

Box 448, Merritt, B.C.

December 3, 1958

237

The Mining Recorder

Merritt, B.C.

Dear Sir:

The geological and geophysical field work detailed in the reports by J. C. Foweraker on the Schulman option was carried out under the general supervision of the undersigned.

I am satisfied that the field work performed by J. Foweraker was well conducted and that the geological and geophysical data contained in the maps and report were carefully and accurately compiled.

Yours very truly,



C. C. Rennie P. Eng.
Geologist

G E O L O G I C A L R E P O R T

By J.C. Foweraker - Geologist

SHULMAN OPTION P.C.M. and CAP GROUPS

CENTENNIAL MINES LIMITED

C O N T E N T S

- 1. Expenses**
- 2. Introduction**
 - General**
 - The claims and groups**
 - Location and access**
 - Mapping**
- 3. Physiography**
- 4. Geology**
- 5. Results of the Geological and Geophysical Investigations**
- 6. General conclusions, recommendations on the results of the geological and geophysical surveys**

*** First forwarded to Head Office,
700 Burrard Building,
Vancouver, B.C. on August 12, 1958**

APPENDIX REPORT

Magnetometer and Dip Needle Survey

Introduction

Equipment

General description of the methods of survey on the property

Calculations and Plotting methods

Results of the Geophysical survey

PLATES

- 11 Plate 1. Geological Map
12 Plate 2. Claim Boundary Map
13 Plate 3. Magnetometer Results - Western
14 Plate 4. Magnetometer Results - Eastern
15 Plate 5. Dip Needle Results - Western
16 Plate 6. Dip Needle Results - Eastern
17 Plate 7. Area "D" Geology and Geophysics
18 Plate 8. Locality Map

SHULMAN OPTION

P.C.M. and CAP Mineral Claims

Expenses Incurred for Assessment

ITEM

Prior to May 17th 1958

1. Labour Line cutting and chaining and dip needle readings.
2 men 55 days @ \$15.00 /man /day \$1,650.00

After May 17th 1958

2. Labour Line cutting and chaining and magnetometer readings.
2 men 60 days @ \$15.00 /man /day \$1,800.00
3. Labour Contract line cutting
99,000 feet (horizontal distance)
at \$30.00 a line mile (slope) \$ 581.00
4. Geology and Geophysics general supervision of the
programme in the field.
1 man for 66 days @ \$15.00 /man /day \$ 990.00
5. Geology and Geophysics and general supervision of the
programme in the field.
1 man for 35 days @ \$15.00 /man /day \$ 525.00
6. Preparation of reports, maps, calculations, supervision
of general programme.
1 man for 22 days @ \$15.00 /man /day \$ 330.00
7. Calculations of results and plotting of results of
magnetometer readings compilation of
magnetometer map (R Harvey)
1 man for 12 1/2 days @ \$15.00 /man /day \$ 187.50

8. Plotting and compilation of dip needle map on 200 feet to 1 inch scale	5-1/2 days @ \$15.00 /man /day	\$ 82.50
9. Drawing of Geological map information Tracing " " " " Interpretation direct from air photographs	2-1/2 days @ \$15.00 /man /day	\$ 37.50
10. Drawing and plotting of claim boundaries map direct from air photos	2-1/2 days @ \$15.00 /man /day	\$ 37.50
		<u>\$6,221.00</u>

The above expenses do not include several items such as transportation of personnel, rental of equipment etc.

I N T R O D U C T I O N

General

An option was negotiated for the property consisting of the P.C.M., CAP AND DOMINO mineral claims for the period 17th March - 17th May from Isaac Shulman of Vancouver. This period was spent largely on a dip needle survey under the direction of W. Pentland and T.S. Smith and on cutting picket lines on the property. On the 17th May, it was decided to continue the option and assessment work on the claims was guaranteed before 1st September. This report is compiled from results of the original reconnaissance, prior to 17th May but mainly from the later work of a semi reconnaissance nature.

The purpose of the survey was to evaluate the P.C.M. and CAP properties for assessment purposes by geological and geophysical methods.

The geological survey was in the form of outcrop mapping based on aerial photographs, and the work records the general geology on the property, the associated rock types, and zones of mineralization evident in the surface rocks examined.

The geophysical survey was to record any magnetometer anomalies on the property, which would indicate the presence or absence of magnetic minerals, primarily magnetite, in the bedrock of the claims. A magnetic anomaly would indicate an area deserving detailed attention, as copper minerals have been found associated with magnetite on other claims not far from this property.

The Mineral Claim grouping on the property

The P.C.M. and CAP groups consist of 52 claims which have been divided for purposes of expenditure and assessment into groups of 8.

The 650 scale claim Boundaries Map plate 2 was compiled from the field copies of the air photos by Jill Foweraker.

- Group (A) P.C.M. mineral claims numbers - 33, 34, 35, 36, 37, 39, 40.
- Group (B) P.C.M. mineral claims numbers - 25, 26, 27, 28, 29, 30, 31, 32.
- Group (C) P.C.M. mineral claims numbers - 17, 18, 19, 20, 21, 22, 23, 24.
- Group (D) P.C.M. mineral claims numbers - 1, 2, 3, 4, 5, 6, 7, 8.
- Group (E) P.C.M. mineral claims numbers - 10, 12, 14, 16.
- Group (F) P.C.M. mineral claims numbers - 9, 11, 13, 15.
CAP mineral claims numbers - 1, 2, 3, 4.
- Group (G) CAP mineral claims numbers - 5, 6, 7, 8, 9, 10, 11, 12.

The property runs approximately east west and is 13 claims long and 4 claims wide.

Location and Access

The P.C.M. and CAP group of claims lie some ten miles by road Northwest of Merritt B.C. (Plate 8). The property is situated on the slopes of the Promontory Hills.

The Forestry Look-out, gravel road, which is also the access road, runs through the property. This access road commences at the main road between Merritt and Spencers Bridge, some 1 1/2 miles south of Lower Nicola. From this road junction up to the Kenvig Ranch House, on the property, is a further 3 1/2 miles.

The eastern side of the property ends on the western hill slopes, which lead down to the Guichon River, before that river joins the East-West Nicola River.

To the south, the property overlooks the Nicola Valley. North of the property is the Forestry Lookout Station situated on the highest point of the Promontory Hills.

Mapping

Before the aerial photographs were available; geological mapping was done by short traverses, which were tied into existing picket lines. Following on from this period geological outcrop mapping was plotted directly onto the aerial photographs, with the aid of a pocket stereoscope, in the field.

A geological outcrop map (Plate 1) was compiled by the author and Jill Feweraker from these photographs and connections were applied for possible distortion by referring all photographs to the East-West Base line, which runs the length of the property. All claim posts were plotted directly onto the photographs and a map showing the mineral claim Boundaries (Plate 2) has been prepared as an overlay for the geological map. The scale of the geological map is 650 feet to 1 inch.

PHYSIOGRAPHY

Drainage of the property is into the Nicola River, and its tributary Guichen Creek. The hills in the area are generally rounded and lack the rugged character of the mountains farther west and south. Vertical cliff faces are present in the Kingsvale Volcanics, and there are steep scree slopes in this area and in the extreme north west corner of the property in rocks of the Nicola group.

The highest point of the Promontory Hills, on the southern slopes of which the property is situated is 5688 feet above sea level.

The country is reasonably covered with fir and Jack Pine with swamps and small lakes in the depressions.

GEOLOGY

Reference G.S.C. memoir ²⁴⁹349. 1948. Geology and Mineral Deposits of the Nicola Map area, British Columbia - by W.E. Cockfield and Geological map 886A which accompanies the memoir.

The geological groups mapped in the property area include rocks of the Kingsvale group of Lower Cretaceous age (Cockfield 1948). These volcanic rocks outcrop at the eastern end of the property and here consist of basalts, andesites, hornblende felspar porphyries, agglomerate and tuffs.

The volcanics are generally steeply dipping and beds of the agglomerate (red-brown hornblende felspar porphyry) stand out well in the near vertical cliff exposures overlooking Dry Lake.

Basalts and agglomerates, which stand out as small elongated ridges on the Kingsvale volcanica in the north east of the property area, show a pronounced swing on curve in the direction of the ridge from a northerly to a north north east direction.

Geology - continued

The Kingsvale volcanics are known to overlie rocks of the Nicola group of Upper Triassic Age, in other claims in the neighbourhood, however no known Nicola group rocks were found in this survey exposed under the Kingsvale.

To the west, near Dry Lake, the Kingsvale Volcanics are in contact with the granite and associated transition zone rocks. (Rocks of the granitic group intimately mixed with Nicola Rocks).

There is a noticeable absence of outcrop in the area, immediately west of the Kingsvale and south of Dry Lake, but from geological information to the north of the property boundary, and from the exposures of altered granite and granodiorite against Kingsvale Volcanics (near the junction of the access road with the Merritt - Spencers Bridge road), a general north - south contact is indicated just to the east and south of Dry Lake.

The outcrops comprising the granite and diorite and associated transition zone rocks vary considerably and some have had to be identified in thin sections.

Granite and rocks of the associated transition zones extend from the Kingsvale volcanics west across the property until they come in contact with the main body of the Nicola group in the north west corner of the property.

Outcrops occur in the granitic zone on isolated mounds and low ridges along two main trend lines which follow on east north east direction.

Altered granites and rocks of the transition zone are often found in the higher ridges along this general trend. Also associated with these rocks are outcrops of granodiorites, diorites, andesites and tuffs of the Nicola group.

An examination of outcrops, and of two old test pits, cut in these trend lines (see geology map) showed evidence of some minor chalcopyrite associated with hematite and magnetite mainly in the andesite and transition zone. The amount of chalcopyrite found from the specimens examined in surface exposures is very small.

On the basis of field interpretation the pockets and lenses of volcanic rock found associated with the granitic group are andesites of the Nicola group.

The andesites are sometimes magnetic, often as not they are non-magnetic. When the andesite is intimately mixed with rocks of the granitic group it is called a transition rock. Associated with the rocks are very occasionally very thin veins of magnetite.

The general topography of the middle and western section of the property, could from the trend of the ridges and valleys be interpreted as folding, with the fold axis running on an east north east direction.

Geology - continued

Separating the most westerly ridge from the rest of the Nicola group, which outcrops on the hills in the north west corner of the property is a depression which runs approximately parallel to the ridge trend.

The Nicola group rocks in this N.W. area have been pushed up into a series of folds with fold axis running approximately north east south west and this would follow the same general trend of the rocks further east on the property.

Andesites containing veins of calcite, olivine basalts, andesite, porphyries and tuffs were observed in outcrops in this area. The topography is generally steep.

RESULTS OF THE GEOLOGICAL AND GEOPHYSICAL INVESTIGATIONS

(See also appendix Geophysical report)

The purpose of the Geophysical surveys was to find if any magnetic anomalies existed on the property, and if so what was their size and intensity. An anomaly would result from the presence or absence of magnetite minerals - magnetite, in the rocks investigated. It is known that copper minerals have been found with magnetite on other claims in the neighbourhood and for this reason a magnetic anomaly would be an area of interest for possible copper ore bodies and worthy of more detailed attention.

Factors which produce variations in vertical magnetic intensity are (See C.C. Rennie's - Geophysical Report on Magnetometer survey Hec group south, June 17, 1958).

- 1) A concentration of magnetic minerals, possibly with associated valuable minerals.
- 2) A variation in the amount of accessory magnetite in granitic or volcanic bedrock.
- 3) A variation in the amount of magnetite distributed through, or connected with, the overburden.
- 4) A variation in depth of non magnetic overburden or caprock over bedrock having a constant vertical magnetic intensity.
- 5) Variations in amounts of magnetic minerals in adjacent bands of volcanic and sedimentary rock, such as may be expected in the Nicola formations which would produce elongated magnetic highs and lows parallel to the form strike. These variations are not expected to be great.
- 6) Any combination between variations in magnetic minerals in the rock and variation in the thickness of the overlying magnetic or non magnetic overburden or cap rock.

Results of the Geological and Geophysical Investigations - continued

It will be seen from the above factors that the evidence for mineralization is not necessarily conclusive from a magnetometer survey, one way, or the other.

On the P.C.M. and CAP groups, areas of interest from the results of the geological and geophysical surveys are as follows:

Anomalies "A & B" (P.C.M. M.C. 29 west and P.C.M. M.C. 36 (south east corner) range from a positive back ground value of 570 gammas to 1245 gammas. The highest dip needle reading recorded was 12.

The outcrops in the area to the north of these two anomalies, consist of fine grained diorites and transition rocks. (A transition rock is one in which granitic rocks are intimately mixed with rocks of the Nicola group). To the south of the anomaly are hills with outcrops of transition rocks and silicified diorites, stained with limonite.

Anomaly "B" is situated in a depression in which two small lakes are ponded.

Near anomaly "A" there is an old shaft which has been sunk in transition and silicified diorite rocks. Minor chalcopyrite and magnetite hematite as well as calcite in veins, occurs here.

Anomaly "C" ranges from a positive background of 570 gammas to 1338 gammas. The highest dip needle reading was 12. The anomaly was recorded on an outcrop area to the north east of the anomalies "A" & "B". The rocks are mainly transition rocks and altered diorite with some epidote and limonite staining.

Anomaly "F" is of larger aerial extent than "A" and "B". The highest positive value recorded here was 1305 gammas. The dip needle readings recorded here were up to 15 and 16. The area of this anomaly is covered by overburden. The anomaly lies within the granitic group.

Area "D" (see Plate 7 accompanying this report).

This area is the most interesting, recorded on the property. In an outcrop of mixed granodiorite, diorite, and pockets and lenses of fractured andesite, occasionally magnetic, a positive value of 1778 gammas and a negative value of 13000 gammas was recorded. To the south west of this outcrop, and immediately to the south of an outcrop of transition rocks a reading of 7212 gammas was recorded. The outcrops in the immediate area are altered transition rocks, porphyritic andesites, andesites (magnetic and non-magnetic), and altered diorites. Some very minor chalcopyrite magnetite and hematite occurs in outcrops.

Results of the Geological and Geophysical Investigations - continued

400 feet further to the south west are exposures of transition rocks with altered granites and dacites containing minute volcanic inclusions also andesites and andesite porphyries. Between these exposures, and these in the extreme south west corner of the map of area "D", on the line 86W there is an anomaly reading up to 1050 gammas. An anomaly of similar intensity was recorded on 82W 1006N. To the east of this anomaly, is an outcrop of transition rocks with altered andesite and associated very minor chalcopyrite, hematite and magnetite.

GENERAL CONCLUSIONS, RECOMMENDATIONS ON THE RESULTS OF THE GEOLOGICAL AND GEOPHYSICAL SURVEYS August 12, 1958

Although the magnetometer results are generally discouraging, there are two areas in which further investigations could be made, Area "D", and the area at the east end of the property.

The geology of the property indicates that there are pockets and lenses of Nicola rocks, within the granitic group boundary, often intimately mixed with granite rocks. Some of the pockets have been found to be magnetic.

Very minor mineralization has been found associated with some of the outcrops, and magnetic anomalies have been recorded in the area.

No readings of outstanding interest were recorded at the inferred main Nicola Granite Boundary, in the valley at the northwest of the property. It should be pointed out, however, that areas of known geologically favourable rocks devoid of anomalies cannot be rejected out of hand purely on the basis of a magnetometer survey alone because there may be commercially interesting mineralization not associated with anomaly producing magnetite minerals, also the mineralization, if associated with magnetite, may be at too great a depth to affect the magnetometer.

However, assuming that magnetic anomalies are indicative of ore potential in the area, then the anomalies in area "D" are the most interesting on the property.

Geology shows area "D" to be in the granitic transition zone with andesites, diorites and granodiorites. Nearby very minor mineralization has been noted in a few samples in outcrop. The general evidence points to the rocks of the granitic group being "at the roof" of the intrusive. Geological evidence would indicate that the granitic zone (with associated transition and Nicola rocks) must have in the past been covered by a greater thickness of Nicola rocks. Only isolated pockets and lenses of this rock remain within the granitic group.

These pockets have been given the field name andesite. Often these rocks are intimately mixed with the granitic group and form what is called in this report, transition rocks. It is evident that only some of the andesite pockets contain magnetite, also random sampling did not at the first reveal the presence of magnetic andesites.

To summarize, so far, it appears that the granitic group, in which lies area "D", consists of altered granites, granodiorites, diorites and possible small intrusive dykes, together with pockets and lenses of andesite and porphyritic andesite, from the overlying and now eroded Nicola Group. These rocks would appear to be at the roof of the intrusive body. Some of the andesites are magnetic, and very minor chalcopyrite, hematite and magnetite has been found associated with some of these outcrops. The random association of rock types described above can be seen in the outcrops shown on the geological map (Plate 1).

From the geophysical evidence of dip needle and magnetometer it appears that all the anomalies on the granitic group, with one exception, are small in extent and magnitude. The exception to this is a reading of minus 13,680 gammas localized to a few feet in area.

Subsurface interpretation can only be based on surface geological evidence and the magnetometer and dip needle results. No diamond drilling has been done on the property.

The conclusions reached are that the anomalies are due to pockets and lenses of magnetic andesite, together with concentrations in small veins of magnetite which have been observed in outcrops. The small grains of chalcopyrite observed are few and the conclusion from surface examination only is that no large concentrations of copper ore occur in the rocks in this area of the granitic zone.

In the Kingsvale volcanics at the extreme eastern end of the property the significance and interpretation of the north east trending magnetic lows and negative values are of interest. While it is outside the writers competence to give an authoritative interpretation of the effect of an unknown thickness of Kingsvale volcanics on the magnetometer readings in this area, and also on the interpretation of the results here presented, the following point of interest may be mentioned.

There are northeast trend lines on the topography and outcrops on other parts of the property and it is possible that the northeast trend of the magnetometer readings on the Kingsvale are a reflection of the rocks underlying the Kingsvale, in this case, probably granitic group and associated transition and Nicola rocks containing magnetite.

It is suggested that in the geological past Kingsvale volcanics were poured out on to an existing erosion surface, then where overlying non-magnetic Kingsvale volcanics filled the existing depressions in the erosion surface the magnetometer readings would be lower than over the adjacent ridges of the old erosion surface where the thickness of overlying Kingsvale volcanics would be less.

Respectfully submitted,

J. C. Foweraker
Geologist

J. C. Foweraker

GEOPHYSICAL APPENDIX REPORT

by J. C. Foweraker

MAGNETOMETER AND DIP NEEDLE SURVEY

August 12, 1958

INTRODUCTION

The main area covered by the dip needle survey was run during the reconnaissance period of March 17th to May 17th 1958 under T.S. Smith. The dip needle map (Plates 5 and 6) was largely compiled from the results of this survey. After the completion of the original dip needle survey, it was decided to continue with the option and assessment work on the claims was guaranteed. A magnetometer survey was run in areas not covered by the original dip needle survey, and areas that appeared interesting from geological investigations and the initial dip needle work. The survey was not generally extended to areas covered by prior stakings of Moranda and P.L. groups at the north and south boundaries of the FCM claims.

The map showing the results of the magnetometer readings was compiled by R. Harvey (Plates 3 & 4).

EQUIPMENT

(a) Dip needle. - The dip needle used for the original reconnaissance survey and for later work in conjunction with the magnetometer was the Sharpe D2.

(b) Magnetometer. - For this survey the vertical force variometer (hereafter referred to as the "Magnetometer") made by Helgar and Watts was used. This instrument has a scale value per division of 30 gammas uses short, medium, and long auxiliary magnets for high readings.

GENERAL DESCRIPTIONS OF THE METHODS OF SURVEY ON THE PROPERTY

(a) Dip Needle

Readings with the Sharpe's dip needle were taken on an east west chain and compass line, between the north south location lines. The results of this survey are shown on the dip needle map (Plate 5 & 6) which accompanies this report.

Further dip needle lines were run to fill in areas in cultivated fields, and steep scree slopes where there was danger of dropping and damaging the magnetometer.

General Description of the Methods of Survey on the Property - continued

(b) Magnetometer

An east west base line of 17,100 feet was established across the centre of the property by transit, and marked by hubs, the line was extended to the east and west boundaries by a picket line. Cross line - picket lines, were turned off at right angles to the base line where required. The main purpose of these crosslines was to carry out the magnetometer survey, however claim posts and property boundaries were also tied to these lines, and plotted on the 200 feet to the inch maps. Along these lines, pickets were driven in every 100 feet to mark the magnetometer stations. The cross lines were extended to the adjoining NRA group to the north and PL group to the south. Both these groups "overlap" the property boundaries.

Although a large amount of line has been cut on the property, some 99,000 horizontal feet has been cut by contract. Although most of the cross lines are on 400 foot spacings, certain areas of special interest have been cut on a much closer grid system.

Before the commencement of the magnetometer survey a base control station was established at L 134 W having a positive value of 570 gammas. This provided a datum to which the survey and subsequent control stations could be related. R. Harvey carried out the magnetometer survey and the subsequent calculations assisted by C. Beaulieu.

CALCULATIONS AND PLOTTING METHODS

(a) Dip Needle

Results of the dip needle survey were compiled at the termination of the reconnaissance period 17th May. However, after the completion of the detailed survey grid for the magnetometer survey, the positions of all claim posts were accurately plotted. The reconnaissance dip needle traverses between the location lines were then replotted on the new 200 scale map.

(b) Magnetometer

An example of the survey results and calculations are shown on the accompanying field sheet run on cross line 70 W/W on the 5th July, 1958, in the P.C.M. group of claims.

Diurnal corrections were applied to the scale readings of the magnetometer .

Where auxiliary magnets were used the connective formula $\frac{2K}{d^3} 10^5$ was applied.

RESULTS OF THE SURVEY
(see also Geological report)

Several areas of higher readings were observed on the property, and closer grid systems were cut on these areas at the completion of the survey. Some of these results were too late to be incorporated in the magnetometer map and are attached as separate sheets to this report (see Anomaly "D").

The readings in these areas range from a positive background value of 570 gammas to a reading of 7212 gammas area "D".

The highest negative reading of 13 680 gammas was also recorded in the same area on anomaly "D".

Anomaly "D"

This is the most interesting area recorded on the property. In an outcrop of granodiorite, and pockets of andesite (both magnetic and non magnetic) a positive value of 1778 gammas and a negative value of 13 680 gammas was recorded. To the S.W. of this outcrop, an outcrop mainly of transition rocks, a positive value of 7212 gammas was recorded

(The geological outcrop and magnetometer results are shown in detail on the plan of area D (Plate 7) accompanying this report.

Anomaly "F" P.C.M. Results are comparable in range only with those in areas A. B. C. (see below). The area is considerably larger. The highest positive value recorded here was 1305 gammas.

Anomaly's "A" "B" "C" range from a positive background value of 570 gammas to 1338 gammas (in area C). The areas of A and B are small, the boundaries of "C" are incomplete on the map due to the cultivation in the fields, preventing surveying here, but the anomalous area appears small.

CAP Group of Mineral Claims

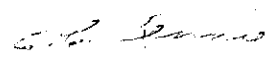
There are marked negative trends in the magnetometer readings on the CAP group of mineral claims at the east and south east end of the property. These trends appear to have a north-east south-west general direction.

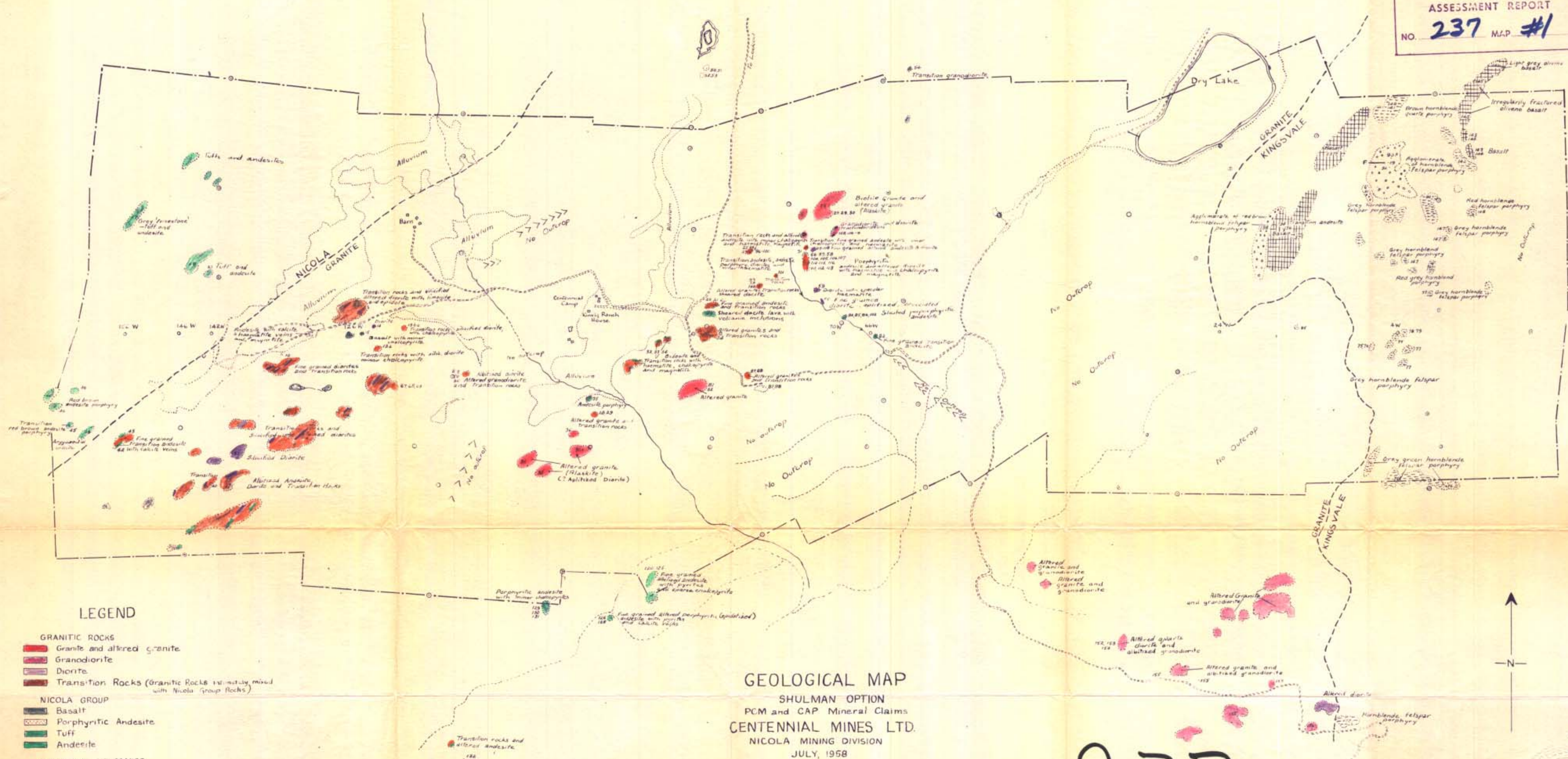
An area of positive readings of up to 1150 gammas continues this general trend further to the south-west of these negative trends.

A further grid was cut in area "E" CAP M.C. #1 after the completion of the magnetometer map. The results show a positive reading of 2597 gammas (the highest) with one adjacent low of 960 gammas.

Respectfully submitted,

J. C. Foweraker
Geologist

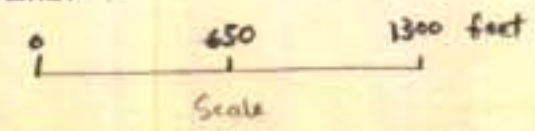




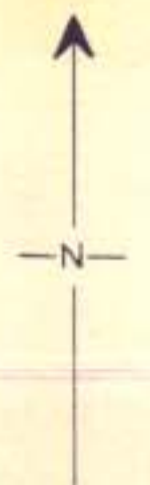
LEGEND

- GRANITIC ROCKS**
 - Granite and altered granite
 - Granodiorite
 - Diorite
 - Transition Rocks (granitic rocks intimately mixed with Nicola Group Rocks)
- NICOLA GROUP**
 - Basalt
 - Porphyritic Andesite
 - Tuff
 - Andesite
- KINGSVALE VOLCANICS**
 - Agglomerate-hornblende porphyry
 - Pink hornblende felspar porphyry
 - Grey hornblende felspar porphyry
 - Basalt
 - Andesite

GEOLOGICAL MAP
 SHULMAN OPTION
 PCM and CAP Mineral Claims
 CENTENNIAL MINES LTD.
 NICOLA MINING DIVISION
 JULY, 1958
 SCALE
 650 Feet to 1 Inch
 Geology by J.C. Foweraker



237

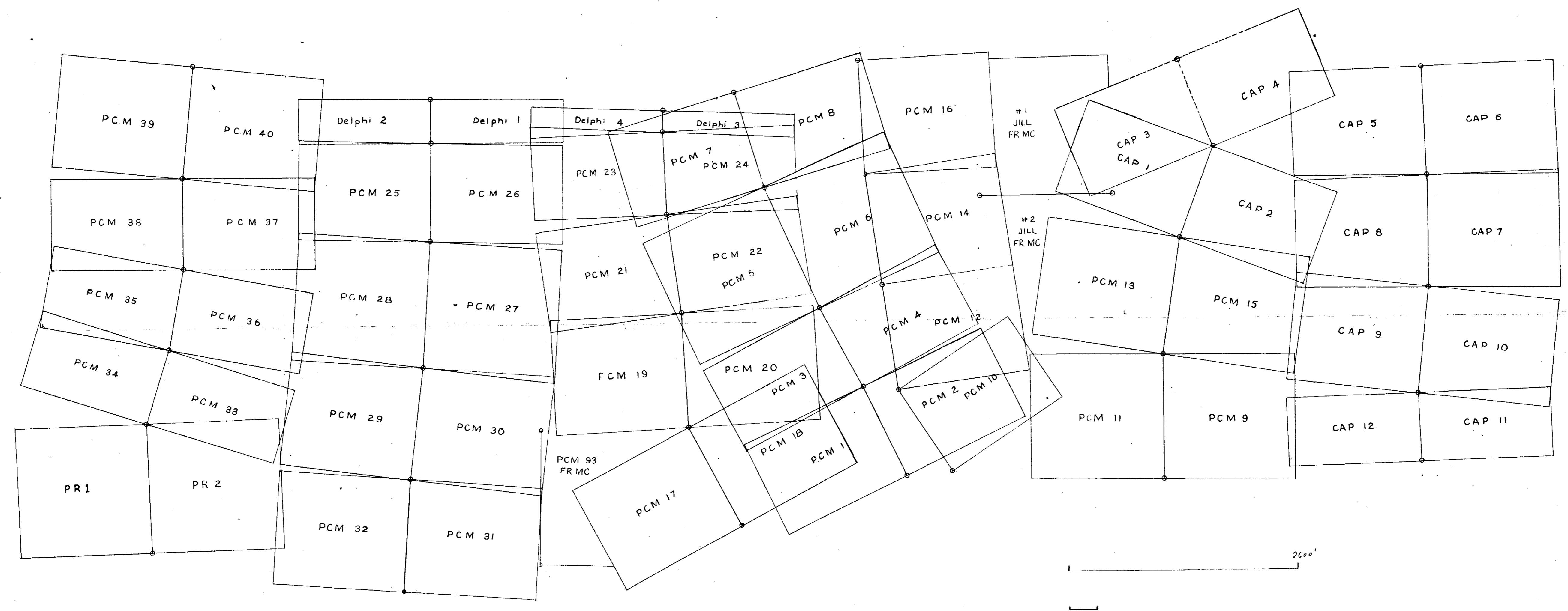


Merritt 6 Miles

Report 033
 J.M.F.

Report
237

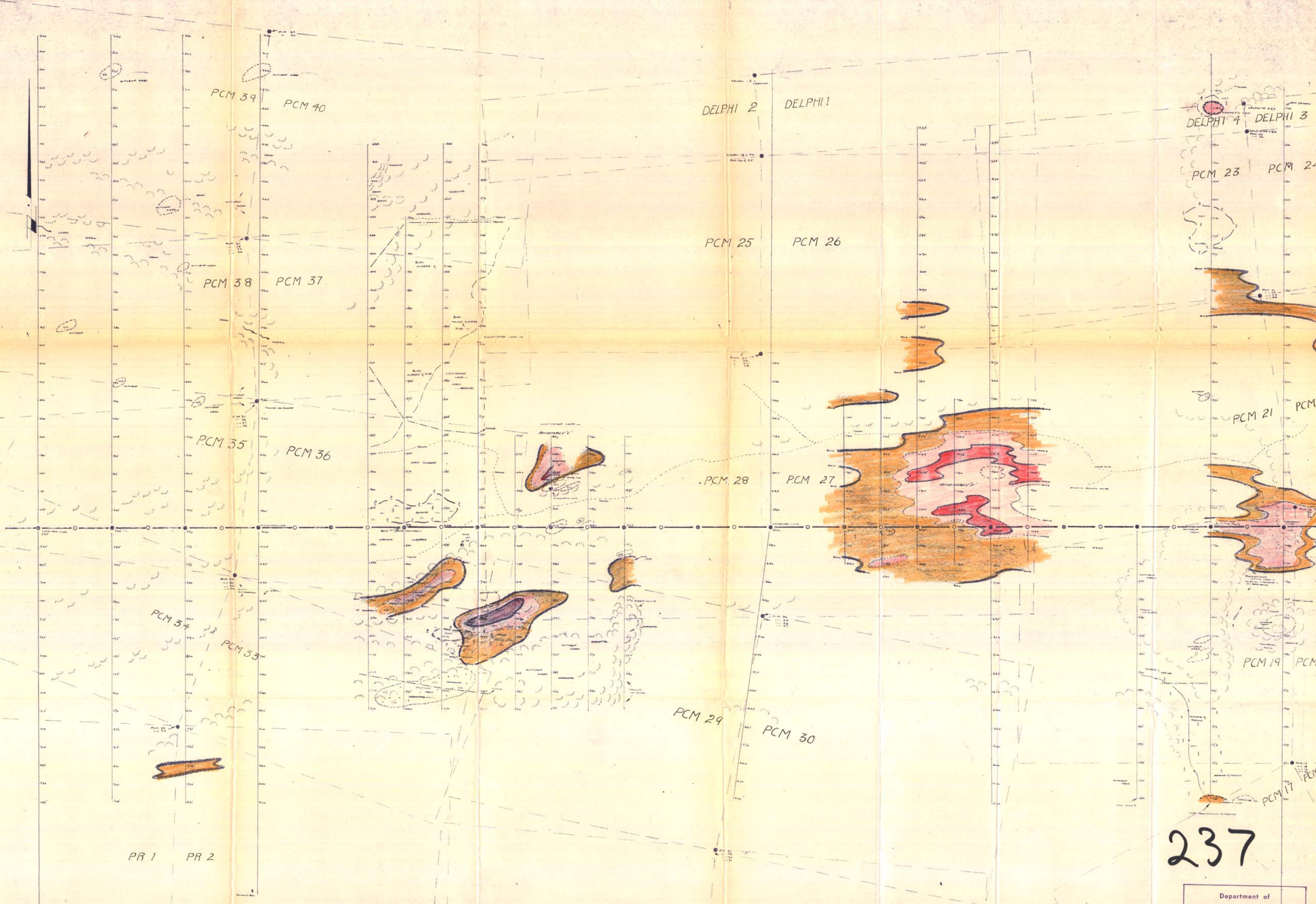
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **237** MAP #2



237

J.C. Poweraker

DRAWN J.C. Poweraker	SCALE 650' = 1"	CANADIAN EXPLORATION LIMITED	MINERAL CLAIM BOUNDARIES
TRACED	DATE 30th July	SHULMAN OPTION	PCM and CAP MC'S
APPROVED		CENTENNIAL MINES LTD.	NICOLA MINING DIVISION
			MAPPED FROM THE AERIAL PHOTOGRAPHS BY J.C. POWERAKER



LEGEND
 Solid line = Boundary
 Dashed line = Contour
 Dotted line = Fault
 Star = Shaft
 Rough ground
 Creek
 Outcrop

PRELIMINARY PLAN
 SHOWING MAGNETOMETER RESULTS OVER PART OF
CENTENNIAL MINES

SCALE 1" = 200'

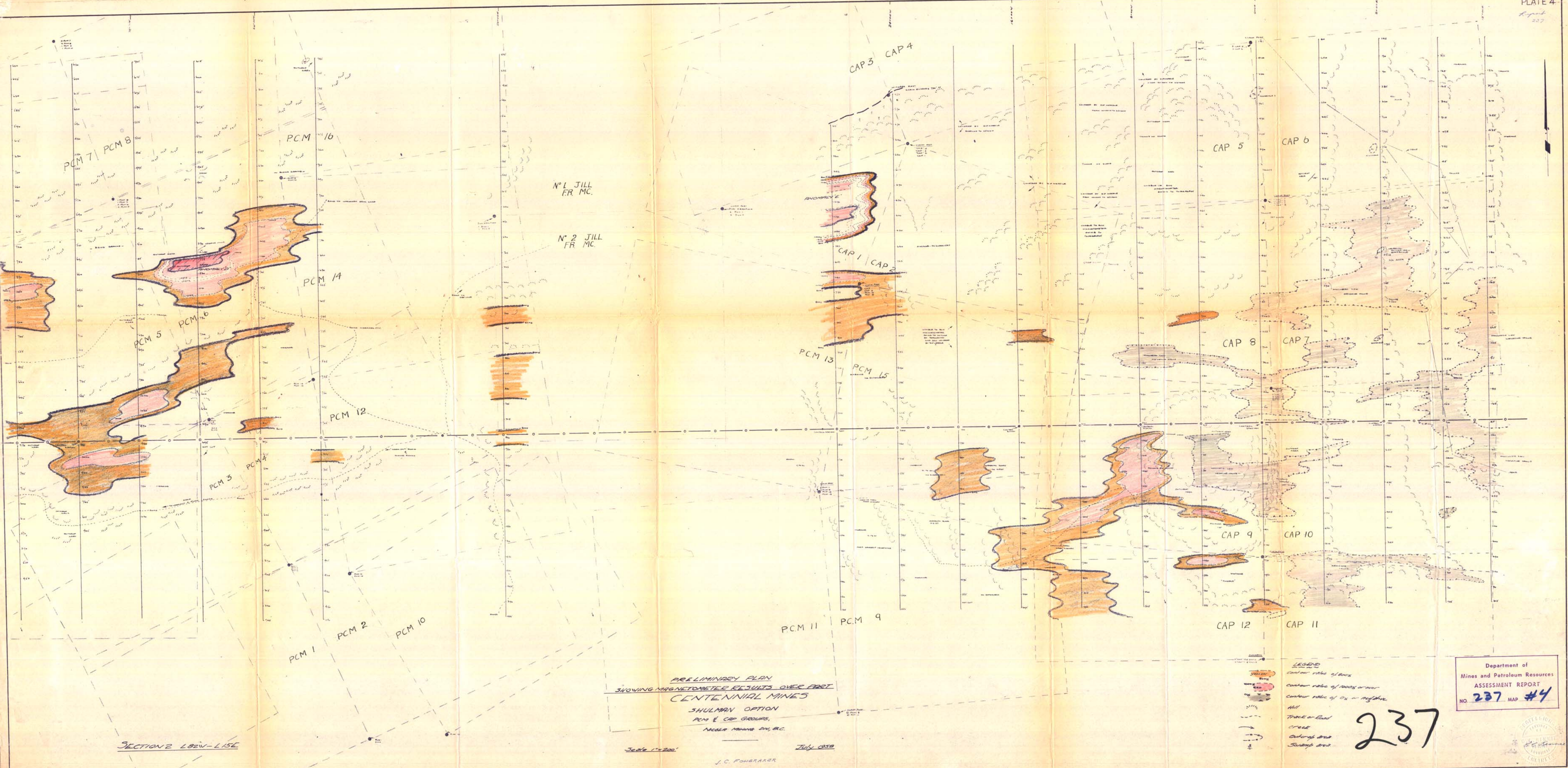
JULY 1958
 J. C. FOWERAKER



237

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 237 M.P. #3

Report 237
 BY E. C. BROWN
 SCHULMAN OPTION
 SECTION 1, T66N-154W



PRELIMINARY PLAN
SHOWING MAGNETOMETER RESULTS OVER PART
CENTENNIAL MINES
SHULMAN OPTION
PCM & CAP GROUPS,
NORRIS MINING CO., ETC.

Scale 1"=200'

July 1958

J. C. POWERS

- LEGEND
- Contour value of 1000
 - Contour value of 2000 or over
 - Contour value of 5000 or higher
 - Hill
 - Track or Road
 - Creek
 - Outcrop area
 - Swamp area

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 237 MAP #4

237



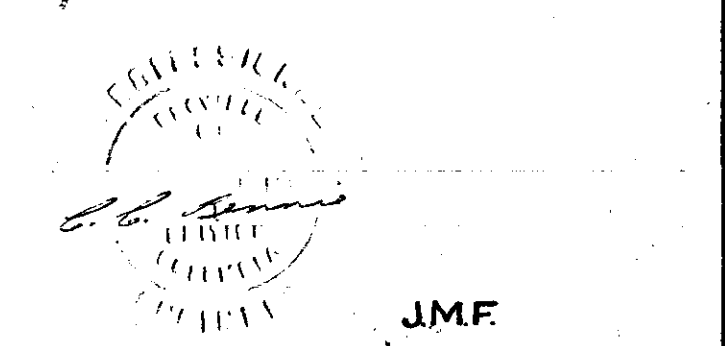
SECTION 2 182N-115E



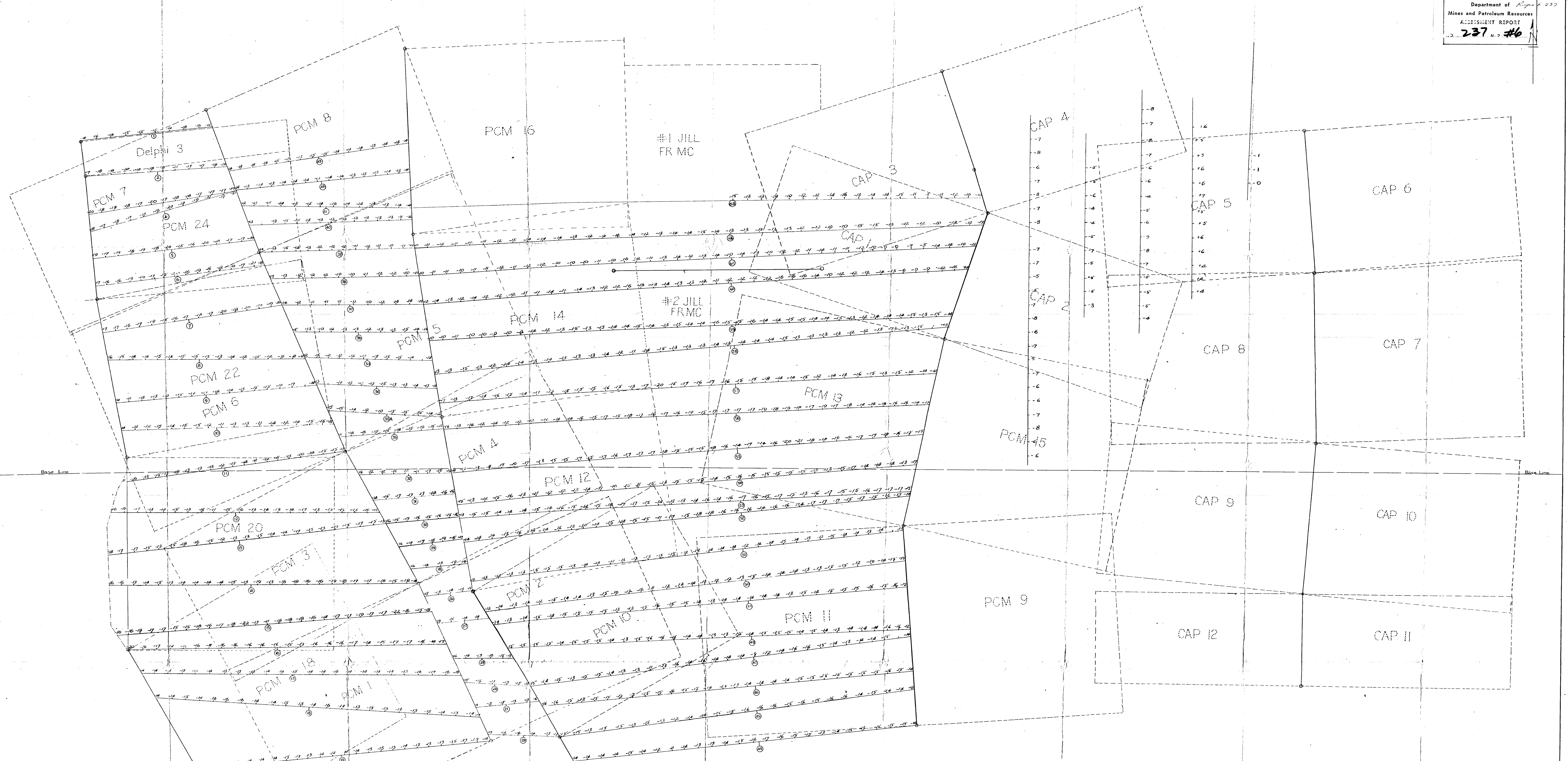
PLAN SHOWING
 DIP NEEDLE RESULTS
 WESTERN HALF
 SHULMAN OPTION
 PCM AND CAP MINERAL CLAIMS
 CENTENNIAL MINES LTD.
 NICOLA MINING DIVISION BC
 July, 1958
 Scale
 200 feet = 1 inch
 J.C. Fowles & Co.

237

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 237 MAP #45

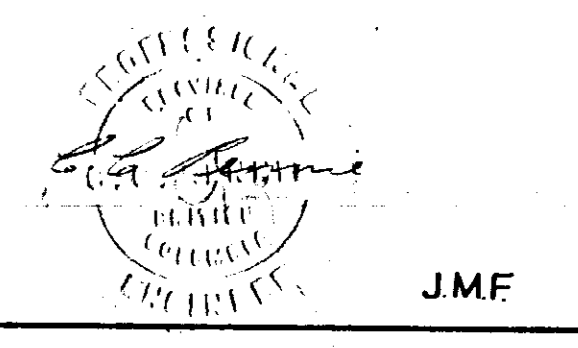


JMF

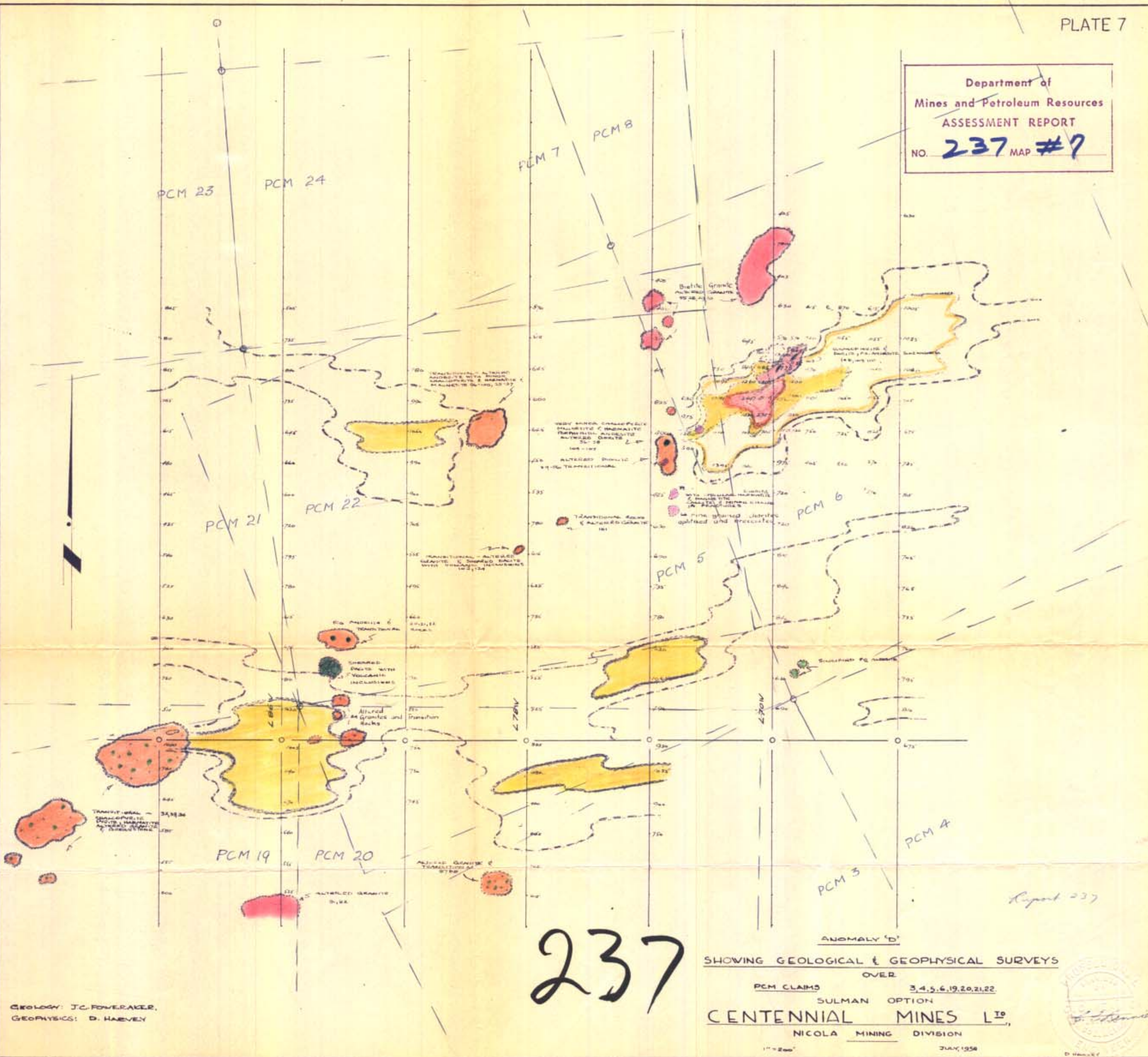


PLAN SHOWING
 DIP NEEDLE RESULTS
 EASTERN HALF
 SHULMAN OPTION
 PCM AND CAP MINERAL CLAIMS
 CENTENNIAL MINES LTD
 NICOLA MINING DIVISION, B.C.
 July, 1958
 Scale
 200 feet = 1 inch.
 V.C. FOWERAKER

237



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **237** MAP #7



GEOLOGY: J.C. POWELLAKER,
GEOPHYSICS: D. HARVEY

237

ANOMALY 'D'
SHOWING GEOLOGICAL & GEOPHYSICAL SURVEYS
OVER

PCM CLAIMS 3, 4, 5, 6, 19, 20, 21, 22

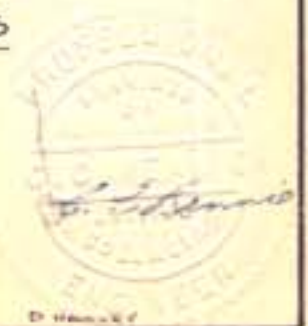
SULMAN OPTION

CENTENNIAL MINES LTD.

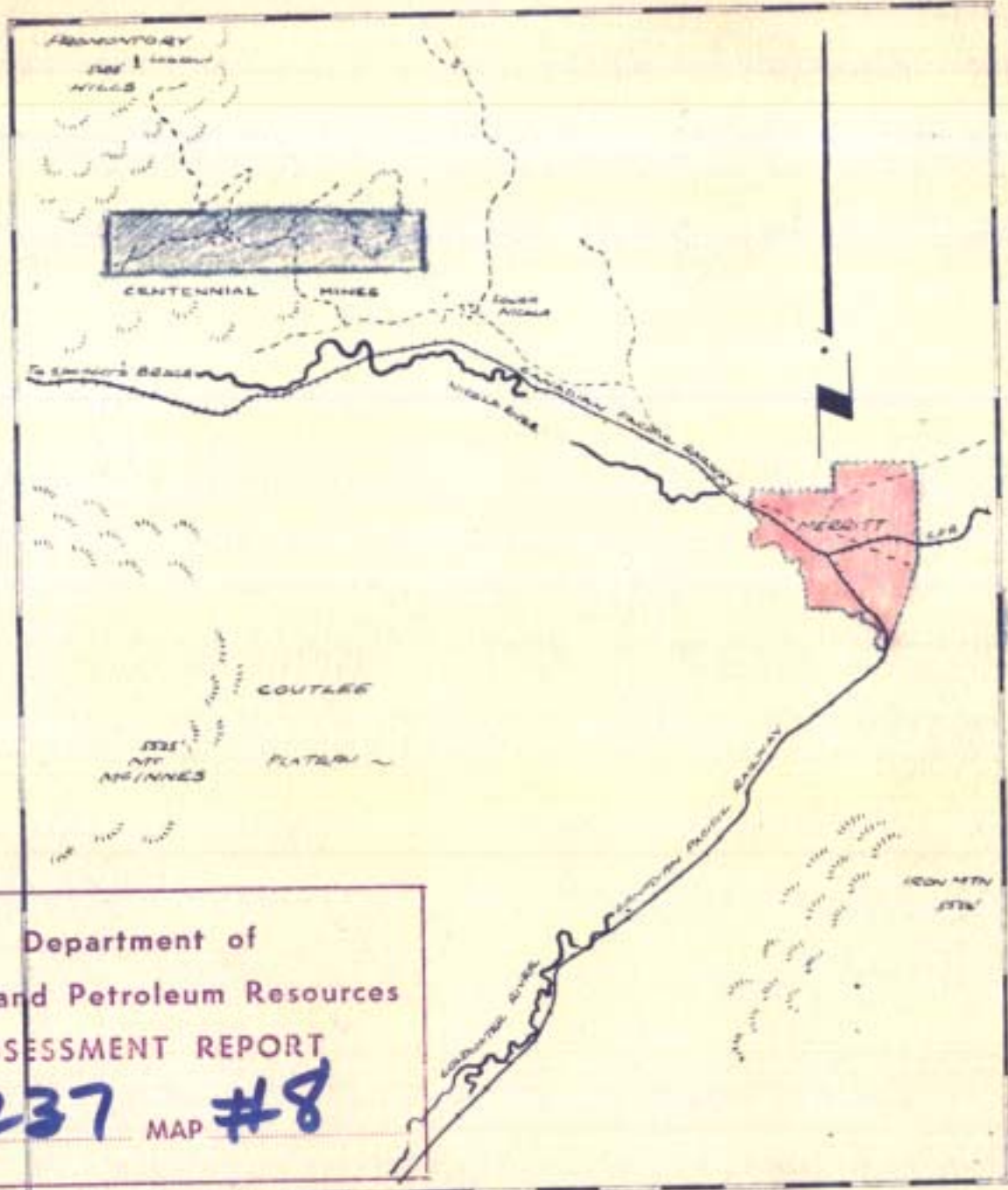
NICOLA MINING DIVISION

1" = 200'

JULY, 1958



237



237

LOCATION MAP

of SHULMAN OPTION,
 CENTENNIAL MINES LTD.,
 NICOLA MINING DIV.,
 NR. MERRITT, B.C.

SCALE 1" = 2 MILES

July 1959

J.C. FOWERAKER

