# DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA

REPT BK NO. 91/55

COONALPYN DOWNS 1
WELL COMPLETION REPORT

GEOLOGICAL SURVEY

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K.L. LABLACK

BIOSTRATIGRAPHY

JUNE, 1991 DME 437/89

#### COONALPYN DOWNS 1

#### WELL HISTORY

#### WELL NAME:

Coonalpyn Downs 1

#### UNIT\_NUMBER:

6826 002 SW 01160

Approximately  $7\frac{1}{2}$  km SE of Coonalpyn along Dukes Highway. Located on old Dukes Highway at Todd Rd LOCATION:

intersection.

35°45′30" LATITUDE:

139°54′00" LONGITUDE:

21.215m (top of casing) ELEVATION:

TOTAL DEPTH: 105.10m

DATE DRILLED: 30/6/90 to 4/7/90

#### DRILLING COMPANY:

ROCKDRIL Contractors Pty Ltd

1 Jijaws St

Summer Park Qld 4074

DRILLER: Pederson

RIG: 8

#### CONSTRUCTION DETAILS:

Hole drilled at 90°

to 4m Rotary drilled with 7" blade bit and

cased with PVC

Rotary drilled HQ 5%" blade bit and to 51m

cased.

51 105.10m NQ Coring to

Casing pulled except for surface, plugged at 60 STATUS:

metres and backfilled.

## **PURPOSE:** Stratigraphic

The location was chosen primarily to intersect and core a complete sequence of the Buccleuch Group. The type section of the Buccleuch was defined by Ludbrook from Coonalpyn town bore.

The location was also selected to intersect basement at around 100m.

#### RESULTS:

The cored interval intersected the full sequence of Buccleuch lithology at this location and penetrated the top of the Renmark Group. Core recovery was rarely 100% and in the absence of geophysical logs through to the end of the hole, complete and accurate lithological details are not available. A preliminary lithological description of the cored interval is included by S.R. Barnett.

The sequence appears very similar to the type section with the exception that no greenish glauconitic limestone grading to marl at the base of the limestone was encountered.

A detailed study of foraminiferal fauna and palynoflora will be undertaken on the core material. Thin sections were taken and the results will be included in a later report.

Drilling ceased due to unconsolidated sand caving on drillstring. No water samples were taken, pre-Tertiary basement was not reached and geophysical logs extended only to 60 metres, the top of the Buccleuch black clays.

10 MAY 1991

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UNIT/STATE NO: 6826/1160

PLAN No S 22253 C

SHEET I OF 3

PROJECT:

## CORE DESCRIPTION

## COONALPYN DOWNS No. 1

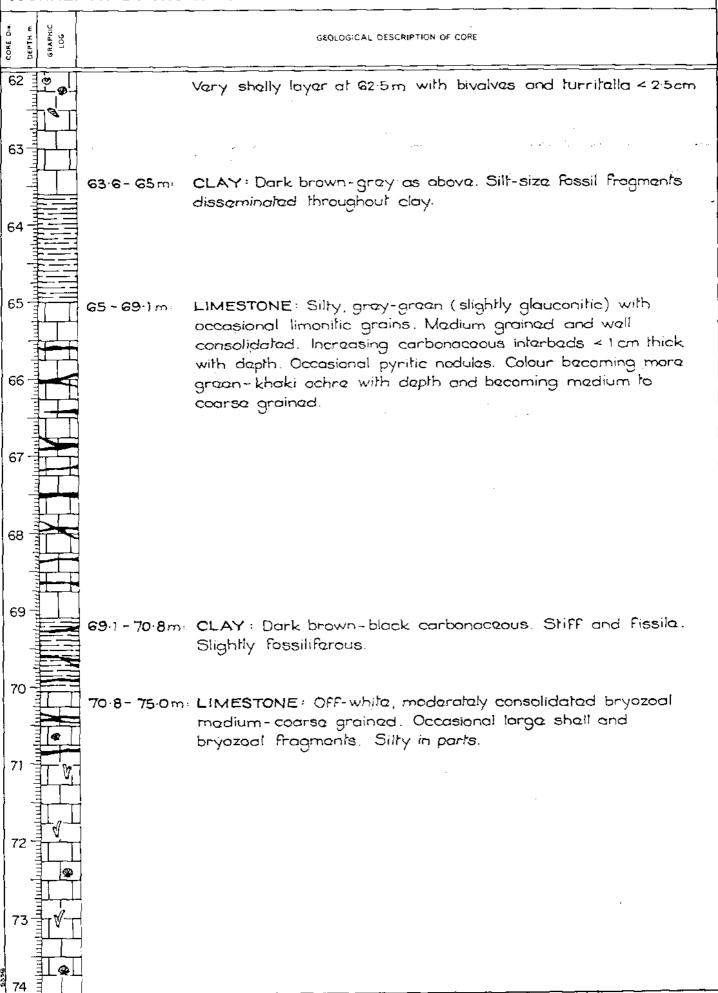
GRAPHIC LOG GEOLOGICAL DESCRIPTION OF CORE CORE 50.5-59.5m: LIMESTONE: Cream to off-white, strongly to moderately consolidated. Madium grained and fossiliferous. Occasional coarse shell fragments and very shally layers Bacoming darker yellow-orange with depth. 54.5-57.8 m: Dark orange comented, unfossiliferous and recrystallized (dolomita?). Below 57m, occasional shell casts. 57-8-58-2m: Strangly camental, coarsaly fossilifarous with occasional large shall fragments and casts. Blabs of yellow brown clay (+ red-brown clay) with rounded limonitic grains (<5mm). 58 58·2-58·8m: Dark yallow-oranga, vary fossilifarous, madiumcoarse grained, shelly and bryozal. 58-8-59-5 m: Unconsolidated, well sorted, fine grained 'sand' consisting of dark orange calcite and dolomite rhombs. 59.5 - GI-1 m = CLAY: Red-brown to yellow-brown, non-calcareous. Laminated. 60:0-61:1 m: Dark brown to gray, vary plastic and stiff. Occasional silf-size fossiliferous interbeds 60 - ₹ 61-1 - 63-6 m = LIMESTONE: Pala gray, unconsolidated fine grained fossil fragments, slightly glauconitic. Balow 62m, bacoming more consolidated, medium to coarse grained.

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PROJECT:

# CORE DESCRIPTION

COONALPYN DOWNS No. 1



DEPARTMENT OF MINES — SOUTH AUSTRALIA ENGINEERING DIVISION UNIT/STATE NO: 6826 / 1160 PROJECT: CORE DESCRIPTION COONALPYN DOWNS No. 1 DEPTH m GEOLOGICAL DESCRIPTION OF CORE 106 CORE 75-0-77-0 m: SILT: Very dark gray-brown. Unconsolidated and slightly Fossilifarous, clayay. 76 -77:0-78:0m: LIMESTONE: Pale and bryozoal, as for 70:8-75:0m. 78:0-78:5m: SILT: Dark gray-brown as above. 78.5-83.9m: LIMESTONE: Dark brown and bryozoal as above. Comented layers present. Some shall fragments, pale orange in colour. Slightly glauconitic. Large shall and echinoid fragments at base. 80 83.9-84.0 m: CONGLOMERATE: Rounded dark brown limonitic pebbles (up to 2cm) in camental bryozaal limestone matrix. 84-0-100-1 m: CLAY: Dark brown to black and carbonaceous laminated clay. Lignitic in part. Thin silty interbads with occasional very micaceous layers. Rare shell fragments in top 3cm. Poorly sorted, medium to coarse grained sandy clay intervals < 1cm thick. 90-PLAN No. 5 22253C SHEET 3 OF 3

HOLE NO