2540

PHONE 604 : 921-7896

CLYDE L. SMITH, PH.D., P.ENG.

CONSULTING GEOLOGIST

6774 DUFFERIN AVENUE, WEST VANCOUVER
BRITISH COLUMBIA, CANADA

GEOPHYSICAL REPORT ON APEX 1-8, 9-54 CLAIMS
AND MINERAL LEASE M-26,

PERKINS PEAK, CARIBOO M.D., B.C.,
LAT. 51°49'30" N., LONG. 125°4'50" W.

HUNTER POINT EXPLORATIONS LTD.

WORK DONE MAY 24, 1970

BY

CLYDE L. SMITH, PH.D., P.ENG.
AUGUST 14, 1970

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

INTRODUCTION

This report is intended to satisfy requirements for assessment on the Apex 1-54 claims and Mineral Lease M-26 in the Perkins Peak area south of Kleena Kleene in the Cariboo Mining Division of British Columbia. The claims are held by Hunter Point Explorations Ltd. and the assessment work has been performed by an airborne geophysical survey conducted by Waterton Airex Ltd. on May 24, 1970.

This report is essentially a description and interpretation of the airborne survey based upon the geophysical data supplied to the writer. Geological data on the area has been obtained by study of several previous reports. The writer has not examined the claims.

PROPERTY

(now Kleena Kleene Feb/71)

Hunter Point Explorations Ltd. is the <u>recorded owner</u> of the following mineral properties in the Perkins Peak area:

Mineral Lease M-26		(total acreage 562.13)
Belchor No. 1		1063 (lot number)
" No. 2		1064
" No. 3		1065
" No. 4		1066
" No. 5		1067
" No. 6		1068
" No. 7		1069
" No. 8		1070
Iron Crown No. 7		1071
Briton		1062
Monarch		1076
Heather		1083
Blue Bell		1084

	Record No.'s	Record Dates
Apex No. 1-8	37968-37975	October 20, 1966
Apex No. 9-54	45637-45682	May 29, 1968.

FIG. 1

TO ACCOMPANY:
GEOPHYSICAL REPORT BY
CLYDE L. SMITH, P.ENG., ON
APEX GROUP, PERKINS PEAK
AREA, CARIBOO MINING
DIVISION, DATED AUG. 14, 1970

AREA OF TRENCHES AND ADITS

APPROXIMATE
OUTLINE OF CLAIM BLOCK
APEX 1-54

OUTLINE OF WATERTON
GEOPHYSICAL SURVEY AREA
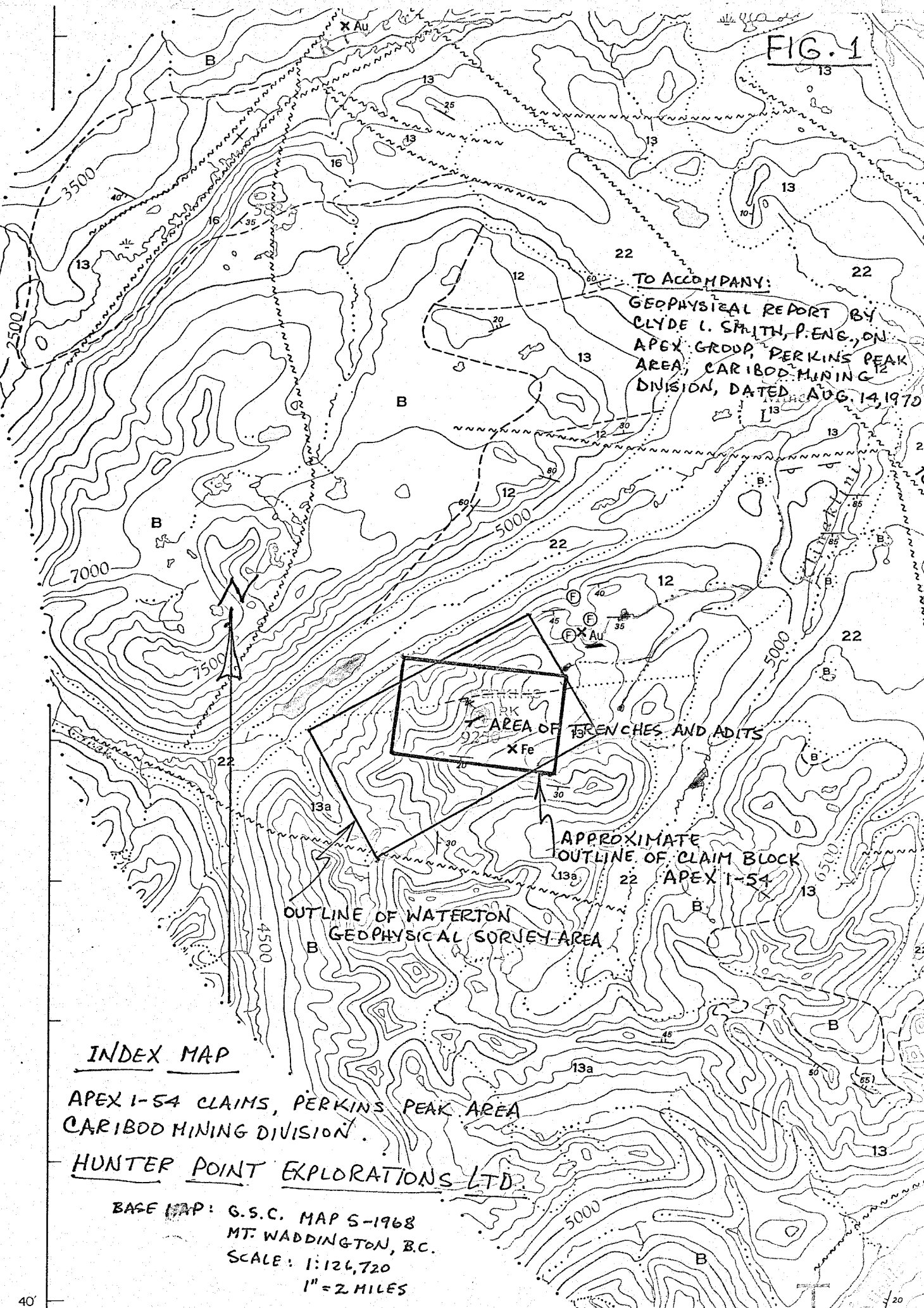
INDEX MAP

APEX 1-54 CLAIMS, PERKINS PEAK AREA
CARIBOO MINING DIVISION.

HUNTER POINT EXPLORATIONS LTD

BASE MAP: G.S.C. MAP S-1968
MT. WADDINGTON, B.C.
SCALE: 1:126,720
1" = 2 MILES

FIG. 2

TO ACCOMPANY:
GEOPHYSICAL REPORT BY
CLYDE L. SMITH, P.ENG. ON
APEX GROUP. PERKINS'
PEAK AREA, CARIBOO M.D.,
DATED AUG. 14, 1970

MINER LAKE

BIG CREEK

eK.

PERKINS
PEAK

1076 1034
1067 1065 1062 1065 1083
1063 1064 1063 1069 1070
1071

Chromium Cr.

M-26

SAID TO ADJOIN

APEX
1-8

APEX 9-54
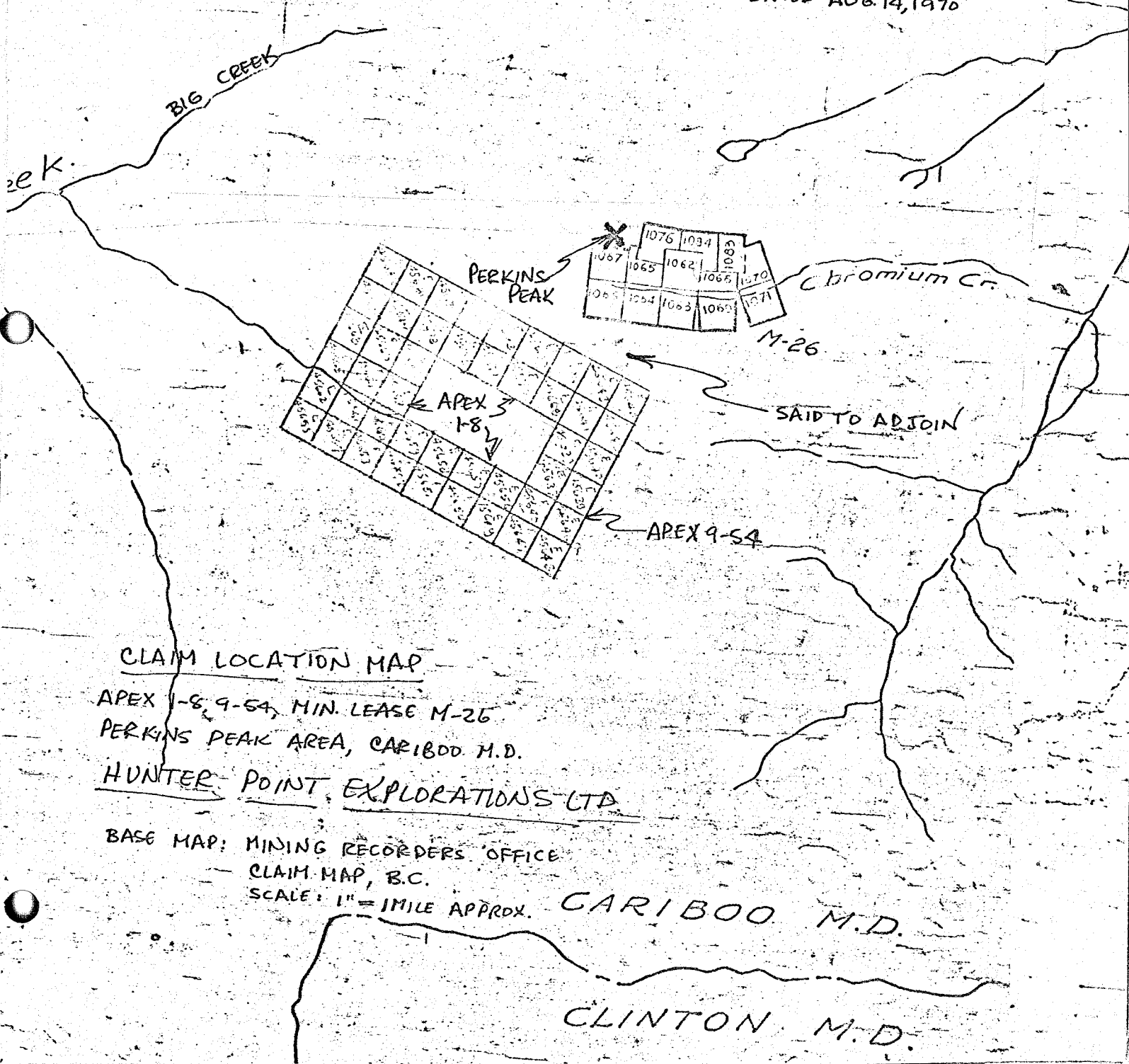
CLAIM LOCATION MAP
APEX 1-8, 9-54, MIN. LEASE M-26
PERKINS PEAK AREA, CARIBOO M.D.

HUNTER POINT EXPLORATIONS LTD

BASE MAP: MINING RECORDERS OFFICE
          CLAIM MAP, B.C.
          SCALE: 1" = 1MILE APPROX.

CARIBOO M.D.

CLINTON M.D.

LOCATION - ACCESS

The above properties are located in the area of Perkins Peak (Fig. 1 and 2) about 13 miles south-southwest of Kleena Kleene and about 14 miles south of the Williams Lake - Bella Coola highway along the eastern slope of the rugged Coast Mountains and about 200 miles northwest of Vancouver.

The property is accessible by travelling westward from Williams Lake on the Bella Coola highway to a point about 15 miles west of Tatla Lake and thence south to Miner Lake a distance of about 13 miles on a newly constructed road. A further 8 miles by trail brings one to the property.

HISTORY AND PREVIOUS REPORTS

Mineral claims were originally located by J.N. Killon in 1935 to cover iron and gold occurrences. Claims were the Mt. King 1-8 and Mt. City 1-8. In 1966 the last of these claims was allowed to lapse. Hunter Point acquired its first properties in the area in October, 1966.

Geological reports have been written by J.T. Mandy, Ph.D., October, 1948 and by R. Steiner, B.A., April 18, 1969. In addition showings have been described in the Perkins Peak area in Minister of Mines Annual Reports for 1917, 1922, 1938, and 1945. Also a description of the area may be found in a Geological Survey of Canada Summary Report, 1925, Part A.

Mandy described arsenopyrite stringers, veinlets and patches in an extensive silicified ("quartzite") zone. The zone is conformable to enclosing sedimentary rocks. Eight open cuts and two adits expose a strike length of 850 feet in a northeasterly, 50-60° southeasterly dipping attitude with possible extensions on either end. On surface the zone width is obscured by talus but a 51 foot width is exposed in one adit. Mandy inferred a tonnage of 33,000 tons in a single ore shoot.

Mandy collected 27 channel and chip samples in the "Commodore adit" which gave a weighted uncut average for all assays of 0.41 oz./ton Au and 0.16 oz./ton Ag across 50.8 feet in width.

Hunter Point Explorations has constructed an 11 mile road from the Bella Coola highway to Miner Lake and plans to provide access to the showings in the near future.

GEOLOGY

The property area lies within the Mt. Waddington map area and as such is described in a recent Geological Survey of Canada Paper 68-33 entitled "Mesozoic and Cenozoic Geology of the Northeast Part of Mt. Waddington Map Area (92N), Coast District, British Columbia" by H.W. Tipper, 1969.

Figure 1 shows that the property area is underlain by map units 12 and 13 and lies immediately east of unit B. Units 12 and 13 are a group of Mid-Early Cretaceous sedimentary and volcanic rocks which occur together with variable combined thickness. Map unit 12 consists mainly of shale, siltstone, graywacke and conglomerate and

unit 13 consists of volcanic breccia and tuff with a few interbeds of siltstone or tuffaceous siltstone; volcanics are mainly andesite with minor docite and basalt. Altered volcanics between Perkins Peak and Middle Lake are epidotized and chloritized and cut by a stockwork of granitic and volcanic dykes. Unit B is granitic and metamorphic rock of the Coast Range batholith of post-Early Cretaceous age. Plutonic rocks are quartz diorite, granodiorite and diorite in composition.

In the area of the property the sediments and volcanics are enclosed in a U-shaped embayment into the Coast Range granitic rocks (Fig. 1). A small quartz diorite stock about 1000 feet in diameter outcrops in a cirque about 3/4 mile southeast of the workings. Mandy believes that "quartzite" alteration from sandy argillite was caused by the quartz diorite intrusive. Most intense mineralization occurs in the quartzite altered zone. Steiner notes that the quartzite zone may be observed over a length of about 7000 feet with a maximum width of about 900 feet. Gossans indicating mineralized zones were noted throughout the quartzite zone. One mineralized section sampled by Steiner 4000 feet west of the older workings assayed 0.945 oz./ton Au and 0.30 oz./ton Ag across 78 feet.

GEOPHYSICAL SURVEY

On May 24, 1970, Mr. Claude Waterton, of Waterton Airex Ltd. conducted an airborne geophysical survey of an area 11,000 feet by 22,000 feet including the above noted properties held by Hunter Point Explorations Ltd. (Fig. 1). The system employed by Waterton has been in use in western Canada for the last six years, has been

flown over many thousand lineal miles for more than 30 clients. The system is a patented, combined, controlled sensitivity method employing a two-coil electromagnetic unit transmitting on 1,000 cps and recording in units of 0.1 microamps, a Sharpe PMF-3 or McPhar M700 magneto-meter recording in units of 100 gammas and a 24 tube Detectron-DR 2-9 with a McPhor TV-5 crystal scintillometer recording in units of 0.001 MR/Hr.

Geophysical results are plotted in units on transparent over-lays on a grid system on a scale of 1 inch = 1000 feet for easy interpretation (Fig. 3, 4, 5).

A total of 22 line spaced 500 feet apart with a length of 22,000 feet for each line was flown over the survey area. Elevation was 500 feet above maximum elevations in the survey area. Lines were flown on a bearing of N 63° E.

INTERPRETATION OF GEOPHYSICAL RESULTS

The most prominent regional geologic feature mapped in the claim area is a N 80° E trending contact between the sedimentary rocks of unit 12 and overlying pyroclastic volcanics of unit 13. This contact may be readily traced through the geophysical survey area by variations in geophysical response to the lithologies of units 12 and 13.

The sedimentary rocks of unit 12 respond with distinct, widely-spaced, elongate EM features above 5 microamps which parallel the strike of the sedimentary rock units. A similar elongate pattern is reflected in the magnetics with a pronounced depression feature in

the north-central part of the survey area also paralleling the strike of the sediments. Radioactive response is almost totally lacking in unit 12.

The volcanic rocks of unit 13 are reflected by a complex, generally erratic EM pattern which also shows a general strike parallel to the mapped volcanic units. A more important aspect of the EM pattern in the volcanics is an indistinct trend in a more northerly direction than the rock units which may indicate a superimposed fracture system. The magnetic response is also erratic in unit 13 and is composed of numerous small neighbouring positive and depression features; some of which also display the more northerly trend possibly indicative of a fracture system. Radioactive response is high with numerous clusters of radioactive increase.

In the area of workings (Fig. 1) the geophysical response is particularly distinct consisting of superimposed EM above 5 microamps and a large magnetic depression; in addition in this area a pronounced junction between the nearly east-west trend of the rock units and the more northerly trend of the inferred fracture system is reflected by both the EM and the magnetics. Also the area of this superimposition and trend junction occurs in a radioactive low surrounded by higher radioactivity.

It is notable that a similar superimposed EM-magnetic feature occurs in the southwest of the survey area and along strike from the above anomalous zone.

It is recommended that the entire extent of the two anomalous zones described above be thoroughly prospected and where feasible checked with ground EM and magnetic surveys to more accurately locate prospecting targets.

DECLARATION

1. I am a graduate of Carleton College, Northfield, Minnesota, B.A., 1959; of the University of British Columbia, M.Sc. in Geology, 1962; and of the University of Idaho, Ph.D. in Geology and Mining Engineering, 1966.
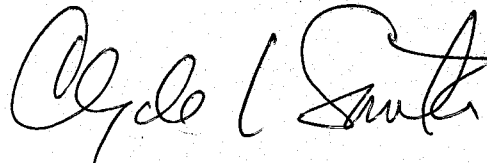
2. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia, registered as a Professional Engineer.

3. I do not hold any interest directly or indirectly in the Apex mineral claims or Mineral Lease M-26, nor do I hold any interest in Hunter Point Explorations Ltd.
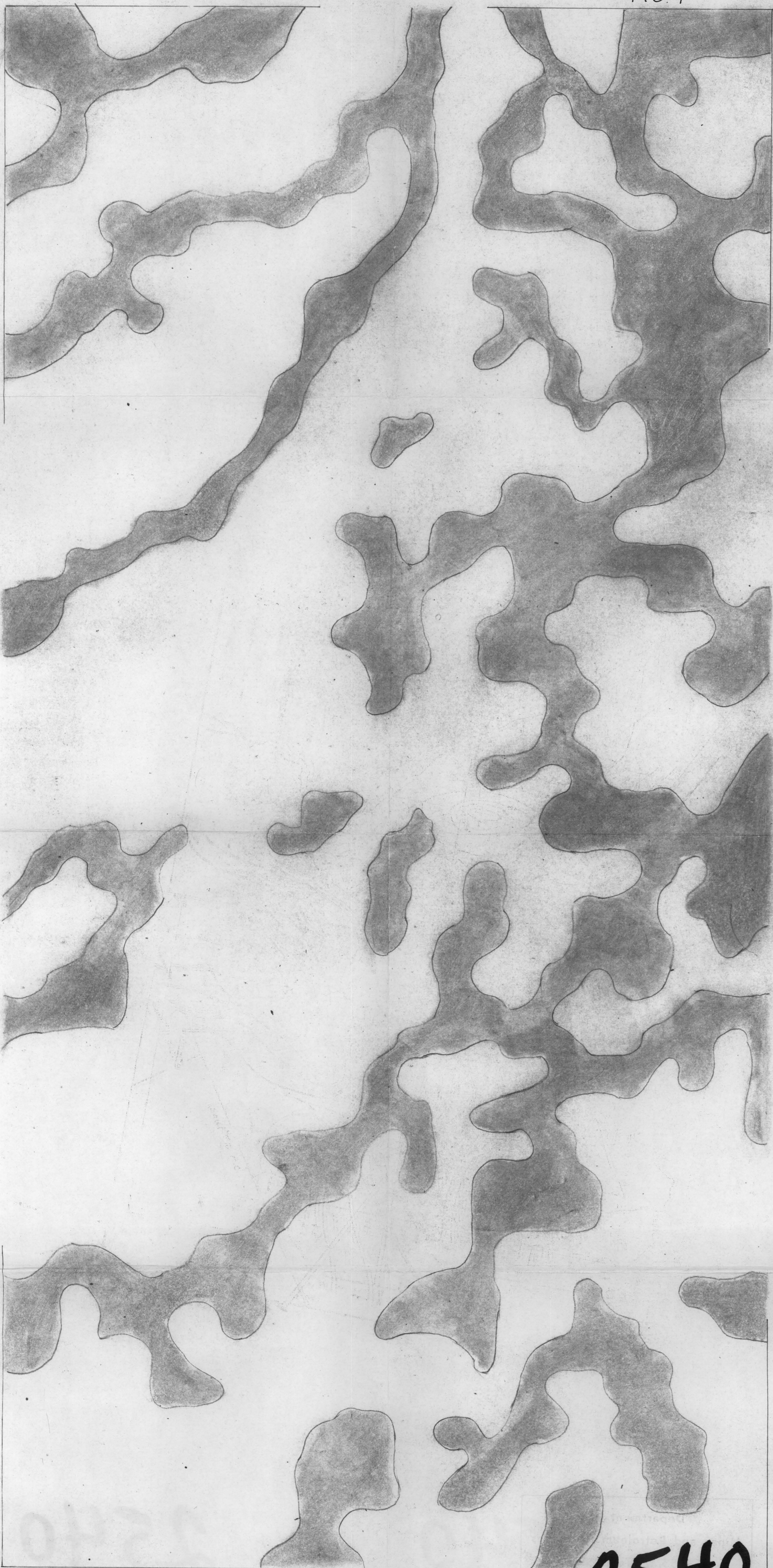
4. This report has been prepared at the request of Mr. M. Hretchka, Manager of Hunter Point Exploration Ltd., as an assessment report on the claims and no part of this report is to be used for any other purpose without the expressed consent of the writer.

Dated at Vancouver, B.C., this 14th day of August, 1970.

Respectfully submitted
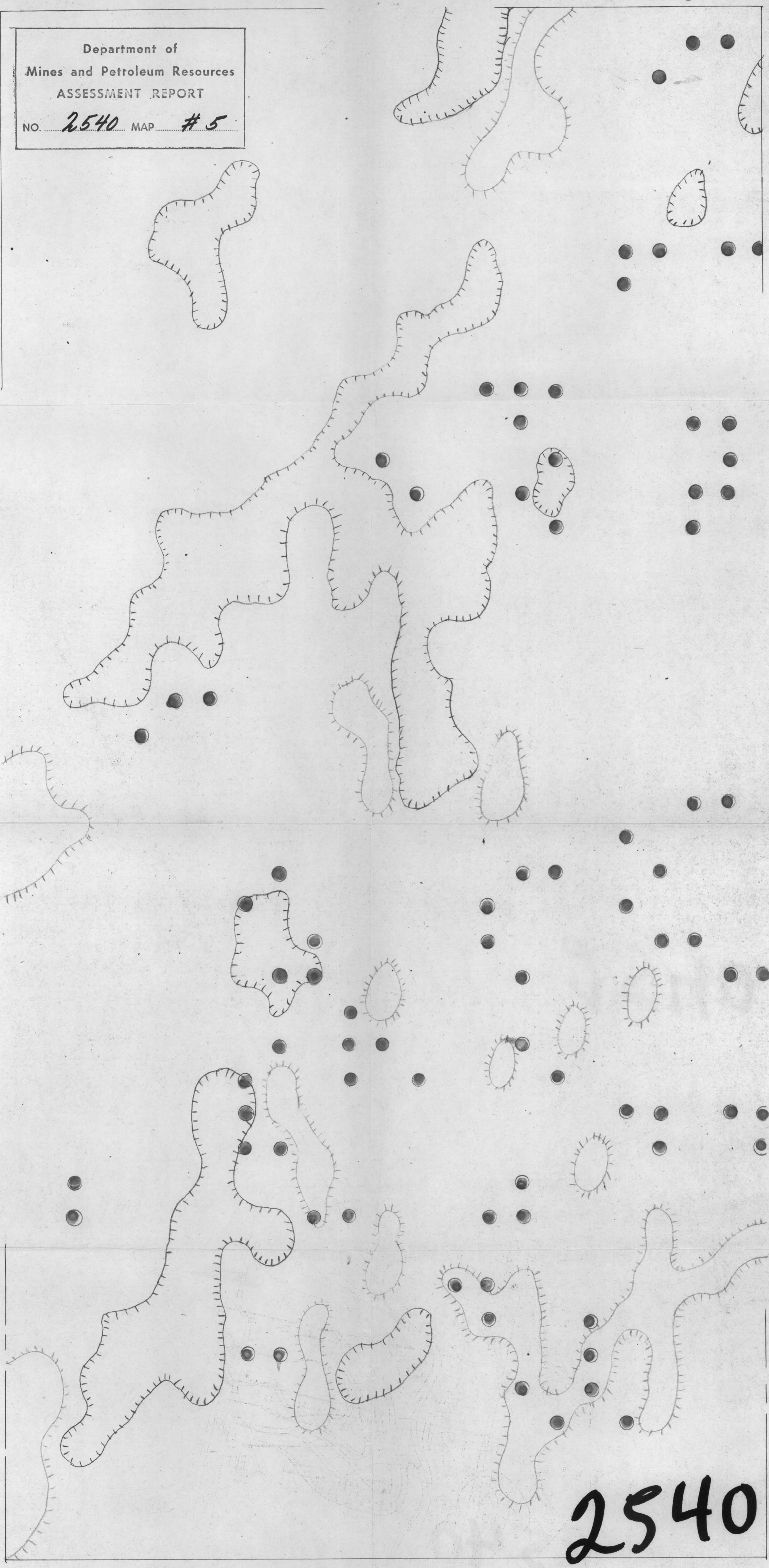
Clyde L. Smith Ph.D., P.Eng.

FIG.4

2540

● = 5" PLUS ELECTROMAGNETIC "PERKINS PEAK"

AIRBORNE RECONNAISSANCE - GEOPHYSICAL
PERKINS PEAK AREA — ELECTROMAGNETIC VALUES

TO ACCOMPANY: GEOPHYSICAL REPORT BY
CLYBE L. SMITH, P. ENG, ON APEX
GROUP, PERKINS PEAK AREA,
CARIBOO M.D., DATED AUG. 14, 1970

FIG. 5

2540

⌐ = + MAG. AREA.   ⌐ = - MAG. AREA   ● = RADIOACTIVE INCREASE

"PERKINS PEAK"

AIRBORNE GEOPHYSICAL RECONNAISSANCE
PERKINS PEAK, B.C., MAGNETIC AND RADIOACTIVITY VALUES

Clyde L. Smith

TO ACCOMPANY: GEOPHYSICAL
REPORT BY CLYDE L. SMITH, P.ENG,
ON APEX GROUP PERKINS PEAK,
CARIBOO M.D, DATED AUG. 13, 1970

FIG. 3

ELECTROMAGNETIC .1 MICROAMPS
RADIOACTIVITY .001 MR/HR
MAGNETOMETER IN UNITS OF 100 GAMMAS

AIRBORNE GEOPHYSICAL RECONNAISSANCE "PERKINS PEAK" B.C.
GRID SCALE 500' TO 1/2 INCH. RUNS 500' APART ALT. 500' ABOVE
GROUND. MAY 24, 1970

TO ACCOMPANY: GEOPHYSICAL REPORT BY
CLYDE L. SMITH, P.ENG. ON APEX GROUP,
CARIBOO M.D., DATED AUG. 14, 1970

Clyde L Smith