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853002

THE SHELL COMPANY OF AUSTRALIA LIMITED
(INCORPORATED IN VICTORIA)

AND

INDUSTRIAL AND MINING INVESTIGATIONS PTY LTD
(INCORPORATED IN THE ACT)

EXPLORATION LICENCE EL5/61
GRAY
TASMANIA

REPORT ON AREAS RELINQUISHED 24TH AUGUST, 1987

BY

F. BOS

MINES
File Ref. EL5/61
19 NOV 1987
Doc. Ref.
Action Officer
LETTER
17. 11. 87
REFERS.

November 1987

Report CR375

ktr1/jaa/022

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853003

C O N T E N T S

TEXT

1. Introduction
2. Description of Relinquished Areas
3. References

ENCLOSURES

1. Relinquished areas and borehole locations
2. Generalised borehole logs GYs, GY7, GY9, GY11
3. Wireline logs GY7, GY9, GY11 (Mines Department copy only)

APPENDICES (2. on microfiche)

1. General borehole data summary
2. Borehole lithological descriptions
3. Analytical data

1. INTRODUCTION

Exploration Licence (EL) 5/61 was granted for an area measuring 775 km^2 on 24 August, 1961. This licence was originally issued to Ernest Roy Hudson and was transferred under Section 15C(10) of the Mining Act, 1929 to Industrial and Mining Investigations Pty. Ltd. (IMI) on 16 January, 1963. The latest transfer to the Shell Company of Australia Limited and IMI took effect on 31 August, 1981.

The original area was reduced to 250 km^2 on 24 August, 1984 in order to conform with the new conditions governing exploration licences, which were introduced in 1982.

This report concerns the areas relinquished on 24 August 1987, the location of which is shown on Enclosure 1. Tenure of the non-relinquished portion of EL5/61 is continued under Retention Licences, numbered RL878, RL879, RL8710 and RL8711 on Enclosure 1.

This report summarises the reasons for relinquishment of Areas A to F and provides details on four boreholes drilled by the joint venturers within the boundaries of the relinquished portions.

2. DESCRIPTION OF RELINQUISHED AREAS

The following areas on Enclosure 1 are relinquished :

Area A - 1 square kilometre
Area B - 1 square kilometre
Area C - 63 square kilometres
Area D - 20 square kilometres
Area E - 8 square kilometres
Area F - 2 square kilometres

Total Areas A to F - 95 square kilometres

Four of the above areas (Areas A, B, E and F) do not contain any boreholes. Although continuations of coal seams known from adjacent areas may occur, these seams are unlikely to be of economic significance, justifying the relinquishment of Areas A, B, E and F.

Area C contains four boreholes drilled by the joint venturers (GY5, GY7, GY9 and GY11). The locations of the boreholes are shown on Enclosure 1 and their generalised lithology and stratigraphic correlations are shown on Enclosure 2. Complete details on lithological descriptions and analysis results are provided in Appendix 1 - 3 and prints of the wireline logs run on boreholes GY7, GY9 and GY11 are attached in Enclosure 3 (Mines Department copy only). Coal seams intersected in these holes are generally thin and of poor quality. As the borehole spacing is very wide, it is possible that local seam improvements are present within this area, but based on the available information retention of Area C was decided against.

Area D was explored by others in earlier years when a number of boreholes were drilled and shafts were sunk in what was called the Seymour Coalfield. These earlier activities are summarised in a report by Bacon and Calver (1984). Coal intersections described in this report are also unattractive, justifying relinquishment of this area.

3. REFERENCES

Bacon, C., Calver, C., 1984 - The Seymour Coalfield, Department of Mines, Tasmania, Unpubl. Report 1984/12

Coal Division (The Shell Company of Australia Limited), 1984 - Report on Areas to be Relinquished 24 August 1984, EL5/61 Gray, Tasmania

Cundy, W.H., 1931 - Seymour Coal Mines, Department of Mines, Tasmania, Unpubl. Report, Open file 31-048

Ford, R., and Bos, F., 1984 - Geology and Coal Resources of the Dalmayne, Douglas River and Apsley River Areas, Eastern Tasmania, E.L.5/61 Gray, The Shell Company of Australia, Report CEPR10/84

Richardson, R.G., Leaman, D.E., 1980 - A seismic Reflection Traverse on the Seymour Coalfield, Department of Mines, Tasmania, Unpubl. Report 1980/45

005

TOPOGRAPHIC SURVEY

ST. HELENS 30 km

BREAK O'DAY

SCAMANDER 5 km

REFER TO THIS MAP AS: SHEET 8514 (EDITION 1)
NATIONAL TOPOGRAPHIC MAP SERIES

FINGAL 16 km

FINGAL 4 km

ROYAL GEORGE 9 km

SWANSEA 17 km

COLES BAY 13 km

Mt Nicholas
ML 32 M/85

RL873

Harefield
RL879

Mt.
Elephant
RL879

Dalmayne
North

GY11

GY9

Dalmayne
RL8710

GY7

Douglas River
RL 8711

GY5

EL 5/61

A

B

C

D

E

F

T A S M A N

S E A

MACLEAN BAY

Mt Nicholas Sidings

Mt Nicholas

Mt Marys

Fingal

Break O'Day

Break O'Day Plains

Douglas River

Dalmayne

Swansea

Coles Bay

Mouting Lagoon CONSERVATION AREA

Bicheno

Scamander

Falmouth

Four Mile Creek

Ironhouse Point

Wardlaws Point

Red Rock Point

Hughes Point

Chain of Lagoons

Saltwater Inlet

Pipeshine Swamp

Picconinny Point

Templestowe Lagoon

Black Dog Hill

Long Point

Diamond Island

Governor Island

Alligator Rock

Meurs Rock

Perm Point

Bingham Bay

Cape Lodi

Courland Bay

Buttons Point

Isaacs Point

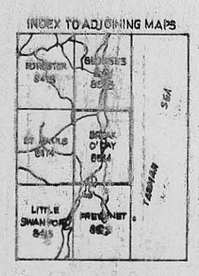
Mariposa Point

Burying Point

SCALE 1 : 100000

Kilometres 2 1 0 2 4 6 8 10 12 Kilometres

INDEX TO ADJOINING MAPS



BLACK NUMBERED GRID LINES ARE 1000 METRE INTERVALS OF THE AUSTRALIAN MAP GRID, ZONE 55
GRID VALUES ARE SHOWN IN FULL ONLY AT THE SOUTH WEST CORNER OF THE MAP
HORIZONTAL DATUM: AUSTRALIAN GEODETIC DATUM 1966
VERTICAL DATUM: AUSTRALIAN HEIGHT DATUM
TRANSVERSE MERCATOR PROJECTION
CONTOUR INTERVAL 20 METRES
ELEVATIONS IN METRES

PRODUCED by the Survey Branch, Lands Department, Hobart, under the direction of the Minister for Minerals and Energy, as part of the national mapping programme.
PRINTED by authority of the Minister for Minerals and Energy, 1975.
DISTRIBUTED by the Department of Minerals and Energy. A state edition is available from the Lands Department, Hobart.
MAP ACCURACY: The average accuracy of this map is ± 25 metres in the horizontal position of well defined detail and ± 5 metres in elevation.
MAP RELIABILITY: Topographic information shown on this map is correct to 1975
ROAD CLASSIFICATION: Roads are classified according to their intended function as part of the national road system.

GRID REFERENCE

TO GIVE A UNIQUE REFERENCE ON THIS SHEET TO NEAREST 100 METRES

IGNORE the SMALLER figures of any grid number; these are for finding the full co-ordinates. Use ONLY the LARGER figures of the grid number, e.g. 84/000

SAMPLE POINT: 778 △ MOUNT ST JOHN

1. Quote this 1 : 100 000 map sheet:	8514			
2. Locate first VERTICAL grid line to LEFT of point and read LARGE figures labelling the line either in the top or bottom margin, or on the line itself:		90		
3. Estimate tenths from grid line to point:			2	
4. Locate first HORIZONTAL grid line BELOW point and read LARGE figures labelling the line in either the left or right margin, or on the line itself:				79
5. Estimate tenths from grid line to point:				9
SAMPLE REFERENCE:	8514-902799			

CROWN COPYRIGHT RESERVED.

Built-up area; National routenarker
Principal road and highway; utting
Secondary road; Embankment
Minor road; Road bridge
Vehicular track
Gate; Cattle grid
Railway, multiple track; Statn; Railway bridge
Railway, single track; Railwetunnel
Light railway or tramway
Power transmission line
Fence; Loose or bank
Mine; Windmill; Yard; Quarry
Building/s; Church; Ruin; Drive-in theatre
Trig station; Bench mark; Spot elevation
Cliff; Contour with value; Depression contour
Abandoned Mine Workings
Exploration Licence and State Reserve Boundary

5 cm

GRID CONVERGENCE 0.0°

GRID MAGNETIC ANGLE 14·6°

TRUE NORTH, GRID NORTH AND MAGNETIC NORTH ARE SHOWN DIAGRAMMATICALLY FOR THE CENTRE OF THE MAP. MAGNETIC NORTH IS CORRECT FOR 1975 AND MOVES EASTERLY BY 0·1° IN ABOUT TWO YEARS.

● GY5 Location of borehole
Areas relinquished 24.8.84
Areas relinquished 24.8.87
Mt Nicholas ML 32 M/85

87-2736

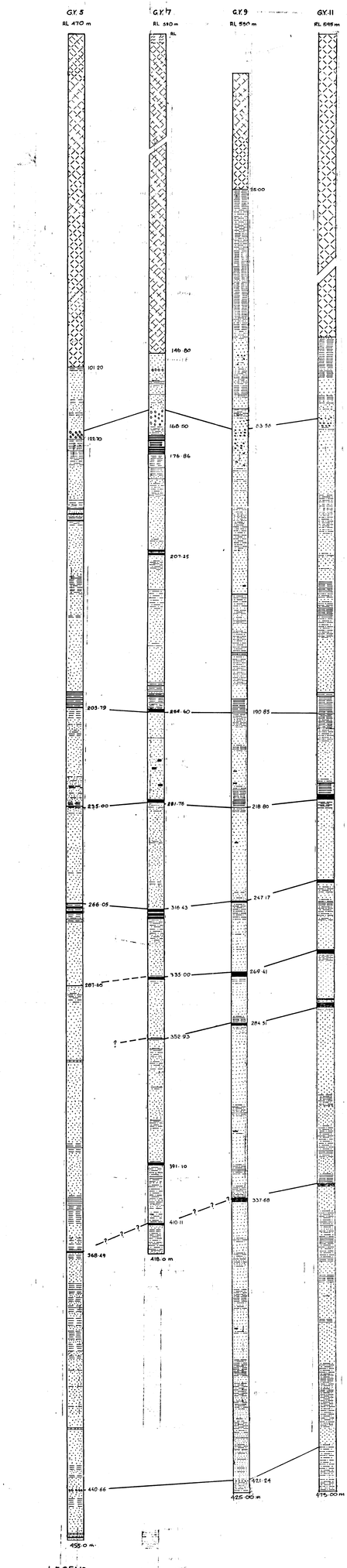
THE SHELL COMPANY OF AUSTRALIA LTD.

TASMANIA SHELL - | BASIN TASMANIA MI EL 5/61 GRAY

RELINQUISHMENT AREAS AND BOREHOLE LOCATIONS

Author: Coal Division		Date: Oct. 87	Encl. 1
Report No: CR376		Drawing No: 5371	

853007



LEGEND

- ALLUVIUM
- GRAVEL, DETRITUS, RUBBLE, SHINGLE CONGLOMERATE
- DETRITUS AND SAND
- SANDSTONE.
- SILTSTONE.
- SANDSTONE AND BANDS OF MUDSTONE ETC.
- SANDSTONE, COAL TRACES, COAL VEINS, COAL BANDS.
- MUDSTONE.
- MUDSTONE AND SANDSTONE BANDS.
- MUDSTONE, COAL BANDS ETC.
- SHALE.
- CARBONACEOUS SHALE.
- COAL.
- LIMESTONE.
- DOLERITE.
- METAMORPHOSED SHALES ETC.

VERTICAL SCALE OF METERS

10 0 10 20 30 m

853008

5 cm

87-2736

THE SHELL COMPANY OF AUSTRALIA LTD.

TASMANIA BASIN, TASMANIA
SHELL I.M.I EL 5/61 GRAY

GENERALISED BOREHOLE LOGS
GY5, GY7, GY9, GY11

Scale 1:500

Author: F. Bos	Date: Nov. 87	Encl.2
Report No: CR375	Drawing No: 3380	

007 87-2736

853009

DETAIL LOG
H.R.DENSITY

COMPANY Shell
BOREHOLE SYT(Gem)
STATE Tasmania COUNTRY Australia

Permanent Datum Rel. Elev. m.
Log measured from Rel. m. above P.D.
Drilling measured from Rel. m. above P.D.

GRID REF E N M.L.

Run No.	Depth/Scale	1	2	3	4
Date		14.10.76			
First Reading		350m 2650	2570		
Last Reading		350m 200m	2430		
Interval Measured		6m 50	140		
Casing Size					
Casing Driller					
Depth Reached		254.70m			
Bottom Driller		0.17m			
Mud Nature		air/water			
SG Viscosity					
Rd Size 1		54 in ID	in	in	
2		in	in	in	
3		in	in	in	
Casing Size 1		in	in	in	
2		in	in	in	
3		in	in	in	
Rm @ Meas Temp		@	@	@	
Rmf @ Meas Temp		@	@	@	
Rmc @ Meas Temp		@	@	@	
Bit					
Operating Time		5 1/2hrs			
Truck No		1104			
Recorded By		G.Pennington			
Witness					

Tool Pos.

REMARKS
Changes in Mud Rm or Additional Samples
Open Hole Diameter
Open Driller

Sonic: Time | Amplitude
Run | Bit Size | Rm @ Meas Temp | Rmf @ Meas Temp | Rmc @ Meas Temp | Rm @ Bht | Rmf @ Bht | Rmc @ Bht

Type | Size | Wt/ft | Grade | Top | Btm

Type Fluid in Hole | Salinity ppm Cl | pH | Fluid Loss | Source of Sample | Rm @ Meas Temp | Rmf @ Meas Temp | Rmc @ Meas Temp | Rm @ Bht | Rmf @ Bht | Rmc @ Bht

Equipment Number | Location

Recorded | Run | Bit | From | To

Equipment Number | Location

Recorded | Run | Bit | From | To

Equipment Number | Location

Recorded | Run | Bit | From | To

Equipment Number | Location

Recorded | Run | Bit | From | To

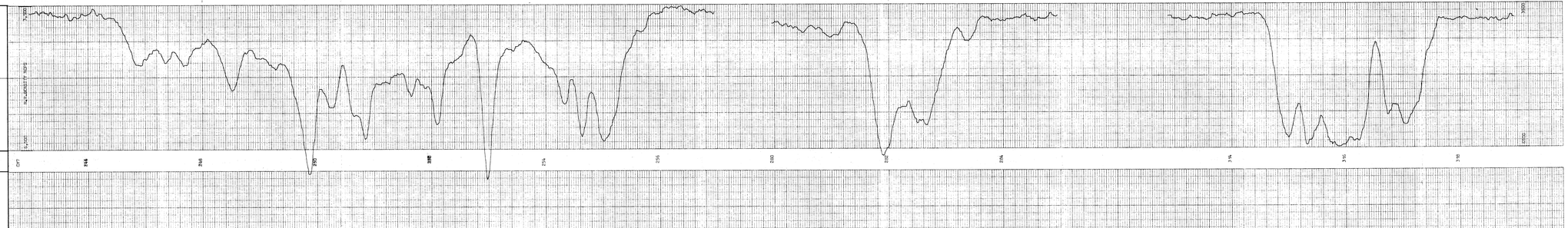
Equipment Number | Location

Recorded | Run | Bit | From | To

Logged through Csg. Shoe

DEPTHS

H.R. DENSITY


2.700
H.R. DENSITY (gm/cc)
2.200
007
007
007

008

87-2736 853010

BPB SEAM THICKNESS LOG

BOREHOLE GY7

CLIENT Shell

AREA Gray

COUNTRY Australia

DATE LOGGED 31.10.70

DEPTH SCALE 1:20 — 1:100

SEAM THICKNESS LOG

BOREHOLE DATA	REFER TO LITHOLOGY LOG
OPERATION DATA	REFER TO LITHOLOGY LOG

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE 127

SIDEWALL POSITION

LOG	TAPING			PANEL			LOG
	LOG SPEED	RECORDED SPEED	AMPLIFIER	SC	NORM		
CALIPER	V	2	8	3	1	–	
DENSITY	V	2	8	3	1	+	

SOURCE SONDE AND CALIBRATION

REFER TO LITHOLOGY LOG

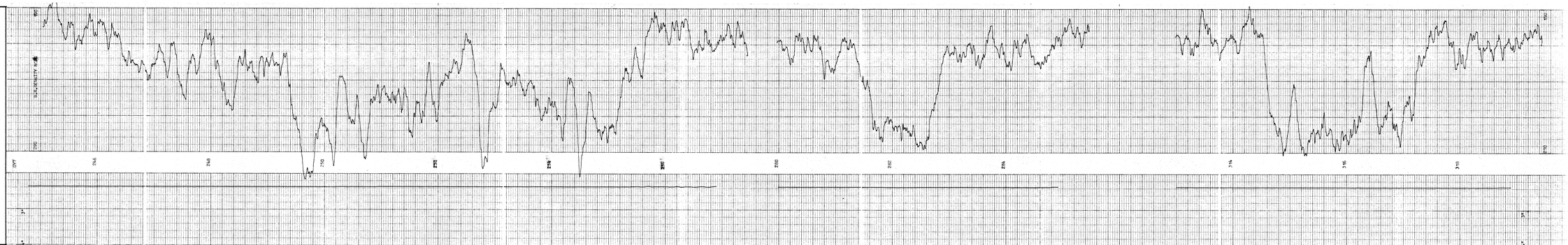
SEAM THICKNESS LOG INTERVALS

FROM	319m	308m	297m	
TO	313m	298m	245m	
INTERVAL	6m	5m	50m	
FROM				NOMINAL THICKNESS
TO				
INTERVAL				+ 3

REMARKS Logged through 7" rods

SONDE TYPE
COAL COMBINATION SONDE

LOG SUITE
CALIPER
B.R. DENSITY



1009

87-2256

GENERAL 6.02
NEUTRON - NEUTRON

COMPANY: Shell
BOREHOLE: Griffithstad
STATE: Transvaal COUNTRY: Rhodesia

Permanent Datum: Gl.s. Elev. m
Log measured from: Gl.s. 1m. above P.D.
Drilling measured from: Gl.s. 1m. above P.D.

CASING	Size	Wgt.	Grade	Thread	Depth	Bit Size
1						
2						
3						

RUN	Date	Depth Driller	Depth Logger	Bottom Log Interval	Top Log Interval	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss	Source of Sample	R @ Meas. Temp	@ Meas. Temp	R @ BHT	@ BHT	Time Since Circ.	Max. Rec. Temp.	Equip. Location	Recorded By	Witnessed By
1	27.2.56	1010	1009	1009	0	1010	0	6"	Mud	1.2	40	10	Flow	0.2 @ 20°C		0.1 @ 20°C		12 hrs	20°C	Bulawayo	Mr. Hall	Mr. Hall

Run No.	Permanent Datum	Elevation	Log Measured From	Above Permanent Datum	Drilling Measured From	Above Permanent Datum
1	Gl.s.		Gl.s.	1m.	Gl.s.	1m.

Run No.	Type Log	Depth Driller	Depth Logger	Bottom Log Interval	Top Log Interval	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss	Source of Sample	R @ Meas. Temp	@ Meas. Temp	R @ BHT	@ BHT	Time Since Circ.	Max. Rec. Temp.	Equip. Location	Recorded By	Witnessed By
1	Neutron	1010	1009	1009	0	1010	0	6"	Mud	1.2	40	10	Flow	0.2 @ 20°C		0.1 @ 20°C		12 hrs	20°C	Bulawayo	Mr. Hall	Mr. Hall

	1	2	3
Run No.	1		
Date	27.2.56		
Depth Driller	1010		
Depth Logger	1009		
Bottom Log Interval	1009		
Top Log Interval	0		
Casing Driller	1010		
Casing Logger	0		
Bit Size	6"		
Type Fluid in Hole	Mud		
Density	1.2		
Viscosity	40		
Fluid Loss	10		
Source of Sample	Flow		
R @ Meas. Temp	0.2 @ 20°C		
@ Meas. Temp			
R @ BHT	0.1 @ 20°C		
@ BHT			
Time Since Circ.	12 hrs		
Max. Rec. Temp.	20°C		
Equip. Location	Bulawayo		
Recorded By	Mr. Hall		
Witnessed By	Mr. Hall		

Run	Bit	From	To
1	6"	0	1010

Run	Type Log	Depth Driller	Depth Logger	Bottom Log Interval	Top Log Interval	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss	Source of Sample	R @ Meas. Temp	@ Meas. Temp	R @ BHT	@ BHT	Time Since Circ.	Max. Rec. Temp.	Equip. Location	Recorded By	Witnessed By
1	Neutron	1010	1009	1009	0	1010	0	6"	Mud	1.2	40	10	Flow	0.2 @ 20°C		0.1 @ 20°C		12 hrs	20°C	Bulawayo	Mr. Hall	Mr. Hall

010

853012 81-2736

BPB

BOREHOLE 117

CLIENT Zimi

AREA Hwy

COUNTRY Australia

DATE LOGGED 31/12/81

DEPTH SCALE 1:5 1:5 or 1:200

COAL QUALITY LOG

BOREHOLE DATA	REFER TO LITHOLOGY LOG
OPERATION DATA	REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA	

COAL COMBINATION SONDE SCT

LOG	TAPING			PASS			DEPTH
	LOG	SPEED	SENSITIVITY	SPEED	SENSITIVITY		
GAMMA	Y	2	5	5	4	4	208
L.S.DENSITY	Y	2	1	3	1	2	208

SOURCE SONDE AND CALIBRATION

REFER TO LITHOLOGY LOG

SONDE TYPE: COAL COMBINATION SONDE

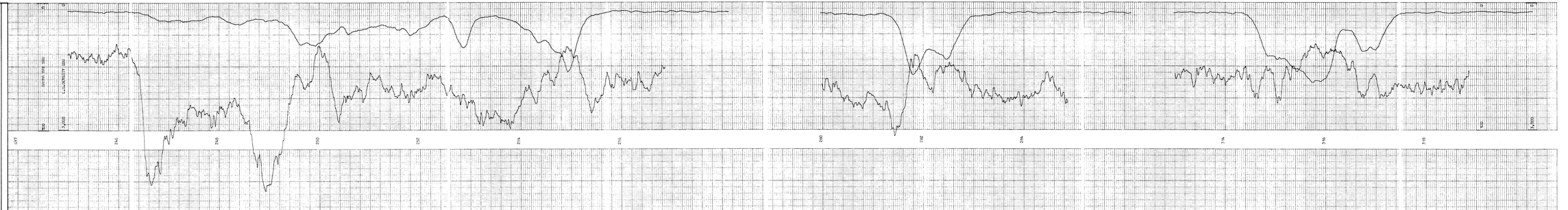
LOG SUITE: GAMMA RAY L.S. DENSITY

COAL QUALITY LOG INTERVALS

FROM	3.50m	5.65m	207m	
TO	3.13m	207m	147m	
NORMAL	um	5m	10m	
FROM				NORMAL
TO				LOG
NORMAL				LOG

REMARKS Leopard Stanmouth Fly Roads

BPB COAL QUALITY LOG



011 ×55013 78-2734

BPB

BOREHOLE —07—
CLIENT BOSCI

AREA Soay
COUNTRY Inner Hebrides
DATE LOGGED 27/10/77

DATE RUN 28/10/77
LOG No. 3-788

COAL LITHOLOGY LOG

SONDE TYPE
COAL
COMBINATION
SONDE

LOG SUITE
GAMMA RAY
γ-γ DENSITY
CALIPER

BOREHOLE DATA

	BIT	DRILLER
DIAMETER (INS)	12¼	DATA
DEPTH (FEET)	357	& TDS
CASING SIZE		
CASING WEIGHT		
CASING GRADE		

FLUID DATA

LEVEL	Estimated
TEMP	
SALINITY	
PH & VISCOSITY	

OPERATION DATA

RIG FLOOR	0.00
GROUND LEVEL	0.00
KB TO G.L.	0.00
OPERATOR	Rutherford's
LOGGED	

EQUIPMENT AND RECORDING DATA

	Run No.	Date	Time	Depth (Driller)	Depth (Logger)	Bottom Log Interval	Top Log Interval	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss	Source Type	Source Strength	Rm @ Meas. Temp.	Rmf @ Meas. Temp.	Rmc @ Meas. Temp.	Source of Rm, Rmf, Rmc	Rm @ BHT	Time Since Circ.	Max. Rec. Temp.	Equip. No.	Location	Recorded By	Witnessed By
	1	28/10/77	0900	357	357	357	0	0	0	12¼																

REMARKS

LOGGED THROUGH CASING

ADDITIONAL SONDES R/A

SONDE	SER. NO.	DIST. ABOVE BIT
		FEET / INCHES

	Run No.	Date	Time	Depth (Driller)	Depth (Logger)	Bottom Log Interval	Top Log Interval	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss	Source Type	Source Strength	Rm @ Meas. Temp.	Rmf @ Meas. Temp.	Rmc @ Meas. Temp.	Source of Rm, Rmf, Rmc	Rm @ BHT	Time Since Circ.	Max. Rec. Temp.	Equip. No.	Location	Recorded By	Witnessed By

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

	GAMMA RAY	BULK DENSITY
CALIB. START		
CALIB. END		
CALIB. BY		
CALIB. No.		
CALIB. DATE		

GAMMA RAY: API units, 0 – 200 – 400 – 600 – 800

BULK DENSITY: g/cm³, 1.95 – 2.00 – 2.05 – 2.10 – 2.15 – 2.20 – 2.25 – 2.30 – 2.35 – 2.40 – 2.45 – 2.50 – 2.55 – 2.60 – 2.65 – 2.70 – 2.75 – 2.80 – 2.85 – 2.90 – 2.95 – 3.00

DEPTH: 0 – 50 – 100 – 150 – 200 – 250 – 300 – 350 – 400 – 450 – 500 – 550 – 600 – 650 – 700 – 750 – 800 – 850 – 900 – 950 –

B13

550864 83-2734

B P B

SEAM THICKNESS LOG

SONDE TYPE
COMBINATION
SONDE

LOG SUITE
CALIPER
BIT DENSITY

WELL DATA

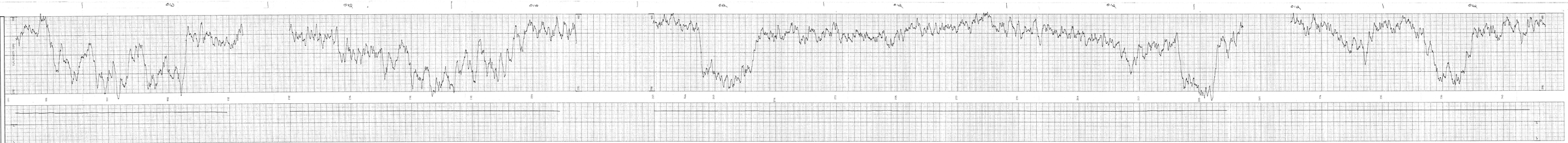
BOREHOLE DATA

OPERATION DATA

EQUIPMENT AND RECORDING DATA

SEAM THICKNESS LOG INTERVALS

B P B SEAM THICKNESS LOG



013

852012 51-2756

SCHLUMBERGER

COMPANY EXXON

WELL 1-32 SCHULTZ

FIELD WILDCAT COUNTY CHEYENNE STATE COLORADO

Permanent Datum: Gr.L. Elev. ---

Log Measured from: G.L. 4.5 ft. above P.D.

Drilling Measured from: G.L. 4.5 ft. above P.D.

	1	2	3
Run No.	One	Two	Three
Date	12-30-85		
First Reading	11150	10726	9350
Last Reading	10726	9350	8000
Bit Size	8 3/4"	8 3/4"	8 3/4"
Casing Driller	8 5/8" @ 2000	@	@
Casing Logger			
Bottom Logged Interval			
Top Logged Interval			
Type Fluid in Hole	KCL/GEL/CHEM		
Density	9.2		
Viscosity	40		
pH	11		
Fluid Loss	6		
Source of Sample	FLOWLINE		
Rm @ Meas Temp	.68 @ 70°	@	@
Rmf @ Meas Temp	.54 @ 70°	@	@
Rmc @ Meas Temp	.85 @ 70°	@	@
Source Rmf / Rmc	M / M		
Rm @ BHT	.38 @ 200°F		
Time Since Circ.	24 HRS		
Max. Rec. Temp.	200°F		
Equip. Location	10726		
Recorded By	J. SCHMIDT		
Witnessed By	SUPERVISOR		

SCHLUMBERGER

DUAL INDUCTION-SFL

DUAL INDUCTION-LATEROLOG

BOREHOLE COMPENSATED SONIC

GAMMA RAY

CALIPER

SPONTANEOUS POTENTIAL

DUAL INDUCTION-SFL

DUAL INDUCTION-LATEROLOG

BOREHOLE COMPENSATED SONIC

GAMMA RAY

CALIPER

SPONTANEOUS POTENTIAL

DEPTH

013 013 013

014

825016 87-2756

COMPANY
BOREHOLE
STATE
COUNTRY
Permanent Datum
Log measured from
Drilling measured from
Elev.
Tie above P.D.
Tie above P.D.

RECORDED BY				
Run No.				
First Reading				
Last Reading				
Gain-x Selected				
Gain-n Selected				
Depth Recorded				
Depth Reached				
Max. Temp. Rec.				
Equipment No.				
Min. Diameter				
Fluid Level				
Source				
Density Log				
Rm @ Meas Temp				
Rmf @ Meas Temp				
Rmc @ Meas Temp				
Bit				
Casing Fluid				
Logged By				
Witnessed By				
Remarks				

015

552917

87-2754

BPB

BOREHOLE 329

CLIENT Shell

AREA SCRA

COUNTRY Swaziland

DATE LOGGED 31.10.87

SURFACE LEVEL

COAL LITHOLOGY LOG

BOREHOLE DATA

PERMANENT DATUM	m.a.s.l.	
LOGGING DATUM	m.a.s.l.	
DRILLER'S DEPTH	m	GROUND
LOGGER'S DEPTH	m	GROUND
DEPTH DRILLED	m	TODAY
CASING	DIA mm	FROM m TO m
CASING SHOE	DIA mm	FROM m TO m

FLUID DATA

TYPE	
LEVEL	
SALINITY	
DENSITY	
VISCOSITY	
TEMPERATURE	

OPERATION DATA

RECORDED BY	
WITNESSED BY	
EQUIPMENT NO.	
TIME SINCE CIRCULATION	
MAX. REC. TEMP.	
EQUIPMENT POSITION	
RIG TIME	

SONDE TYPE: COAL COMBINATION DENSITY

LOG SUITS: GAMMA RAY, N. DENSITY, CALIPER

EQUIPMENT AND RECORDING DATA

ADDITIONAL SONDES RUN

REMARKS

LOGGER'S STRING TO: m

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

GAMMA RAY

BULK DENSITY

CALIPER

0 m

30

60

90

120

150

180

210

240

270

300

330

360

390

420

450

480

510

540

570

600

630

660

690

720

750

780

810

840

870

900

930

960

990

1020

1050

1080

1110

1140

1170

1200

BPB 553915 93-2756

BPB

COAL QUALITY LOG

BOREHOLE NO.
ELEVATION (m)
AREA / LOCALITY
COUNTRY / PROVINCE
DATE LOGGED

BOREHOLE DATA — NEW TO LITHOLOGY LOG
OPERATION DATA — NEW TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
LOG COMBINATION RUNS NO'S

RUN	FROM	TO	DRILL.	CASING	LOGGED
1	0	1	1	1	1

PROBE TYPE / SERIAL / SECTION

PROBE	SERIAL	SECTION
GR		
DEN		

PROBE CONFIGURATION

LOGGING UNITS

	FROM	TO	SCALE
GR	0	150	API
DEN	1.95	2.55	g/cc

REMARKS

PROBE TYPE
COAL COMBINATION RUNS
LOG SUITS
GAMMA RAY
γ-γ DENSITY

COAL QUALITY LOG INTERVALS

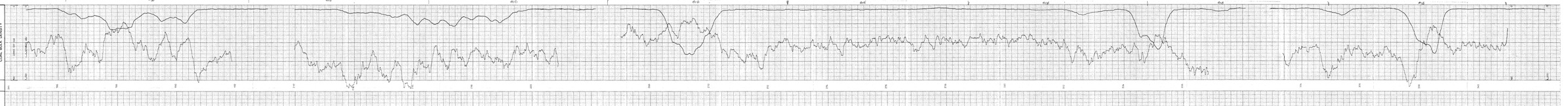
FROM	0 m	0 m	0 m	0 m
TO	0 m	0 m	0 m	0 m

REMARKS

BPB COAL QUALITY LOG

GAMMA RAY
COAL BULK DENSITY

DEPTH



87-2754

619228

BPB

SEAM THICKNESS LOG

BOREHOLE (ID) [illegible]

CLIENT [illegible]

AREA [illegible] FIELD [illegible]

COUNTY [illegible]

DATE LOGGED [illegible] RUN NUMBER [illegible]

BOREHOLE DATA	DEPTH TO DRILLER'S DEPTH [illegible]
OPERATING DATA	DEPTH TO LOGGER'S DEPTH [illegible]
EQUIPMENT AND RECORDING DATA	

TIME CONSTANT (SEC) [illegible] SPEED [illegible] SENSITIVITY [illegible]

	CASING	SIZE	WEIGHT	TOP	BASE
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

FLUID LEVEL AND OIL ARMOUR [illegible]

RECORDED BY [illegible] WITNESSED BY [illegible]

REMARKS [illegible]

SCALE TYPE: TOTAL COMBINATION SONDE

GG SUITE

CAL PER

BR DENSITY

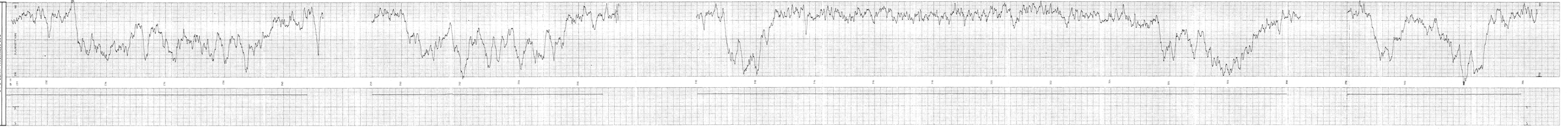
SEAM THICKNESS LOG INTERVALS

	Top	Base	Thickness
1	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

	Depth
Driller	[illegible]
Logger	[illegible]
Bottom Log Interval	[illegible]
Top Log Interval	[illegible]

TOLERANCE ± 0.05 SEC / 0.01 FEET (0.3 cm) APPROVED [illegible]

BPB SEAM THICKNESS LOG



010

87-2736

912620

SCHLUMBERGER

SCT-3A 4.3S

<1.4MM2277>

COMPANY Shell

BOREHOLE SCT-3(new)

STATE Tamaulipas COUNTRY Pueblillo

Permanent Datum: GL Elev. 0.0

Log measured from: KB 0.0 ft. above P.D.

Drilling measured from: KB 0.0 ft. above G.L.

Run No.	One	Two	Three	
Date	11-14-74			
Depth-Driller	10,476 ft.	ft.	ft.	
Depth-Logger	10,476			
Bottom Logged Interval	10,476			
Top Logged Interval	1,000			
Casing-Driller	13 3/8 @ 1,000			
Casing-Logger				
Bit Size	12 1/4			
Type Fluid in Hole	Lignosulfonate			
Density	10.2			
Viscosity	42			
pH	10.5			
Fluid Loss	6			
Source of Sample	Pit			
Rm @ Meas. Temp.	.4 @ 70°F	@ °F	@ °F	
Rmf @ Meas. Temp.	.3 @ 70°F	@ °F	@ °F	
Rmc @ Meas. Temp.	.5 @ 70°F	@ °F	@ °F	
Source of Rmf and Rmc	Meas.			
Rm @ BHT	.2 @ 200°F	@ °F	@ °F	
Time Since Circulation	12 hrs.			
Max. Rec. Temp.	200°F	°F	°F	
Equipment Number	1202			
Location	Pueblillo			
Recorded By	Gonzalez			
Witnessed By	Rodriguez			

RUN NO. | BIT SIZE | CASING-DRILLER | CASING-LOGGER | BOTTOM LOGGED INTERVAL | TOP LOGGED INTERVAL | TYPE FLUID IN HOLE | DENSITY | VISCOSITY | PH | FLUID LOSS | SOURCE OF SAMPLE | RM @ MEAS. TEMP. | RMF @ MEAS. TEMP. | RMC @ MEAS. TEMP. | SOURCE OF RMF AND RMC | RM @ BHT | TIME SINCE CIRCULATION | MAX. REC. TEMP. | EQUIP. NO. | LOCATION | RECORDED BY | WITNESSED BY

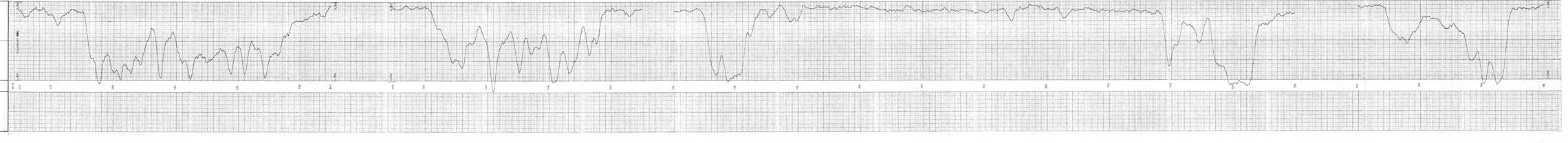
One | 12 1/4 | 13 3/8 @ 1,000 | | 10,476 | 1,000 | Lignosulfonate | 10.2 | 42 | 10.5 | 6 | Pit | .4 @ 70°F | .3 @ 70°F | .5 @ 70°F | Meas. | .2 @ 200°F | 12 hrs. | 200°F | 1202 | Pueblillo | Gonzalez | Rodriguez

DEPTH CONTROLLED BY

DEPTH RECORDER NO.

RECORDED BY

WITNESSED BY



819

87-2734

S25681

SCHLUMBERGER

WELL LOG

COMPANY [illegible]

BOREHOLE [illegible]

STATE [illegible] COUNTY [illegible]

Permanent Datum [illegible] Elev. [illegible] ft.

Log measured from [illegible] ft. above P.D.

Drilling measured from [illegible] ft. above P.D.

RUN NO.	ONE	TWO	THREE
DATE	[illegible]		
DEPTH-DRILLER	[illegible]		
DEPTH-LOGGER	[illegible]		
BTM. LOG INTERVAL	[illegible]		
TOP LOG INTERVAL	[illegible]		
CASING-DRILLER	[illegible]		
CASING-LOGGER	[illegible]		
BIT SIZE	[illegible]		
TYPE FLUID IN HOLE	[illegible]		
DENS. VISC.	[illegible]		
PH FLUID LOSS	[illegible]		
SOURCE OF SAMPLE	[illegible]		
RM @ MEAS. TEMP.	[illegible]		
RMF @ MEAS. TEMP.	[illegible]		
RMC @ MEAS. TEMP.	[illegible]		
SOURCE RMF RMC	[illegible]		
RM @ BHT	[illegible]		
TIME CIRC.	[illegible]		
MAX. REC. TEMP.	[illegible]		
EQUIP. LOCATION	[illegible]		
RECORDED BY	[illegible]		
WITNESSED BY	[illegible]		

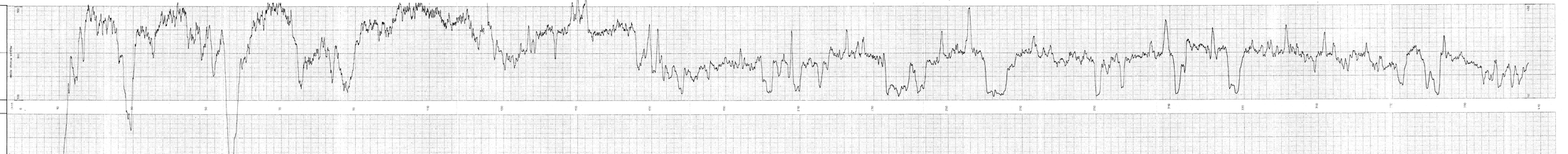
RUN NO. | BIT | FROM | TO | SIZE | WGT. | VISC. | FLUID LOSS

CASING RECORD | SIZE | WGT. | GRADE | FROM | TO | BIT SIZE

SCHLUMBERGER WELL SURVEYING CORPORATION

SONIC LOG

DEPTH



810 87-2756 820 553687

BPB

BOREHOLE 20/15
CLIENT BPCCL

AREA TITAS
COUNTRY AUSTRALIA

DATE LOGGED 2-10-96

COAL LITHOLOGY LOG

BOREHOLE DATA
DERRICK FLOOR 0.0 m
GROUND R.L. m
DEPTH DRILLER 0.0 m
DEPTH LOGGER 0.0 m
CASING SIZE 0.0 m
CASING DEPTH 0.0 m

FLUID DATA
LEVEL 17.0 m
TYPE Mud
DENSITY
VISCOSITY
PH / CHL. MG/L

OPERATION DATA
RIG NUMBER TOTAL
LOGGING UNIT NUMBER 10271
OPERATOR No. 170 / 71
LOGGED BY J.MCBRIDE / T.
WITNESS

SONDE TYPE
GAMMA
COMBINATION
SPACE

LOG SUITE
GAMMA RAY
DENSITY
CALIPER

DEPTHS AND BOREHOLE DATA

REMARKS
— LOGGED THROUGH 7in. CASING

ADDITIONAL SONDES RUN

BPB COAL LITHOLOGY LOG
FLUID LEVEL

GAMMA RAY
0 API 200
BULK DENSITY
2.4 g/cc 1.4

820 820 820

BPB

COAL QUALITY LOG

BOREHOLE 2211
SURVEY 2211

WELL TYPE
LOCATION 7500E/0N
DATE LOGGED 24/6/83

SCALE 1" = 5'

BOREHOLE DATA NONE TO OTHERWISE GIVEN
OPERATION DATA NONE TO OTHERWISE GIVEN
EQUIPMENT AND RECORDING DATA
ALL TIMING IN SECS. QTZ

| | | |

022

853024

APPENDIX 1

THE SHELL COMPANY OF AUSTRALIA LTD.

GENERAL BOREHOLE DATA SUMMARY

GRAY

023

THE SHELL COMPANY OF AUSTRALIA LTD.

GENERAL BOREHOLE DATA SUMMARY

GRAY

LEGEND

BOREHOLE TYPE

CHIP CHIP HOLE
CORE CORE HOLE
BORE WATER BORE
SHAFT SHAFT
REDR REDRILL
REVS REVERSE CIRC

UNIT

MM MILLIMETRES
M METRES

INFORMATION AVAILABLE

S SAMPLES
L LITHOLOGICAL DESCRIPTION
A ANALYSES
W WIRELINE LOGS
T GEOTECHNICAL DATA
(Y YES N NO)

DRILLING FLUID

X AIR
D WATER INJECTION WITH DETERGENT
A FRESH WATER
O MUD
M BENTONITIC MUD
B BRAN
Y OTHERS

WATER LEVEL

INIT - WATER LEVEL AT THE TIME OF FIRST INTERSECTION
STAND - WATER LEVEL AT THE TIME OF PETROPHYSICAL WIRELINE LOGGING

COLLAR ELEVATION REFERENCE

MSL METRES ABOVE SEA LEVEL

DATA SOURCE

SCOA SHELL COMPANY OF AUSTRALIA LTD.

853025

024

STATE TASMANIA
BASIN TASMANIA
PROSPECT GRAY

GENERAL BOREHOLE DATA SUMMARY

BOREHOLE NAME	TYPE	DATA SOURCE	(GRID) EASTING M	NORTHING M	ELEVATION MSL	DATE DRILLING COMMENCED	TOTAL DRILL DAYS	TOTAL DRILLED DEPTH	HOLE SIZE MM	CORE SIZE MM	WATER-LEVEL INIT M	WATER-LEVEL STAND M	DRILL FLUID	DEPTH WIRELINE LOGGED	INFORMATION AVAILABLE S L A W T
GY 5	CORE	SCOA	592,400	5,370,800	470.00	8/ 8/78	25	455.00							Y Y Y N N
GY 7	CORE	SCOA	593,300	5,375,900	590.00	3/ 9/78	13	418.92						381.00	Y Y Y Y N
GY 9	CORE	SCOA	595,800	5,383,100	530.00	17/ 9/78	17	426.20						408.60	Y Y Y Y N
GY 11	CORE	SCOA	596,000	5,385,000	590.00	5/10/78	14	473.00				10.00		407.00	Y Y Y Y N

853026

BELL+HOWELL

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 5

HOLE TYPE	CORE	
EASTING	592,400 M	GRID
NORTHING	5,370,800 M	GRID
ELEVATION	470.00 M	
TOTAL DEPTH DRILLED	455.00 M	
DRILLING STARTED	8/ 8/78	
DRILLING TIME	25 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 5

BELL+HOWELL

BOREHOLE : GY 5 PAGE 1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
12.00	12.00			100% DOLERITE	SCREE.
13.10	1.10	60		100% DOLERITE	MED.-COARSE GRAINED, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK.
16.19	3.09	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
23.00	6.81	100		100% DOLERITE	MED.-COARSE GRAINED, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS.
24.50	1.50	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
26.66	2.16	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
36.20	9.54	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
41.09	4.89	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
44.63	3.54	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS.
47.47	2.84	100		100% DOLERITE	MED.-COARSE GRAINED, STRONGLY FRAGMENTED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, SLIGHTLY WEATHERED, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
50.28	2.81	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
56.84	6.56	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
73.68	16.84	100		100% DOLERITE	MED.-COARSE GRAINED, STRONGLY FRAGMENTED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .
87.57	13.89	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH CALCITE ON JOINTS AND CHLORITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES. .
88.58	1.01	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREY, WITH TALC ON JOINTS AND CHLORITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES. .

BOREHOLE : GY 5 PAGE 2

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
89.60	1.02	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREEN, WITH CALCITE ON JOINTS AND CHLORITE ON JOINTS, STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
92.52	2.92	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREEN, MODERATELY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
100.56	8.04	100		100% DOLERITE	MED.-FINE GRAINED, BADLY BROKEN, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS.
101.20	0.64	100		100% DOLERITE	FINE GRAINED, BADLY BROKEN, GREY, WITH CALCITE ON JOINTS AND TALC ON JOINTS, MODERATELY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS.
101.55	0.35	100		100% SANDSTONE,COARSE GRAINED	CREAM, MODERATELY WEAK ROCK.
102.16	0.61	100		100% MUDSTONE	BAKED, FERRUGINOUS, YELLOW-BROWN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
103.44	1.28	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE LENSES, LIGHT GREY, WITH TALC ON JOINTS AND CHLORITE ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
106.69	3.25	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
106.97	0.28	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
111.32	4.35	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, WITH CHLORITE ON JOINTS AND TALC ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
112.23	0.91	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
112.70	0.47	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
114.96	2.26	100		100% SANDSTONE	MED.-COARSE GRAINED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
116.00	1.04	60		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
119.44	3.44	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE LENSES, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CROSS LAMINATION.
121.17	1.73	100		70% SANDSTONE 30% PEBBLE CONGLOMERATE	VERY COARSE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK.
122.70	1.53	100		100% PEBBLE CONGLOMERATE	GREY, MODERATELY WEAK ROCK.
122.90	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
125.72	2.82	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
126.05	0.33	40		100% MUDSTONE	SILTSTONE, BADLY BROKEN, LIGHT GREY, VERY WEAK ROCK.
126.34	0.29	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
127.14	0.80	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK GREY, CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
128.27	1.13	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
130.85	2.58	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
131.74	0.89	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
132.99	1.25	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
134.11	1.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
141.53	7.42	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
141.62	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
141.83	0.21	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK.
143.10	1.27	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
143.71	0.61	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
143.85	0.14	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
143.86	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
143.90	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
143.94	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	CARBONACEOUS, LAMINAE, WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.08	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT, MODERATELY WEAK ROCK.
144.10	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
144.12	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
144.15	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
144.18	0.03	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
144.20	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.21	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
144.28	0.07	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
144.31	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.41	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.51	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, WITH LIMONITE ON CLEAT, MODERATELY STRONG ROCK.
144.65	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
144.71	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH CALCITE ON CLEAT.
144.75	0.04	100		100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT.
144.79	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
144.83	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
144.88	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
144.97	0.09	100		100% COAL, DULL	
144.99	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
145.59	0.60	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.
146.03	0.44	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
146.26	0.23	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK.
146.56	0.30	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, JOINTS DIP 90 DEG.
146.84	0.28	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, BEDS DIP 10 DEG.
146.99	0.15	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN-BLACK, WEAK ROCK.
147.15	0.16	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
147.27	0.12	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
147.33	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
147.63	0.30	100		100% COAL, INTERBANDED DULL AND BRIGHT	HEAVY DULL COAL, BANDS, WITH CALCITE ON CLEAT.
148.31	0.68	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
149.28	0.97	100		100% SILTSTONE	SANDSTONE, BANDS, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
164.28	15.00	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,MEDIUM GRAINED	FRIABLE, BANDS, LIGHT GREY. CALCAREOUS, LIGHT GREY. MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
164.43	0.15	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
164.51	0.08	100		100% MUDSTONE	CARBONACEOUS, STREAKS, YELLOW-GREY, MODERATELY WEAK ROCK.
164.73	0.22	100		100% SILTSTONE	BADLY BROKEN, GREY-BROWN, VERY WEAK ROCK.
164.83	0.10	100		100% CLAYSTONE	YELLOW-GREY, VERY WEAK ROCK.
164.87	0.04	100		100% CLAYSTONE	YELLOW-GREY, SOFT.
165.04	0.17	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BROWN-BLACK, VERY WEAK ROCK.
165.21	0.17	100		100% MUDSTONE	BADLY BROKEN, DARK GREY, SOFT.
165.34	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
165.58	0.24	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
166.82	1.24	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
167.00	0.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
167.05	0.05	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK.
167.64	0.59	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
168.14	0.50	100		60% SANDSTONE 40% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS.
168.43	0.29	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
168.64	0.21	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
169.09	0.45	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
169.39	0.30	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
170.30	0.91	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.62	0.32	100		50% SANDSTONE 50% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, WITH LOAD CASTS.
171.42	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
174.42	3.00	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
175.76	1.34	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
176.61	0.85	100		100% SANDSTONE,MEDIUM GRAINED	BRIGHT COAL LENSES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, .
176.89	0.28	100		100% MUDSTONE	BADLY BROKEN, FISSILE, CREAM, VERY WEAK ROCK.
193.52	16.63	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.97	3.45	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
197.79	0.82	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
199.31	1.52	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
				TOP OF DALMAYNE B : DEPTH = 270.69 M	
200.30	0.99	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BUFF. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
200.51	0.21	0		CORE LOSS	
201.62	1.11	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. ARENACEOUS, BANDS, BUFF. MODERATELY WEAK ROCK, THINLY BEDDED.
201.69	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
201.89	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
201.98	0.09	100		100% CLAYSTONE	ARENACEOUS, CREAM, WEAK ROCK.
202.50	0.52	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, STREAKS, LIGHT BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
202.67	0.17	100	100%	CLAYSTONE	FISSILE, CREAM, STIFF, RAPID SLAKING.
202.74	0.07	100	100%	MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
202.81	0.07	100	100%	MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
202.85	0.04	100	100%	SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
202.89	0.04	100	100%	MUDSTONE	CARBONACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK.
202.95	0.06	100	100%	MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
203.09	0.14	100	100%	MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
203.13	0.04	100	100%	MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
203.29	0.16	100	100%	CLAYSTONE	CREAM, VERY WEAK ROCK, SLOW SLAKING.
203.57	0.28	100	100%	CLAYSTONE	FISSILE, CREAM, STIFF, RAPID SLAKING.
203.64	0.07	100	100%	MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
203.70	0.06	100	100%	COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
203.79	0.09	100	100%	COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.
		BASE OF DALMAYNE B : THICKNESS = 4.48 M; SAMPLED THICKNESS = 0.00 M			
203.96	0.17	100	100%	MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
205.06	1.10	100	100%	SILTSTONE	GREY, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
205.23	0.17	100	100%	MUDSTONE	FISSILE, YELLOW-GREY, VERY WEAK ROCK.
206.00	0.77	100	100%	MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
206.06	0.06	100	100%	CLAYSTONE	GREY-BROWN, VERY WEAK ROCK, WITH CARBONACEOUS WISPS.
206.15	0.09	100	100%	MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
206.52	0.37	100	100%	SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
206.66	0.14	100	100%	MUDSTONE	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
207.21	0.55	100	100%	SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
207.53	0.32	100	100%	SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
208.22	0.69	100	100%	SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
209.03	0.81	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
210.99	1.96	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
211.55	0.56	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
212.45	0.90	100		100% CLAYSTONE	SILTSTONE, BANDS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES.
224.42	11.97	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
225.16	0.74	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
225.81	0.65	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
226.25	0.44	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
226.92	0.67	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
227.58	0.66	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
227.62	0.04	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
227.64	0.02	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
227.66	0.02	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
227.68	0.02	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
227.70	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
227.78	0.08	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
228.05	0.27	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
228.54	0.49	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
229.39	0.85	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
230.07	0.68	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
231.68	1.61	100		60% SANDSTONE 40% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
232.39	0.71	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.

TOP OF DALMAYNE C : DEPTH = 237.61 M

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
232.96	0.57	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
233.00	0.04	100		100% CLAYSTONE	LIGHT GREY, VERY WEAK ROCK.
233.44	0.44	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
233.59	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
233.74	0.15	100		100% CLAYSTONE	FISSILE, LIGHT GREY, VERY WEAK ROCK.
233.79	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
234.36	0.57	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS.
				BASE OF DALMAYNE C : THICKNESS = 1.97 M; SAMPLED THICKNESS = 0.00 M	
234.51	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
234.87	0.36	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
235.58	0.71	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
235.85	0.27	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
236.05	0.20	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
236.23	0.18	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
245.09	8.86	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
245.82	0.73	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
253.75	7.93	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
253.85	0.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
255.60	1.75	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
255.80	0.20	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, WHITE, WITH BANDS OF CALCITE, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.68	0.88	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
256.91	0.23	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, WHITE, WITH BANDS OF CALCITE MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
260.36	3.45	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
262.84	2.48	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
262.98	0.14	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
263.14	0.16	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
263.18	0.04	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
263.21	0.03	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
263.24	0.03	100	2	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
263.59	0.35	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
263.62	0.03	100	2	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
263.69	0.07	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
263.72	0.03	100	2	100% MUDSTONE	GREY-BROWN, WEAK ROCK.
263.76	0.04	100	2	100% CLAYSTONE	LIGHT BROWN, FIRM.
		TOP OF		: DEPTH = 206.24 M	
263.93	0.17	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
263.99	0.06	100	3	100% MUDSTONE	FISSILE, LIGHT BROWN, STIFF.
264.04	0.05	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
264.15	0.11	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
264.56	0.41	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.
264.57	0.01	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
264.71	0.14	100	4	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
264.83	0.12	100	4	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
264.87	0.04	100	5	100% COAL, HEAVY DULL	
264.88	0.01	100	5	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
264.91	0.03	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
265.03	0.12	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
265.05	0.02	100	5	100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
265.14	0.09	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
265.16	0.02	100	5	100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK.
265.26	0.10	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.
265.62	0.36	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
265.88	0.26	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	HEAVY DULL COAL, BANDS.
265.90	0.02	100	5	100% COAL, BRIGHT	
266.00	0.10	100	5	50% COAL, BRIGHT 50% CARBONACEOUS SHALE	THINLY LAMINATED.
				BASE OF : THICKNESS = 2.24 M; SAMPLED THICKNESS = 2.24 M	
266.05	0.05	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK BROWN, WEAK ROCK.
266.16	0.11	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
266.54	0.38	100		100% MUDSTONE	COALY, TRACES, GREY, MODERATELY WEAK ROCK, LAMINATED.
267.17	0.63	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
267.30	0.13	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
267.79	0.49	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
267.81	0.02	100		100% CARBONACEOUS SHALE	COALY, LAMINAE.
267.89	0.08	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
267.95	0.06	100		100% CARBONACEOUS SHALE	COALY, LAMINAE.
268.05	0.10	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
268.36	0.31	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
268.59	0.23	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
268.61	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
268.85	0.24	100		100% MUDSTONE	FISSILE, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
269.28	0.43	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	MUDSTONE, LAMINAE, GREY. FISSILE, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
287.65	18.37	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
287.72	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGIC DESCRIPTION
289.84	2.12	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
291.36	1.52	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 20 DEG., WITH CROSS LAMINATION.
291.48	0.12	100		60% SANDSTONE,COARSE GRAINED 40% MUDSTONE	LIGHT GREY. CARBONACEOUS, DARK BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
292.36	0.88	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
293.40	1.04	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
304.70	11.30	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
304.85	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
304.94	0.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
304.98	0.04	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
305.06	0.08	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
305.60	0.54	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
306.65	1.05	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
307.83	1.18	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
308.85	1.02	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
309.10	0.25	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
310.47	1.37	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
310.65	0.18	100		100% CALCITE	SANDSTONE, BANDS, WHITE, MODERATELY WEAK ROCK.
314.82	4.17	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
314.97	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
332.23	17.26	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
334.98	2.75	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
335.12	0.14	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
335.35	0.23	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
335.78	0.43	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
336.37	0.59	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. GREY-BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
337.10	0.73	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
337.60	0.50	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
338.00	0.40	0		CORE LOSS	
338.02	0.02	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
338.14	0.12	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
339.06	0.92	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	GREY. SILTSTONE, GREY. MODERATELY WEAK ROCK, LAMINATED.
340.63	1.57	100		70% SANDSTONE 30% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. SANDSTONE, LAMINAE, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
341.40	0.77	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
346.74	5.34	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
346.99	0.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
350.26	3.27	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
350.89	0.63	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
352.80	1.91	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
352.90	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
353.07	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
353.88	0.81	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
354.38	0.50	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
354.46	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
354.69	0.23	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
355.09	0.40	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, LAMINATED.
355.30	0.21	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
355.53	0.23	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	LIGHT GREY. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
355.93	0.40	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
356.37	0.44	100		100% SANDSTONE	VERY FINE GRAINED, CREAM, MODERATELY WEAK ROCK.
356.63	0.26	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
356.84	0.21	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
356.94	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
357.40	0.46	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, LAMINATED.
357.80	0.40	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
358.80	1.00	0		CORE LOSS	
359.05	0.25	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
359.35	0.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
359.61	0.26	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
360.87	1.26	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
363.15	2.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
363.80	0.65	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
364.25	0.45	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
364.37	0.12	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
364.59	0.22	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY-BROWN. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
365.07	0.48	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
365.23	0.16	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
366.13	0.90	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
366.61	0.48	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
367.08	0.47	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
367.40	0.32	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
367.57	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, LAMINATED.
367.62	0.05	100	6	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
367.66	0.04	100	6	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
367.70	0.04	100	6	100% MUDSTONE	BROWN, WEAK ROCK.
				TOP OF DALMAYNE E2 : DEPTH = 102.30 M	
367.84	0.14	100	7	100% COAL, HEAVY DULL	
367.86	0.02	100	7	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
368.02	0.16	100	7	100% COAL, HEAVY DULL	
368.13	0.11	100	7	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
368.20	0.07	100	7	100% COAL, HEAVY DULL	
368.49	0.29	100	7	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	MUDSTONE, LAMINAE.
				BASE OF DALMAYNE E2 : THICKNESS = 0.79 M; SAMPLED THICKNESS = 0.79 M	
368.50	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
369.17	0.67	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, BROWN, MODERATELY WEAK ROCK.
369.55	0.38	100		100% CLAYSTONE	GREY, VERY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
370.11	0.56	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
370.40	0.29	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
371.16	0.76	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
377.35	6.19	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
377.68	0.33	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
378.00	0.32	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
379.00	1.00	0		CORE LOSS	
379.21	0.21	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
380.60	1.39	80		100% MUDSTONE	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
381.60	1.00	80		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
382.35	0.75	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
383.70	1.35	80		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
383.92	0.22	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
384.83	0.91	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
385.50	0.67	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
386.35	0.85	90		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WITH BANDS OF CLAY, MODERATELY WEAK ROCK, LAMINATED.
386.50	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
388.30	1.80	100		50% SILTSTONE 50% SANDSTONE	CARBONACEOUS, STREAKS, GREY. MED.-FINE GRAINED. MODERATELY WEAK ROCK, THINLY LAMINATED.
389.52	1.22	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
389.54	0.02	100		100% CLAYSTONE	FISSILE, BUFF, WITH LENSES OF CALCITE, STIFF.
390.00	0.46	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
390.18	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
390.44	0.26	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
390.46	0.02	100		100% CLAYSTONE	FISSILE, BUFF, STIFF.
391.14	0.68	100		50% MUDSTONE 50% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
392.07	0.93	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
392.95	0.88	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
393.36	0.41	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, WITH FRAGMENTS OF CALCITE, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, LAMINATED.
393.74	0.38	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
393.84	0.10	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
394.82	0.98	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
395.33	0.51	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
396.55	1.22	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
399.75	3.20	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
401.93	2.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH POOR SORTING.
402.23	0.30	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
402.45	0.22	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
403.58	1.13	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH POOR SORTING.
404.00	0.42	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
404.98	0.98	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
406.60	1.62	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
406.79	0.19	100		50% SILTSTONE 50% SANDSTONE	GREY. MED.-COARSE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 60 DEG., WITH CARBONACEOUS WISPS.
406.84	0.05	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
407.18	0.34	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
407.27	0.09	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
407.51	0.24	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
410.00	2.49	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
410.98	0.98	100		100% SANDSTONE	MED.-COARSE GRAINED, PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
411.65	0.67	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
412.24	0.59	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
412.48	0.24	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
412.62	0.14	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
416.00	3.38	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
416.27	0.27	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
416.88	0.61	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
417.02	0.14	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
418.20	1.18	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
419.65	1.45	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
420.95	1.30	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, LAMINATED.
421.45	0.50	100		100% LIMESTONE	LIGHT GREY, MODERATELY WEAK ROCK.
422.22	0.77	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
424.84	2.62	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
425.10	0.26	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
431.62	6.52	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
432.36	0.74	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
432.55	0.19	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
432.60	0.05	100		50% COAL, DULL 50% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED.
432.68	0.08	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
433.16	0.48	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, LAMINATED.
433.22	0.06	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
433.28	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
434.36	1.08	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK, WITH BURROWING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
435.21	0.85	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT BROWN. GREY-BROWN. WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, THINLY LAMINATED.
435.36	0.15	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
435.58	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
435.82	0.24	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
435.91	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, LAMINATED.
435.95	0.04	100		100% SANDSTONE	VERY FINE GRAINED, BROWN, MODERATELY WEAK ROCK.
436.09	0.14	100		100% SANDSTONE,FINE GRAINED	BROWN, MODERATELY WEAK ROCK.
436.37	0.28	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, LAMINATED.
436.67	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
436.78	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
436.92	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
438.13	1.21	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	MODERATELY WEAK ROCK, THINLY LAMINATED.
438.62	0.49	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
438.85	0.23	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
439.55	0.70	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	GREY-GREEN. SILTSTONE, GREY-GREEN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
439.76	0.21	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK.
440.09	0.33	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
440.50	0.41	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK.
440.66	0.16	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK.
441.04	0.38	100		100% MUDSTONE	SILTSTONE, GREY-GREEN, MODERATELY WEAK ROCK, LAMINATED.
441.34	0.30	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
442.20	0.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, MODERATELY WEAK ROCK.
444.77	2.57	100		60% MUDSTONE 40% MUDSTONE	SILTSTONE, GREY. SILTSTONE, GREEN. MODERATELY WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
445.61	0.84	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
445.89	0.28	100		100% SANDSTONE,FINE GRAINED	MUDSTONE LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
446.41	0.52	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
447.26	0.85	100		100% SANDSTONE,FINE GRAINED	MICACEOUS, LAMINAE, LIGHT GREEN, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
449.00	1.74	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH FRAGMENTS OF CALCITE AND LAMINAE OF MICA, MODERATELY WEAK ROCK.
452.74	3.74	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREEN, WITH STREAKS OF MICA, MODERATELY WEAK ROCK.
453.39	0.65	100		100% LIMESTONE	SANDSTONE, FRAGMENTS, CREAM, MODERATELY STRONG ROCK.
455.00	1.61	100		100% SANDSTONE	MED.-COARSE GRAINED, ARGILLACEOUS, LIGHT GREEN, WITH STREAKS OF MICA, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	199.31 - 203.79 M	4.48 M
DC	0.00 M	232.39 - 234.36 M	1.97 M
DC1	2.24 M	263.76 - 266.00 M	2.24 M
DE2	0.79 M	367.70 - 368.49 M	0.79 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	262.84 - 263.18 M	0.34 M
2	263.18 - 263.76 M	0.58 M
3	263.76 - 264.56 M	0.80 M
4	264.56 - 264.83 M	0.27 M
5	264.83 - 266.00 M	1.17 M
6	367.57 - 367.70 M	0.13 M
7	367.70 - 368.49 M	0.79 M

BELL+HOWELL

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 7

HOLE TYPE	CORE	
EASTING	593,300 M	GRID
NORTHING	5,375,900 M	GRID
ELEVATION	590.00 M	
TOTAL DEPTH DRILLED	418.92 M	
DRILLING STARTED	3/ 9/78	
DRILLING TIME	13 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 7

BELL+HOWELL

BOREHOLE : GY 7

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.00	4.00	100		100% DOLERITE	ARGILLACEOUS, BADLY BROKEN, ORANGE-BROWN, HIGHLY WEATHERED, WEAK ROCK.
17.50	13.50	100		100% DOLERITE	BADLY BROKEN, ORANGE-GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
21.00	3.50	100		100% DOLERITE	BADLY BROKEN, FISSILE, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK.
26.50	5.50	100		100% DOLERITE	BADLY BROKEN, GREY-GREEN, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
30.50	4.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
42.00	11.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
45.50	3.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
54.00	8.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
59.00	5.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
60.50	1.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
68.50	8.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
76.50	8.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 10 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
78.00	1.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
87.50	9.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
94.50	7.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
95.20	0.70	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
95.50	0.30	100		50% DOLERITE 50% CALCITE	BADLY BROKEN. CHLORITIC.
104.00	8.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
117.00	13.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CALCITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
124.00	7.00	100		100% DOLERITE	MOTTLED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
136.00	12.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
138.90	2.90	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
140.65	1.75	100		100% DOLERITE	CHLORITIC, BADLY BROKEN, GREY-GREEN, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
146.80	6.15	100		100% DOLERITE	FINE GRAINED, CHLORITIC, DARK GREY, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
148.73	1.93	100		100% SANDSTONE	MED.-COARSE GRAINED, GREEN, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
150.07	1.34	100		100% SANDSTONE,COARSE GRAINED	LITHIC, GREY-GREEN, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
151.52	1.45	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREEN, UNWEATHERED, MODERATELY STRONG ROCK.
151.74	0.22	100		100% PEBBLE CONGLOMERATE	LITHIC, RED-BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
154.40	2.66	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
154.87	0.47	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
154.92	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
154.96	0.04	100		100% COAL, HEAVY DULL	
155.22	0.26	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
155.42	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
156.60	1.18	100		100% SILTSTONE	GREY, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED.
157.97	1.37	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
158.63	0.66	100		100% SANDSTONE,COARSE GRAINED	LITHIC, CARBONACEOUS, GREY, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
159.08	0.45	100		100% MUDSTONE	CARBONACEOUS, BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
160.45	1.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, COALY, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
160.70	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
161.43	0.73	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, COALY, GREY, UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED.
161.78	0.35	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
163.35	1.57	100		100% SANDSTONE	LITHIC, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
163.71	0.36	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
163.89	0.18	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
168.50	4.61	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
168.84	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
170.67	1.83	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
170.80	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, WEAK ROCK.
170.87	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
171.07	0.20	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
171.19	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
171.26	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
171.34	0.08	100		100% COAL, HEAVY DULL	
171.39	0.05	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
172.10	0.71	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, WEAK ROCK.
172.20	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
172.24	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.58	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
172.61	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.80	0.19	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
172.84	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.89	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
173.01	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
174.60	1.59	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
174.67	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
174.70	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
176.40	1.70	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
176.46	0.06	100		100% COAL, HEAVY DULL	
176.52	0.06	100		100% COAL, INTERBANDED DULL AND BRIGHT	
176.54	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
176.59	0.05	100		100% COAL, HEAVY DULL	
176.68	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
176.73	0.05	100		50% COAL, BRIGHT 50% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
176.77	0.04	100		80% MUDSTONE 20% COAL, BRIGHT	CARBONACEOUS. LENSES.
176.86	0.09	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT.
176.88	0.02	100		70% MUDSTONE 30% COAL, BRIGHT	CARBONACEOUS.
177.95	1.07	100		100% MUDSTONE	GREY, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
178.00	0.05	100		70% COAL, BRIGHT WITH NUMEROUS DULL BANDS 30% MUDSTONE	CARBONACEOUS, BANDS.
179.25	1.25	100		100% MUDSTONE	COALY, STREAKS, DARK GREY.
179.81	0.56	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. LIGHT GREY.
180.10	0.29	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
180.47	0.37	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY.
180.65	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
180.80	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
181.30	0.50	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
181.42	0.12	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, VERY WEAK ROCK.
182.35	0.93	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
183.06	0.71	100		100% MUDSTONE	SILTSTONE, COALY, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
183.96	0.90	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
184.01	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
184.04	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
185.20	1.16	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
188.89	3.69	100		100% SILTSTONE	COALY, STREAKS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
188.96	0.07	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK.
189.54	0.58	100		100% SILTSTONE	ARENACEOUS, COALY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
189.95	0.41	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
194.00	4.05	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
198.72	4.72	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
199.14	0.42	100		100% SANDSTONE,FINE GRAINED	PEBBLY, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
202.66	3.52	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
203.42	0.76	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
204.93	1.51	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
205.34	0.41	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
205.56	0.22	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
205.74	0.18	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
205.85	0.11	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
205.91	0.06	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
205.95	0.04	100	1	100% CLAY	FISSILE, BROWN, UNWEATHERED, VERY WEAK ROCK.
206.15	0.20	100	1	100% COAL, HEAVY DULL	
206.22	0.07	100	1	100% MUDSTONE	ARENACEOUS, BROWN, UNWEATHERED, WEAK ROCK.
206.26	0.04	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
206.29	0.03	100	1	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
206.36	0.07	100	1	100% MUDSTONE	ARENACEOUS, BROWN, UNWEATHERED, WEAK ROCK.
206.39	0.03	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
206.55	0.16	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
206.59	0.04	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
206.64	0.05	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
206.75	0.11	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
206.97	0.22	100	1	100% COAL, HEAVY DULL	
207.07	0.10	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
207.11	0.04	100	1	100% COAL, DULL	
207.25	0.14	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
207.44	0.19	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
207.64	0.20	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
209.00	1.36	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
209.77	0.77	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
209.95	0.18	100		100% SILTSTONE	ARGILLACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
211.60	1.65	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
211.80	0.20	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
212.30	0.50	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
214.73	2.43	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
215.90	1.17	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES. .
217.78	1.88	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
217.88	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
218.90	1.02	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
223.54	4.64	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .
224.17	0.63	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, UNWEATHERED, STRONG ROCK.
224.32	0.15	100		100% SANDSTONE	COALY, LENSES, GREY, UNWEATHERED, STRONG ROCK.
225.34	1.02	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, UNWEATHERED, STRONG ROCK.
225.54	0.20	100		80% SANDSTONE 20% COAL	MED.-FINE GRAINED, LITHIC, GREY. LENSES UNWEATHERED, MODERATELY STRONG ROCK.
226.05	0.51	100		100% SANDSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
229.50	3.45	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
230.36	0.86	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
233.39	3.03	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
233.85	0.46	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK.
234.28	0.43	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
235.12	0.84	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
236.17	1.05	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
237.70	1.53	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
240.10	2.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
240.48	0.38	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
242.00	1.52	100		100% SANDSTONE	LITHIC, MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
243.60	1.60	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
245.93	2.33	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
246.11	0.18	100		100% CARBONACEOUS SHALE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
246.23	0.12	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK.
246.58	0.35	100		60% CARBONACEOUS SHALE 40% MUDSTONE	BLACK. CARBONACEOUS, BANDS, BLACK.
246.61	0.03	100		100% SILTSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
246.67	0.06	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK.
246.72	0.05	100		100% COAL, HEAVY DULL	
246.85	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
247.79	0.94	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN. SILTSTONE, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
247.84	0.05	100		100% CLAYSTONE	BUFF, UNWEATHERED, VERY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
248.45	0.61	100		60% CARBONACEOUS SHALE 40% MUDSTONE	COALY, BLACK. CARBONACEOUS, BANDS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
248.52	0.07	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, BUFF, UNWEATHERED, WEAK ROCK.
249.06	0.54	100		70% CARBONACEOUS SHALE	COALY, BLACK.
				30% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
249.36	0.30	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
249.50	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
249.55	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
249.63	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
249.76	0.13	100		100% COAL, HEAVY DULL	
249.88	0.12	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
250.01	0.13	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
250.13	0.12	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
250.18	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
250.40	0.22	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
250.83	0.43	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
251.18	0.35	100		100% CLAYSTONE	CARBONACEOUS, BANDS, BUFF, UNWEATHERED, WEAK ROCK.
251.30	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
251.39	0.09	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
251.85	0.46	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
252.13	0.28	100		100% SILTSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
252.37	0.24	100		100% CLAYSTONE	BUFF, UNWEATHERED, VERY WEAK ROCK.
252.54	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
252.60	0.06	100		100% SILTSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
252.73	0.13	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
253.00	0.27	100		100% SILTSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
253.50	0.50	100		60% SILTSTONE 40% MUDSTONE	CARBONACEOUS, LIGHT GREY. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE B : DEPTH = 336.50 M	
253.52	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
253.60	0.08	100	2	100% COAL, HEAVY DULL	
253.63	0.03	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
253.66	0.03	100	2	100% COAL, HEAVY DULL	
253.80	0.14	100	2	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
253.97	0.17	100	2	100% COAL, INTERBANDED DULL AND BRIGHT	
254.00	0.03	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
254.12	0.12	100	2	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
254.28	0.16	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	SANDSTONE, LENSES, WITH CALCITE ON CLEAT.
254.34	0.06	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
254.35	0.01	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
254.37	0.02	100	2	100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
254.60	0.23	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
				BASE OF DALMAYNE B : THICKNESS = 1.10 M; SAMPLED THICKNESS = 1.08 M	
254.69	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
254.74	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
254.81	0.07	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
254.86	0.05	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
255.01	0.15	100		100% SANDSTONE	COALY LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
258.10	3.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
262.02	3.92	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY BEDDED, WITH MUD PELLETS.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
262.05	0.03	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
272.34	10.29	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY BEDDED, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
272.37	0.03	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
272.76	0.39	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
272.92	0.16	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
278.92	6.00	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
278.94	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
279.36	0.42	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
280.73	1.37	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
				TOP OF DALMAYNE C : DEPTH = 309.27 M	
280.76	0.03	100	3	100% COAL, HEAVY DULL	
280.80	0.04	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
280.97	0.17	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
281.00	0.03	100	3	100% SANDSTONE	CARBONACEOUS, GREY.
281.04	0.04	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
281.09	0.05	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
281.10	0.01	100	3	100% COAL, BRIGHT	
281.25	0.15	100	3	100% COAL, HEAVY DULL	
281.27	0.02	100	3	100% COAL, DULL	
281.35	0.08	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
281.40	0.05	100	3	100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
281.44	0.04	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
281.47	0.03	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
281.51	0.04	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
281.57	0.06	100	3	100% COAL, DULL	
281.76	0.19	100	3	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
		BASE OF DALMAYNE C : THICKNESS = 1.03 M; SAMPLED THICKNESS = 1.03 M			
282.39	0.63	100		70% MUDSTONE 30% SILTSTONE	CARBONACEOUS, DARK BROWN. GREY UNWEATHERED, MODERATELY WEAK ROCK.
283.31	0.92	100		85% SILTSTONE 15% SANDSTONE	CARBONACEOUS, LENSES, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
283.80	0.49	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
284.12	0.32	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
284.37	0.25	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
293.44	9.07	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
293.60	0.16	100		100% SILTSTONE	MUDSTONE, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
293.62	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
293.82	0.20	100		100% SILTSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
294.41	0.59	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
294.47	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
296.00	1.53	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
297.56	1.56	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
298.12	0.56	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
298.85	0.73	100		100% SANDSTONE	SILTSTONE LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
301.03	2.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
301.33	0.30	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
301.93	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
302.14	0.21	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
302.74	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
303.62	0.88	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
304.20	0.58	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
305.51	1.31	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
305.60	0.09	100		100% CLAYSTONE	BUFF, UNWEATHERED, MODERATELY WEAK ROCK.
305.91	0.31	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
306.12	0.21	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
309.80	3.68	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
313.83	4.03	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
		TOP OF			: DEPTH = 276.17 M
313.86	0.03	100	4	100% CLAYSTONE	SHALY, BROWN, SOFT.
313.93	0.07	100	4	100% MUDSTONE	CARBONACEOUS, SHALY, BROWN-BLACK, MODERATELY WEAK ROCK.
313.97	0.04	100	4	100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
314.00	0.03	100	4	100% COAL, HEAVY DULL	BLACK, MODERATELY WEAK ROCK.
314.09	0.09	100	4	100% COAL, HEAVY DULL	
314.16	0.07	100	4	100% COAL, DULL	
314.19	0.03	100	4	100% COAL, HEAVY DULL	

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
314.21	0.02	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
314.26	0.05	100	4	100% MUDSTONE	SHALY, BROWN, FIRM.
314.32	0.06	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
314.40	0.08	100	5	100% COAL, HEAVY DULL	
314.43	0.03	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
314.46	0.03	100	5	100% COAL, DULL	
314.47	0.01	100	5	100% MUDSTONE	BROWN, SOFT.
314.60	0.13	100	5	100% COAL, DULL	
314.61	0.01	100	5	100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
314.66	0.05	100	5	100% COAL, DULL	
314.68	0.02	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
314.69	0.01	100	5	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
314.83	0.14	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
314.84	0.01	100	5	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
314.87	0.03	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
314.89	0.02	100	5	100% COAL, HEAVY DULL	
314.96	0.07	100	5	100% COAL, DULL	
315.19	0.23	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	
315.22	0.03	100	5	100% COAL, HEAVY DULL	
315.26	0.04	100	5	100% COAL, DULL	
315.31	0.05	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
315.38	0.07	100	5	100% COAL, DULL	
315.42	0.04	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
315.43	0.01	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
315.44	0.01	100	5	60% COAL, BRIGHT 40% SHALE	LIGHT BROWN. LAMINATED.
315.52	0.08	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
315.56	0.04	100	5	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
315.71	0.15	100	6	100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
315.83	0.12	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
315.84	0.01	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
315.86	0.02	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	
316.25	0.39	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
316.28	0.03	100	6	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
316.43	0.15	100	6	100% COAL, HEAVY DULL	
		BASE OF		: THICKNESS = 2.60 M; SAMPLED THICKNESS = 2.60 M	
316.44	0.01	100	7	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
316.46	0.02	100	7	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
316.62	0.16	100	7	100% MUDSTONE	CARBONACEOUS, SHALY, BROWN-BLACK, MODERATELY WEAK ROCK.
317.80	1.18	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
320.91	3.11	100		60% SILTSTONE 40% SANDSTONE	CALCAREOUS, GREY, MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
321.76	0.85	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
323.08	1.32	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
330.32	7.24	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
331.88	1.56	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
332.00	0.12	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
333.60	1.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
333.65	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
333.87	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
334.00	0.13	100		100% CARBONACEOUS SHALE	
		TOP OF	DALMAYNE D UPPER	: DEPTH = 256.00 M	
335.00	1.00	0		CORE LOSS	
		BASE OF	DALMAYNE D UPPER	: THICKNESS = 1.00 M; SAMPLED THICKNESS = 0.00 M	

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
335.65	0.65	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
336.23	0.58	100		100% SILTSTONE	ARENACEOUS BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
338.35	2.12	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
343.97	5.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
344.12	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
347.54	3.42	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
347.63	0.09	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
347.75	0.12	100		100% SILTSTONE	STRONGLY FRAGMENTED, GREY, UNWEATHERED, WEAK ROCK.
352.31	4.56	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
352.49	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
352.64	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR.
352.84	0.20	100		100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
			TOP OF DALMAYNE D LOWER : DEPTH = 237.16 M		
352.92	0.08	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
352.93	0.01	100		100% COAL, DULL	
353.00	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
353.03	0.03	100		100% COAL, HEAVY DULL	
			BASE OF DALMAYNE D LOWER : THICKNESS = 0.19 M; SAMPLED THICKNESS = 0.00 M		
353.05	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
353.08	0.03	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, WEAK ROCK.
353.11	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
353.13	0.02	100		100% COAL, HEAVY DULL	
353.14	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
353.22	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
353.48	0.26	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
355.52	2.04	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
356.14	0.62	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .
356.19	0.05	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK.
358.59	2.40	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .
358.75	0.16	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
359.67	0.92	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
361.00	1.33	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
362.00	1.00	0		CORE LOSS	
362.29	0.29	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
362.86	0.57	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
363.43	0.57	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
365.22	1.79	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
368.32	3.10	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
368.43	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
368.47	0.04	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
368.70	0.23	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
371.50	2.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
372.40	0.90	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
377.04	4.64	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
377.55	0.51	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WITH PLANT REMAINS.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
380.15	2.60	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
381.98	1.83	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
390.31	8.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
390.38	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK.
390.39	0.01	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
390.42	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
390.49	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
390.58	0.09	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
390.60	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
390.80	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
390.92	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
390.96	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
391.10	0.14	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
391.23	0.13	100		100% MUDSTONE	COALY, STREAKS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
391.25	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
391.41	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
391.44	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
392.00	0.56	100		100% SILTSTONE	CARBONACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
392.57	0.57	100		80% SILTSTONE 20% SANDSTONE	CARBONACEOUS, BANDS, DARK GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
393.06	0.49	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
394.38	1.32	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
395.00	0.62	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
395.07	0.07	100		100% CARBONACEOUS SHALE	DARK GREY, UNWEATHERED, WEAK ROCK.
395.18	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
395.21	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
395.32	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
395.62	0.30	100		100% SILTSTONE	ARENACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
396.06	0.44	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
396.67	0.61	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
397.95	1.28	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
398.58	0.63	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
399.68	1.10	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
400.24	0.56	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
401.00	0.76	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
401.13	0.13	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
401.34	0.21	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
401.67	0.33	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, LAMINATED.
402.50	0.83	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
403.52	1.02	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
404.14	0.62	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
404.56	0.42	100		100% SANDSTONE,FINE GRAINED	FRIABLE, GREY, WEAKLY CEMENTED.
404.80	0.24	100		100% MUDSTONE	FISSILE, GREY, STIFF, LAMINATED.
407.59	2.79	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
407.61	0.02	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
407.94	0.33	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, MODERATELY WEAK ROCK.
407.99	0.05	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, VERY WEAK ROCK.
408.07	0.08	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, MODERATELY WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
		TOP OF DALMAYNE E2 : DEPTH = 181.93 M			
408.21	0.14	100		100% COAL, HEAVY DULL	
408.44	0.23	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
408.57	0.13	100		100% COAL, DULL	
408.72	0.15	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
		BASE OF DALMAYNE E2 : THICKNESS = 0.65 M; SAMPLED THICKNESS = 0.00 M			
410.11	1.39	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
410.84	0.73	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
410.87	0.03	100		100% COAL, BRIGHT	
411.10	0.23	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
416.55	5.45	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
416.77	0.22	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, BANDS.
416.82	0.05	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
417.43	0.61	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED.
418.00	0.57	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.

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SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	1.08 M	253.50 - 254.60 M	1.10 M
DC	1.03 M	280.73 - 281.76 M	1.03 M
DC1	2.60 M	313.83 - 316.43 M	2.60 M
DDU	0.00 M	334.00 - 335.00 M	1.00 M
DDL	0.00 M	352.84 - 353.03 M	0.19 M
DE2	0.00 M	408.07 - 408.72 M	0.65 M

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SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	205.74 - 207.25 M	1.51 M
2	253.52 - 254.60 M	1.08 M
3	280.73 - 281.76 M	1.03 M
4	313.83 - 314.32 M	0.49 M
5	314.32 - 315.56 M	1.24 M
6	315.56 - 316.43 M	0.87 M
7	316.43 - 316.62 M	0.19 M

BELL+HOWELL

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 9

HOLE TYPE	CORE	
EASTING	595,800 M	GRID
NORTHING	5,383,100 M	GRID
ELEVATION	530.00 M	
TOTAL DEPTH DRILLED	426.20 M	
DRILLING STARTED	17/ 9/78	
DRILLING TIME	17 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		

INFORMATION AVAILABLE : SAMPLES TAKEN
ANALYTICAL DATA
LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 9

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BOREHOLE : GY 9 PAGE 1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
10.00	10.00	100		100% DOLERITE	BADLY BROKEN, RED-GREY, HIGHLY WEATHERED, VERY WEAK ROCK.
26.00	16.00	100		100% DOLERITE	ARGILLACEOUS, YELLOW-BROWN, COMPLETELY WEATHERED, WEAK ROCK.
32.80	6.80	100		100% DOLERITE	BADLY BROKEN, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK.
33.06	0.26	100		100% CLAY	ORANGE-YELLOW, SLIGHTLY WEATHERED, VERY WEAK ROCK.
33.21	0.15	100		100% CLAYSTONE	FRIABLE, GREY, UNWEATHERED, WEAK ROCK.
34.64	1.43	100		100% CLAYSTONE	YELLOW-BROWN, SLIGHTLY WEATHERED, WEAK ROCK.
35.62	0.98	100		100% CLAYSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
36.45	0.83	100		100% CLAYSTONE	SHALY, VARIAGATED COLOUR, SLIGHTLY WEATHERED, VERY WEAK ROCK.
36.60	0.15	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK.
38.10	1.50	100		100% CLAYSTONE	FRIABLE, SHALY, VARIAGATED COLOUR, UNWEATHERED, VERY WEAK ROCK.
38.63	0.53	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
39.08	0.45	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, VERY WEAK ROCK, THICKLY LAMINATED.
39.45	0.37	100		100% SILTSTONE	CARBONACEOUS, SHALY, DARK GREY, UNWEATHERED, VERY WEAK ROCK.
39.56	0.11	100		100% PEBBLE CONGLOMERATE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.
40.74	1.18	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, WEAK ROCK, THICKLY LAMINATED.
43.57	2.83	100		100% SILTSTONE	SHALY, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
45.88	2.31	100		100% SILTSTONE	ARENACEOUS, GREY-GREEN, WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, .
47.00	1.12	100		100% MUDSTONE	SHALY, FRIABLE, GREY, VERY WEAK ROCK.
47.17	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
48.87	1.70	100		100% SILTSTONE	ARGILLACEOUS, BANDS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

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BOREHOLE : GY 9 PAGE 2

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
49.23	0.36	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. GREY. WEAK ROCK, THICKLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
50.30	1.07	100		100% SILTSTONE	ARGILLACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
50.87	0.57	100		100% SILTSTONE	COALY, STREAKS, GREY, VERY WEAK ROCK.
51.85	0.98	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. LIGHT GREY. WEAK ROCK.
56.90	5.05	100		100% CLAYSTONE	ARENACEOUS, BANDS, VARIAGATED COLOUR, VERY WEAK ROCK.
57.11	0.21	100		100% CLAYSTONE	PEBBLY, BUFF, VERY WEAK ROCK.
58.20	1.09	100		100% CLAYSTONE	SHALY, BANDS, YELLOW-GREY, VERY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
59.85	1.65	100		100% CLAYSTONE	SILTSTONE, BANDS, VARIAGATED COLOUR, WEAK ROCK.
60.13	0.28	100		100% SANDSTONE,COARSE GRAINED	ARGILLACEOUS, GLAUCONITIC, GREEN, WEAK ROCK.
67.60	7.47	100		100% CLAYSTONE	ARENACEOUS, BANDS, BROWN, VERY WEAK ROCK.
70.60	3.00	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY, VERY WEAK ROCK.
71.05	0.45	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
71.45	0.40	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
71.60	0.15	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, BUFF, VERY WEAK ROCK.
71.95	0.35	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGAT PLANAR, ROUGH DISCONTINUITIES, .
72.73	0.78	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
74.00	1.27	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGAT PLANAR, ROUGH DISCONTINUITIES, .
75.27	1.27	100		100% MUDSTONE	SILTSTONE, DARK BROWN, WEAK ROCK.
75.60	0.33	100		100% SILTSTONE	SHALY, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
77.50	1.90	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.87	1.37	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
79.60	0.73	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
82.40	2.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
83.02	0.62	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
83.47	0.45	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
83.56	0.09	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.
83.65	0.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, SILTSTONE, GREY, MODERATELY WEAK ROCK.
84.30	0.65	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
84.65	0.35	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
85.00	0.35	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
85.47	0.47	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
86.54	1.07	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
87.00	0.46	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
87.25	0.25	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
87.51	0.26	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
87.72	0.21	100		100% CARBONACEOUS SHALE	DARK GREY, VERY WEAK ROCK.
88.65	0.93	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
88.80	0.15	100		100% SHALE	DARK BROWN, WEAK ROCK.
89.38	0.58	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, WEAK ROCK.
89.58	0.20	100		100% MUDSTONE	SHALY, BROWN, WEAK ROCK.
89.89	0.31	100		100% SHALE	GREY, VERY WEAK ROCK.
90.75	0.86	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
92.23	1.48	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
92.71	0.48	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, GREY, WEAK ROCK.
94.22	1.51	100		80% MUDSTONE 20% SILTSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN. GREY. WEAK ROCK.
94.25	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
94.35	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
95.28	0.93	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
96.02	0.74	100		100% SANDSTONE,FINE GRAINED	SILTSTONE BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH TROUGH CROSS BEDDING.
98.60	2.58	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
98.66	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
98.75	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
99.23	0.48	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
99.58	0.35	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
101.89	2.31	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
102.23	0.34	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
102.40	0.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
102.61	0.21	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
104.73	2.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
105.07	0.34	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
105.44	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
106.36	0.92	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
106.49	0.13	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
106.67	0.18	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
107.90	1.23	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
108.04	0.14	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
108.76	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
109.20	0.44	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
109.37	0.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
109.89	0.52	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
110.16	0.27	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
110.61	0.45	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.84	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
110.89	0.05	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
110.91	0.02	100		100% COAL, DULL	BADLY BROKEN.
113.77	2.86	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
114.43	0.66	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
116.44	2.01	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, COALY, LIGHT GREY, MODERATELY WEAK ROCK.
117.50	1.06	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
118.20	0.70	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, WEAK ROCK.
119.68	1.48	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
119.86	0.18	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
120.71	0.85	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
121.08	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
121.33	0.25	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
123.17	1.84	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
123.43	0.26	100		100% CLAYSTONE	LIGHT GREY, VERY WEAK ROCK.
123.87	0.44	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
124.46	0.59	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
125.24	0.78	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
126.22	0.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
128.47	2.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
130.22	1.75	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, WITH CROSS LAMINATION.
130.94	0.72	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
131.18	0.24	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
131.44	0.26	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.80	0.36	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS.
132.17	0.37	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS.
132.33	0.16	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
133.15	0.82	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
133.25	0.10	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK GREY, VERY WEAK ROCK.
140.20	6.95	100		100% SILTSTONE	ARGILLACEOUS, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
141.00	0.80	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS.
141.43	0.43	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, GREY, MODERATELY WEAK ROCK.
148.42	6.99	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
150.80	2.38	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
151.81	1.01	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
151.83	0.02	100		100% COAL, BRIGHT	
152.05	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
152.16	0.11	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
153.78	1.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
154.42	0.64	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, WEAK ROCK.
154.44	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN.
154.47	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
154.49	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
154.68	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
154.72	0.04	100		100% COAL, DULL	
154.77	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
156.23	1.46	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
156.48	0.25	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
156.92	0.44	100		100% SILTSTONE	GREY, WEAK ROCK.
158.03	1.11	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
158.25	0.22	100		85% SILTSTONE 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY. LIGHT GREY. WEAK ROCK.
158.46	0.21	100		80% SANDSTONE 20% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, BANDS, GREY. WEAK ROCK.
159.21	0.75	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK.
159.59	0.38	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
159.70	0.11	100		100% SILTSTONE	ARGILLACEOUS, BUFF, WEAK ROCK.
159.89	0.19	100		100% SILTSTONE	LIGHT BROWN, VERY WEAK ROCK.
160.35	0.46	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
161.03	0.68	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, GREY, WEAK ROCK.
161.21	0.18	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
162.32	1.11	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
162.38	0.06	100		100% CLAYSTONE	FISSILE, FRAGMENTED, BUFF, VERY WEAK ROCK.
162.44	0.06	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, VERY WEAK ROCK.
162.51	0.07	100		100% CLAY	BUFF, VERY SOFT.
162.57	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, SOFT.
163.48	0.91	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
165.51	2.03	100		100% SANDSTONE,FINE GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
165.78	0.27	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
166.06	0.28	100		100% CLAYSTONE	FISSILE, MICACEOUS, BUFF, VERY WEAK ROCK.
166.48	0.42	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
167.05	0.57	100		100% CLAYSTONE	FISSILE, PEBBLY, LIGHT BROWN, VERY WEAK ROCK.
171.82	4.77	100		100% SILTSTONE	LAMINAE, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
172.02	0.20	100		100% CLAYSTONE	FISSILE, MICACEOUS, BUFF, VERY WEAK ROCK.
172.07	0.05	100		100% COAL, HEAVY DULL	
172.13	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.17	0.04	100		100% COAL, HEAVY DULL	
172.23	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
172.46	0.23	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
172.74	0.28	100		100% CLAYSTONE	FISSILE, MICACEOUS, BUFF, VERY WEAK ROCK.
172.79	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
172.82	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
172.98	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
173.00	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
173.04	0.04	100		100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK.
176.87	3.83	100		100% SILTSTONE	GREY, WEAK ROCK, WITH CROSS LAMINATION.
178.94	2.07	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
181.00	2.06	100		100% SILTSTONE	GREY, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
181.24	0.24	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
181.61	0.37	100		100% SILTSTONE	ARENACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
182.31	0.70	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
182.44	0.13	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
183.16	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
183.23	0.07	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
183.60	0.37	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
184.13	0.53	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, VERY FAINLY BEDDED.
184.32	0.19	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
184.33	0.01	100		100% COAL, BRIGHT	
184.54	0.21	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
184.82	0.28	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
184.90	0.08	100		100% SILTSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
185.15	0.25	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
185.95	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE B : DEPTH = 344.05 M	
186.04	0.09			100% COAL, HEAVY DULL	

BOREHOLE : GY 9

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
186.05	0.01			100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
186.33	0.28			100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
186.46	0.13		1	100% MUDSTONE	CARBONACEOUS, BLACK.
186.47	0.01		1	100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
186.50	0.03		1	100% MUDSTONE	CARBONACEOUS, BLACK.
186.61	0.11		1	100% MUDSTONE	CARBONACEOUS, BLACK.
186.92	0.31		1	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
187.09	0.17		1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.19	0.10		1	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
187.33	0.14		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.41	0.08		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.49	0.08		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.50	0.01		2	100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
187.55	0.05		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.60	0.05		2	70% MUDSTONE 30% COAL, BRIGHT	CARBONACEOUS, BROWN-BLACK. MODERATELY STRONG ROCK, LAMINATED.
187.68	0.08		2	100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
187.70	0.02		2	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
187.88	0.18		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.98	0.10		2	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
187.99	0.01		3	100% COAL, BRIGHT	
188.28	0.29		3	100% COAL, HEAVY DULL	BLACK, VERY WEAK ROCK.
188.35	0.07		3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .
188.42	0.07		3	100% MUDSTONE	SILTSTONE, FISSILE, LIGHT BROWN.
188.59	0.17		3	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
188.97	0.38		3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .
189.07	0.10		3	100% CLAYSTONE	LIGHT BROWN, FIRM.
189.43	0.36		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
189.53	0.10		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
189.56	0.03		4	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
189.77	0.21		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
189.79	0.02		4	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
189.90	0.11		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
189.94	0.04		4	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
190.00	0.06		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
190.07	0.07		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
190.15	0.08	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
190.20	0.05	100	5	100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
190.23	0.03	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
190.29	0.06	100	5	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
		BASE OF DALMAYNE B : THICKNESS = 4.34 M; SAMPLED THICKNESS = 3.96 M			
190.75	0.46	100		100% MUDSTONE	SHALY, GREY-BROWN, VERY WEAK ROCK.
190.85	0.10	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, VERY WEAK ROCK.
191.15	0.30	100		100% SILTSTONE	LIGHT GREY, WEAK ROCK.
191.18	0.03	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
192.10	0.92	100		100% SILTSTONE	LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
192.50	0.40	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CROSS LAMINATION.
192.90	0.40	100		100% SILTSTONE	GREY, WEAK ROCK.
193.15	0.25	100		100% MUDSTONE	COALY, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
194.51	1.36	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
194.94	0.43	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
199.68	4.74	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
200.00	0.32	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
200.60	0.60	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.

BELL HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
200.81	0.21	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
201.34	0.53	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
202.14	0.80	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	BANDS, GREY. SILTSTONE, LAMINAE, LIGHT GREY. WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
202.37	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
202.85	0.48	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
203.85	1.00	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
204.58	0.73	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
205.77	1.19	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
205.89	0.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
207.48	1.59	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
208.58	1.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
209.00	0.42	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
210.74	1.74	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
210.96	0.22	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
211.00	0.04	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
211.96	0.96	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
212.82	0.86	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
213.05	0.23	100		100% SILTSTONE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
213.21	0.16	100		100% SILTSTONE	GREY, WEAK ROCK.
213.23	0.02	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
				TOP OF DALMAYNE C : DEPTH = 316.77 M	
213.48	0.25	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
213.90	0.42	100		100% MUDSTONE	CARBONACEOUS, BROWN, VERY WEAK ROCK.
213.93	0.03	100		100% CLAYSTONE	BROWN, VERY WEAK ROCK.
214.09	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN, VERY WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
214.32	0.23	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
214.37	0.05	100		100% CARBONACEOUS SHALE	DARK GREY, VERY WEAK ROCK.
214.39	0.02	100		100% CLAYSTONE	BUFF, VERY WEAK ROCK.
214.51	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
214.68	0.17	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
214.76	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
214.86	0.10	100		100% MUDSTONE	BROWN, WEAK ROCK.
214.96	0.10	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
215.11	0.15	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
215.44	0.33	100		100% MUDSTONE	DARK BROWN, WEAK ROCK.
215.51	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
215.80	0.29	100		100% CLAYSTONE	FISSILE, BUFF, SOFT.
216.00	0.20	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
216.05	0.05	100		100% MUDSTONE	ARENACEOUS, CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
216.09	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
216.14	0.05	100		100% MUDSTONE	ARENACEOUS, BROWN, WEAK ROCK, SLOW SLAKING.
216.37	0.23	100		100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
216.53	0.16	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
216.65	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
216.67	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
216.69	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
216.71	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
217.05	0.34	100		100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
217.12	0.07	100		100% CARBONACEOUS SHALE	
217.17	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
217.18	0.01	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
217.21	0.03	100		100% CLAYSTONE	CARBONACEOUS, BLACK, FIRM.
217.29	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
217.32	0.03	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
217.35	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
217.38	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
217.63	0.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
217.65	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
217.77	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
217.87	0.10	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
217.97	0.10	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
218.17	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.22	0.05	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
218.23	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.24	0.01	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
218.27	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.28	0.01	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
218.40	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.45	0.05	100		100% COAL, HEAVY DULL	
218.53	0.08	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
218.56	0.03	100		100% CARBONACEOUS SHALE	
218.63	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
218.72	0.09	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
218.80	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
			BASE OF DALMAYNE C : THICKNESS = 5.57 M; SAMPLED THICKNESS = 0.00 M		
219.09	0.29	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
219.19	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
219.26	0.07	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
219.29	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
219.60	0.31	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
219.69	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
219.78	0.09	100		100% MUDSTONE	BADLY BROKEN, GREY, WEAK ROCK.
219.91	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
219.96	0.05	100		100% MUDSTONE	BADLY BROKEN, GREY.
221.00	1.04	0		CORE LOSS	
221.64	0.64	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
222.80	1.16	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
223.08	0.28	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
223.60	0.52	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
223.73	0.13	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
224.57	0.84	100		100% SANDSTONE	LITHIC, MED.-FINE GRAINED, LIGHT GREY, WEAK ROCK.
226.61	2.04	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
227.80	1.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
229.13	1.33	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK.
229.27	0.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
229.65	0.38	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
229.78	0.13	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
230.00	0.22	0		CORE LOSS	
230.31	0.31	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LENSES, GREY, VERY WEAK ROCK.
230.38	0.07	100		100% CLAY	LIGHT BROWN, SOFT.
232.40	2.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
232.60	0.20	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
232.74	0.14	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
233.20	0.46	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
234.10	0.90	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
235.56	1.46	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
237.00	1.44	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
242.00	5.00	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
244.26	2.26	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
244.40	0.14	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
244.46	0.06	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
244.56	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
244.66	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
245.31	0.65	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
245.52	0.21	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
245.62	0.10	100		100% SILTSTONE	GREY, WEAK ROCK.
246.61	0.99	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
			TOP OF	: DEPTH = 283.39 M	
247.17	0.56	100		100% COAL, HEAVY DULL	
			BASE OF	: THICKNESS = 0.56 M; SAMPLED THICKNESS = 0.00 M	
247.27	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.
247.95	0.68	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
248.17	0.22	100		100% MUDSTONE	CARBONACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
252.30	4.13	100		100% SILTSTONE	GREY, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
252.33	0.03	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
252.38	0.05	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
252.44	0.06	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK GREY, VERY WEAK ROCK.
252.63	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
252.70	0.07	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, VERY WEAK ROCK.
252.83	0.13	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
252.96	0.13	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
253.14	0.18	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
253.46	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
253.60	0.14	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
253.80	0.20	0		CORE LOSS	
255.01	1.21	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
255.31	0.30	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
256.19	0.88	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
256.21	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.81	0.60	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
257.02	0.21	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK.
257.51	0.49	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
257.86	0.35	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
258.02	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
258.78	0.76	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
260.60	1.82	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
261.23	0.63	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
261.46	0.23	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, THICKLY LAMINATED.
262.11	0.65	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK.
265.28	3.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
265.31	0.03	100		100% SILTSTONE	COALY, LENSES, LIGHT GREY, WEAK ROCK.
265.34	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
265.41	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
265.80	0.39	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
266.90	1.10	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
267.00	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
268.02	1.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
		TOP OF	DALMAYNE D UPPER : DEPTH = 261.98 M		
268.03	0.01	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
268.06	0.03	100	6	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
268.34	0.28	100	6	100% COAL, HEAVY DULL	
268.38	0.04	100	6	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
268.72	0.34	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
269.14	0.42	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	
269.15	0.01	100	6	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
269.41	0.26	100	6	100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
				BASL OF DALMAYNE D UPPER : THICKNESS = 1.39 M; SAMPLED THICKNESS = 1.39 M	
269.63	0.22	100	7	100% MUDSTONE	SHALY, DARK BROWN, MODERATELY WEAK ROCK.
269.68	0.05	100	7	100% COAL, DULL WITH FEW BRIGHT BANDS	
269.79	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
269.82	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
269.87	0.05	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
270.80	0.93	100		100% MUDSTONE	SHALY, GREY-BROWN, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
270.89	0.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
271.21	0.32	100		100% SILTSTONE	GREY-GREEN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
272.00	0.79	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
272.40	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
274.48	2.08	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
275.88	1.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
276.29	0.41	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
277.57	1.28	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
278.04	0.47	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
281.42	3.38	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
281.92	0.50	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
281.95	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
282.16	0.21	100		100% MUDSTONE	CARBONACEOUS, BLACK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
282.22	0.06	100		100% SILTSTONE	GREY, WEAK ROCK.
282.25	0.03	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
282.93	0.68	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
283.38	0.45	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
283.50	0.12	100		100% MUDSTONE	BADLY BROKEN, GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
		TOP OF	DALMAYNE D LOWER : DEPTH =	246.50 M	
283.67	0.17	0	8	CORE LOSS	
283.75	0.08	100	8	100% COAL, HEAVY DULL	
283.78	0.03	100	8	100% COAL, HEAVY DULL	
283.84	0.06	100	8	100% COAL, HEAVY DULL	WITH MUD PELLETS.
283.87	0.03	100	8	100% COAL, HEAVY DULL	BADLY BROKEN.
283.88	0.01	100	8	100% MUDSTONE	CARBONACEOUS, BLACK.
284.23	0.35	100	8	100% COAL, HEAVY DULL	
284.25	0.02	100	8	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
284.43	0.18	100	8	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
284.51	0.08	100	8	100% COAL, HEAVY DULL	
		BASE OF	DALMAYNE D LOWER : THICKNESS =	1.01 M; SAMPLED THICKNESS = 1.01 M	
285.39	0.88	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, GREY-GREEN, VERY WEAK ROCK.
285.73	0.34	100		100% SILTSTONE	GREY, WEAK ROCK.
286.80	1.07	100		100% SANDSTONE,FINE GRAINED	FRIABLE, BANDS, LIGHT GREY, WITH MICA, VERY WEAK ROCK.
287.45	0.65	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
287.76	0.31	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, WEAK ROCK.
288.65	0.89	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH MICA, WEAK ROCK.
291.83	3.18	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
293.60	1.77	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
295.30	1.70	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
297.70	2.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
298.68	0.98	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
299.62	0.94	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
300.77	1.15	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
301.10	0.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
301.16	0.06	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
305.54	4.38	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
306.08	0.54	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
308.10	2.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
308.33	0.23	100		100% SILTSTONE	GREY, WEAK ROCK.
308.34	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH PYRITE.
309.17	0.83	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
309.81	0.64	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
310.78	0.97	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
310.80	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
311.00	0.20	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
311.31	0.31	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, WEAK ROCK.
311.96	0.65	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK.
313.03	1.07	100		100% SANDSTONE,FINE GRAINED	LITHIC, MICACEOUS, GREY, WEAK ROCK.
313.67	0.64	100		100% SANDSTONE,FINE GRAINED	QUARTZOSE, LIGHT GREY, WITH CALCITE, MODERATELY WEAK ROCK, .
316.02	2.35	100		100% SANDSTONE,FINE GRAINED	MICACEOUS, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
316.29	0.27	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
317.03	0.74	60		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
319.40	2.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
319.84	0.44	100		100% SANDSTONE,MEDIUM GRAINED	MICACEOUS, CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
319.88	0.04	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
320.75	0.87	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
321.12	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
324.60	3.48	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
326.00	1.40	100		100% SANDSTONE,MEDIUM GRAINED	FRIABLE, BANDS, LIGHT GREY, WEAK ROCK.
326.53	0.53	100		100% SILTSTONE	GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
326.55	0.02	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
327.32	0.77	100		100% SILTSTONE	GREY, WEAK ROCK.
327.40	0.08	100		100% MUDSTONE	GREY, VERY WEAK ROCK.
327.45	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
327.46	0.01	100		100% COAL, HEAVY DULL	
327.54	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
327.90	0.36	25		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK.
327.92	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
327.94	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
328.04	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK.
328.24	0.20	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES, BLACK, VERY WEAK ROCK.
328.25	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
328.26	0.01	100		100% CARBONACEOUS SHALE	COALY, BLACK, VERY WEAK ROCK.
329.21	0.95	100		100% SILTSTONE	ARGILLACEOUS, BANDS, GREY, WEAK ROCK.
329.31	0.10	100		100% SANDSTONE	SILTSTONE, PEBBLY, GREY, WEAK ROCK.
331.39	2.08	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
332.34	0.95	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
332.62	0.28	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WITH MICA, WEAK ROCK.
333.53	0.91	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
333.68	0.15	100		100% SHALE	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
333.74	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
333.85	0.11	100		100% SILTSTONE	BADLY BROKEN, GREY.
335.00	1.15	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, WEAK ROCK.
336.26	1.26	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
336.37	0.11	0	9	CORE LOSS	

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
336.53	0.16	100	9	100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK, MODERATELY WEAK ROCK.
336.55	0.02	100	9	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
336.56	0.01	100	9	100% COAL, HEAVY DULL	
336.61	0.05	100	9	100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE E2 : DEPTH = 193.39 M	
336.70	0.09	100	10	100% COAL, HEAVY DULL	
336.81	0.11	100	10	100% COAL, DULL	
336.82	0.01	100	10	100% MUDSTONE	LIGHT BROWN, WEAK ROCK, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
336.99	0.17	100	10	100% COAL, DULL	
337.01	0.02	100	10	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
337.44	0.43	100	10	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	HEAVY DULL COAL, LAMINAE.
337.53	0.09	100	10	100% COAL, DULL	
337.62	0.09	100	10	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, BANDS.
337.68	0.06	100	10	100% COAL, BRIGHT WITH FEW DULL BANDS	
				BASE OF DALMAYNE E2 : THICKNESS = 1.07 M; SAMPLED THICKNESS = 1.07 M	
338.00	0.32	100		100% SILTSTONE	GREY, VERY WEAK ROCK.
338.26	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
341.24	2.98	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
343.45	2.21	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
348.32	4.87	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
349.02	0.70	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
349.28	0.26	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
351.16	1.88	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
351.60	0.44	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
351.86	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .
352.55	0.69	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
353.33	0.78	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
353.45	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
353.53	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
353.95	0.42	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
354.43	0.48	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
354.53	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
355.40	0.87	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, WEAK ROCK, VERY THINLY BEDDED.
355.85	0.45	100		60% MUDSTONE 40% SANDSTONE	CARBONACEOUS, DARK GREY. CARBONACEOUS, LENSES. WEAK ROCK.
355.95	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
356.04	0.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
356.55	0.51	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
357.77	1.22	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, THICKLY LAMINATED.
358.39	0.62	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK.
359.10	0.71	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
359.55	0.45	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
363.77	4.22	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR. .
363.92	0.15	100		100% SHALE	COALY, LENSES, GREY, WEAK ROCK.
363.93	0.01	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
363.95	0.02	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
365.00	1.05	100		100% SILTSTONE	GREY, WEAK ROCK.
365.07	0.07	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
365.64	0.57	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK.
365.82	0.18	100		100% MUDSTONE	FISSILE, ARGILLACEOUS, BROWN, VERY WEAK ROCK.
366.83	1.01	100		100% MUDSTONE	SILTSTONE, BROWN, WEAK ROCK.
366.93	0.10	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, VERY WEAK ROCK.
367.16	0.23	100		100% MUDSTONE	SILTSTONE, BROWN, WEAK ROCK.
367.35	0.19	100		100% MUDSTONE	ARENACEOUS, LENSES, BROWN, WEAK ROCK.
368.10	0.75	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
368.85	0.75	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, WEAK ROCK.
369.60	0.75	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WITH MICA, WEAK ROCK.
370.15	0.55	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
371.00	0.85	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
371.11	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
371.23	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
371.78	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
372.69	0.91	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
373.25	0.56	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, LAMINATED.
373.60	0.35	100		100% SANDSTONE,FINE GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
374.77	1.17	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
375.07	0.30	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
375.35	0.28	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
375.53	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
376.08	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
376.62	0.54	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
377.03	0.41	100		100% SILTSTONE	ARENACEOUS, LENSES, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
378.00	0.97	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
378.41	0.41	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
378.63	0.22	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
379.23	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
379.88	0.65	100		100% SANDSTONE	MED.-FINE GRAINED, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
380.35	0.47	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
380.43	0.08	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
380.63	0.20	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
380.86	0.23	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
381.03	0.17	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
381.09	0.06	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
381.43	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
382.17	0.74	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
382.30	0.13	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
382.36	0.06	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
383.06	0.70	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
383.16	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
383.64	0.48	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
384.89	1.25	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
385.06	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
385.15	0.09	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
385.38	0.23	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
386.00	0.62	100		100% SILTSTONE	GREY, WEAK ROCK.
386.07	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
386.14	0.07	100		60% MUDSTONE 40% SANDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY. BANDS, LIGHT GREY. WEAK ROCK.
386.22	0.08	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
387.44	1.22	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
387.66	0.22	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
388.64	0.98	100		100% SILTSTONE	ARGILLACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
388.68	0.04	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
388.71	0.03	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
388.72	0.01	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY.
388.74	0.02	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
388.76	0.02	100		100% COAL, HEAVY DULL	
388.82	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
388.84	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
388.86	0.02	100		100% MUDSTONE	CARBONACEOUS, COALY, DARK BROWN.
389.50	0.64	100		100% SILTSTONE	GREY, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
390.65	1.15	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	BANDS, GREY. BANDS, LIGHT GREY.
390.73	0.08	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
390.79	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
391.34	0.55	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, WEAK ROCK, WITH CROSS LAMINATION, WITH FLAME/PULL STRUCTS.
391.94	0.60	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
392.00	0.06	100		100% SANDSTONE	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
392.04	0.04	100		100% CLAYSTONE	FISSILE, BADLY BROKEN, BUFF, VERY WEAK ROCK.
392.06	0.02	100		100% CARBONACEOUS SHALE	BLACK, WEAK ROCK.
392.09	0.03	100		100% CLAYSTONE	FISSILE, CARBONACEOUS, BROWN, VERY WEAK ROCK.
392.11	0.02	100		100% SHALE	CARBONACEOUS, STREAKS, GREY, VERY WEAK ROCK.
393.44	1.33	100		100% SILTSTONE	GREY, WEAK ROCK.
393.72	0.28	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
393.98	0.26	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
394.87	0.89	100		100% SILTSTONE	ARENACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
395.25	0.38	100		100% SILTSTONE	ARENACEOUS, BANDS, LIGHT GREY, WEAK ROCK, WITH PLANT REMAINS.
395.87	0.62	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
396.07	0.20	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
396.24	0.17	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, WEAK ROCK.
397.00	0.76	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
397.34	0.34	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	CALCITIC, LIGHT GREY. CARBONACEOUS, BANDS, DARK GREY. MODERATELY WEAK ROCK.
398.34	1.00	100		100% SILTSTONE	GREY, VERY WEAK ROCK.
398.36	0.02	100		100% COAL, BRIGHT	
398.40	0.04	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, MODERATELY WEAK ROCK.
398.75	0.35	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. LIGHT GREY. WEAK ROCK.
398.98	0.23	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
399.11	0.13	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
399.19	0.08	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
399.73	0.54	100		100% SILTSTONE	ARENACEOUS, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
400.80	1.07	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
401.30	0.50	100		100% SILTSTONE	GREY, WEAK ROCK.
402.09	0.79	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
402.42	0.33	100		50% SANDSTONE,MEDIUM GRAINED 50% SILTSTONE	CALCITIC, LIGHT GREY. CARBONACEOUS, BANDS, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
402.61	0.19	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK, THICKLY LAMINATED.
402.98	0.37	100		55% SANDSTONE,MEDIUM GRAINED 45% SILTSTONE	CALCITIC, LIGHT GREY. BANDS, GREY. MODERATELY WEAK ROCK.
403.04	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
403.39	0.35	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, WITH CROSS LAMINATION, WITH LOAD CASTS.
404.25	0.86	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	GREY. MICACEOUS, MICACEOUS, LIGHT GREY. WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
404.95	0.70	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
405.15	0.20	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
405.38	0.23	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
406.97	1.59	100		65% SILTSTONE 35% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. CALCITIC, CALCITIC, LIGHT GREY. WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
407.52	0.55	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK, WITH LOAD CASTS.
408.06	0.54	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
408.09	0.03	100		100% COAL, HEAVY DULL	
408.18	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
408.28	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
408.46	0.18	100		100% SILTSTONE	ARENACEOUS, BROWN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
408.91	0.45	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, WEAK ROCK.
409.00	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
409.15	0.15	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
409.31	0.16	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK.
410.18	0.87	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING, WITH LOAD CASTS.
410.30	0.12	100		100% SILTSTONE	GREY, WEAK ROCK.
410.42	0.12	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
411.17	0.75	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
411.47	0.30	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
411.67	0.20	100		60% SILTSTONE 40% CALCITE	GREY.
411.95	0.28	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
412.16	0.21	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, CARBONACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
412.52	0.36	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
412.84	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
412.94	0.10	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
413.07	0.13	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
414.49	1.42	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, TIGHT NON PLANAR, .
414.76	0.27	100		100% SILTSTONE	ARENACEOUS, ARGILLACEOUS, GREY, WEAK ROCK.
415.64	0.88	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
415.73	0.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
416.40	0.67	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
416.49	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
416.55	0.06	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
416.90	0.35	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
417.19	0.29	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
417.52	0.33	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
418.41	0.89	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
418.55	0.14	100		100% SILTSTONE	GREY, WEAK ROCK.
418.91	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, CALCITIC, GREY, MODERATELY WEAK ROCK.
419.79	0.88	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
419.82	0.03	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
420.48	0.66	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
420.61	0.13	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
420.73	0.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
420.91	0.18	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
421.14	0.23	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
421.24	0.10	100		100% PEBBLE CONGLOMERATE	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
425.00	3.76	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.

BELL+HOWELL

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	3.96 M	185.95 - 190.29 M	4.34 M
DC	0.00 M	213.23 - 218.80 M	5.57 M
DC1	0.00 M	246.61 - 247.17 M	0.56 M
DDU	1.39 M	268.02 - 269.41 M	1.39 M
DDL	1.01 M	283.50 - 284.51 M	1.01 M
DE2	1.07 M	336.61 - 337.68 M	1.07 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	186.33 - 187.19 M	0.86 M
2	187.19 - 187.98 M	0.79 M
3	187.98 - 189.07 M	1.09 M
4	189.07 - 190.15 M	1.08 M
5	190.15 - 190.29 M	0.14 M
6	268.02 - 269.41 M	1.39 M
7	269.41 - 269.68 M	0.27 M
8	283.50 - 284.51 M	1.01 M
9	336.26 - 336.61 M	0.35 M
10	336.61 - 337.68 M	1.07 M

BELL+HOWELL

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 11

HOLE TYPE	CORE	
EASTING	596,000 M	GRID
NORTHING	5,385,000 M	GRID
ELEVATION	590.00 M	
TOTAL DEPTH DRILLED	473.00 M	
DRILLING STARTED	5/10/78	
DRILLING TIME	14 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	10.00 M	
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		

INFORMATION AVAILABLE : SAMPLES TAKEN
ANALYTICAL DATA
LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 11

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
7.80	7.80			100% DOLERITE	MODERATELY WEATHERED.
11.25	3.45			100% DOLERITE	HIGHLY WEATHERED.
14.20	2.95			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
15.00	0.80			100% DOLERITE	BADLY BROKEN, MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
20.40	5.40			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
23.00	2.60			100% DOLERITE	MED.-COARSE GRAINED, GREY, UNWEATHERED.
27.50	4.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
28.50	1.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
36.00	7.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
48.50	12.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
55.50	7.00			100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
57.50	2.00			100% DOLERITE	MEDIUM GRAINED, LIGHT BROWN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
59.50	2.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
63.00	3.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
75.00	12.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
81.00	6.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
83.50	2.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
89.50	6.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
110.00	20.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
120.00	10.00			100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
124.00	4.00			100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
125.00	1.00			100% DOLERITE	FINE GRAINED, GREY, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
125.34	0.34			100% DOLERITE	FINE GRAINED, GREY, MODERATELY STRONG ROCK.
125.92	0.58			100% DOLERITE	FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
126.00	0.08			100% MUDSTONE	GREY, WEAK ROCK.
126.74	0.74			100% SANDSTONE	FINE GRAINED, GREY, MODERATELY WEAK ROCK.
133.90	7.16			100% MUDSTONE	GREEN, MODERATELY WEAK ROCK.
135.00	1.10			100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
135.55	0.55			100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED.
136.50	0.95			100% MUDSTONE	ARENACEOUS, BANDS, CREAM, MODERATELY WEAK ROCK.
136.70	0.20			100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
137.40	0.70			100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
138.10	0.70			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
138.20	0.10			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
142.39	4.19			100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, LAMINATED.
143.27	0.88			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
143.50	0.23			80% MUDSTONE 20% COAL, BRIGHT	CARBONACEOUS, BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED.
143.88	0.38			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
143.97	0.09			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
145.00	1.03			100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
145.78	0.78			100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS.
147.00	1.22			100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
147.34	0.34			100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
147.44	0.10			100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
147.91	0.47			100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
148.00	0.09			100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
149.22	1.22	45		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
149.51	0.29	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
150.35	0.84	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, WEAK ROCK.
151.17	0.82	100		70% SANDSTONE,MEDIUM GRAINED 30% PEBBLE CONGLOMERATE	COALY, LENSES, LIGHT GREY. LIGHT GREY. MODERATELY WEAK ROCK.
152.40	1.23	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, BANDS.
152.76	0.36	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
152.98	0.22	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
153.09	0.11	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
153.39	0.30	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, WEAK ROCK.
153.78	0.39	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
157.38	3.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WEAK ROCK.
157.54	0.16	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
160.03	2.49	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
161.06	1.03	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
161.86	0.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
162.26	0.40	100		100% SANDSTONE,MEDIUM GRAINED	BRIGHT COAL, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
162.55	0.29	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY. LIGHT GREY. WEAK ROCK.
163.17	0.62	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
163.78	0.61	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
165.05	1.27	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
165.49	0.44	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
166.71	1.22	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
166.97	0.26	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY. SILTSTONE, LAMINAE, GREY. MODERATELY WEAK ROCK.
167.45	0.48	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
169.40	1.95	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
169.67	0.27	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
171.81	2.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
171.88	0.07	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LIGHT GREY, WEAK ROCK.
171.96	0.08	100		100% SILTSTONE	GREY, WEAK ROCK.
172.27	0.31	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
172.61	0.34	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
172.63	0.02	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
172.65	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
172.75	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
172.76	0.01	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
172.79	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
172.84	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
172.88	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
173.10	0.22	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
174.15	1.05	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
174.39	0.24	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, WEAK ROCK.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
174.95	0.56	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
175.73	0.78	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, NON-PLANAR DISCONTINUITIES, .
176.05	0.32	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
176.14	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
176.32	0.18	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
176.66	0.34	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
176.88	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
176.97	0.09	100		100% MUDSTONE	CARBONACEOUS, GREY, WEAK ROCK.
177.21	0.24	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
177.50	0.29	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
177.60	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
177.65	0.05	100		100% CLAYSTONE	BADLY BROKEN, LIGHT BROWN, FIRM.
177.68	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
177.86	0.18	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
177.89	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
177.90	0.01	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
177.92	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
177.95	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
177.97	0.02	100		100% COAL, BRIGHT	
178.05	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
179.00	0.95	100		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
179.06	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, WITH MUD PELLETS.
179.09	0.03	100		100% SILTSTONE	LIGHT GREY, WEAK ROCK.
179.20	0.11	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
180.84	1.64	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.

BELL+HOWELL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
181.07	0.23	100		100% SILTSTONE	CARBONACEOUS, BANDS, DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
181.53	0.46	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
182.00	0.47	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
184.75	2.75	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK.
185.30	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
187.90	2.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
189.24	1.34	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
189.96	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
190.16	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
190.19	0.03	100		100% SANDSTONE,FINE GRAINED	COALY, BANDS, LIGHT GREY, WEAK ROCK.
190.49	0.30	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
190.59	0.10	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
190.70	0.11	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
191.52	0.82	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
191.57	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
191.78	0.21	100		100% SILTSTONE	GREY, WEAK ROCK.
193.55	1.77	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
193.70	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, COALY, LIGHT GREY, WEAK ROCK.
194.40	0.70	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
194.85	0.45	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
194.95	0.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
195.04	0.09	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
195.79	0.75	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
196.13	0.34	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
196.33	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.76	0.43	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.91	0.15	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, WEAK ROCK.
198.00	1.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
199.45	1.45	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
199.47	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
199.48	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	
199.51	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
199.55	0.04	100		100% COAL, HEAVY DULL	
199.80	0.25	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
200.18	0.38	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
200.26	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
200.28	0.02	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
200.48	0.20	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
200.75	0.27	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
200.78	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
200.87	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, VERY WEAK ROCK, WITH PLANT REMAINS.
200.91	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, SOFT.
201.15	0.24	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
201.34	0.19	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
201.40	0.06	100		100% CLAYSTONE	FISSILE, BROWN, SOFT.
201.60	0.20	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
201.68	0.08	100		100% CARBONACEOUS SHALE	
201.75	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
201.92	0.17	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, SOFT.
201.95	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
202.04	0.09	100		100% COAL, HEAVY DULL	

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
202.24	0.20	100		100% COAL, INTERBANDED DULL AND BRIGHT	
202.33	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
204.28	1.95	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
204.48	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREEN, VERY WEAK ROCK.
205.02	0.54	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
206.49	1.47	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
206.61	0.12	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, FIRM.
206.65	0.04	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, WEAK ROCK.
206.71	0.06	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
206.82	0.11	100		100% SILTSTONE	CARBONACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
206.89	0.07	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
206.95	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
206.98	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
207.55	0.57	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
207.87	0.32	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT GREEN, WITH MICA, VERY WEAK ROCK.
208.28	0.41	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
208.36	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
208.46	0.10	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
208.56	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
208.63	0.07	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK, WITH MUD PELLETS.
208.72	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
208.94	0.22	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
209.00	0.06	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
209.09	0.09	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
209.31	0.22	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
209.34	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
209.43	0.09	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
209.50	0.07	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
209.53	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
209.56	0.03	100		100% SILTSTONE	COALY, STREAKS, GREY, MODERATELY WEAK ROCK.
209.65	0.09	100		100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
209.75	0.10	100		100% SILTSTONE	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
210.09	0.34	100		100% SILTSTONE	COALY, STREAKS, GREY, WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
211.12	1.03	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
211.47	0.35	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
214.68	3.21	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
214.91	0.23	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, FIRM.
214.95	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
214.97	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
215.00	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
215.03	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
215.18	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
215.40	0.22	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN, WEAK ROCK.
215.59	0.19	100		100% MUDSTONE	COALY, LENSES, BROWN, WEAK ROCK.
215.74	0.15	100		100% SILTSTONE	COALY, LENSES, LIGHT BROWN, WEAK ROCK.
217.11	1.37	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
218.64	1.53	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
220.36	1.72	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
224.76	4.40	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
225.44	0.68	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
225.89	0.45	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
227.00	1.11	100		100% SANDSTONE,FINE GRAINED	CALCITIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
227.40	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
230.42	3.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
230.57	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
230.81	0.24	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
231.30	0.49	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
231.52	0.22	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
231.54	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
231.74	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
232.18	0.44	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
232.44	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
232.54	0.10	100		100% COAL, HEAVY DULL	MUDSTONE, FRAGMENTS.
232.56	0.02	100		100% MUDSTONE	GREY.
232.58	0.02	100		100% COAL, HEAVY DULL	
232.62	0.04	100		100% CARBONACEOUS SHALE	MUDSTONE, FRAGMENTS.
232.65	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
232.77	0.12	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
233.18	0.41	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
233.37	0.19	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
233.39	0.02	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
233.44	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN.
233.50	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
233.60	0.10	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
233.63	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
233.69	0.06	100		100% MUDSTONE	SIDERITIC, DARK BROWN.
233.75	0.06	100		100% COAL, HEAVY DULL	
233.78	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
233.81	0.03	100		100% COAL, HEAVY DULL	
233.82	0.01	100		100% MUDSTONE	GREY.
233.86	0.04	100		100% CARBONACEOUS SHALE	
233.88	0.02	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
233.89	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
233.92	0.03	100		100% MUDSTONE	SIDERITIC, DARK BROWN.
233.99	0.07	100		100% CARBONACEOUS SHALE	HEAVY DULL COAL, LENSES.
234.05	0.06	100		100% MUDSTONE	SIDERITIC, DARK BROWN.
234.32	0.27	100		50% MUDSTONE 50% CARBONACEOUS SHALE	CARBONACEOUS, DARK BROWN. HEAVY DULL COAL, LENSES.
234.34	0.02	100		100% CARBONACEOUS SHALE	
234.38	0.04	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
234.40	0.02	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
234.52	0.12	100		100% CARBONACEOUS SHALE	
234.62	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
234.77	0.15	100		100% CARBONACEOUS SHALE	
234.79	0.02	100		100% SANDSTONE	LITHIC, GREY, VERY WEAK ROCK.
234.92	0.13	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
235.04	0.12	100		100% CARBONACEOUS SHALE	
235.07	0.03	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
235.10	0.03	100		100% CARBONACEOUS SHALE	
235.16	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
235.33	0.17	100		100% MUDSTONE	BROWN, VERY WEAK ROCK.
235.56	0.23	100		100% CARBONACEOUS SHALE	MUDSTONE, FRAGMENTS, MODERATELY WEAK ROCK.
235.73	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, STRONG ROCK.
236.69	0.96	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
236.81	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, STRONG ROCK.
237.06	0.25	100		100% CARBONACEOUS SHALE	MUDSTONE, FRAGMENTS, STRONG ROCK.
237.09	0.03	100		100% MUDSTONE	GREY, WEAK ROCK, RAPID SLAKING.
237.18	0.09	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES, STRONG ROCK.
237.39	0.21	100		100% CARBONACEOUS SHALE	MUDSTONE, LENSES.
237.46	0.07	100		100% MUDSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
237.71	0.25	100		100% CARBONACEOUS SHALE	MUDSTONE, LENSES.
237.86	0.15	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY STRONG ROCK.
237.99	0.13	100		100% CARBONACEOUS SHALE	
238.00	0.01	100		100% MUDSTONE	DARK GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
238.02	0.02	100		100% CARBONACEOUS SHALE	
238.05	0.03	100		100% MUDSTONE	GREY.
238.06	0.01	100		100% CARBONACEOUS SHALE	
238.11	0.05	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
238.21	0.10	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
238.26	0.05	100		100% COAL, DULL	
238.30	0.04	100		100% CARBONACEOUS SHALE	
238.33	0.03	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
238.77	0.44	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES, MODERATELY WEAK ROCK.
238.87	0.10	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
238.90	0.03	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
239.00	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
239.35	0.35	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS.
240.01	0.66	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
240.11	0.10	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, VERY WEAK ROCK.
240.14	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
240.63	0.49	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
240.72	0.09	100		100% CLAYSTONE	FISSILE, BROWN, VERY WEAK ROCK.
240.97	0.25	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
241.02	0.05	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, VERY WEAK ROCK.
241.07	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.12	0.05	100		100% MUDSTONE	CARBONACEOUS, COALY, BROWN-BLACK, MODERATELY STRONG ROCK.
241.28	0.16	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
241.35	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
241.47	0.12	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
241.59	0.12	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
241.77	0.18	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, VERY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
241.84	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
241.87	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
242.00	0.13	100		70% MUDSTONE 30% CLAYSTONE	CARBONACEOUS, BANDS, DARK BROWN. LIGHT BROWN.
242.14	0.14	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
242.30	0.16	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
242.46	0.16	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
242.52	0.06	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, VERY WEAK ROCK.
242.58	0.06	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK, WEAK ROCK.
242.61	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
242.78	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
242.85	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
243.03	0.18	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
243.06	0.03	100		100% COAL, HEAVY DULL	
243.12	0.06	100		100% COAL, DULL	
243.13	0.01	100		100% COAL, BRIGHT	
243.19	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
243.48	0.29	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
244.60	1.12	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
246.50	1.90	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
247.37	0.87	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
248.45	1.08	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
248.97	0.52	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
249.05	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
249.40	0.35	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
252.40	3.00	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
254.54	2.14	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
255.47	0.93	100		100% SANDSTONE	MED.-FINE GRAINED, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
258.39	2.92	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
259.40	1.01	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
259.58	0.18	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
259.63	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
259.87	0.24	100		100% MUDSTONE	CARBONACEOUS, BROWN.
259.89	0.02	100		100% COAL, HEAVY DULL	STRONG ROCK.
259.93	0.04	100		100% MUDSTONE	CREAM.
259.97	0.04	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN.
260.00	0.03	100		100% COAL, HEAVY DULL	
260.08	0.08	100		100% COAL, INTERBANDED DULL AND BRIGHT	CALCITIC, CHERTY.
260.10	0.02	100		100% MUDSTONE	DARK GREY.
260.11	0.01	100		100% MUDSTONE	BROWN, MODERATELY STRONG ROCK.
260.13	0.02	100		100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK.
260.16	0.03	100		100% MUDSTONE	BROWN, WEAK ROCK.
260.29	0.13	100		100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK.
260.53	0.24	100		100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK.
260.60	0.07	100		100% MUDSTONE	CARBONACEOUS, GREY.
260.63	0.03	100		100% MUDSTONE	BROWN, WEAK ROCK.
260.71	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
260.79	0.08	100		100% MUDSTONE	BROWN, WEAK ROCK.
261.03	0.24	100		100% MUDSTONE	CARBONACEOUS, BLACK.
261.05	0.02	100		100% COAL, HEAVY DULL	
261.06	0.01	100		100% MUDSTONE	BROWN.
261.20	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
261.35	0.15	100		100% MUDSTONE	DARK GREY.
261.63	0.28	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
261.80	0.17	100		100% CARBONACEOUS SHALE	
261.83	0.03	100		100% MUDSTONE	BROWN.
261.98	0.15	100		100% CARBONACEOUS SHALE	
262.05	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK.
262.28	0.23	100		100% CARBONACEOUS SHALE	
262.40	0.12	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
262.41	0.01	100	1	100% CARBONACEOUS SHALE	
262.43	0.02	100	1	100% COAL, HEAVY DULL	
262.55	0.12	100	1	100% CARBONACEOUS SHALE	
262.69	0.14	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
262.70	0.01	100	1	100% MUDSTONE	BROWN, VERY WEAK ROCK.
262.80	0.10	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
262.85	0.05	100	1	100% MUDSTONE	BROWN.
262.96	0.11	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
263.00	0.04	100	1	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
263.04	0.04	100	1	100% COAL, HEAVY DULL	
263.10	0.06	100	1	100% MUDSTONE	GREY-BROWN.
263.11	0.01	100	1	100% CARBONACEOUS SHALE	
263.18	0.07	100	1	100% COAL, HEAVY DULL	
263.66	0.48	100	1	100% COAL, DULL	HEAVY DULL COAL, LENSES.
263.71	0.05	100	1	100% COAL, HEAVY DULL	
263.85	0.14	100	1	100% CARBONACEOUS SHALE	MUDSTONE, LENSES.
263.94	0.09	100	1	100% COAL, HEAVY DULL	
264.00	0.06	100	1	100% MUDSTONE	CARBONACEOUS, GREY.
264.15	0.15	100	1	100% COAL, HEAVY DULL	STRONG ROCK.
264.22	0.07	100	1	100% MUDSTONE	CARBONACEOUS, GREY.
264.27	0.05	100	1	100% COAL, HEAVY DULL	
264.33	0.06	100	1	100% CARBONACEOUS SHALE	
264.38	0.05	100	1	100% MUDSTONE	BROWN.
264.44	0.06	100	1	100% CARBONACEOUS SHALE	
264.49	0.05	100	1	100% MUDSTONE	BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
264.60	0.11	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
264.80	0.20	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
267.29	2.49	100		100% SHALE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
269.00	1.71	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
271.98	2.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
272.50	0.52	100		100% SANDSTONE	MED.-FINE GRAINED, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
273.57	1.07	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
273.74	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
274.50	0.76	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
275.13	0.63	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
275.30	0.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
275.67	0.37	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
277.12	1.45	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
277.19	0.07	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
277.75	0.56	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
277.87	0.12	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
278.03	0.16	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
279.23	1.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
280.64	1.41	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
280.90	0.26	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
281.20	0.30	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
281.90	0.70	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
283.11	1.21	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
284.15	1.04	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
284.52	0.37	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
288.19	3.67	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
288.33	0.14	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
288.85	0.52	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
288.90	0.05	100		100% COAL, INTERBANDED DULL AND BRIGHT	
288.91	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
288.95	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
288.99	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
289.04	0.05	100		100% CLAYSTONE	CARBONACEOUS, BROWN, FIRM.
289.20	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
289.21	0.01	100		100% CLAYSTONE	FISSILE, BROWN, FIRM.
		TOP OF		: DEPTH = 300.79 M	
289.29	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.37	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.45	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
289.76	0.31	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.84	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
289.88	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	
289.98	0.10	0		CORE LOSS	
290.00	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
290.15	0.15	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
290.20	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
		BASE OF		: THICKNESS = 0.99 M; SAMPLED THICKNESS = 0.00 M	
290.23	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
290.38	0.15	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
290.45	0.07	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
290.63	0.18	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
292.72	2.09	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
293.93	1.21	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LITHIC, LIGHT GREY. GREY. MODERATELY WEAK ROCK, WITH PLANT REMAINS.
294.15	0.22	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
294.43	0.28	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
295.11	0.68	100		70% SILTSTONE 30% SANDSTONE,MEDIUM GRAINED	BANDS, GREY. LIGHT GREY. WEAK ROCK.
295.44	0.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
295.52	0.08	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
295.60	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
295.67	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
295.71	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
296.35	0.64	100		100% MUDSTONE	SILTSTONE, FISSILE, GREY, VERY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
296.50	0.15	100		100% MUDSTONE	FISSILE, CALCITIC, GREY, VERY WEAK ROCK.
296.59	0.09	100		100% MUDSTONE	FISSILE, SILTSTONE, GREY, VERY WEAK ROCK.
296.62	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
297.56	0.94	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
298.06	0.50	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, WEAK ROCK.
299.55	1.49	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, MODERATELY WEAK ROCK.
300.24	0.69	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
300.80	0.56	100		100% SILTSTONE	MICACEOUS, GREY, MODERATELY WEAK ROCK.
303.49	2.69	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	ARENACEOUS, LAMINAE, GREY. CARBONACEOUS, STREAKS, LIGHT GREY. MODERATELY WEAK ROCK.
303.51	0.02	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
303.55	0.04	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
303.59	0.04	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
305.00	1.41	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
305.50	0.50	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
306.32	0.82	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
309.96	3.64	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
				TOP OF DALMAYNE D UPPER : DEPTH = 280.04 M	
310.05	0.09	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
310.17	0.12	100	2	100% COAL, HEAVY DULL	STRONG ROCK.
310.20	0.03	100	2	100% COAL, DULL	
310.39	0.19	100	2	100% COAL, HEAVY DULL	
310.46	0.07	100	2	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
310.71	0.25	100	2	100% COAL, DULL	STRONGLY FRAGMENTED.
310.86	0.15	100	2	100% COAL, HEAVY DULL	STRONGLY FRAGMENTED.
311.06	0.20	100	2	100% COAL, DULL	STRONGLY FRAGMENTED.
311.09	0.03	100	2	100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
311.23	0.14	100	2	100% COAL, DULL	
				BASE OF DALMAYNE D UPPER : THICKNESS = 1.27 M; SAMPLED THICKNESS = 1.27 M	
311.48	0.25	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
311.62	0.14	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
311.83	0.21	100		100% SILTSTONE	LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
312.25	0.42	100		100% SHALE	GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
312.86	0.61	100		100% SILTSTONE	MICACEOUS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
312.91	0.05	100		100% SHALE	GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
313.02	0.11	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
314.17	1.15	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
315.12	0.95	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
315.57	0.45	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
316.16	0.59	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
316.47	0.31	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
317.51	1.04	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
317.85	0.34	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
318.00	0.15	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
318.96	0.96	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
319.26	0.30	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
319.66	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
319.85	0.19	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
321.34	1.49	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
321.62	0.28	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
322.81	1.19	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
323.27	0.46	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
324.20	0.93	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
324.32	0.12	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
324.64	0.32	100		100% SANDSTONE,MEDIUM GRAINED	FISSILE, LITHIC, LIGHT GREY, WEAK ROCK.
324.75	0.11	100	3	100% COAL, DULL	

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
324.78	0.03	100	3	100% COAL, HEAVY DULL	
324.86	0.08	100	3	100% COAL, DULL	HEAVY DULL COAL, LENSES, STRONG ROCK.
325.02	0.16	100	3	100% MUDSTONE	COALY, LENSES, BLACK, MODERATELY WEAK ROCK.
325.05	0.03	100	3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
325.07	0.02	100	3	100% COAL, BRIGHT	
325.17	0.10	100	3	100% COAL, HEAVY DULL	STRONG ROCK.
325.19	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
325.28	0.09	100	3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
325.30	0.02	100	3	100% CARBONACEOUS SHALE	BLACK.
325.63	0.33	0	3	CORE LOSS	
325.73	0.10	100	3	100% MUDSTONE	FRAGMENTED, CARBONACEOUS, GREY.
325.77	0.04	100	3	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
325.91	0.14	100	3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
325.97	0.06	100	3	100% MUDSTONE	CARBONACEOUS, FRAGMENTED, BLACK.
		TOP OF	DALMAYNE D LOWER : DEPTH = 264.03 M		
326.03	0.06	100	4	100% COAL, DULL	FRAGMENTED.
326.04	0.01	100	4	100% COAL, DULL	
326.06	0.02	100	4	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
326.07	0.01	100	4	100% COAL, HEAVY DULL	
326.39	0.32	100	4	100% COAL, DULL	
326.40	0.01	100	4	100% MUDSTONE	GREY.
327.40	1.00	100	4	100% COAL, DULL	
		BASE OF	DALMAYNE D LOWER : THICKNESS = 1.43 M; SAMPLED THICKNESS = 1.43 M		
327.86	0.46	100		100% MUDSTONE	FRAGMENTED, GREY, MODERATELY WEAK ROCK.
328.12	0.26	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, WEAK ROCK.
328.94	0.82	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, MICACEOUS, LIGHT BROWN, WEAK ROCK.
328.97	0.03	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
329.85	0.88	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
332.68	2.83	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
333.19	0.51	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
333.22	0.03	100		100% SANDSTONE,MEDIUM GRAINED	FISSILE, MICACEOUS, GREY, VERY WEAK ROCK.
333.25	0.03	100		100% CALCITE	ARENACEOUS, CREAM, MODERATELY WEAK ROCK.
333.53	0.28	100		100% SANDSTONE	CALCITIC, MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
333.58	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY-GREEN, VERY WEAK ROCK.
333.62	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
333.86	0.24	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
334.43	0.57	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
334.52	0.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
334.64	0.12	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
335.82	1.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
336.01	0.19	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
336.97	0.96	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
339.14	2.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
340.17	1.03	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
340.27	0.10	100		100% SANDSTONE,FINE GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
341.00	0.73	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
341.60	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
341.86	0.26	100		100% SANDSTONE	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
343.70	1.84	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
346.47	2.77	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
346.55	0.08	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
347.43	0.88	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
348.24	0.81	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
348.56	0.32	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
353.46	4.90	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
353.55	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
353.58	0.03	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK.
353.65	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
354.49	0.84	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
354.51	0.02	100		100% COAL, HEAVY DULL	
354.55	0.04	100		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK, WITH PLANT REMAINS.
356.50	1.95	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
356.71	0.21	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
357.07	0.36	100		100% SILTSTONE	BADLY BROKEN, GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
357.49	0.42	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
362.88	5.39	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
363.55	0.67	100		100% SILTSTONE	GREY, WEAK ROCK, LAMINATED, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
364.86	1.31	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
365.00	0.14	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, MODERATELY STRONG ROCK.
365.04	0.04	100		100% COAL, HEAVY DULL	
365.35	0.31	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
365.52	0.17	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
366.14	0.62	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
366.29	0.15	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
366.39	0.10	100		50% SILTSTONE 50% MUDSTONE	GREY, CARBONACEOUS, DARK BROWN. WEAK ROCK.
366.67	0.28	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
366.74	0.07	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
366.94	0.20	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
367.37	0.43	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK.
367.95	0.58	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
369.13	1.18	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
370.07	0.94	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
370.14	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
370.18	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
370.21	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
370.24	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
370.36	0.12	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
370.57	0.21	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
370.72	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
371.08	0.36	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
371.18	0.10	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK.
371.30	0.12	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN-BLACK, MODERATELY WEAK ROCK.
371.42	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
371.46	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
371.52	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK, WITH PLANT REMAINS.
				TOP OF DALMAYNE E : DEPTH = 218.48 M	
371.56	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
371.60	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE E : THICKNESS = 0.08 M; SAMPLED THICKNESS = 0.00 M	

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
371.78	0.18	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
372.14	0.36	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, LAMINATED.
372.36	0.22	100		100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
372.75	0.39	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
373.37	0.62	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
373.56	0.19	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
373.84	0.28	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
374.93	1.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
375.01	0.08	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
376.93	1.92	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
377.07	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
377.10	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
377.57	0.47	100		100% SILTSTONE	GREY, WITH MICA, MODERATELY WEAK ROCK, LAMINATED.
377.64	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
377.67	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
378.25	0.58	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
378.57	0.32	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. LIGHT GREY. WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
379.32	0.75	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
379.55	0.23	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
379.80	0.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
379.82	0.02	100		100% CLAYSTONE	CARBONACEOUS, BADLY BROKEN, BROWN, SOFT.
379.95	0.13	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
380.07	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
380.11	0.04	100		100% MUDSTONE	BROWN, VERY WEAK ROCK.

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DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
380.31	0.20	100		100% CARBONACEOUS SHALE	BLACK.
380.33	0.02	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
380.35	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
				TOP OF DALMAYNE E2 : DEPTH = 209.65 M	
380.74	0.39	100	5	100% COAL, HEAVY DULL	DULL COAL, LENSES, STRONG ROCK.
380.76	0.02	100	5	100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY STRONG ROCK.
380.78	0.02	100	5	100% CARBONACEOUS SHALE	BLACK.
380.82	0.04	100	5	100% COAL, HEAVY DULL	STRONG ROCK.
380.83	0.01	100	5	100% COAL, BRIGHT	WEAK ROCK.
381.01	0.18	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, STRONG ROCK.
381.02	0.01	100	5	100% CARBONACEOUS SHALE	BLACK.
381.05	0.03	100	5	100% COAL, INTERBANDED DULL AND BRIGHT	
381.08	0.03	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	
381.23	0.15	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, STRONG ROCK.
381.24	0.01	100	5	100% CARBONACEOUS SHALE	BLACK.
				BASE OF DALMAYNE E2 : THICKNESS = 0.89 M; SAMPLED THICKNESS = 0.89 M	
381.29	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
381.31	0.02	100		100% CLAYSTONE	FISSILE, BROWN, VERY WEAK ROCK.
381.32	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
381.34	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
381.37	0.03	100		100% SILTSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
382.84	1.47	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
383.23	0.39	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
385.29	2.06	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
385.34	0.05	100		100% SANDSTONE,FINE GRAINED	FISSILE, LITHIC, LIGHT GREY, VERY WEAK ROCK.
385.84	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
386.13	0.29	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
386.79	0.66	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
387.01	0.22	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
388.00	0.99	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
388.96	0.96	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
390.65	1.69	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
392.84	2.19	100		100% SILTSTONE	GREY, LAMINATED, WITH PLANT REMAINS.
393.02	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
393.22	0.20	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
393.46	0.24	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
393.82	0.36	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
394.53	0.71	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
394.64	0.11	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
394.72	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
394.78	0.06	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK, VERY WEAK ROCK, WITH PLANT REMAINS.
394.96	0.18	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, MODERATELY WEAK ROCK.
395.06	0.10	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
395.50	0.44	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	BANDS, LIGHT GREY. CARBONACEOUS, SILTSTONE, DARK BROWN. WEAK ROCK.
395.51	0.01	100		100% COAL, BRIGHT	
395.95	0.44	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK BROWN. CARBONACEOUS, STREAKS, LIGHT GREY. WEAK ROCK, WITH PLANT REMAINS, LAMINATED.
396.77	0.82	100		100% SILTSTONE	GREY, WEAK ROCK, LAMINATED.
396.89	0.12	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
396.93	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
396.98	0.05	100		100% COAL, HEAVY DULL	
397.01	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, FIRM.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
397.11	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
397.21	0.10	50		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
397.49	0.28	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
397.71	0.22	50		100% MUDSTONE	CARBONACEOUS, DARK BROWN, VERY WEAK ROCK.
397.79	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
398.00	0.21	40		100% MUDSTONE	CARBONACEOUS, DARK BROWN, VERY WEAK ROCK.
398.25	0.25	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
398.89	0.64	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, SILTSTONE, DARK BROWN. WEAK ROCK, LAMINATED.
399.15	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
399.50	0.35	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
399.56	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
400.45	0.89	100		100% SILTSTONE	MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
400.51	0.06	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
400.53	0.02	100		100% CLAY	CARBONACEOUS, DARK GREY, SOFT.
401.25	0.72	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
401.27	0.02	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
402.08	0.81	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
402.52	0.44	100		100% SILTSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
402.56	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK.
402.64	0.08	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
402.80	0.16	100		100% MUDSTONE	CARBONACEOUS, WEAK ROCK.
403.42	0.62	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
403.75	0.33	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
403.92	0.17	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
404.37	0.45	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
404.41	0.04	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK BROWN.
404.51	0.10	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
407.51	3.00	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
407.52	0.01	100		100% COAL, BRIGHT	
408.01	0.49	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, WEAK ROCK.
408.12	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
408.26	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
408.58	0.32	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
409.60	1.02	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK.
409.80	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
411.92	2.12	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT BROWN, MODERATELY WEAK ROCK.
412.05	0.13	100		100% SILTSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
413.93	1.88	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT BROWN, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
414.27	0.34	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
415.52	1.25	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
417.80	2.28	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
420.67	2.87	100		100% SANDSTONE	COALY LENSES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
420.84	0.17	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
420.99	0.15	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
421.18	0.19	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
421.43	0.25	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
421.52	0.09	100		100% SANDSTONE	MED.-FINE GRAINED. GREY-BROWN, MODERATELY WEAK ROCK.
421.56	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
422.10	0.54	100		100% SILTSTONE	LIGHT BROWN, WEAK ROCK.
422.13	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
422.22	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
422.56	0.34	100		60% SANDSTONE 40% SILTSTONE	COALY, LENSES, GREY-GREEN. GREY. WEAK ROCK.
423.26	0.70	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK, THINLY BEDDED.
423.42	0.16	100		100% SANDSTONE	PEBBLY, COALY, GREY-GREEN, MODERATELY WEAK ROCK.
424.83	1.41	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
425.24	0.41	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
426.29	1.05	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
426.44	0.15	100		100% SANDSTONE	COALY, LENSES, GREY-GREEN, MODERATELY WEAK ROCK.
427.46	1.02	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
428.55	1.09	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK.
433.92	5.37	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
434.15	0.23	100		100% SANDSTONE	COALY, LENSES, GREY-GREEN, WEAK ROCK, WITH MUD PELLETS.
437.71	3.56	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, WITH PLANT REMAINS.
437.99	0.28	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
438.91	0.92	100		55% SILTSTONE 45% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. CARBONACEOUS, STREAKS, GREY-GREEN. WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
439.18	0.27	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
439.46	0.28	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
439.80	0.34	100		100% MUDSTONE	BADLY BROKEN, GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
441.10	1.30	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREEN, WITH MICA, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
441.41	0.31	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
441.81	0.40	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY-GREEN, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
441.92	0.11	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
442.67	0.75	100		100% SILTSTONE	GREY-GREEN, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
442.84	0.17	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
442.91	0.07	100		100% COAL, HEAVY DULL	BADLY BROKEN.
444.88	1.97	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREEN, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
446.00	1.12	100		60% SILTSTONE 40% SANDSTONE	GREY-GREEN, MED.-FINE GRAINED, LIGHT GREEN, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, TIGHT NON PLANAR, .
446.26	0.26	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
447.00	0.74	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
447.36	0.36	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY-GREEN, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
447.86	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
448.17	0.31	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
449.00	0.83	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK.
450.63	1.63	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
453.58	2.95	100		100% SILTSTONE	BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
454.53	0.95	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, ARGILLACEOUS, GREEN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
458.68	4.15	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREEN, WEAK ROCK.
467.30	8.62	100		100% SILTSTONE	BROWN, WITH FRAGMENTS OF QUARTZ, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
467.40	0.10	100		100% MUDSTONE	CALCITIC, FISSILE, GREY, FIRM.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
470.45	3.05	100		100% SILTSTONE	GREY-BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
473.00	2.55	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DC1	0.00 M	289.21 - 290.20 M	0.99 M
DDU	1.27 M	309.96 - 311.23 M	1.27 M
DDL	1.43 M	325.97 - 327.40 M	1.43 M
DE	0.00 M	371.52 - 371.60 M	0.08 M
DE2	0.89 M	380.35 - 381.24 M	0.89 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	262.40 - 264.60 M	2.20 M
2	309.96 - 311.23 M	1.27 M
3	324.64 - 325.97 M	1.33 M
4	325.97 - 327.40 M	1.43 M
5	380.35 - 381.24 M	0.89 M

025

THE SHELL COMPANY OF AUSTRALIA LTD.

RAW COAL PLY ANALYSIS

GRAY.

APPENDIX 3

853027

THE SHELL COMPANY OF AUSTRALIA LTD.

RAW COAL PLY ANALYSIS

026

LEGEND

TOTAL MOISTURE BASIS

	Air Dried
A	As Received
T	Total
B	Bed
Q	Equilibrium
E	Estimated Value

INHERENT MOISTURE BASIS

	Air Dried
E	Estimated Value

TOTAL SULPHUR BASIS

	Air Dried
A	As Received
R	Dry Basis

ASH/VOLATILE MATTER/FIXED CARBON BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free
E	Estimated Value

SPECIFIC ENERGY BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free

INTERVAL MARKER CODE

Cols 1-2: Member/Marker
Col 3: Subseam
Col 4: Seam Split
Col 5: Subsplit

U8	- MT. NICHOLAS UPPER 8
M1	- MT. NICHOLAS MIDDLE 1
M2	- MT. NICHOLAS MIDDLE 2
M3	- MT. NICHOLAS MIDDLE 3
L1	- MT. NICHOLAS LOWER 1
L2	- MT. NICHOLAS LOWER 2
DA	- DALMAYNE A
DB	- DALMAYNE B
DC	- DALMAYNE C
DD	- DALMAYNE D
DDU	- DALMAYNE D UPPER
DDM	- DALMAYNE D MIDDLE
DDL	- DALMAYNE D LOWER
D2	- HAREFIELD 2
D3	- HAREFIELD 3
D4	- HAREFIELD 4
DE	- DALMAYNE E
DE2	- DALMAYNE E2
DE3	- DALMAYNE E3
DF	- DALMAYNE F

SAMPLE NUMBER

* Not Sampled - Assumed Analysis

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RAW COAL PLY ANALYSIS

CRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY5

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		263.18	0.34	1.34				14.9					
2		263.76	0.58	2.22				81.6					
3	DC1	264.56	0.80	1.49				27.3					
4	DC1	264.83	0.27	2.22				81.5					
5	DC1	266.00	1.17	1.44				26.0					
6		367.70	0.13	2.17				70.6					
7	DC2	368.49	0.79	1.44			3.1	23.1	28.1	45.7	0.48	24.25	

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY7

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		207.25	1.51	1.62				38.6					
2	DB	254.60	1.08	1.67				41.0					
3	DC	281.76	1.03	1.60				37.4					
4	DC1	314.32	0.49	1.70				46.9					
5	DC1	315.56	1.24	1.45				22.0					
6	DC1	316.43	0.87	1.78				51.5					
7		316.62	0.19	2.16				73.4					

029

RAW COAL PLY ANALYSIS

CRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE GY9

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DB	187.19	0.86	2.03				71.8					
2	DB	187.98	0.79	1.77				52.5					
3	DB	189.07	1.09	2.05				66.4					
4	DB	190.15	1.08	1.97				57.6					
5	DB	190.29	0.14	2.29				80.9					
6	DDU	269.41	1.39	1.43				20.3					
7		269.68	0.27	1.76				53.0					
8	DDL	284.51	1.01	1.50				27.0					
9		336.61	0.35	2.08				66.3					
10	DE2	337.68	1.07	1.43				20.1					
6	DDU	269.41	1.39	1.43			4.0	20.5	27.0	48.5	0.33	25.41	
8	DDL	284.51	1.01	1.50			4.6	26.8	22.1	46.5	0.30	22.45	
10	DE2	337.68	1.07	1.43			3.3	20.3	27.7	48.7	0.42	25.71	

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030

RAW COAL PLY ANALYSIS

CRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE CY11

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS				TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
							INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %			
1		264.60	2.20	1.62				38.8					
2	DDU	311.23	1.27	1.49				26.0					
3		325.97	1.33	1.93			4.9	26.5	36.2	32.4	0.36	23.06	
4	DDL	327.40	1.43	1.47				60.0					
5	DD2	381.24	0.89	1.47				23.7					
4	DDL	327.40	1.43	1.47			4.9	24.0	23.1	48.0	0.34	23.32	
5	DD2	381.24	0.89	1.47			5.6	23.7	27.4	43.3	0.49	23.59	

23.7

853032

031

THE SHELL COMPANY OF AUSTRALIA LTD.

WASHED COAL / COMPOSITE ANALYSIS

GRAY

853033

032

THE SHELL COMPANY OF AUSTRALIA LTD.

WASHED COAL / COMPOSITE ANALYSIS

LEGEND

TOTAL MOISTURE BASIS

	Air Dried
A	As Received
T	Total
B	Bed
Q	Equilibrium
E	Estimated Value

INHERENT MOISTURE BASIS

	Air Dried
E	Estimated Value

TOTAL SULPHUR BASIS

	Air Dried
A	As Received
R	Dry Basis

ASH/VOLATILE MATTER/FIXED CARBON BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free
E	Estimated Value

SPECIFIC ENERGY BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free

SAMPLE STATE

COL 1-4:	JCRD	Jaw Crushed. Raw. Dry Screenings
	JCFD	Jaw Crushed. Fractional. Dry Screenings
	HKRD	Hand Knapped. Raw. Dry Screenings
	HKFD	Hand Knapped. Fractional. Dry Sceenings
	DSRD	Drop Shattered. Raw. Dry Screenings
	DSFD	Drop Shattered. Fractional. Dry Screenings
	SARD	Size Adjusted. Raw. Dry Screenings
	SAFD	Size Adjusted. Fractional. Dry Screenings
	DTRD	Dry Tumbled. Raw. Dry Screenings
	DTFD	Dry Tumbled. Fractional. Dry Screenings
	WTCR	Wet Tumbled with cubes. Raw. Wet Screenings
	WTCF	Wet Tumbled with cubes. Fractional
	WTR	Wet Tumbled without cubes. Raw
	WTF	Wet Tumbled without cubes. Fractional
	RCRW	Recrushed. Raw. Wet Screenings
	RCFW	Recrushed. Fractional. Wet Screenings
	WTC	Wet Tumbled. Cumulative
	DTC	Dry Tumbled. Cumulative
	JCC	Jaw Crushed. Cumulative
	BWSF	Broken. Wet Screened. Fractional
	BWS	Broken. Wet Screened
	BWSC	Broken. Wet Screened. Cumulative
	WTNC	Wet Tumbled (without cubes). Cumulative
COL 5:	blank	
COL 6	S	Sink Fraction
	F	Float Fraction
COL 7-10:	N.nn	Separation Relative Density

853034

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE		YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample [illegible]													
001	266.00	2.24	JCC	F1.65	64.8	4.4	15.3	30.5	49.8	0.51		27.42	
			JCC	F1.80	70.5	4.1	18.5	30.1	47.3	0.48		26.41	
Sample [illegible]													
002	268.49	0.79	JCC	F1.65	82.4	3.3	15.7	30.8	50.2	0.48		27.29	

033

8530335

WASHED COAL / COMPOSITE ANALYSIS

CRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE [illegible]

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE		YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1+2													
DB	254.60	2.59	JCC	F1.70	59.2	3.5	21.3	28.5	46.7	0.35		24.85	
Sample 3													
DC	281.76	1.03	JCC	F1.70	61.7	4.3	18.1	30.6	47.0	0.46		25.92	
Sample 5+6													
DC1	316.43	2.11	JCC	F1.50	53.5	4.1	14.1	30.9	50.9	0.40		27.68	
Sample 4-6													
DC1	316.43	2.60	JCC	F1.80	74.0	3.8	22.6	28.6	45.0	0.36		24.44	

853036

WASHED COAL / COMPOSITE ANALYSIS

CRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY9

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE		YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample A													
DD1	269.41	1.39	JCC	F1.60	90.9	3.4	17.3	28.1	51.2	0.34		26.82	
Sample B													
DD1	284.51	1.01	JCC	F1.60	72.4	3.9	20.5	23.5	52.1	0.37		24.83	
Sample C													
DF2	337.68	1.07	JCC	F1.70	89.0	3.2	15.2	29.1	52.5	0.47		27.68	

035

8530327

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE		YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1	264.60	2.20	JCC	F1.80	67.3	5.1	23.2	26.6	45.1	0.37		23.74	
Sample 2 CDU	311.23	1.27	JCC	F1.60	80.7	4.2	17.4	28.5	49.9	0.38		26.60	
Sample 3+4 CDL	327.40	2.76	JCC	F1.80	65.9	3.8	26.2	23.5	46.5	0.33		23.73	

056

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