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GEOPHYSICAL AND GEOCHEMICAL REPORT

RANGER, PAW, SAM, GW CLAIMS

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INTRODUCTION

Magnetometer and geochemical soil surveys have been carried out on the Ranger, Paw, Sam and GW claims. These are located in the Bonaparte Valley 15 miles north of Cache Creek. They are owned by Peyto Oils Ltd. of Calgary, Alberta. Field work was carried out between March 15 and May 1, 1971, by Keith Colombo under the direction of the author.

INSTRUMENTATION

The magnetometer survey was carried out using the MZ-4 torsion magnetometer of A. B. Electrisk Malmletning of Stockholm, Sweden. This measures the vertical magnetic intensity with an accuracy of 2 gammas.

FIELD PROCEDURE

The magnetometer was read at 100 ft. stations along the picket lines, and the readings corrected for diurnal variation. Soil samples of the C horizon were taken at some of the 100 ft. stations using a spade. They were packaged in wet kraft heavy duty envelopes, air dried for 6 hours and screened in an 80 mesh stainless steel screen. Analyses were carried out by Vancouver Geochemical Laboratories Ltd.. The samples were digested in hot

nitric and perchloric acid and determined by an atomic absorption spectrophotometer.

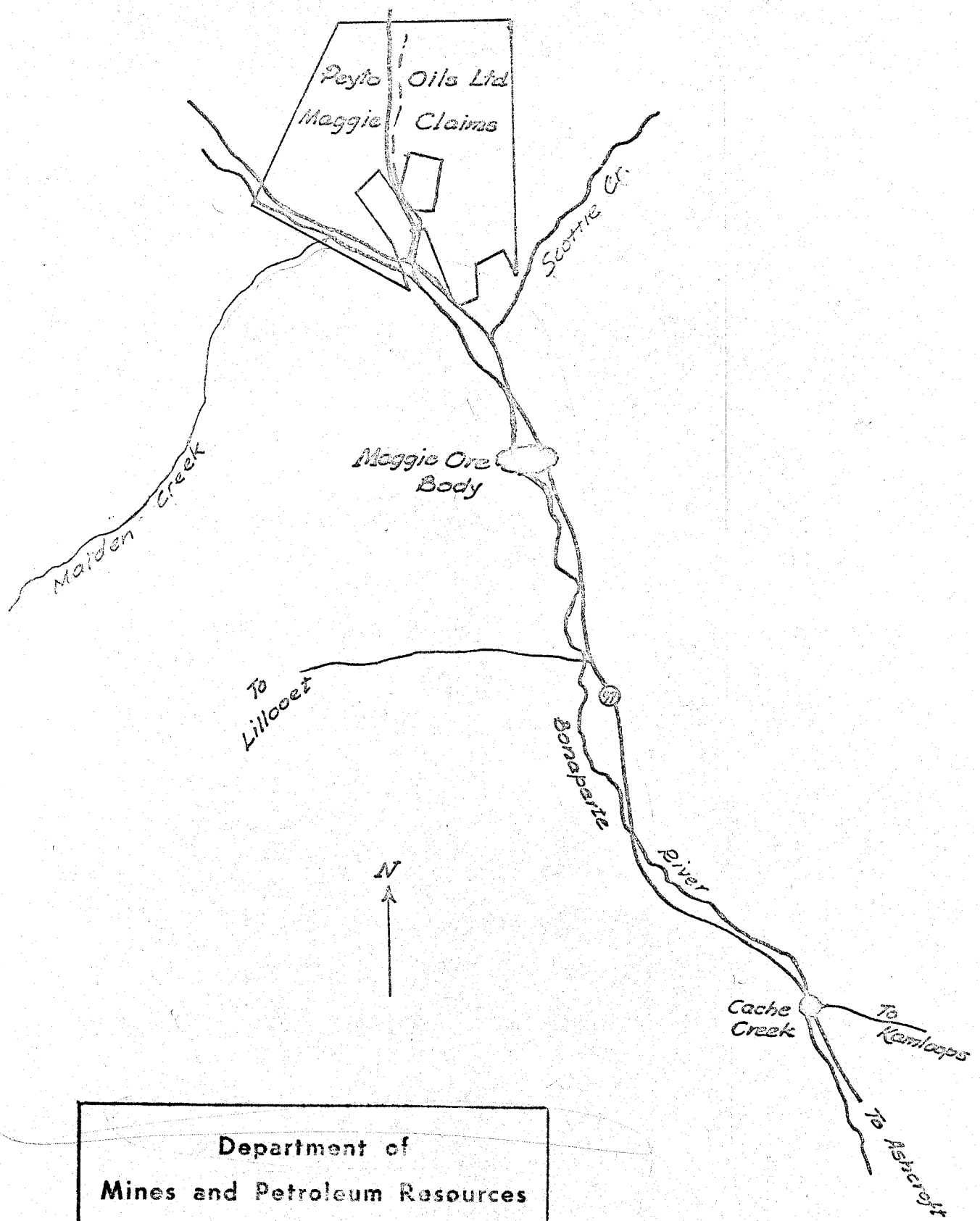
RESULTS

The molybdenum and copper values in parts per million for the C horizon soil samples, and the reduced vertical magnetic intensity in gammas are shown on Figure 1 (in pocket). The magnetometer survey shows slight highs (1) to the east of the Base Line on lines 40S to 28S and (2) at the east end of lines 8S to 12N. These show small contrasts in magnetic polarization that may be due to more basic rock types. A geochemical anomaly correlates with (2). A molybdenum anomaly occurs west of the Base Line between 56S and 28S. A copper-molybdenum anomaly occurs between 46W and 64W on lines 36S to 12S. In order to show the location of any sulphide mineralization in this anomalous area an Induced Polarization survey is recommended on lines 12N to 40S inclusive from 9W to the east end of the property.

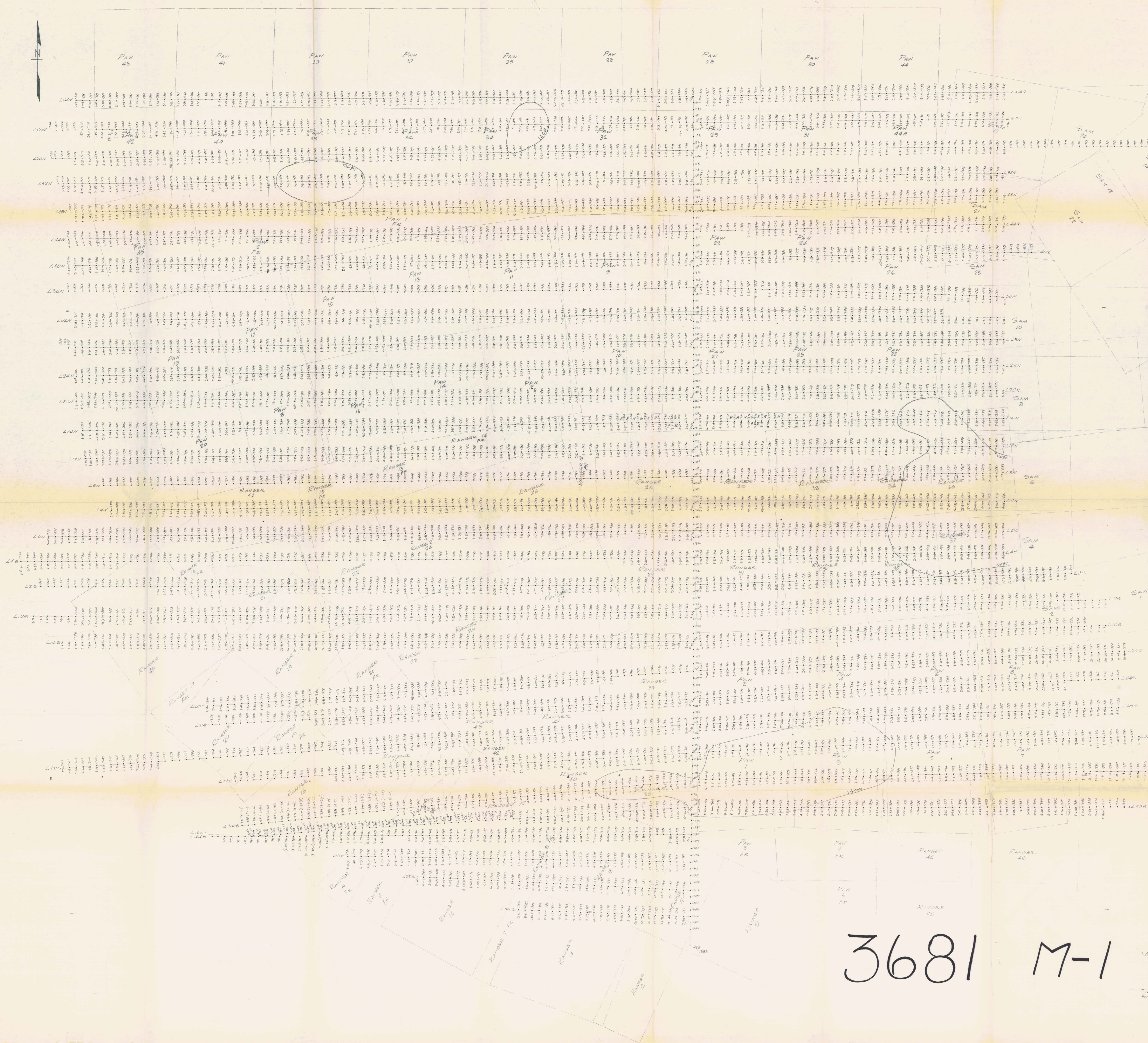
Respectfully submitted,

D. W. SMELLIE, P.Eng.

October 20, 1971



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3681 MAP



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PEYTO OILS LTD
MAGNETOMETER AND GEOCHEMICAL REPORT
RANGER, PAW, SAM, GW CLAIMS
KAMLOOPS M.D., B.C.

Scale 1" = 400 ft. October 1971

Fig. 1 To Accompany Geophysical and Geochemical Report By Donald W Smellie Dated October 20, 1971.

D.W. Smellie, P. Eng.

CLINTON
KAMLOOPS
CLINTON
KAMLOOPS
MAIDEN RIVER
NORTH GROUP
ROAD GROUP
SOUTH GROUP
CENTRAL GROUP
3681
M-2
Department of
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ASSESSMENT REPORT
NO. 3681 MAP #2
PEYTO OILS LTD.
BONAPARTE RIVER B.C.
SCALE: 1" = 400'
CONTOUR INTERVAL 25'
MAP REFERENCE 92I 14W
DATE OF PHOTOGRAPHY B.C. GOVT. 1966
DATUM G.S.C.
SHEET 1 OF 2
RECONNAISSANCE MAP PENCIL MANUSCRIPT
Lockwood Survey Corporation Limited