, Michigan Technological University, Houghton, Michigan.
- (5) B.S. (with Honour) in Geological Engineering (Geophysics option), Michigan Technological University, Houghton, Michigan.

*Keith Whiting*

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Keith Whiting, P. Eng.,  
(B.C. Reg. No. 4284)  
Supervisor.

EVIDENCE OF EXPENDITURES

MAGNETOMETER SURVEY, STIKINE EAST GROUP

Ralph D. Falconer	Geophysicist-Operator 13 days @ \$27.00/day	\$ 351.00
G. Tickner	Helper, Line Chaining 7 days \$ 400/mo	100.00
M. Zults	Helper, Line Chaining 7 days @ \$400/Mo	100.00
G. Tickner	Linecutter 17 days " \$400/Mo	225.00
M. Zults	Linecutter 17 days " \$400/mo	225.00
<hr/>		
	Total Labour	\$ 1,001.00
<hr/>		
<u>LIVING EXPENSES</u>		\$ 649.00
<u>MAGNETOMETER RENTAL</u>	13 days @ \$10/day	130.00
<u>HELICOPTER COSTS</u>	14 hrs @ \$130/hr	1,820.00
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	TOTAL EXPENDITURES CLAIMED	\$ 3,600.00
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Declared before me at the

City of Vancouver in the  
province of British Columbia  
this 7 day of March, 1965, A.D.



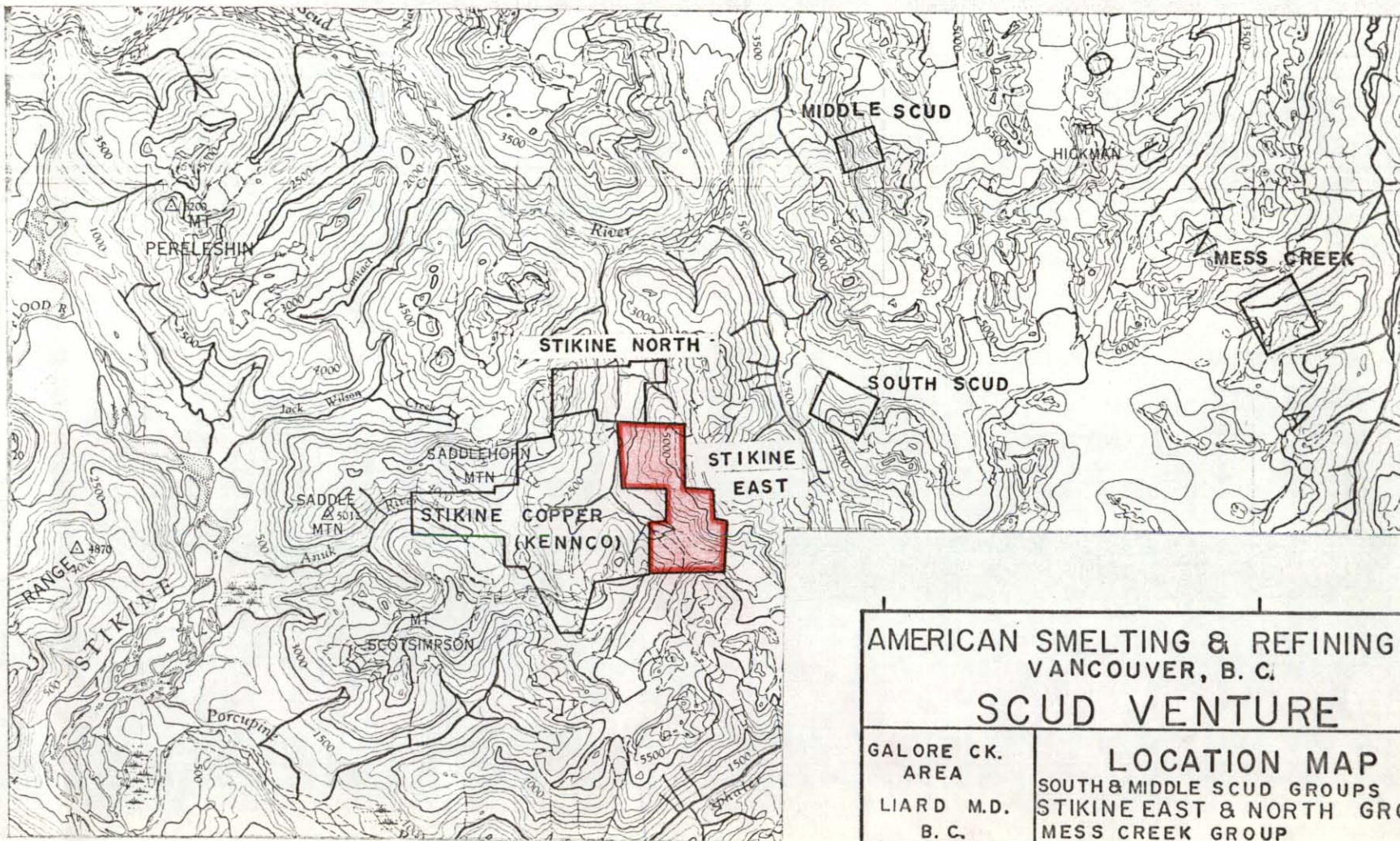
W. St.C. Dunn

  
Sub-mining Recorder

Stamp: SUB-MINING RECORDS, VANCOUVER, B.C. M.R. # \_\_\_\_\_



57° 15' N



131° 30' W

AMERICAN SMELTING & REFINING CO.  
VANCOUVER, B. C.

### SCUD VENTURE

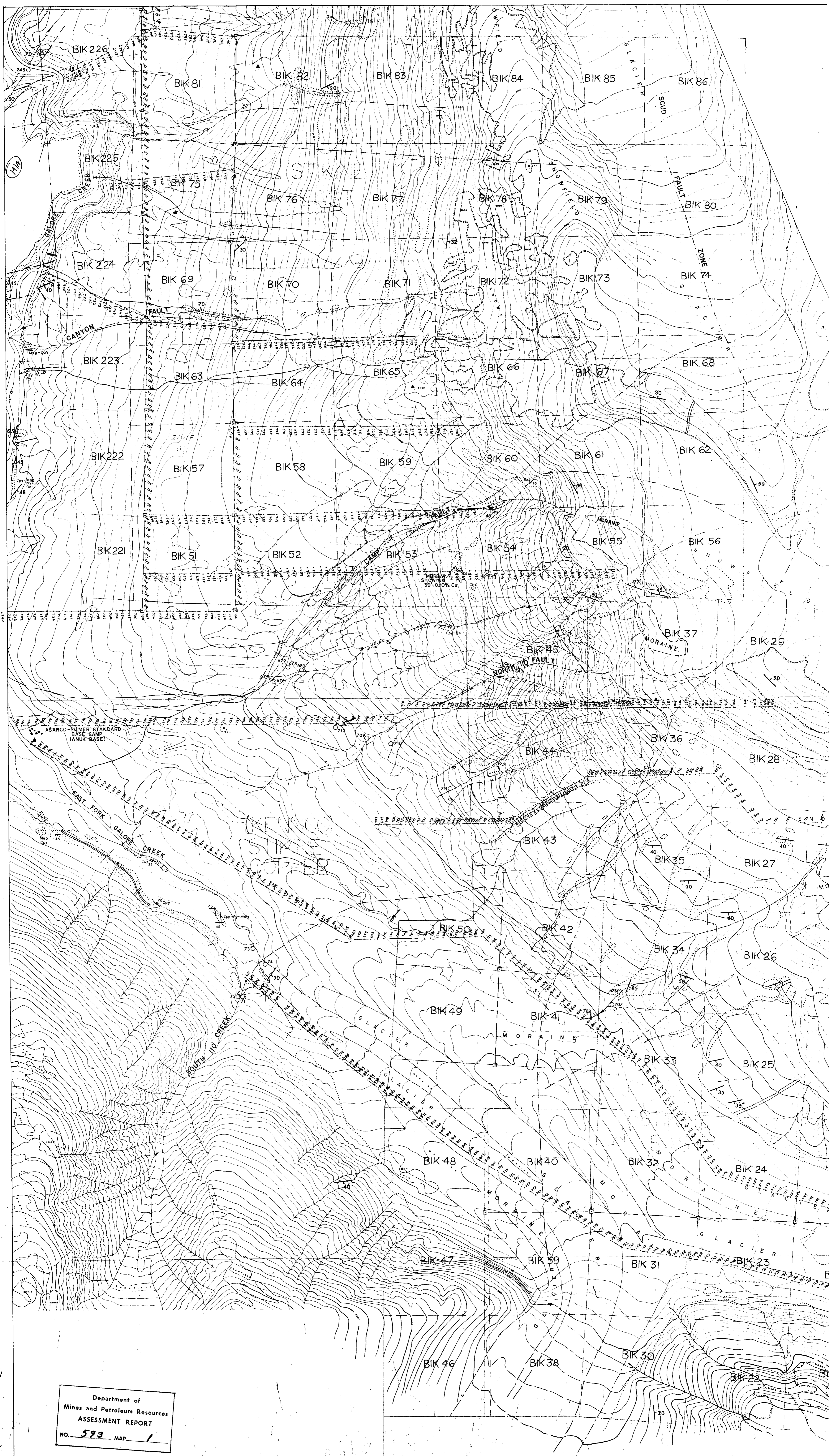
GALORE CK.  
AREA  
LIARD M.D.  
B. C.

LOCATION MAP  
SOUTH & MIDDLE SCUD GROUPS  
STIKINE EAST & NORTH GROUPS  
MESS CREEK GROUP

SCALE	DATE	DRAWN	APPROVED	FILE NR.
1"=4 miles	NOV 64			MAP NR. 1

593

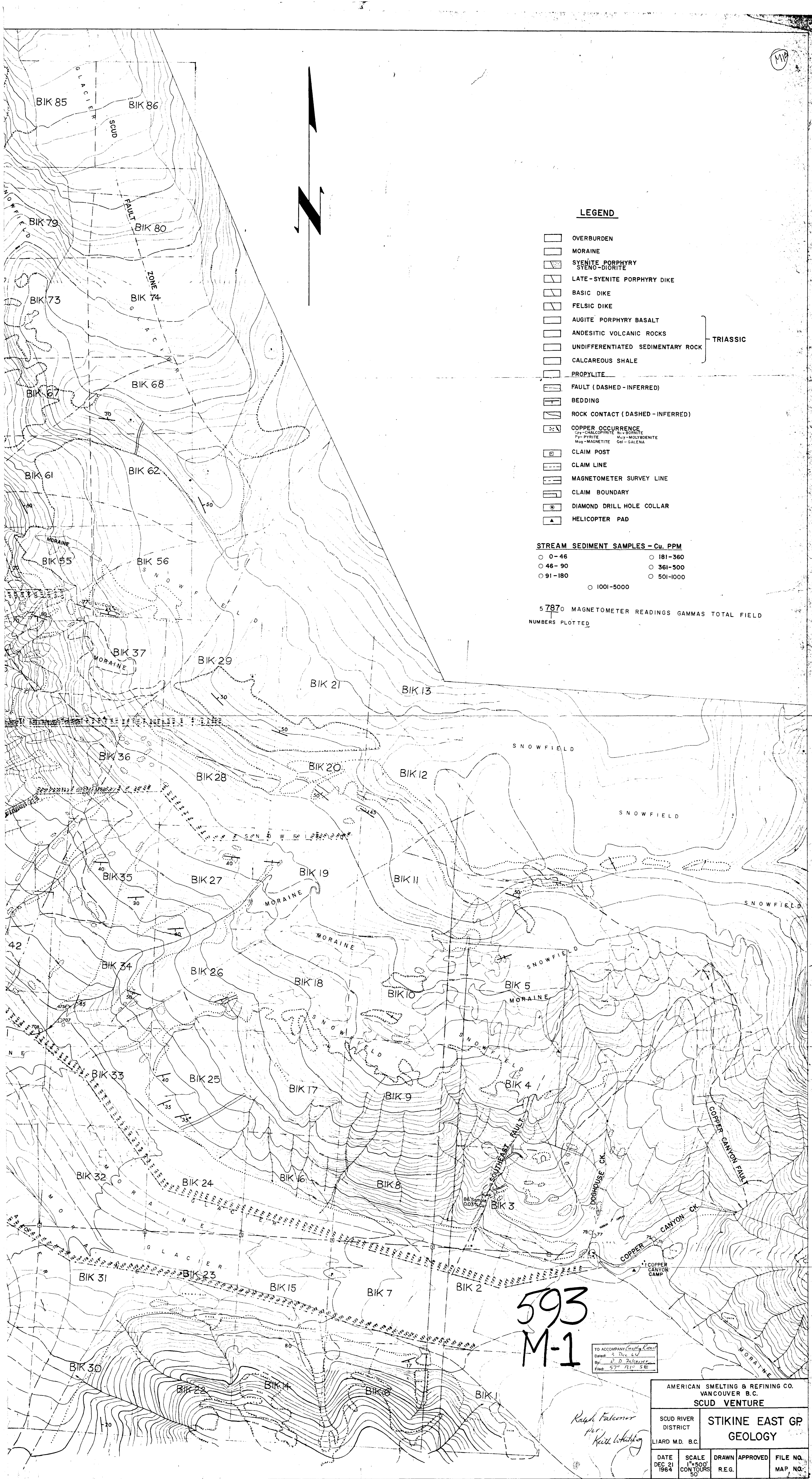




Department of  
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ASSESSMENT REPORT  
NO. 593 MAP 1



M10



LEGEND

- OVERBURDEN
- MORAINE
- SYENITE PORPHYRY
- SYENO-DIORITE
- LATE-SYENITE PORPHYRY DIKE
- BASIC DIKE
- FELSIC DIKE
- AUGITE PORPHYRY BASALT
- ANDESITIC VOLCANIC ROCKS
- UNDIFFERENTIATED SEDIMENTARY ROCK
- CALCAREOUS SHALE
- PROPYLITE
- FAULT (DASHED-INFERRED)
- BEDDING
- ROCK CONTACT (DASHED-INFERRED)
- COPPER OCCURRENCE  
Cpy - CHALCOPYRITE    Bt - BORNITE  
 Py - PYRITE            Moly - MOLYBDENITE  
 Mag - MAGNETITE    Gal - GALENA
- CLAIM POST
- CLAIM LINE
- MAGNETOMETER SURVEY LINE
- CLAIM BOUNDARY
- DIAMOND DRILL HOLE COLLAR
- HELICOPTER PAD

STREAM SEDIMENT SAMPLES - Cu. PPM

○ 0-46	○ 181-360
○ 46-90	○ 361-500
○ 91-180	○ 501-1000
	○ 1001-5000

57870 MAGNETOMETER READINGS GAMMAS TOTAL FIELD  
 NUMBERS PLOTTED

593  
 M-1

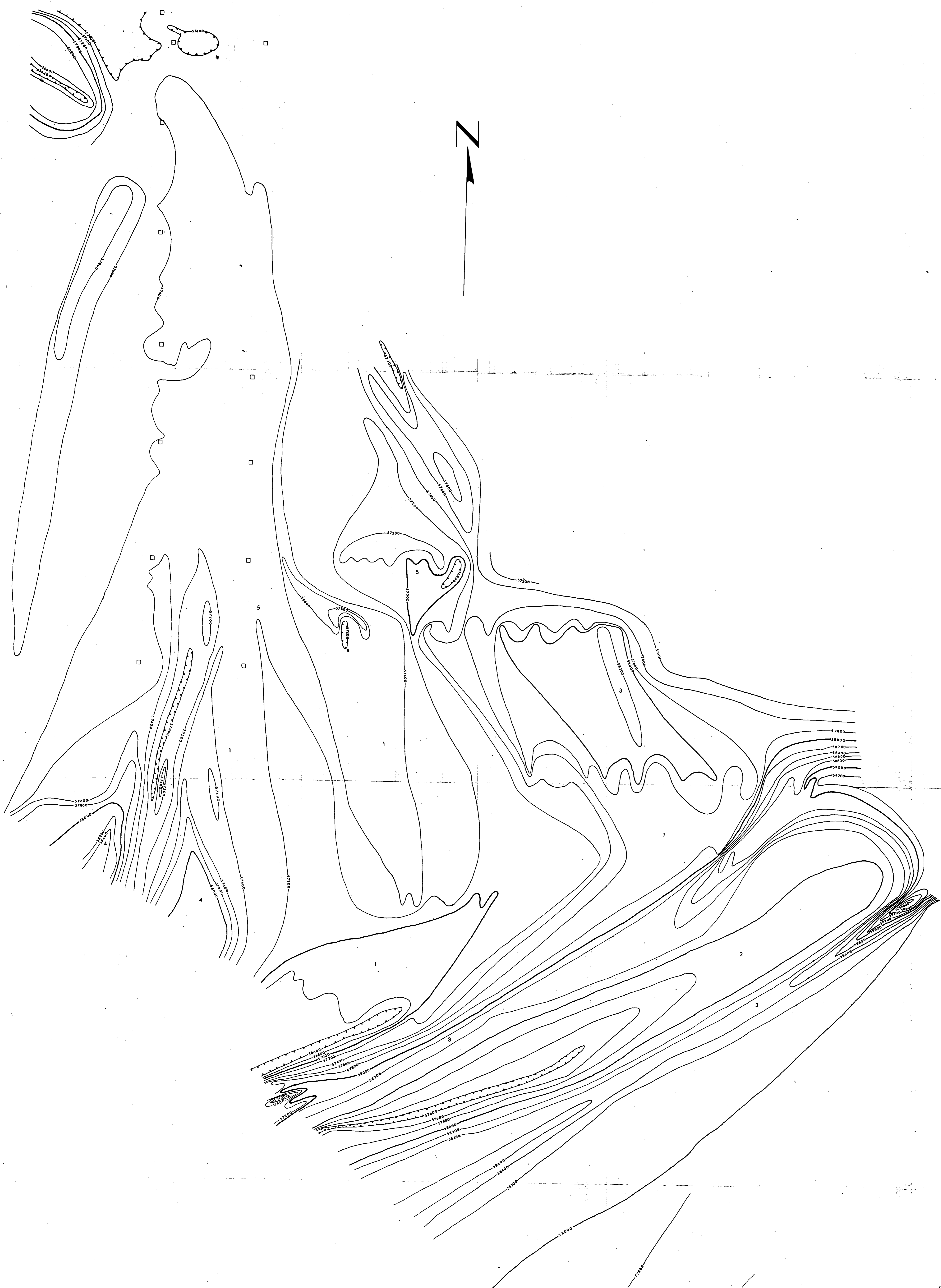
TO ACCOMPANY *Crestline*  
 Date: 9 Dec 64  
 By: R. D. Falconer  
 Filed: 570 1310 5E

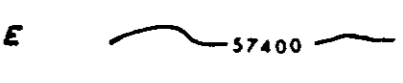

AMERICAN SMELTING & REFINING CO. VANCOUVER B.C.				
SCUD VENTURE				
SCUD RIVER DISTRICT	STIKINE EAST GP GEOLOGY			
LIARD M.D. B.C.				
DATE DEC 21 1964	SCALE 1"=500' CONTOURS 50'	DRAWN R.E.G.	APPROVED	FILE NO. MAP NO.

*Ralph Falconer*  
 per  
*Kurt Whitting*



(12)



CONTOUR INTERVAL 200' TOTAL FIELD  
 CONTOUR LINE   
 CLAIM POST 

TO ACCOMPANY *Geology Report*  
 DRAWN BY *R. D. Falconer*  
 FILED *573315E*

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 523 MAP 2

*Ralph Falconer*  
*for Reichel & Co.*  
 AMERICAN SMELTING AND REFINING CO.  
 VANCOUVER, B.C.  
 SCUD VENTURE  
 GALORE CK. STIKINE EAST GROUP  
 AREA  
 LIARD CO., B.C. MAGNETOMETER SURVEY  
 SCALE DATE DRAWN APPROVED FILE NO.  
 1:500 10/26/61 R.D.F. MAP NO. 2