

EXPLORATION LICENCE 5/61QUARTERLY REPORT - 24/8/81 TO 23/11/81

U.M.	A.O.	C.G.	E.O.	D.S.M.F.
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SUMMARY

Exploration and feasibility activities during the quarter have centred on the completion of reports on the Mount Nicholas deposit, field mapping and the initiation of a drilling programme at Harefield, restoration at Mount Nicholas, and the preparation for drilling at Douglas River.

Exploration priorities have been determined by our policy of progressing work which is most likely to lead to the early development of a mine. It is a consequence of this policy that exploration of the Harefield prospect has taken priority over measured reserves drilling at Douglas River. Clearly the existence of significant open-cut reserves at Harefield could substantially benefit the viability of the Mount Nicholas deposit, while Douglas River, by virtue of its location and restricted mining access, must be seen as potentially viable only in the long term.

Expenditure for the quarter has been approximately \$100,000.

MOUNT NICHOLAS

The results of pre-feasibility exploration at Mount Nicholas are reported fully in report CEPR 11/81 entitled "An Assessment of the Mount Nicholas Coal Deposit". This report, two volumes of which were completed during the quarter, concludes that from the measured and indicated reserves of 45.5 million tonnes it should be possible to produce a total of 14.7 million tonnes of washed product coal. A typical product specification of 9% total moisture, 20% moist ash, and 23.3 MJ/jg moist specific energy is estimated at washery yields ranging from 67.5% to 80%.

As a consequence of the limited reserves base at Mount Nicholas it is clear that it will not be possible to sustain an annual production rate exceeding 700,000 tonnes over an acceptable mine life. It is however also evident that a minimum production close to the present total production of Tasmanian coal (300,000 tonnes) will be required to support the substantial capital investment required for the development of a new mine and wash plant. In view of these basic constraints, and the uncertainty which currently surrounds the market for coal in Tasmania, the nearby Harefield prospect assumes great importance as a potential source of flexible incremental coal production.

Operations at Mount Nicholas during the quarter were restricted to the cementing of boreholes as a safety precaution for future mining.

HAREFIELD

The structural interpretation which flowed from the drilling of GY32 in mid-1980 suggested that the Dalmyne D seam might subcrop beneath the southern part of the Break O Day Plain near Harefield. This possibility was strengthened by the drilling this year of GY47 and GY48 (Enclosures 1, 2 and 3) which showed that the elevation of the Dalmyne D seam approximated that of the plain to the north. Field mapping showed the presence of some thin seam outcrops, a predominance of flat dips, and a generally thin cover of Cainozoic cover. These favourable indications were however offset by the probability that any seams were thin, setting as a precondition for open-cut coal the existence of sizeable areas where the coal occurs at depths of less than 20m.

Page two

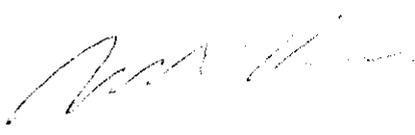
Following negotiations with landowners and the granting of statutory approvals, drilling commenced on 12th November with two rigs supported by a logging unit with digitizing capability. Shallow open holes generally less than 30m deep were drilled on nine lines spaced at 1 km intervals and aligned approximately normal to strike. In the initial phase holes were spaced at intervals sufficient only to establish the broad limits of potentially favourable areas. All holes were logged with an SIE unit running natural gamma, gamma-gamma density, and caliper logs.

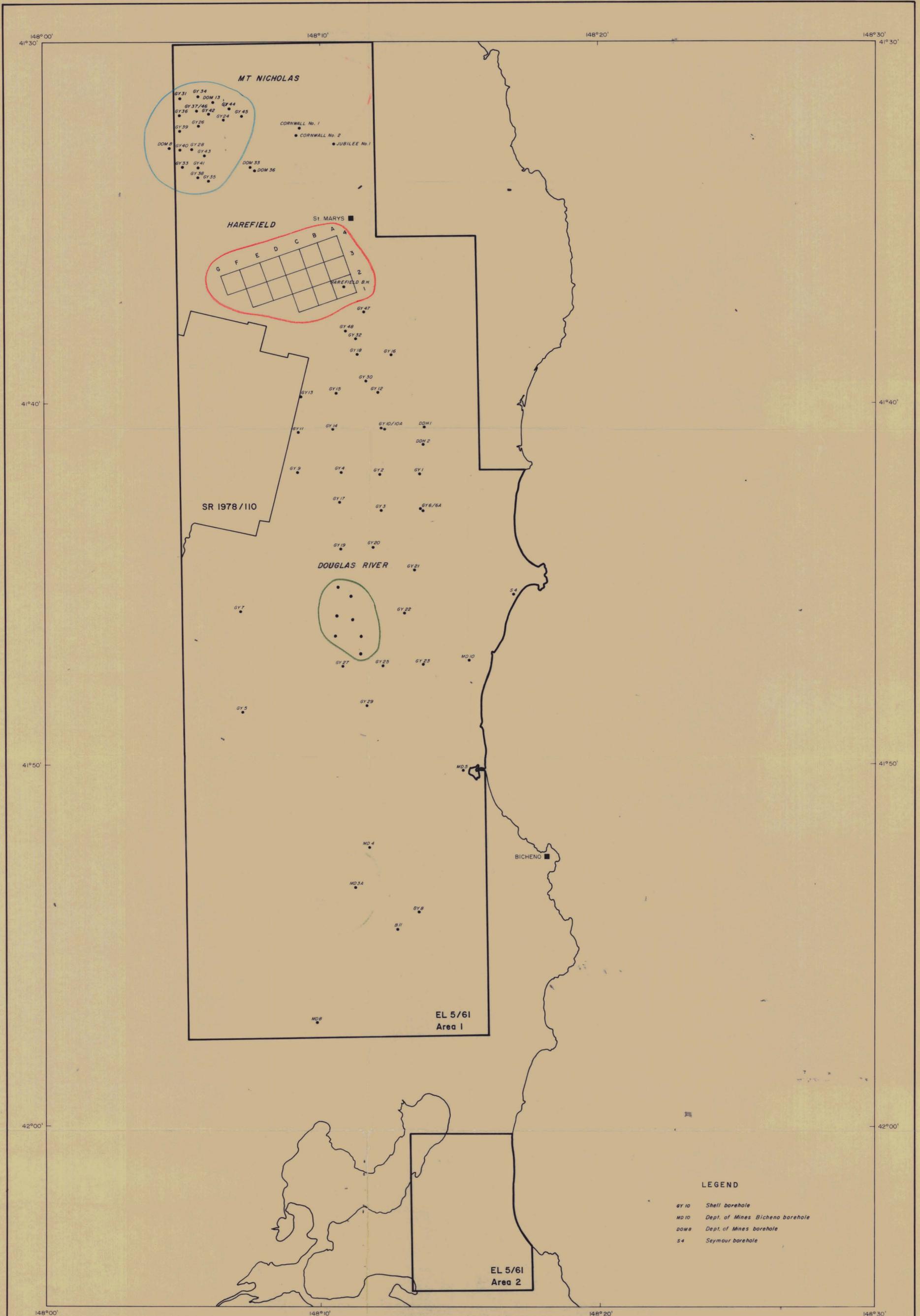
By 23rd November 30 holes had been completed for an aggregate of approximately 1000m of drilling. Results so far to hand suggest the area around lines A, B, C, D and F may have some promise. In these areas seams less than 2m thick occur over appreciable areas at depths of less than 20m. Drilling will continue in these areas to provide a basis for confident correlations and an approximate delimitation of the areas with acceptable overburden to coal ratios. Cored holes will also be drilled to provide accurate coal quality data and to provide the basis for a preliminary geotechnical assessment. Following the assessment of this data it is likely that a second drilling programme will be mounted this summer.

DOUGLAS RIVER

Drilling in 1978, 1979 and 1980 established indicated reserves of over 200 million tonnes in the Dalmayne - Douglas River areas. Segmentation of these reserves by major faults has however had the effect of severely restricting the reserves of coal which are accessible to adit entry mining. One segment which appears to show some promise is the area south west of an old adit on the Douglas River. The existing data shows that the Dalmayne D seam exceeds 3m in thickness and subcrops in a small area of the Douglas River valley. Structural, coal quality, and roof and floor trends are not known with any precision however. In view of the apparent occurrence of only one adit entry point, the mining geology of the area within a few kilometres of that entry may be critical to the viability of the whole Douglas River segment. Accordingly we have initiated a programme to assess measured reserves and mining conditions within 3 km of the indicated entry.

Access to the Douglas River area has been preserved by maintenance of tracks during the year. Statutory approvals were granted during the last quarter for the drilling of up to six holes. Local drill site construction will commence this Wednesday, 24th November, and drilling will commence immediately after the conclusion of the current Harefield programme on or about the 7th December.


W.H. KOPPE
HEAD OF EXPLORATION - SOUTHERN STATES



LEGEND
 GY 10 Shell borehole
 MD 10 Dept. of Mines Bicheno borehole
 DOM 8 Dept. of Mines borehole
 S 4 Seymour borehole

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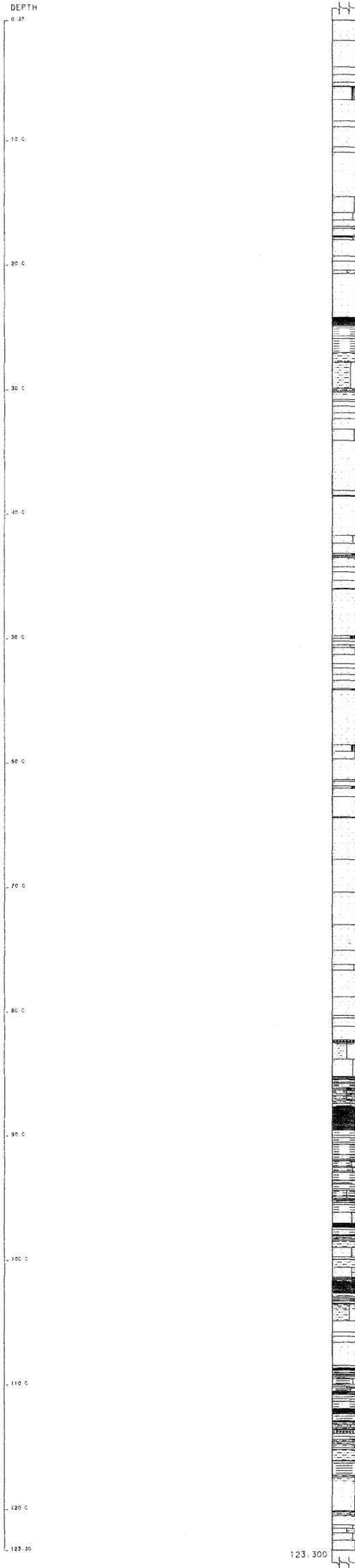
THE SHELL COMPANY OF AUSTRALIA LTD.

TASMANIA BASIN, TASMANIA
 SHELL - IMI EL 5/61 GRAY
 PROPOSED DRILLING
 PROGRAMME 1981-82

Scale 1:100000

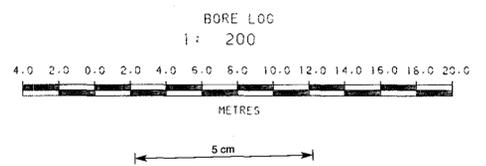
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LEGEND
LITHOLOGY REFERENCE

- | | | | |
|--|-----------------------|--|---------------------|
| | SANDSTONE | | SILTSTONE |
| | COAL | | COAL STONY |
| | MUDSTONE | | NOT CORED/CORE LOSS |
| | CARBONACEOUS MUDSTONE | | TONSTEIN |
| | | | CLAYSTONE |

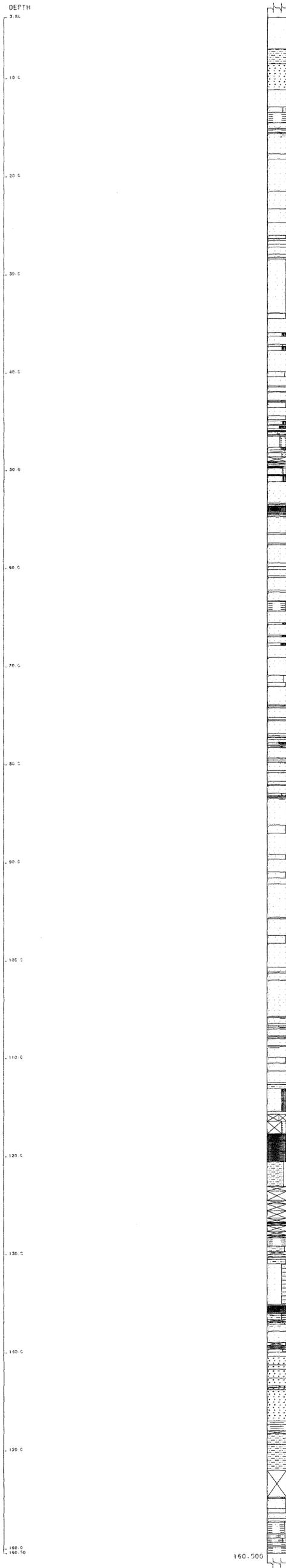


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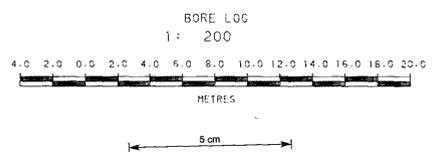
ENCLOSURE 2

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LEGEND
LITHOLOGY REFERENCE

- | | | | |
|--|-----------------|--|-----------------------|
| | BASIC INTRUSIVE | | COAL |
| | SANDSTONE | | CARBONACEOUS MUDSTONE |
| | SILTSTONE | | NOT CORED/CORE LOSS |
| | MUDSTONE | | CLAYSTONE |
| | | | CLAY |



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ENCLOSURE 3

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