

DOLMAGE CAMPBELL & ASSOCIATES LTD.
CONSULTING GEOLOGICAL & MINING ENGINEERS
1000 GUINNESS TOWER
VANCOUVER 1, B.C.

GEOPHYSICAL REPORT

on the

SMOKE MINERAL CLAIMS
1, 3, 5, 33-46 inclusive

KWANIKA CREEK AREA, B.C.

Omineca Mining Division
55° 35' N. Lat., 125° 20' W. Long.

N.T.S. Map 93N/11W

Owner of Claims:
Anglo-Bomarc Mines Ltd.

Supervision and Report by:
R. S. Adamson, P.Eng.

Work Completed: August 19 to August 24, 1974

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 5495 MAP

June 15, 1975

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INTRODUCTION

Dolmage Campbell & Associates carried out a magnetometer survey over a portion of SMOKE claims in August of 1974 on behalf of Anglo-Bomarc Mines Ltd. As outcrops are few on the property the magnetometer survey was implemented with a view to outlining the bedrock geology that underlies a soil uranium anomaly defined by a previously conducted geochemical survey.

The magnetometer survey was undertaken on 16 of the 35 claims that constitute the Smoke property. Dolmage Campbell and Associates personnel doing the survey were Mr. K. Lovang, Mrs. K. Pelkey, and Mr. W. Pelkey. Mr. K. Lovang was the magnetometer operator under the direction of the writer. The remainder of the crew established the control for the survey. The period during which the survey was carried out extended from August 19 to August 24th, 1974, a total of 6 days.

LOCATION AND ACCESS: $55^{\circ} 35' N.$, $125^{\circ} 18' W.$ (Figure 1)

The Smoke property lies 15 miles west southwest of Germansen Lake in north-central British Columbia and 35 miles by road west of the small community of Manson Creek which is in turn 160 miles northwest of Prince George.

The road from Manson Creek deteriorates somewhat west of Germansen Lake but is still suitable for ground access to near the south end of the property in the summer. However, because of wet ground conditions a helicopter was used to support this magnetometer survey.

TOPOGRAPHY:

In general, elevations on the property rise uniformly from 3500 feet at the southern edge of the property progressively northward to the timberline at 4500 feet. The general rising terrain is interrupted by a sharply-incised east-west trending valley which drains easterly, (Figure 2). A prominent knoll protrudes slightly above timberline south of the creek. Outcrop occurs on the knoll, one of the few places on the property south of the above creek.

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NO. 5495 MAP 1

OMINECA

RIVER

Germansen
Lake

SMOKE CLAIMS

Kwanika Creek

Tsayta Lake



R. S. Adamson

0 2 4 6 8 10 miles



5495
MAP 1

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ANGLO-BOMARC MINES LTD.
VANCOUVER, CANADA

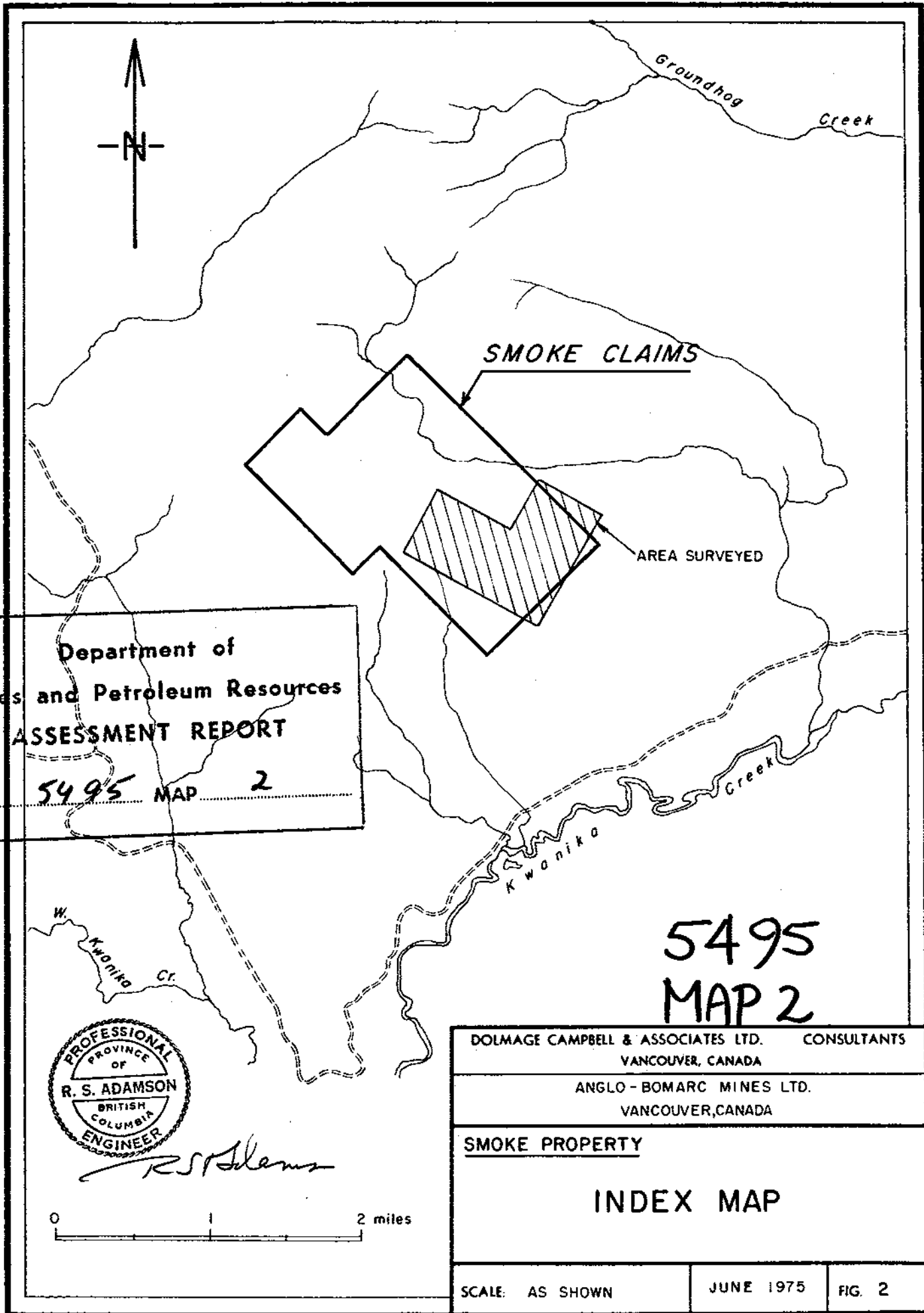
SMOKE PROPERTY

LOCATION MAP

SCALE 1" = 4 MILES

JUNE 1975

FIG. 1



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 NO. **5495** MAP **2**

5495
MAP 2



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<u>SMOKE PROPERTY</u>	
INDEX MAP	
SCALE: AS SHOWN	JUNE 1975
	FIG. 2

GEOLOGICAL SETTING

REGIONAL GEOLOGY:

The dominant geological features in the region of the Smoke property are the north-northwest trending Jura-Cretaceous Hogem Batholith and the Pinchi Fault Zone which bounds the batholith on its western side. The Pinchi Fault and Hogem Batholith divorce older (Paleozoic) sedimentary rocks on the west from younger (Upper Triassic) sedimentary and volcanic units to the east. The Smoke property is situated within a narrow neck of the batholith and lies approximately three miles east of the Pinchi Fault Zone.

The Hogem Batholith is composed chiefly of granodiorite although differentiation into a wide variety of acidic, intermediate, and basic phases is fairly common. Relationships between these phases indicate the batholith is probably a multiple intrusion in which the more acidic phases are generally later, and therefore intrusive into, the major granodioritic intrusive body. Generally the later (younger) intrusive bodies are small, exhibit a reasonably distinct aeromagnetic response, and frequently have metallic mineralization associated with them.

PROPERTY GEOLOGY:

Outcrops on the property, though not plentiful, are sufficiently distributed to arrive at a reasonable appreciation of the local geology, particularly when related to the regional geology and the aeromagnetic configuration from published data.

The property for the most part is underlain by granite. The granite is in contact with monzonite off the property to the east and with gabbro on the western sector of the property. A small plug of Alaskite, averaging 1000 feet in diameter in erratic outcrop, intrudes the granite on the small, but prominent knoll in the centre of the property. This alaskite body exhibits a high background radioactivity. Samples of this rock returned uranium values ranging from 0.003 to 0.012% U_3O_8 in 1969.

From the government aeromagnetic survey a very distinct lineament can be projected from the Pinchi Fault south 60° east across the Smoke property (Figure 6) for approximately 10 miles. Because the lineament clearly divorces a highly magnetic (gabbro) rock from lower magnetic (granite) rock for some considerable distance along its length including a section of the Smoke property, the lineament is assumed, with a reasonable degree of confidence, to be a strong fault structure.

MINERAL OCCURRENCES

Uranium mineralization is present locally in the alaskite intrusive rock, although the precise mineral containing the uranium has not been identified. The mineralization, which occurs at an isolated locality on the previously-discussed knoll, (Figure 4), is in narrow quartz veinlets and stringers in widely-spaced fractures. Two specimen samples of the quartz taken in 1969 assayed 0.07 and 0.14% U_3O_8 .

Chalcopyrite and molybdenite mineralization occur in outcrop in the creek which drains easterly from the valley north of the knoll and in isolated outcrop southeast of the property. Each of two occurrences lie off the property about a claim length from the eastern edge of the property. The host rock at both localities is a monzonite.

Neither the uranium nor copper-molybdenite occurrences are considered to be of direct economic significance.

MAGNETOMETER SURVEY

The survey was carried out with a McPhar M-700 fluxgate magnetometer (Serial No. 7161). The instrument has a maximum sensitivity of 20 gammas per scale division.

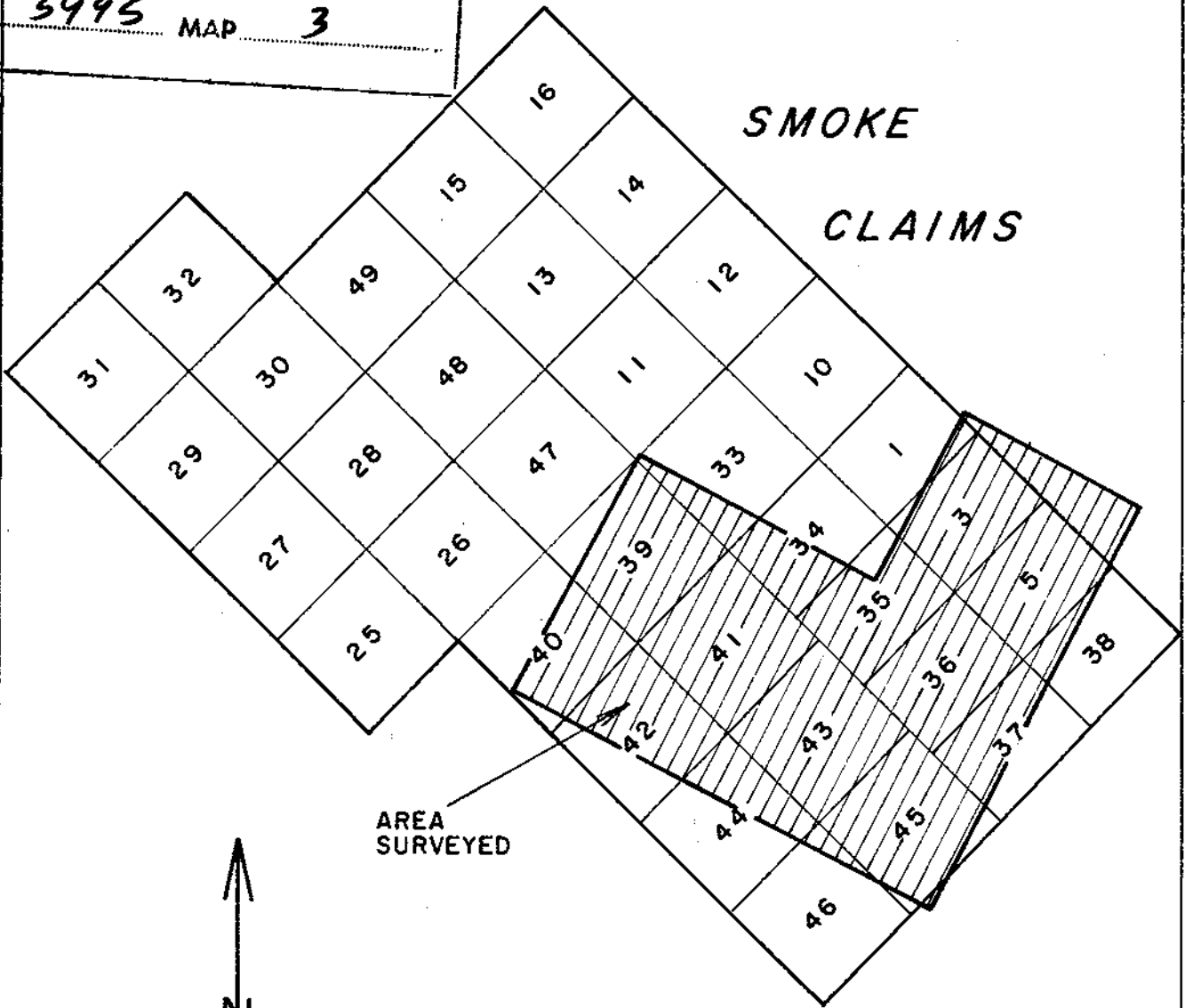
SURVEY TECHNIQUES:

Control was established for the survey by using the baseline cut for the geochemical soil sampling that was done during the period June 6 to 27th, 1974. Separate flagged lines were established for the magnetometer survey by compass and topofil chain perpendicular to the baseline. The lines were flagged at 800 foot intervals along the baseline.

The magnetometer grid covered only the southeastern half of the geochemical grid, sufficient to embrace the anomalous geochemical values. Readings were taken at 100 foot intervals along the flagged lines (Figure 4). Diurnal corrections were made by traversing in circuits from predetermined corrected readings along the baseline.

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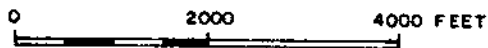
NO. 5495 MAP 3



**5495
MAP 3**



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SMOKE PROPERTY

CLAIM MAP

SCALE: 1" = 2000'

JUNE 1975

FIG. 3

RESULTS:

The results of the magnetometer survey are shown on Figure 4. The values were contoured at 1000 gamma intervals. Approximately one quarter of the surveyed area (the northwestern quadrant) is underlain by rocks of high magnetic susceptibility; the remainder of the area is underlain by rocks of low magnetic susceptibility.

CONCLUSIONS

The magnetometer survey has served to define the contact of gabbroic rocks (highly magnetic) with granitic rocks (lower magnetism) on the Smoke property. The contact generally strikes north 35° west.

The fault which apparently cuts across the property, more or less coincident with the baseline, has no obvious magnetic expression. The fault, a strong aeromagnetic and moderate airphoto lineament, strikes north 60° west.

The wedge of granitic rock lying between the baseline (assumed fault trace) and the gabbro-granite contact offers a geological setting which could be amenable to the deposition of uranium mineralization. Anomalous uranium values occur in soils which overlie this wedge.

Respectfully submitted by,

DOLMAGE CAMPBELL & ASSOCIATES LTD.



A handwritten signature in cursive script, appearing to read "R. S. Adamson".

R. S. Adamson, P.Eng.

5495

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of SMOKE MINERAL CLAIMS

I, R. S. ADAMSON

of # 1000 - 1055 WEST HASTINGS STREET, VANCOUVER, B.C.

in the Province of British Columbia, do solemnly declare that

Expenditures for GEOPHYSICAL work performed on the SMOKE Mineral Claims between August 19th and August 24th, 1974 are as follows:

WAGES	\$ 582.00
MAINTENANCE - 18 MAN/DAYS @ \$ 20.00/DAY	360.00
MAGNETOMETER RENTAL	147.00
HELICOPTER	799.90
TYPING, SECRETARIAL AND DRAUGHTING	200.00
SUPERVISION AND REPORTS	<u>800.00</u>
	<u>\$ 2888.90</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 26
day of June 1975, A.D.

R S Adams

Jan Jones
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

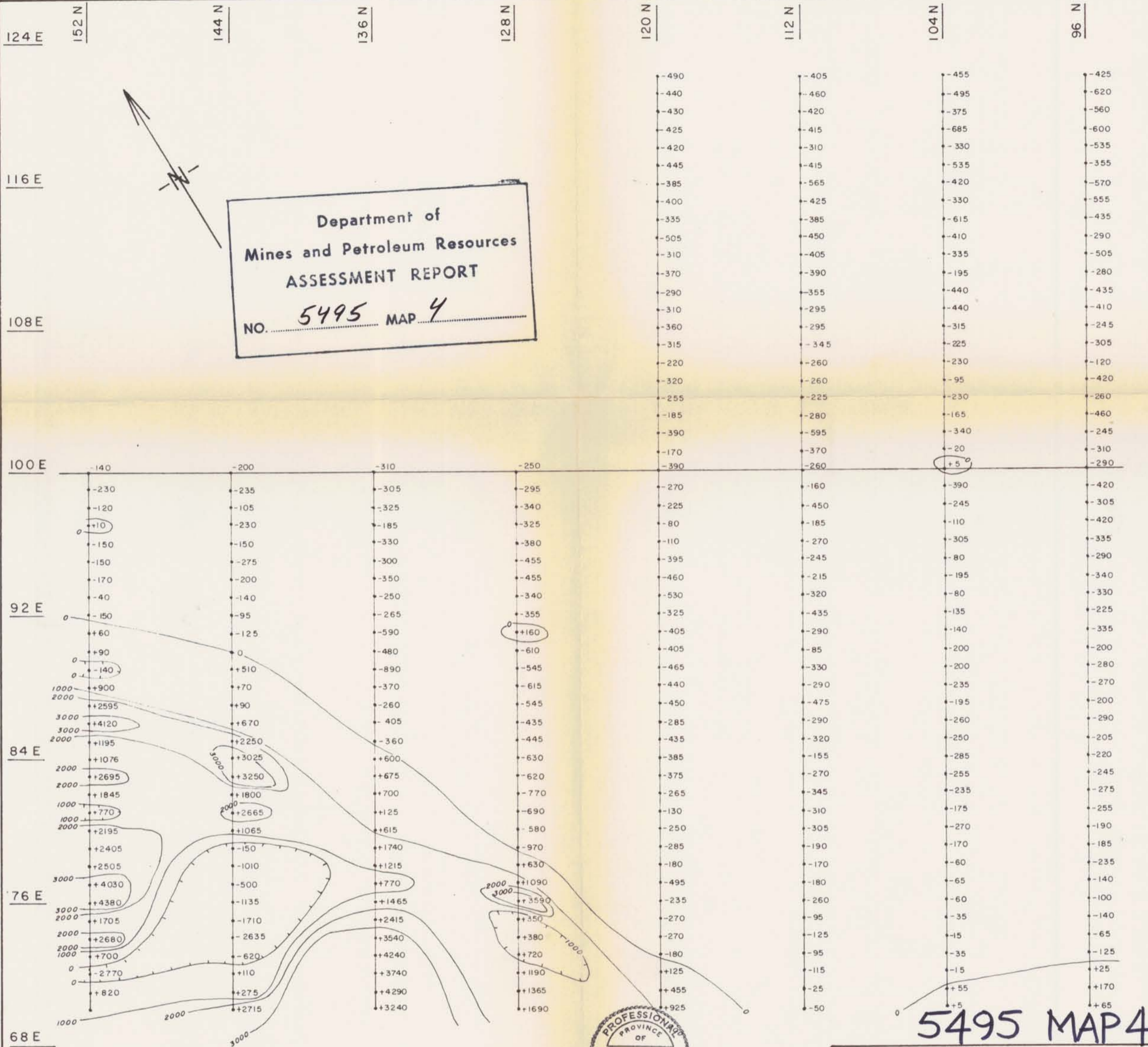
Sub-mining Recorder

#5495

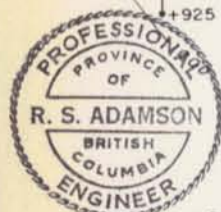
APPENDIX 2
STATEMENT OF LABOUR COSTS

<u>NAME</u>	<u>DATES</u>	<u>DAILY RATE</u>	<u>COST</u>
K. Lovang	Aug. 19 - 24, 1974	\$ 40.00	\$ 240.00
C. Pelkey	Aug. 19 - 24, 1974	\$ 25.00	\$ 150.00
W. Pelkey	Aug. 19 - 24, 1974	\$ 32.00	\$ <u>192.00</u>
			\$ <u><u>582.00</u></u>

K. LOVANG - MAGNETOMETER OPERATOR
C+W PELKEY - established control for the survey



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NO. 5495 MAP 4



VALUE IN GAMMAS
CONTOURS INTERVAL AT 1000 GAMMAS

5495 MAP 4

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SMOKE CLAIMS

MAGNETOMETER SURVEY
RESULTS

SCALE 1" = 500'

JUNE 1975

FIG. 4