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**ADOGA TRANSPORT COMPANY PTY LTD**

**E.L. 21/82**

**MERRYWOOD AREA**

**EXPLORATION LICENCE REPORT**

**PERIOD OCTOBER 1986- OCTOBER 1987**

This report documents the exploration activities within the Exploration Licence for the 12 month period from October 1986 to October 1987.

A consulting geologist, Mr V.M.Threader was engaged to log the diamond drill core and interpret the results. This included the review of published information and work carried out on the E.L. to date.

## 2.0 DRILLING PROGRAMME

In March a small drilling program was carried out in the eastern area of the E.L. This programme was designed to intercept the possible extension of the Merrywood seam to the east of Pratts Hill.

Two shallow holes were drilled and summary data is set out below. Figure 1 shows the location. One of the holes (AT11) intercepted coal bearing sediments.

### SUMMARY DATA (Elevation and grid references are approximate)

No.	Easting m.	Northing m.	Elevation	Total Depth m.	Pre-collar Depth
AT10	581200	5374200	320 MASL	24.00	15.00
AT11	581100	5374300	340 MASL	21.30	4.30

Four figures accompany this report:

- Figure 1: A plan of the area showing drill hole locations and sections.
- Figure 2: A section from west to east through RG3, AT9, Merrywood coal mine, Pratts Hill boreholes, AT10 and 11 and DOM 22.
- Figure 3: Graphic borehole sections at scale of 1:250 at their respective elevations.
- Figure 4: Graphic coal seams section at scale of 1:25. AT11 and Merrywood seam.

## 3.0 SEAM CORRELATION

There is a probable correlation between the coal seam intersection in AT11 and the Merrywood seam (Figure 4), although the closeness of the

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borehole coal to surface has caused severe deterioration of the seam with consequent loss of some of the detail. The correlation is based on a comparison of total seam thicknesses and intraseam banding but an insufficient thickness of the sedimentary succession has been drilled to allow a proper assessment.

The section (Figure 2) indicates a coal seam dip of  $14^{\circ}$ , which is substantially higher than the regional dip ( $2^{\circ}$ ), although dips of  $10^{\circ}$  to  $15^{\circ}$  were recorded by Investigator Coal Exploration P/L in the east side of the old Merrywood workings. These abnormal dips are suggestive of structural disturbance, possibly in the Pratts Hill area, where there is also a difference of around 100m. on the dolerite contact.

#### 4.0 CONCLUSIONS AND FUTURE DRILLING PROSPECTS

A borehole, drilled from the top of Pratts Hill may solve this structural problem but the steepness of the terrain and the quality of coal in AT11 do not justify the expense as far as opencut mining is concerned. A small underground reserve may be present under Pratts Hill but the likelihood of faulting and again coal quantity are not encouraging.

A field inspection further east, i.e. Pratts Hill to Coal Rivulet, indicates reasonable prospectivity for open cut coal on the south east edge of the alluvial plain.

Insufficient information is presently available for a clear structural interpretation, but, as a working hypothesis, it is suggested that the Merrywood seam could be correlated with coal intersections in boreholes RG3, AT11 and DOM22. This is depicted in Figure 2, in which the seam is represented by a broken line.

This section indicates that:

- i) The coal has a regional dip of  $2^{\circ}$  SSE
- ii) there is probably a fault displacement in the Pratts Hill area.
- iii) The seam could lie between the bottom of AT8 and the top of AT9. This could be verified by deepening AT8 to overlap with AT9.
- iv) The seam has probably been eroded from Rosemount Flat between Pratts Hill and Meadstone Saddle on the southeast edge of the plain. This could be verified by a drill hole to the north-east of A10 and A11.

## 5.0 PROPOSED PROGRAMME FOR 1987-88

The deepening of AT 8 and another hole to the north-east of A10, A11 are planned, together with more mapping in the eastern area of the EL. Consideration will also be given to another hole on the eastern flank of Pratts Hill.

The possibility of extending the EL to the east will also be investigated as this seems to be the most prospective area.

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Elev.  
-340

From	To	Thick- ness	Recon- ery	Description	AT11	Depth
0.00	4.30	4.30	nil	Pre collared		0
4.30	6.08	1.78	98	weathered mudstone		25
6.08	7.00	0.92		Grey mudstone		50
7.00	9.00	2.00		Dull coal		75
9.00	9.85	0.85	96	Grey mudstone (broken core)		10
9.85	11.5	1.30		Dull coal (broken core)		10
11.5	11.65	0.50		Grey mudstone		125
11.65	12.70	1.05		Grey lithic sandstone		125
12.70	18.10	5.40	100	Grey mudstone		15
18.10	19.30	1.20		Fine, current bedded sand stone		175
19.30	21.30	2.00		Medium grained lithic sandstone		20

-330

AT10

-320

From	To	Thick- ness	Recon- ery	Description	Depth
0	15.00	15.00	nil	Pre collared	25
15.00	16.00	1.00		medium lithic sandstone, carbonaceous partings	50
16.00	19.00	3.00	100	medium-coarse lithic sandstone with coal lenses	75
19.00	24.00	5.00		medium-coarse lithic sandstone	100
					125
					150
					175
					200
					225
					250

-310

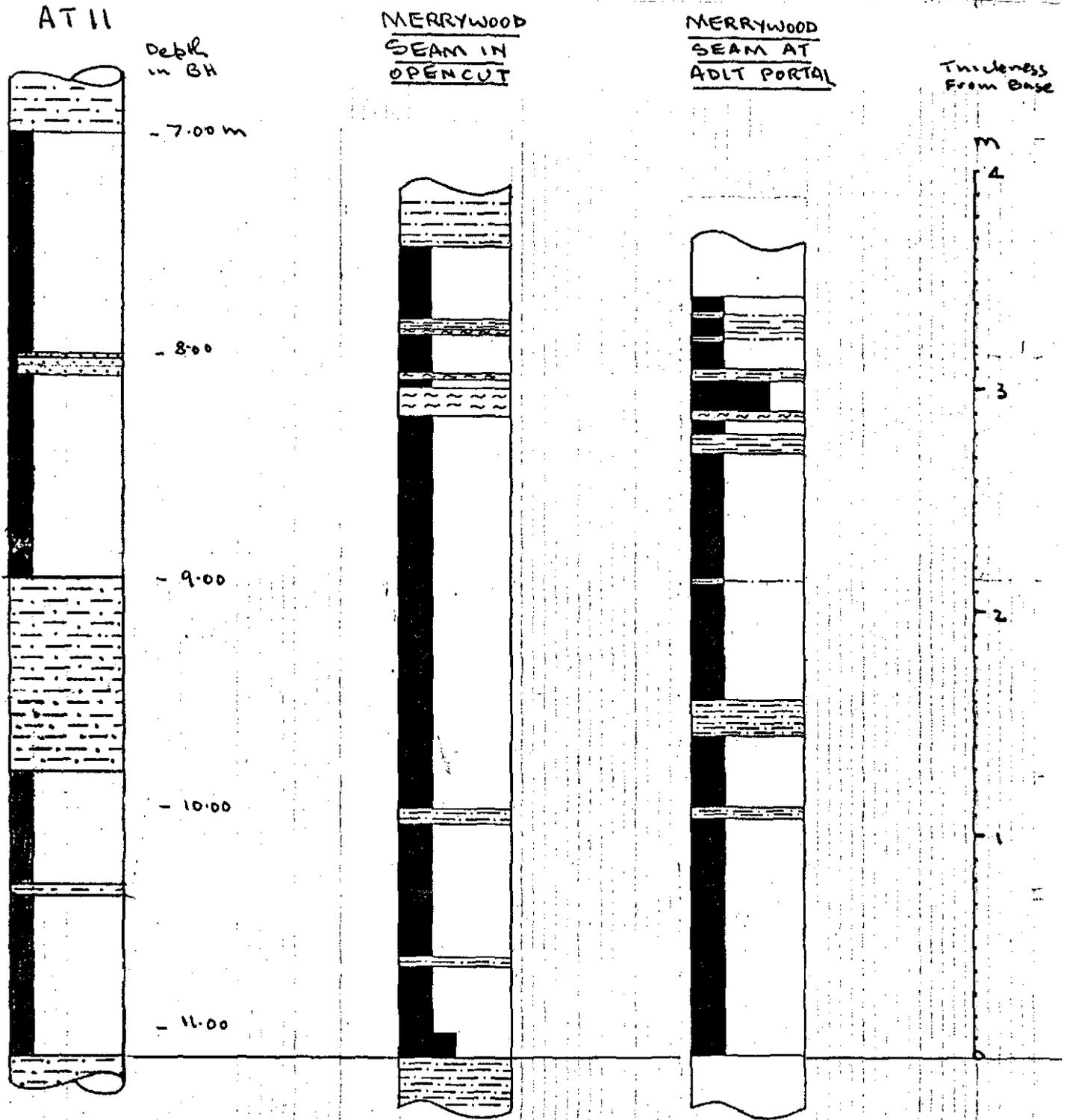
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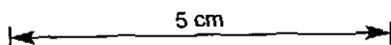
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FIGURE 4

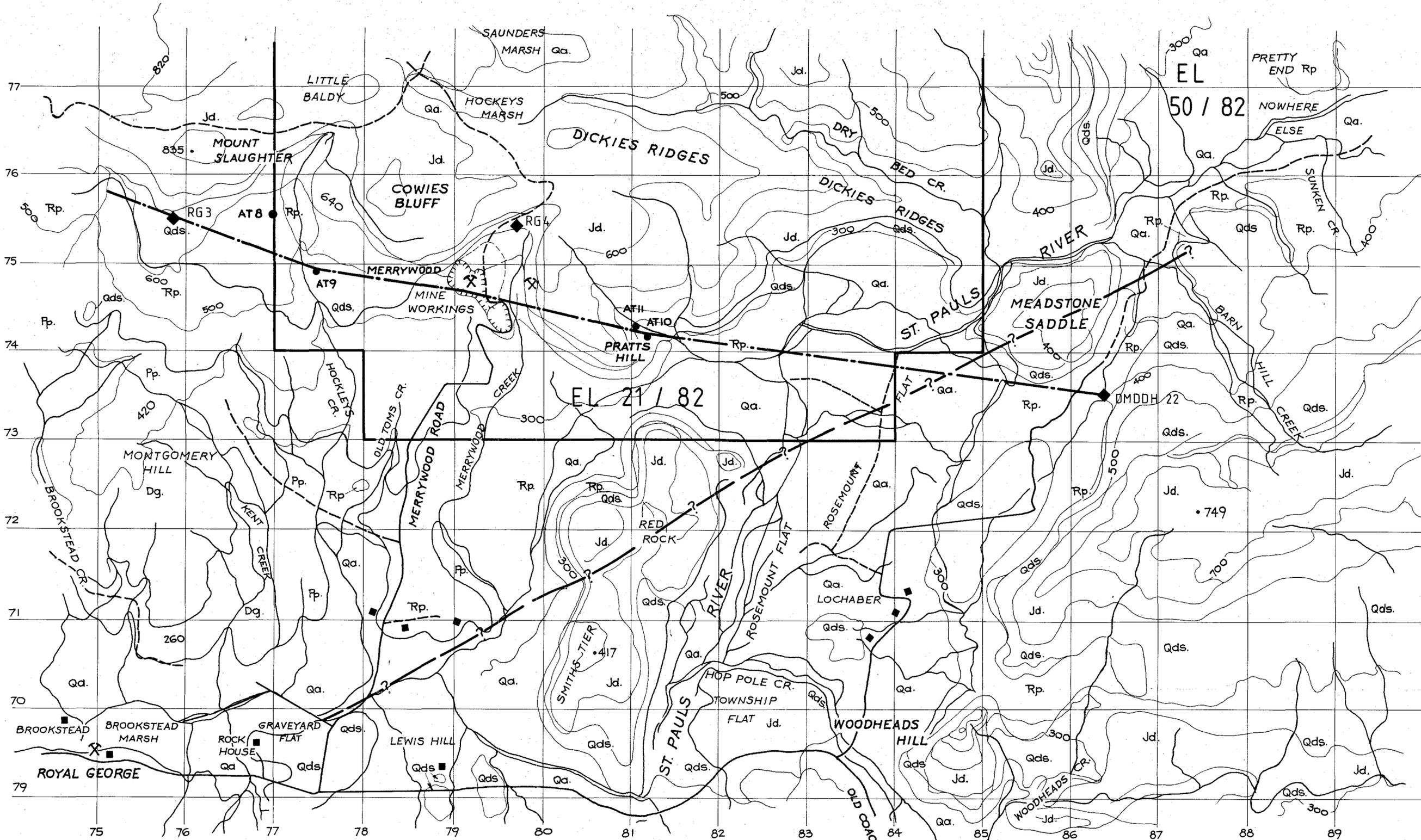
COAL SEAM SECTIONS - AT11, MERRYWOOD SEAM



SCALE 1:25



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**LEGEND :**

- SECTION LINE (FIGURE 3)
- EXPLORATION LICENCE BOUNDRY
- DIAMOND DRILL HOLE (NEW)
- ◆ DIAMOND DRILL HOLE (EXISTING)
- ?-?-? FAULT INFERRED
- PROPOSED DIAMOND DRILL HOLE

5 cm

SCALE = 1 : 30,000

DATE : 3-10-87

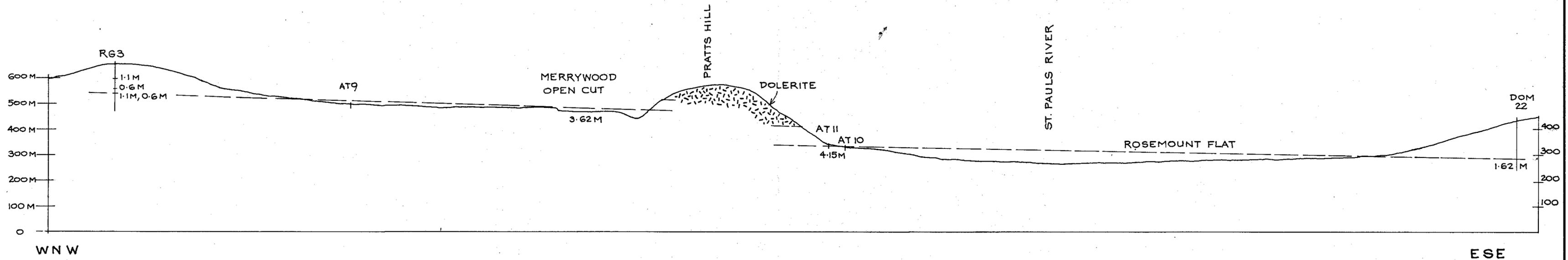
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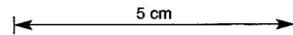
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**EL 21/82 COAL EXPLORATION - PLAN**

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SCALE : H = 1 : 20,000  
 V = 1 : 10,000



----- MERRYWOOD COAL SEAM

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CONCEPTUAL STRUCTURAL SECTION THROUGH MERRYWOOD COAL MINE (FIGURE 3)

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