WCR (G.B)
WOODSIDE - 2
W442

ONSHORE WOODSIDE OIL. N
PPL/171

1 Folio No.	2 Ref.	3 Date	4 Clearing Officer's Initials	1 Folio No.	2 Referred to	3 Date	4 Clearing Officer's Initials

FILE COVER INSTRUCTIONS FOR ACTION OFFICERS

(1) FOLIO NUMBERS: Each subject paper attached to a file is to be given a consecutive number by the attaching officer. Papers must not be removed from or attached to a file without approval.

(2) REFERRAL TO OTHER OFFICERS: When an Officer completes action on the file and further action is required by some other Officer, please initial Column (4) and on the next vacant line, enter the relevant folio number in Column (1), indicate to whom the file is to be forwarded in Column (2) and record the date in Column (3).

(3) BRING UP MARKINGS: When action on a file is required at a later date, the officer will initial Column (4) and, on the next vacant line, enter the relevant folio number in Column (1), then write "B/U" followed by the action officer's name in Column (2) and the date the file is required in Column (3).

(4) PUTAWAY MARKINGS: When ALL action on a file is completed the officer concerned will initial Column (4) and, on the next vacant line, write "P/A" in column (2).

REGISTRY MUST BE NOTIFIED OF ANY FILE MOVEMENTS BETWEEN OFFICERS

LOCATION

EARLIER FILES	LATER FILES	RECORDS DISPOSITION

RELEVANT FILES

File No.	Subject

SYMBOLS FOR ACTION OFFICERS

EXECUTIVE

Secretary	SEC
Deputy Secretary	DS
Executive Director Portfolio Management	EDPM
Executive Director Performance Evaluation	EDPE
Executive Director Primary Industries and Chief Scientist	EDPI,CS
Executive Director Catchment Mgt & Sustainable Agriculture	EDCMSA
Executive Director Minerals and Petroleum	EDMP
Executive Director Forests Service	EDFS
Executive Director Parks, Flora and Fauna	EDPF
Executive Director Land Victoria	EDLV
Executive Director Regional Services	EDRS

CORPORATE MANAGEMENT

General Manager Corporate Services	GMCS
Chief Finance Officer	CFNO
Manager Information Technology Strategies	MITS
Director Capital Policy	DCP
Director Human Resources	DHR
Director Planning & Budget	DPB
Director Information Technology & Telecommunications	DITT
Director Business Reform	DBR
Manager Business Improvement	MBI
Manager Administrative Policy & Procedures	MAPP
Manager Metropolitan Administrative Operations	MMAO
Manager Corporate Communications & Information	MCCI
Manager Electronic Information Services	MEIS
Manager Library & Information Services	MLIS

MINERALS AND PETROLEUM

Manager Petroleum Development	MPD
Manager Geological Survey Victoria	MGSV
Manager Mineral & Petroleum Operations	MMPO
Manager Minerals Development	MMD
Manager Extractive Industries	MEI
Manager Minerals & Petroleum Titles	MMPT

PRIMARY INDUSTRIES & CHIEF SCIENTIST

Manager Chemical Standards Branch	MCSB
Manager Plant Standards	MPS
Chief Veterinary Officer	CVO
Director Bureau of Animal Welfare	DBAW
Director Fisheries	DF
Director Quality Assurance	DQA
Director Agribusiness	DA

PERFORMANCE EVALUATION

Chief Economist	CE
Manager Internal Audit & Risk Mgt Policy	MIARMP
Manager Strategic Quality Assurance	MSQA

CATCHMENT MGT & SUSTAINABLE AGRICULTURE

Program Manager Pest Plants & Animals	PMPPA
Director Catchment & Water Resources	DCWR
Director Sustainable Development	DSD
Director Office of Rural Affairs	DORA
Director Natural Resource Policy	DNRP

FORESTS SERVICE

Manager Commercial Forestry	MCF
Chief Fire Officer	CFO
Manager Forest Management	MFM
Manager Regional Forests Agreements	MRFA

PARKS, FLORA & FAUNA

Manager Parks & Reserves	MPR
Manager Business Management Parks, Flora & Fauna	MBMPFF
Manager Flora & Fauna	MFF
Manager Coasts & Ports	MCP

LAND VICTORIA

Director Geospatial Information	DGI
Director Resources & Reform	DRR
Surveyor General	SG
Valuer General	VG
Director Land Registry	DLR
Director Crown Land Management	DCLM

PORTFOLIO MANAGEMENT

Director Water Agencies	DWA
Manager Portfolio Coordination	MPC
Manager Environmental Policy	MEP
Manager Policy Support	MPOS
Director Media	DM

WELL SUMMARY
WOODSIDE-2
(W442)

CONTENTS PAGE:

APPENDIX 1.0

PE904205

This is an enclosure indicator page.
The enclosure PE904205 is enclosed within the container PE904204 at this location in this document.

The enclosure PE904205 has the following characteristics:

ITEM_BARCODE	= PE904205
CONTAINER_BARCODE	= PE904204
NAME	= Well Card
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= WELL_CARD
DESCRIPTION	= well card Woodside 3
REMARKS	=
DATE_CREATED	= 28/02/57
DATE_RECEIVED	=
W_NO	= W442
WELL_NAME	= Woodside-3
CONTRACTOR	= Woodside Lakes Entrance Oil Co
CLIENT_OP_CO	= Woodside Lakes Entrance Oil Co

(Inserted by DNRE - Vic Govt Mines Dept)

WELL DETAILS W442 Page 192 102 V

WELL WOODSIDE No 2. TYPE. N.F.W. BASIN GIPPSLAND

TEN. HOLDER Woodside (L.E) Oil Co. N.L. LAT. 38°37'43"S Ph. Balleeng

OPERATOR " " " LOCATION. Long. 146°53'42"E

TENEMENT PPL. 174 (Now PPL 157) Military Map. Alberton / Mts Lands

ELEVATION 35 T.D. 8512 STATUS. D&A

SPUD. Jan 1956 COMPL. Suspended at 6110' on March 1956 ABD. Feb 1957 1956.

CASING Cemented at 6110'

STRATIGRAPHY.

AGE	FORMATION	DEPTH	THICKNESS
	Gippsland Ls.	980	
	[illegible]	2240	
	Latrobe Valley Coal Mbs.	2490	
	Narracan Group.	3543.	
	Strezlecki Group.	3800.	

FORMATION TESTS.

LOG SUMMARY and INTERPRETATION

Type	Run	Interval	Date	Type	Run	Interval	Date	Interval	Φ	Sw
E Log.	1	6089-1127	22 Mar '56							

Woodside (L.E.) Oil Co. N.L. WOODSIDE No 2.

WOODSIDE No 2 2/2 7

CORES

No	Interval	Rec	No	Interval	Rec	No	Interval	Rec	No	Interval	Rec
										6892-6910	10'3½"
				2325-2330							
							3560-3570				
	1103-1123									7785-7805	20'
				2500-2511						7951-7958	6'6"
				2527-2530							
				2530-2540							
	1641-1660			2562-2550						8843-8862	15'
	1960-1966										
	1966-1981										

CHEMICAL ANALYSES (OIL, WATER, GAS.)

Analyses by Mines Dept.

1310 - 1350. - Dark brown to black crude oil of S.G. 092 to 0.93 - heavy crude oil free from gasoline, kerosene, & other light fractions, of a mixed paraffinic - asphaltic base.

5635 - 5640 Dark brown crude oil of S.G. 0.97. Crude oil containing approx. 20% of light low b.p. fractions, and is of mixed paraffinic - asphaltic base of softening point 40°-50° C. and contains some sulphur.

Shows.

Oil 980-1000 - slight.
1310'
1500'
1966-1980' Tr p/w show Brown Oil
2493-2511' " " " show oil.

Gas. 980'-1000'
3104' gas continuous.
3170' Large flow gas when in production.
5022'-5032'
5235'-5266'
5120'-5290' Sample show light oil + paraffin.
5351-5600 Gas. Oil show while drilling.

GENERAL (Conclusions, structure, abandonment programme, etc.)

5708-5711 Show of oil.

Location from County Bulla Bulla plan in Drafting office

Mud other details of above from Core Lab. Graphic & descriptive logs.

APPENDIX 2.0

MINES DEPARTMENT

VICTORIA

7408 Complete

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. N.L. bore on No. 2 Well.

* Petroleum Prospecting Licence
* ~~Petroleum Mineral Lease~~ Number ....174..... during week ending .....25th January,..... 1956.

DEPTH	DESCRIPTION OF STRATA
0' - 382'	Sand and Clay.
382' - 606'	Sand and Shells.
606' - 831'	Sand, Shells and Quartz.
831' -1101'	Hard Sandy Shale, Shells and streaks of lime stone.
1101' -1135'	Light Brown Sandstone and limestone.
1135' - 1180'	Limestone.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

Show of gas and slight show of oil from 980' - 1000'.

9.5/8" casing cemented to 1123 feet.

D. Thomas 20.2.56

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO. N.L.

LEGAL MANAGER ...Rees B. Withers..... COY.

Date ..17../..2../..56. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. N.L. bore on No. 2 Well.

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number .....174..... during week

ending .....1st. February..... 1956.

DEPTH	DESCRIPTION OF STRATA
1180' - 1300'	Limestone.
1300' - 1310'	Coarse Grit and shells.
1310' - 1350'	Brownish coarse sand.
1350' - 1429'	Limestone.
1429' - 1470'	Silica Quartz.
1470' - 1546'	Limestone.
1546' - 1817'	Limestone, sand and sandy shale.
1817' - 2141'	Limestone and brown sand.

Continued on next page.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

SIGNED .....

LEGAL MANAGER ..... COY.

Date ...../...../..... .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO N.L. bore on No. 2 Well.

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number ...174..... during week

ending ....1st February..... 19.56. CONTINUED.

DEPTH	DESCRIPTION OF STRATA
2141' - 2286'	Very changeable, limestone, sandy shale, blue clay and grey mudstone.
2286' - 2400'	Sandy shale and blue clay.
2400' - 2528'	Sand, shells and coal.
2528' - 2714'	Brown coal with some shale.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

Oil show reported between 1310 feet and 1500 feet levels.

1966 feet - 1980 feet - Top of core showed brown oil sand.

2493 feet - 2511 feet - indications of oil in top section of core.

SIGNED .WOODSIDE (LAKES ENTRANCE) OIL CO.N.L.

LEGAL MANAGER ...Rees.B..Withers..... COY.

Date ..17./...2./..56. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at .WOODSIDE.(LAKES.ENTRANCE).OIL.CO.N.L.bore on No. 2. Well.

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number ...174..... during week

ending ...8th.February,..... 19.56.

DEPTH	DESCRIPTION OF STRATA
2714' - 2916'	Coal with sand and clay.
2916' - 3104'	Silica, quartz at 2920' with seam of hard black coal underlying.
3104' - 3295'	Silica sands with shells.
3295' - 3566'	Silica quartz, sandstone with brown mudstone and shale.
3566' - 3678'	Brown clay and shale with mudstone.
3678' - 3851'	Grey sandy shale and clay.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

After passing through coal series mud became saturated with oil and coal and showed considerable gas constantly.
Gas showing continuously at 3104 feet.

Large Flow of gas encountered at 3170 feet with colour in mudstream.

SIGNED .WOODSIDE.(LAKES.ENTRANCE).OIL CO.N.L.

LEGAL MANAGER ...Rees.B..Withers..... COY.

Date ..17./...2./..56. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. N.L bore on NO. 2 WELL.

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number ....174..... during week

ending .....15th February., 19.56.

DEPTH	DESCRIPTION OF STRATA
3851' - 4018'	Blue grey sandy shale and clay.
4018' - 4121'	Hard shale and shells.
4121' - 4251'	Hard shale and sandy shale.
4251' - 4302'	Hard shale and sandy shales.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO.N.L.

LEGAL MANAGER ... Rees. B. Withers..... COY.

Date 16../..3./.56. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at .WOODSIDE.(LAKES.ENTRANCE).OIL.CO.N.L.bore on No. 2 WELL

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number ....174..... during week

ending ....22nd.February,.... 1956.

DEPTH	DESCRIPTION OF STRATA
4302' - 4402'	Shale and sandy shale with hard bands.
4402' - 4634'	Shale and sandy shale with hard streaks.
4634' - 4756'	Sand, shale with hard streaks.
4756' - 4844'	Hard grey shale with brown clay.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

SIGNED WOODSIDE.(LAKES.ENTRANCE).OIL CO.N.L.

LEGAL MANAGER ...Rees..B..Withers..... COY.

Date .16../..3../.56.. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO.N.L. bore on No. 2 Well.

* Petroleum Prospecting Licence
* ~~Petroleum Lease~~ Number ....174..... during week

ending ...29th February,..... 1956.

DEPTH	DESCRIPTION OF STRATA
4844' - 4933'	Sandstone with bands of hard shale.
4933' - 4981'	Brown sandy shale.
4981' - 5019'	Sandy shale.
5019' - 5128'	Sandy shale with hard bands.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

Chloroform test shows color from bit sample at 4962 ft.

Show of gas at 5022' - 5032'.

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO. N.L.

LEGAL MANAGER ..Rees B. Withers..... COY.

Date ..16./...3./..56. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at ..WOODSIDE.(LAKES.ENTRANCE).OIL.CO.NLbore on No. 2 WELL

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number .....174..... during week

ending ....7th.March,..... 1956.

DEPTH	DESCRIPTION OF STRATA
5128' - 5266'	Hard shale and sandstone with streaks of sandy shale.
5266' - 5351'	Sandstone shale and sandy shale.
5351' - 5449'	Sandstone, dark siltstone and sandy shale.
5449' - 5567'	Sandy shale and sand.
5567' - 5600'	Sandy shale and shale.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

1. Show of gas 5235' - 5266'.
2. 5120' - 5290' samples show light oil and paraffin.
3. Gas and oil show in mudstream continuously 5351' - 5600'.

SIGNED WOODSIDE.(LAKES.ENTRANCE).OIL CO. N.L.

LEGAL MANAGER .....Rees.B..Withers..... COY.

Date ..16./..3../.56.. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO.N.L. bore on No. 2 WELL.

* Petroleum Prospecting Licence
* Petroleum Mineral Lease Number ....174..... during week ending ..14th March,..... 19.56.

DEPTH	DESCRIPTION OF STRATA
5600' - 5640'	Sandstone and shale.
5640' - 5675'	Shale.
5675' - 5728'	Sand and Sandy Shale.
5728' - 5749'	Sandy Shale and Shale.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

1. Coarse Sand 5708' - 5713' show of oil.

SIGNED ..WOODSIDE (LAKES ENTRANCE) OIL CO.N.L.

LEGAL MANAGER ..Rees..R..Withers..... COY.

Date ..24../...4../..56.. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. N.L. bore on No. 2 WELL.

* Petroleum Prospecting Licence
* Petroleum Mineral Lease Number ...174..... during week ending ...21st March,..... 1956.

DEPTH	DESCRIPTION OF STRATA
5749' - 5837'	Hard shale and sandy shale.
5837' - 5949'	Shale, sandy shale and sandy limestone.
5949' - 5976'	Hard shale.
5976' - 5995'	Hard shale.
5995' - 6017'	Hard black shale.
6017' - 6067'	Sandy shale and shale.
6067' - 6088'	Oil Sand.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO.N.L.

LEGAL MANAGER Rees B. Withers..... COY.

Date ..24./...4./..56. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. N.L. bore on No. 2 WELL

* Petroleum Prospecting Licence
* Petroleum Mineral Lease Number ....174..... during week ending ..23th March..... 1956.

DEPTH	DESCRIPTION OF STRATA
6088' - 6108'	Hard sandstone.
6108'	Final depth.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

Ran electric log of well.

Cemented 6104 feet of 6.5/8" casing.

Halliburton cement plug was inserted approximately 30 ft. up from casing shoe.

NOTE - Logging of well indicates further sands at 6108 ft. and it is, therefore, intended to resume drilling on this well as soon as lighter drill pipe can be obtained.

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO.N.L.

LEGAL MANAGER ..Rees. R. Withers..... COY.

Date ..24../...4../..56.. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. bore on No. 2 WELL.

* Petroleum Prospecting Licence Number ..174..... during week

ending ....30th November,.... 1956.

DEPTH	DESCRIPTION OF STRATA
6108'-6151'	Hard Sandstone.
6151'-6197'	Medium Hard Sandstone.
6197'-6270'	Hard Sandstone.
6270'-6364'	" "
6364'-6402'	Hard Sandstone and Grey Shale.
6402'-6469'	Sandstone with traces of Calcite.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

Drilling was resumed on this hole from 6108 ft. after the hole had been standing cased for some months pending the completion of hole No. 3 and the arrival of light drill stems.

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO. N.L.

LEGAL MANAGER Rees. B. Withers. COY.

Date ..16./..1./..57..

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

~~14~~ of 25

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. .... bore on No. 2 WELL.

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number ....174..... during week ending .....7th December, 1956 ~~XX~~..

DEPTH	DESCRIPTION OF STRATA
6469'-6553'	Grey Sandstone with Shale Bands.
6553'-6643'	do. do.
6643'-6669'	do. do.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO. N.L.

LEGAL MANAGER ...Rees. B. Withers..... COY.

Date ..16./.1.../.57.. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

Spec Boreholes

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at .WOODSIDE.(LAKES.ENTRANCE)..... bore on

* Petroleum Prospecting Licence
* Petroleum Mineral Lease Number ..... during week

ending .13th December..... 19.56.

DEPTH	DESCRIPTION OF STRATA
Bore No. 2 - 6,800'	Drilling is proceeding satisfactorily in formation of hard sandstone with shale bands. Slight traces of an oily substance have occurred in the drilling mud at these lower depths but insufficient quantities were recovered to allow its full significance to be evaluated.
Bore No. 4 - 708'	After casing the hole to 184' drilling has been resumed and is proceeding through sand and shell formation with clay and sandstone becoming more evident.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

SIGNED ..Rees.B..Withers.....
General
~~LEGAL~~ MANAGER Woodside.(Lakes.Entrance).. Coy.
Oil Co. N.L.

Date ...../...../..... .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

~~16 of 25~~

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO..... bore on No. 2 WELL

* Petroleum Prospecting Licence
* ~~Petroleum Mining Lease~~ Number ...174..... during week

ending .....14th December..... 1957.

DEPTH	DESCRIPTION OF STRATA
6669'-6700'	Sandy Shale.
6700'-6781'	Sandstone and Shale with traces of Calcite.
6781'-6845'	Sandstone with Shale bands.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO. N.L..

LEGAL MANAGER ..Rees B. Withers..... COY.

Date ..16./..1../..57.. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

~~17 of 25~~

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MINES DEPARTMENT

VICTORIA

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. N.L. bore on No. 2 WELL

* Petroleum Prospecting Licence Number .....174..... during week
* ~~Petroleum Mining Lease~~

ending .21st December..... 19.56.

DEPTH	DESCRIPTION OF STRATA
6845'-6967'	Fine-grained grey Arkose.
6967'-7054'	do. do.
7054'-7106'	do. do. (HARD)
7106'-7350	do. do.
7350'-7595'	ARKOSE
7595'-7825'	SANDSTONE

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

Dr. Thomas
Copies for your files
18.1.57 23.1.57

SIGNED WOODSIDE (LAKES ENTRANCE) OIL CO. N.L.

LEGAL MANAGER ....Rees B. Withers..... COY.

Date ...16./....1./.57.. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

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MINES DEPARTMENT

VICTORIA

20/20

Mines (Petroleum) Act, 1935.
Section 45.

Record of Work at WOODSIDE (LAKES ENTRANCE) OIL CO. N.L. bore on No. 2 Well.

* Petroleum Prospecting Licence Number ...174..... during week ending .....15th February,..... 19..57.

DEPTH	DESCRIPTION OF STRATA
7825'-8862'	Arkose - Total Depth.

Notes by Driller in Charge (State in notes whether water, gas or petroleum has been met with, and, if so, give depth and nature of occurrence, also depth to which casing has been inserted and cemented.)

Cored from 8853 ft. - 8862 ft. Arkose.

Cement plug at 5645 ft.

Perforation tests carried out by Lane Wells Ltd. with negative results.

WOODSIDE (LAKES ENTRANCE) OIL CO. N.L.
SIGNED .....
LEGAL MANAGER .....Rees B. Withers..... COY.

Date ...24./...7./...57. .

N.B. - The Act also requires the Minister to be notified immediately water, gas or petroleum is encountered.

Analyses of water, gas and oil should be submitted if available.

APPENDIX 3.0

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W O O D S I D E W E L L No 2

STRATIGRAPHIC COLUMN

Driller's Depth	Correction (if any)	Description of Lithology
120		Fine gravelly sand with marine shells
140		As above.
160		As above. Some shells rolled. Gravel getting coarser.
180		As above.
200		Particularly shelly level. Obviously beach sand. Some worm-perforated shell fragments. Most fragments well rolled
220		Gravel coarse, up to pea size.
		As above. Gravel somewhat finer.
260		As above. Grains mainly quartz, but also some basalt. Shells rolled.
320		50/50 shell and gravel, medium to fin
410		Very coarse gravel shell beds. Shells rolled.
420		As above, gravel badly sorted.
440		coarse, well rolled gravelly sand with about 30% rolled shells.
460		Better graded quartz gravel (⅛-1/16) No shells.
580		Less well graded gravelly sand with some ¼ inch grains. No shells.
620		As above. Occasional large grains. No shells.
640		Shell-less quartz gravel, mostly ⅛ to 1/16, with some prominently larger grains here and there.
660		As above.
720		As above.
740		As above.
760		As above.
780		Coquina of coarse gravel and shells. Many gravel grains are rolled shells, but besides these are also delicate and well-preserved pelecypod shells. Fragments of Bryozoa. Gravel unsorted
800		As above.
820		Shell bed with subordinate sand. Sand gravelly, prominent gastropods; also pelecypods and bryozoa. Some shells well preserved. Others broken but not rolled.
830		Lumachelle. Small shells whole.
840		Fine gravel with gastropods, pelecypods, scaphopods and bryozoa.
850		As above. Some fine shell specimens.
860		As above. Particularly shelly.
870		As above.
880		As above.
900		Coarse gravel, up to pea size. S- well-preserved gastropods etc. -shore, marine.

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920		Fine gravel. Shells fall off steeply.
950		Shell bed with fragments of lime-cemented sand matrix attached to shells.
960		As above. Oyster fragments prominent.
970		As above.
980		Coarse travertine with embedded shells of Turritella and other shells: Pecten etc.
990		Carbonaceous travertine with floated ligneous fragments mixed with marine shells Deltaic.
1000		Travertine with largeish pebbles incl. quartz & basalt. Some rolled shells.
1005	CORE.	A core exactly corresponding in lithology to chips of prec. sample: calcareous, cemented travertinous sand.
1010		Chips of same. Some shell fragments.
1015	CORE.	Calcareous, cemented sand with carbon. gr. scattered through the mass.
1020		Same sand. Largeish grains of rolled quar. and well pres. Turritella shells. Some quartz grains with cement attached.
1025	CORE.	Sand as above. No visible shells.
1030		Sample identical to 1020.
1040		Carbonaceous travert. as above. Rare shells Occ. large grains of rolled quartz.
1050		As above. Fragments of travertine as in core above, with embedded scaphopods.
1060		As above. Matrix contains many tubes of scaphopods. Some loose bryozoa and shells.
1070		As above. Much embedded sand, some coarse, and embedded shells common: all marine.
1080		As above. Also veins of bedded calcite.
1090		Travertine increasingly calcareous. Tubes of tightly packed bryozoa and scaphopods forming porous limestome.
1100		As above. Matrix turning to sandy marl & limestone.
1103-1123	CORE.	Sandy marl, packed with scaphopoda and pelecypoda. Fragments of bryozoa.
1160		Carbonaceous sandy marl with shells as ab. Occ. sand grains of large size.
1170		Marl as above with <u>embedded</u> sand grains. Many shells: increasingly sandy.
1180		Gravelly marl. Shells and pea-sized quartz grains embedded in marl cement.
1190		As above: Scaphopods very numerous. Sand grains of some size clearly imbedded in the marl: interesting facies interfinger.
1200		As above: scaphopods partic. numer.
1210		As above: saphop. tightly packed with sand grains in marl cement.
1220		<u>Ditrupa</u>-laden calcareous marly limestone.
1230		As above.
1240		As above.
1250		As above.
1260		As above.
1270		As above. Occasional grains rolled red qu.
1280		As above.
1290		Ditrupa marlstone; sandy; crab claws.
1310	<u>Oil trace.</u>	Cream-coloured sandy marl. As above.
1310-1320	<u>Oil stained</u>	sandy marl as above.
1320	<u>Oil sticky</u>,	sandy foraminiferal and Ditrupa carrying marl. Most of the oil extracted from this level. Oil described in Chemical Laboratory Report 50/52/-56 of 10-2-1956.

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1320-1330		Oil sticky, brown-stained foraminiferal marl. Some largeish sand grains embedded in marl matrix with forams & scaphopods.
1340		As above. Oil has been extracted from this sample and described in report previously mentioned.
1350	Bottom oil level.	Oil stains decrease. Lithology as above: sandy foramin. & scaph. marl.
1360		As above: quartz grains and forams very abundant: sand lenses cannot be far removed from well.
1370		Very sandy and shelly marl. Sand gr. very fine in about 50/50 prop. to marl.
1380		Foraminiferal marl. Occ. sand grains.
1390		Very occ. pea-sized quartz gr. in a marlstone matrix. Matrix otherwise not sandy.
1400		Finely sandy marl.
1410		50/50 marl and very fine sand.
1420		50/50 marl and sandstone.
1430		As above. Some foreign quaternary mat.
1440		As above.
1490		50/50 fine sand-marl mixture.
1500		Bryozoal marl.
1520		As above. slightly contaminated.
1530		As above. Strongly polluted by Quatern. cave-in material.
1540		Marl. Somewhat contaminated.
1550.		Foraminiferal marl.
1560		As above. Numerous rolled foraminifera.
1570		As above. Occ. sand grains.
1580		Polyzoal marl.
1600		As above. Marlstone.
1610		Polyzoal limestone.
1620		" " " or marlstone.
1630		Polyzoal limestone.
1640		As above.
1641-1660	CORE.	Polyzoal marlstone & marl with well preserved large branching bryozoa. Middle: marl with some polyzoa. Bottom: marl.
1670		50/50 marl and marly sandstone.
1680		As above. Rare polyzoal fragments.
1690		As above: sandy marl or marly sdstone.
1700		Ditrupa sandy marl facies.
1710		As above.
1720		As above.
1730		As above: very sandy.
1740		Calcareous very fine grained sandstone to marlstone.
1750		Calcareous sandstone. Getting coarser. sand grains in marl matrix.
1760		Polyzoal limestone with some sand gr.
1770		Cream coloured Polyzoal limestone.
1780		Gray polyzoal limestone.
1790		As above.
1800		Polyzoal limestone. Quaternary contamin.
1810		Polluted mixture containing even box wood. Not collected on screen.
1820		Contaminated polyzoal limestone.
1830-40		As above.
1850		Polyzoal limestone.

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		Polyzoal limestone.
1860		As above.
1870		Gray to cream-coloured polyzoal marl.
1880		Glauconitic polyzoal limestone. First
1900		appearance of glauconite.
		Polyzoal marl or limestone.
1910		Gray coloured polyzoal marl.
1920		As above.
1930		As above.
1940		As above.
1950		Marl/becoming somewhat clayey.
1960		
1960	BIT SAMPLE	Polyzoal marl.
1960-1966	CORE	Greenish cream coloured glauconitic marl.
		Bottom: Greenish glauconitic marl.
1966-1981	CORE	Top: White foraminiferal marl.
		Bottom: White foraminiferal marl.
1970		White marl with glauconitic patches.
2000		White marl with glauconitic patches.
2010		White marl.
2020		As above.
2040		White marl; small glauconitic nests.
2050		As above.
2060		White foraminiferal marl.
2070		As above.
2080		As above with green glauconitic nests.
2090		Glauconitic greenish marl.
2110		White marl with glauconitic pellets.
2120		Polyzoal limestone.
2130		Mixed polyzoal limestone and marl.
2140		White marl.
2150		White marl with some polyz. lstone.
2160		As above.
2170		Gray polyzoal marl.
2180		White " " " " contaminated with Quater
		gravel and shells.
2192		Gray bryozoal marl with Brachiopods.
2195		White polyz. marl.
2200		Gray to white Do.
2210		As above
2220		As above.
2230		Gray polyzoal limestone.
2232		Do heavily polluted from gravel levels ab
2240		As above . Pollution less severe,
2250		Polyzoal lstone. Some foreign sand grains
2262		Gray, clayey foraminiferal limestone.
2270		Gray, shelly marl. Shell fragments along
		planes of stratification.
2280		Gray marly clay with rolled polyzoa, spon
2290		Pyritic clayey marl with pyrites and lst.
2300		Argillaceous polyz. marl. Contaminated.
2310		Somewhat glauconitic polyzoal marl. Conts
2320		
		Glauconitic marl. Contaminated.
2325		Argillaceous cream-coloured marl.
2325-2330	CORE.	Top: gray to dark gray well stratified argil
		foraminif. marl. Dip about 3°. Worm tracks
		filled-in with darker material. Sponges.
		Bottom: Gray marl as above. Forams and worm
		tracks. However rock more massive and lighte
		coloured (less argillaceous).
2340		Marl as above.
2350		Do.
2360		Do.
2370		Do.
2380		Do.
2390		Do.

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5./20

2400		Marl as above.
2410		Cherty marl.
2420		Glauconitic and somewhat coarse marl.
2430		Foraminiferal marl with worm tracks.
2440		As above.
2450		Foraminiferal marl with much glauconite in largeish grain clusters.
2460		Glauconitic marl. Large gl. grains.
2470		Pyritic and glauconitic marl. Contam.
2480		Intensely polluted useless sample.
2490		Glauconitic marl. Badly contaminated.
2500-2511	CORE.	Top: Very sandy and glauconitic marl, containing also large Turritella & other shells filled with pyrite. Middle: About 9 feet of highly glauc. sandy marl with as much as 50% sand. Sand grains large, up to pea-sized gravel grade, scattered through the argillaceous marl. Colour is dark gray, almost black to green. An evil smelling organic ooze strewn with coars sand and gravel. Positive chloroform reaction in top of core. Negative in the argillaceous middle part. Bottom: Dark marl rests in bottom foot on brown coal. Penetrates cracks of latter: base of Middle Miocene-Oligocene suite. At contact, the sand grains are sub-angular.
2520		Brown coal.
2525		Brown coal with some marl as above.
2527-2530	CORE.	Solid brown coal.
2530-2540		Brown coal. 100%
2547-2550	CORE.	Brown coal 100%
2550		Do.
2560		Do.
2570		Do. Some contamination.
2580		Brown coal 100%
2590		1/3 brown coal 2/3 quartz sand.
2600		As above.
2610		About 50/50 br. coal & coarse qu. sd.
2620		Do.
2630		About 1/3 coal to 2/3 coarse sand.
2640		As above.
2650		100% brown coal.
2660		100% brown coal.
2670		Do.
2680		Do.
2690		Do. Much polluted with marl.
2700		100% brown coal.
2710		Do.
2720		Do.
2730		Do.
2740		Do.
2750		Very coarse, well rolled quartz grav. sand to pea size. About 1/6 br. coal.
2760		Gravel as above. Traces of coal.
2770		99% brown coal. Traces of gravel.
2780		Do.
2790		Brown coal 100%
2800		50/50 brown coal & med. gr. qu. sd.
2810		Coarse, gravelly sand up to pea size. Traces of coal.

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2820		Unsorted gravel and gravelly sand. Some ¼ inch or larger grains.
2830		As above with perhaps 1/10 coal.
2840		Gravel coarser still. About 1/6 coal.
2860		About ⅓ coal in very coarse gravelly sand. Gr. size up to ½ inch.
2870		50/50 sand and coal. Sand unsorted, finer but with some very large grains.
2880		Coarse sand with about 1/6 coal.
2890		As above. Rather less coal.
2900		Brown coal 2/3; sand 1/3.
2903-2910	CORE.	Impure, partly carbonaceous fire clay.
2910		Brown coal 100%.
2911-2928.	CORE.	Gray-yellow fire clay.
2930		Brown coal 100%.
2950		About ¼ coal with coarse quartz gravel.
2960		About 1/8 coal in medium grav. sand.
2970		50/50 coal and coarse gravelly sd.
2980		As above. Contam. with marl.
2990		50/50 coal and gr. sd.
3000		Clear quartz medium grav. sand.
3010		Coarse gravel. Traces of coal.
3020		Coarse, poorly sorted qu. gravel.
3030		Do.
3040		Do. Up to ½"grains.
3050		About 1/3 coal in fine sand.
3060		Traces of coal in coarse and poorly sorted gravel.
3070		Better graded gravel about ⅛-1/16".
3080.		Do.
3090		Do.
3100		Do.
3110		Do.
3120		Do.
3130		Do.
3140		Do.
3150		Coarse, poorly sorted gravel & few coal lumps.
3160		Do.
3170		Fine gravelly sand with coal lumps.
3171		About 1/10 coal in very fine gravelly sd.
3172-3182	CORE.	Fire clay.
3190		Fine grained quartz sand.
3200		Coarsening sand & coal traces.
3220		Do.
3230		50/50 very coarse gravel (½ inch), sub--angular, unsorted.
3240		Do.
3250		Do.
3260		Brown coal with about 1/8 coarse angul. gravel as above.
3270		50/50 coal and gravel as above.
3280		1/3 coal and gravel as above.
3290		gravel as above with coal lumps.
3300		50/50 mixture coal and fire clay
3310		1/3 coal, 1/3 fire clay, 1/3 med. qu. gr.
3320		Very coarse unsorted gravel(½") Coal tr.
3330		Coal lumps in gravel up to ¾ inch .
3340		Do.
3350		Do. No coal.
3360		50/50 coal & gravel.
3370		Unsorted gravel. Traces of coal.
3380		Do.

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3390-3430		Gravel gradually gets finer through this series of samples downward. No coal, except in traces.
3440		Fine gravel to coarse sand.
3450		About 1/3 coal in fine gravel or sd.
3460		Coarse sand with lumps of coal. Sd. sub-angular.
3470		Do.
3480		50/50 coarse unsorted gr. & coal.
3490		Do.
3500		Do.
3510		Very coarse grav. (¾") Traces brown c
3520		Exceedingly coarse gravel (mostly above ½ inch) qu. & other rock compon., tr. br.
3530		Do.
3540		Mixed Quartz & basalt gravel. Coal traces.
3550		Weathered basalt.
3560		Do.
3560-3570	CORE.	Wine to gray coloured basalt.
3580		Weathered basalt.
3590		Do.
3600		As above.
3610		Do.
3620		Do.
3630		Do.
3640		Do.
3650		Basalt with some chips of Mesozoic sandstone: Unconformity level. Base of Tertiary.
3660		Mesozoic sandstone.
3670		Mesozoic sandstone.
3680		Do.
3690		Do.
3700		Do.
3710		Highly contaminated cave-in sample.
3720		As above.
3730		Jurassic arkose. Coarse, calc. cemented impervious.
3740		Jurassic arkose, somewh. finer-gr. Contam.
3750		Dense Jurassic arkose. Coarse.
3760		As above, polluted with Tertiary cave-in.
3770		Do. Highly contaminated.
3780		Unacceptable sample: wood fibre and about everything drilled through so far: not from screen. Poor sampling.
3800		Fairly coarse, cemented Jurassic arkose.
3810		Do. Some brown coal contamin.
3820		Do.
3830		Do. Badly contaminated.
3840		Do. Very contaminated.
3850		Do.
3860		50/50 mixture of fine-grained Jurassic sandstone and arkose. Some contamination.
3870		About 1/3 mixture arkose, fine-gr. sdst. & mudstone.
3880		Very fine-gr. gray sandstone; muddy.
3890		As above: very fine-grained sandy mudstone.
3900		Mostly mudstone, with streaks of sdst. as above and occ. arkoses w. black coal veins.
3910		Do.
3920		Do.
3930		50/50 fine-gr.sdst. and coarser arkose.

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3940		50/50 coaly mudstone, black coal and ark.
3950		50/50 arkose and fine grained muddy sdst.
3960		50/50 mudstone & fine-grained sandstone.
3970		Arkose with black coal veinlets.
3980		50/50 arkose and dense fine-gr. sdstone.
3990		Completely contaminated sample.
4000		50/50 arkose and very dense fine-gr. sdst.
4010		As above with conspicuous mudstone chips. Some brown coal & gravel pollution.
4020		50/50 sandstone and mudstone.
4030		50/50 mudstone and coarse sandstone.
4040		As above.
4060		2/3 sanstone and 1/3 mudstone. Contamin.
4070		As above.
4080		50/50 fine grained dense sandstone and mudstone with occasional arkose.
4090		As above.
4100		As above.
4110		Very fine gr., dense sanstone with occas. mudstone streaks.
4120(?)		50/50 sandstone and mudstone.
4114-4127	CORE.	Dense mudstone with plant remains of same type as above.
4130		As above.
4140		As above. About 50% fine-gr. muddy sdst.
4150		As above.
4160		50/50 mudstone and fine-gr. sandstone.
4170		As above.
4180		as above with streaks of coarse arkose.
4190		Mostly mudstone.
4200		As above with some coal streaks and sdst.
4210		Almost only mudstone.
4220		As above.
4225		50/50 mudstone and fine-gr. sandstone.
4230		Fine-gr. sdst. with streaks of dark gray mudstone. Some brown coal contamination.
4240		50/50 mudstone and dense sandstone.
4250		Mostly mudstone.
4250		Bit sample. Caved sample of everything drilled through so far.
4251- 4256	CORE.	Massive mudstone with plants.
4260		Mostly mudstone.
4270		Finely laminated mudstone. Thin streaks of very fine grained sandstone.
4280		Mudstone with a few lumps of dense arkosic sandstone.
4290		90% coarse and fine gr. sdst. & 10% shale.
4300		As above with coal streaks. Ab. 95% sandst.
4310		As above.
4320		As above.
4330		As above.
4340		At least 95% coarse calcium cemented arkose and not more than 5% shale.
4350		100% fine gr. banded sandstone and arkose.
4360		Largely coarse or med. grained arkose. Streaks of banded fine-gr. sdst. & bl.shale.
4370		As above. Shale increases to ab. 20%.
4380		Coarse and med. gr. arkose.
4390		As above. About 10% shale.
4400		Coarse arkose. 5% or les shale, black as ab.
4410		50/50 arkose and black shale.
4420		Not more than 3% shale in coarse arkose.
4430	4405-10	Coarse ark. less than 10%. 90% black shale.
4440		95% coarse arkose. 5% shale.
4450		Mostly coarse arkose and sandstone.
4460		Coarse arkose, banded sdstone.

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		70% arkose and sandstone. 30% shale.
4470		Coarse and fine sandstone. Traces bi. coal.
4480		As above.
4490		90% hard siliceous shale. 10% fine grai-
4500	4480	ned muddy, siliceous sandstone.
4510	4490	85% coarse arkose. 15% shale.
4610	4490	70% shale, 30% fine grained banded, mu-
4520	4500	ddy sandstone and mudstone. Bl. coal str.
		90% shale. Sandstone & coal as ab. 10%.
4530	4510	As above.
4540	4515	As above.
4550		About 100% coarse & med. gr. arkose.
4560	4520	100% arkose of various grades.
4570		100% arkose.
4580		As above.
4590		As above.
4600		95% arkose, 5% shale.
4610		50/50 arkose and shale.
4620	4605	As above.
4630		About 80% arkose and 20% shale.
4640		As above. Shale tends to increase.
4650	4630	About 95% arkose.
4660	4640	About 95% shale.
4670	4650	80% arkose. Brown coal contamination.
4680		100% arkose. " " "
4690		As above.
4700		As above.
4710		As above.
4720		As above.
4730		About ¾ shale: black, hard, siliceous.
4740		3/4 in coarse arkose.
		80% coaly black shale. 20% muddy sil. sds
4750	4730	50/50 shale and sandstone.
4760		As above.
4770		Cave-in material.
4780		
4780	Bit Sample	as above.
4790		50/50 sandstone and shale.
4800		As above.
4810		As above.
4820	4805	100% arkose.
4830		As above.
4840		As above.
4850(?)		As above.
4848-4865	CORE. Top:	Horizontally bedded plant bearing, med. & coarse grained arkose
	Bottom:	Hard, horizontally bedded shale.
4865		95% very coarse arkose. 5% shale.
4870		75% arkose and 25% finely banded shale.
4880		As above. Some very coarse arkose.
4890		As above.
4900		About 50/50 arkose & black shale.
4910	4870-75	As above.
4920		About 100% arkose. Fairly coarse.
4930		
4940	4905-10	50/50 shale and sandstone.
4950		As above.
4960		As above.
4970		About 75% shale.
4980		About 90% shale.
4981-4983	CORE. Top:	Coarse to medium-grained plant bearing arkose.
	Bottom:	fine-grained Do. Dip: Horizontal to 2-3° at most.
4983	Bit Sample:	caved-in Tertiary rocks.
5000		70-75% arkose, polluted with Tertiary.
5010		Medium to coarse grained arkose. Traces of shale. Considerable Tertiary rock cont.

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5020		50/50 arkose and shale.
5030		As above. Some of the arkose component is white, black coal streaked.
5040	5025	As above. 50/50 arkose and shale, with banded, varve-like sandstone.
5050	5030	100% rather fine-grained arkosic sandstone.
5070		100% rather coarse arkose.
5080		100% arkose as above.
5090		As above.
5100		As above.
5110		As above. Tertiary brown coal contaminat.
5120		100% coarse arkose.
5130	5100	Almost 100% arkose. Some weathered basalt from Tertiary levels above.
5140		50/50 arkose and shale. Tert. contamin.
5150	5120	80 Or more% shale.
5160	5130	80% shale and mudstone. Fine banded sandstone present in remainder. Tert. poll.
5170	5140	Almost all shale. Badly contaminated.
5180		100% black & gray shale. Tertiary contamin.
5190		50/50 shale and coal streaked, banded, varve-like arkosic sandstone.
5200		80% arkose with 20% shale and mudstone.
5205		50/50 shale and arkose.
5210	5180	50/50 shale and arkose.
5215		75% arkose. Rest shale.
5220		About as above.
5230		As above.
5235	5205	About 75% arkose as above.
5240		100% arkose.
5245		100% arkose.
5250		As above.
5255		Coarse arkose. Some siliceous sandstone.
5260		100% arkose.
5265		As above.
5270		As above.
5275	5245	75% arkose and 25% shale.
5280	5250	As above.
5285		75% to 80% arkose and sandstone.
5290	5260	As above. Some finely banded siliceous rock.
5295		50/50 arkose and shale.
5300		75-80% arkose.
5305		90-95% arkose variously graded.
5310		As above.
5315		As above.
5320		As above.
5325		As above.
5330		As above.
5335		As above.
5340		As above.
5345		As above.
5350		50/50 arkose & shale mixture.
5355		Almost 100% arkose and sandstone.
5360	5330-35	75% shale. Tertiary contamination.
5370		About 1/3 or less shale in coarse arkose.
5375		As above, but proportion of shale somewhat smaller.
5380		As above.
5385	5360	As above. Not more than 10% shale.
5390		About 100% hard, siliceous, fine-gr. and coarse, calcium cemented arkose.
5395		As above. Whatever smal prop. of shale there is, is hard, siliceous, sandy.
5400	5380	50/50 shale and arkose.
5405		Fine-gr. and coarse arkose in 50/50 propert.
5410		As above.
5420		As above.
5415		As above.
5420		

WOODSIDE WELL No 2.

11/20

5420		As above. 100% variously graded arkose.
5425		As above.
5430		As above.
5435		As above.
5440		Largely variously graded arkose. Occasion.
5445		shaly partings (maybe 5%).
		As above, but arkose coarser.
5450		As above.
5455		about 1/3 shale and 2/3 arkose.
5460		As above.
5465		About 50/50 shale, arkose and some bl.coal
5470	5445	about 50/50 shale & arkose.
5475		As above.
5480		About 80% shaly sandstone & coarse arkose.
5485	5460	Fine-gr. sandst., hard, siliceous and
5490		coarse arkose in 50/50 proportion.
		Arkose, mostly coarse. 30% siliceous sdst.
5495		As above.
5500		About 1/3 to 1/2 shale & mudstone. Rest,
5505	5485	coarse, calcite-cemented arkose.
		As above.
5510		Coarse arkose.
5515		As above.
5520		As above.
5525		As above.
5530		As above.
5535		1/3 siliceous shale.2/3 coarse arkose &
5540	5510	siliceous sandstone.
		Coarse arkose.
5545		As above.
5550		Same as above.
5555		Coarse arkose, fine-gr. banded, varve-like
5560		sandstone, & occasional mudstone.
		As above.
5565		As above.
5570		Rocks as above. Proportion of mudstone
5575		increased to about 1/3.
		As above.
5580		Coarse arkose.
5585		As above.
5595		50/50 arkose and fine-gr. banded sil. sdst.
5600		Coarse arkose.
5605		As above.
5610		As above.
5615		Coarse arkose with lumps of muddy, silic.,
5620		fine-grained sandstone.
		Rocks as above. Mudst. prop. up to 30%.
5625		As above.
5630		Sample strongly stained with free, viscous
5635	5600 Oil.	green oil strongly smelling of crude pet-
		roleum. Chemical analysis of hydrocarbon
		in Chemical Laboratory Report271/272/56 of
		6th April, 1956.
		Rock is 70% arkose, 30% shaly mudstone &
		a few 1/8" veinlets of black coal.
5640		Rock as above., some oil traces.
5645		As above. No free oil. Chlorof. react. +.
5650		50/50 shale and sdst., some coal.
5655		As above.
5660		As above.
5665	5630	Almost all dark gray, coaly shale & mudst.
5670		100% arkose.
5675		80% arkose, 20% mudstone.
5680	5660	Overwhelmingly mudstone and dark gray shale

WOODSIDE WELL No 2.

12/20

		As above. Practically all shale.
5685		Do.
5690		Do.
5695		Do.
5700		Do.
5705		50/50 shale and arkose.
5710		As above.
5715	5695	80% arkose with 20% or less shale.
5720		75% fine-gr. sdst. dominant. 25% arkose.
5725		Just about pure arkose.
5730	5710	100% coarse arkose.
5735		Almost pure arkose: streaks of shale.
5740		Arkose and fine-grained sanstone.
5745	5720	Highly polluted sample containing Tert.
5750		rocks.
5750(second sample)		Curiously, not contamin.: 50/50 arkose and shale.
5755		50/50 arkose and shale.
5760		Do. Some contamination.
5765		Do.
5770		Do. Strong Tertiary contamin.
5775		Mostly shale; also fine-gr. sdy mudstone.
5780		Almost pure shale.
5785		Shale with mudstone. Some contamin.
5790		Almost all shale.
5795		Do.
5800		Do.
5810		Do.
5815		All shale.
5820		85% shale.
5830		50/50 shale & hard siliceous mudstone.
5835		Do.
5840		75-80% shale. The rest: hard mudstone.
5845		50/50 shale and arkose.
5850		Do.
5855		80% pink lime-cemented arkose: large pink angular feldspars.
5860		100% arkose.
5865		Do.
5870		Do.
5875		Highly contaminated with Tertiary. Shale dominant.
5880		Do.: shale and siliceous mudstone.
5885		Do.
5890		Do.
5895		As above: polluted with basalt, marl etc.
5900		50/50 shale & fine, banded silic. sdst. considerab. polluted with Tertiary.
5905		Do.
5910		75% shale, contaminated.
5915		Do.
5920		Do.
5925		Mostly arkose. Some brown coal contamin.
5930		Do.
5930-5945		Do. Contamin. with weathered basalt.
5940		100% arkose.
5945		50/50 arkose & finely-banded silic. sdst.
5950	NO LAG.	80% arkose & 20% shale.
5955		Pure shale but high contamination.
5960		All shale.
5965		Do.
5970		do.
5975		Do.
5980		Do.
5989-5992	CORE.	Somewhat sandy, massive dark gray shale. Regular partings break-up core into segm Dip about 5°. Towards top becomes dark, conchoidally fractured.
5992-5995	CORE.	As above. Massive but regul. bedded. 5°.

WOODSIDE WELL No 2. 13/20

5992-5995		CORE.	(continued):Shale becomes dark & conchoidally fractured towards the top.
6000			Very dark. ~~xxky~~ coaly gray to black shale. Some coal veinlets.
6005			Do.
6010			Do.
6015			80 to 90% arkose and 10-20% silic. fine-gr. sandstone.
6020			Do. 100% ark.-sdst mixture.
6030			Do.
6035			Do.
6040			50/50 shale & mudstone + sandstone mixt.
6045			All shale.
6050			Do.
6055			Overwhelmingly shale.
6060			All shale.
6065	6050		Mostly shale.
6070			50/50 shale-arkose mixture.
6075			Do.
6080			Do.
6090-6093		CORE.	Arkose as above: med.-gr., micaceous, pink.
6093-6096		CORE.	As above: pink feldspars.
6096-6099		CORE.	Arkose becoming noticeably coarser. Large Biotite mica flakes.
6099-6102		CORE.	Arkose as above, gray, massive.
6102-6105		CORE.	As above.
6105-6108		CORE.	Somewhat finer-grained arkose, massive & gray. Probably 5° dip, as indicated by varying rock hardness.

WELL TO BE DEEPENED FROM THIS LEVEL DOWN.

APPENDIX 4.0

3rd Copy

WOODSIDE (LAKES ENTRANCE) OIL CO.

Yarram, Vict.
10/2/57.

Core Report.

Woodside No.2.
Interval- 8843' to 8862'
Recovery- 15ft,7 inches.

Length.	Lithology.
Top.	
6"	Arkose, gray, medium grained; veins of calcite at angle of 80° to diameter of core, also calcite with crystal faces embedded in arkose; few streaks of coal. (This section of core in small broken pieces).
2'2"	Arkose gray, medium grained, with few very small streaks of coal and siltstone; 2 calcite veins as before.
3"	Arkose, pink as a pellet in gray arkose as above.
1'5"	Arkose, gray, medium grained, with very many streaks of coal throughout, few streaks of siltstone as pellets. (This section of core many pieces but not broken).
2'7"	Arkose, gray medium grained to fine grained, with fwe thin streak coal and siltstone, several calcite vei ns as before.
1'2"	Arkose pink with few specks and streaks of coal.
10"	Arkose, pink to gray, medium to fine grained with calcite veins irregular and irregularly running along diameter of core, siltstonein veins intersecting calcite veins slickenslided, irregular.
3'2"	Arkose, gray, medium to fine grained, with bands of siltstone, many calcite veins at angle 80 degrees to diameter of core. Occaisional patches of coal. (This section of core has many broken pieces)
4"	Siltstone black, coarse grained, massive with pink calcite veins at angle 80 degrees to diameter of core. (This section has many broken pieces).

Bottom of hole.

P.W.Bollen.

Fwb copy Typed

WOODSIDE (LAKES ENTRANCE) OIL CO.N.L.

Core Report. 10/1/57.

Woodside No. 2. 2nd Copy.
Interval 7785ft- 7805ft.
Recovery 20ft.

Top.

11½"	Arkose-Gray coloured, medium grained.
2"	Arkose-Pinkish white medium grained.
1'2"	Arkose-Gray, medium grained.
1'	Arkose-Gray, medium grained with streaks of coal.
2'6"	Arkose-Gray, medium grained.
1'3"	Arkose-Gray, medium grained with pellets of siltstone.
1'	Arkose-Gray, fine grained.
1'3"	Arkose-Gray, medium grained.
2"	Arkose-Gray, medium grained with pellet of pink-white arkose.
2'	Arkose-Gray, medium grained.
1½"	Arkose-Gray, medium grained with pellet of pink-white arkose.
14"	Arkose-Gray, medium grained.
5'3"	Arkose-uniform gray medium grained with thin streaks of coal at interval throughout.
2'	Arkose- Gray fine grained (Finer grained slightly than above)

Bottom.

This core was in pieces of the following lengths: 12'9"
5'3"
1'3"
9" of pieces.

P.W.Bollen.

Core Report. 14/1/57.

Woodside No 2. 2nd Copy
Core.
Interval 7951'-7958'.
Recovered 6'6".

7951' Top.

5'	Gray ARKOSE umiformly medium to fine grained with a 2" pellet of Pink arkose.
1'6"	Gray Arkose medium grained with streaks of coal at angle of 20 degrees to diam of core, little pyrites associated with coal, few streaks of siltstone. One streak of calcite at 80 degrees to diam of core. Displacement of 1mm on calcite. Red quartzite grains in base of core associated with arkose.

Bottom

13/

2/18

WOODSIDE(LAKES ENTRANCE) OIL COMPANY.

CORE RECORD. Well No. 2. 15/12/56.

Interval cored 6892-6910 ft.
Recovered Length 10ft 3½ ".

1ft 2" Gray fine-grained arkose with mud pellets and thin strands of coalified plant remains. Core in 4 pieces and bottom one had at it's base black shale at angular contact of 30 degrees to diam. of core with arkose.(I think this a large mud pellet).

4ft. 7½" Gray siltstone showing bedding, with slight cross-bedding, at angle of 30-35 degrees to diam. of core. Thin layer of calcite at 82 degrees to diam. of core. Very slight to no displacement of beds. 3 pieces of core.

4ft 6" Without break in core from siltstone to gray fine-grained arkose as in top 1ft2", but with mud pellets only in the top foot and then none.

On bottom foot of core a layer of calcite at angle of 82 degrees to diam of core. This layer one tenth of an inch wide approx. Nothing seen to give an idea if displacement present or not.

A concave downwards contact seen with above siltstone.

Bottom of core.

Test with chloroform done on spot piece and may be positive -test material sent to Dr. Boutakoff for decision.

Sample of core sent to Dr. Boutakoff.

P.W.Bollen.

WOODSIDE No 2

Cores.

Interval	Lenght in tray.	Lithology.
1003'-1023'	8'	Foss. sandy marl
1103'-1123'	2'	Foss. sandy lmst.
16408-1660'	5'	Foss. sandy lmst.
1966'-1981'	8'	Foss. sandy lmst.
2325'-2330'	4'	Foss. marl.
2493'-2511'	18'	Coal & foss. glauc. marl.
2511'-2528'	9'	Coal.
2528'-2548'	1'	Coal.
2903'-2928'	2'6"	Coal.
[illegible]2'-3192'	2'	Marl.
3560'-3570'	2'	Basalt (Weathered.)
4114'-4127'	1'	Sltst.
4251'-4256'	3'	Sltst
4858'-4865'	6'	Ark. & grn. sh.
4981'-4983'	1'6"	Ark.
59891-5992'	5'	Ark.& sltst.
60908-6108'	9'	Ark.
6402'-6420'	10'	Ark. & sltst.

Interval	Recovery	Lithology.
6892'-6910'	10'3"	Ark & sltst.
7785'-7805'	20'	Ark.
7951'-7958'	6'6"	Ark.
8843'-8862'	15'7"	Ark. (fualted).

Bottom of hole.

P.W.Bollen.

3/18

Woodside No 2. Core 7785'-7805' Rec 20'

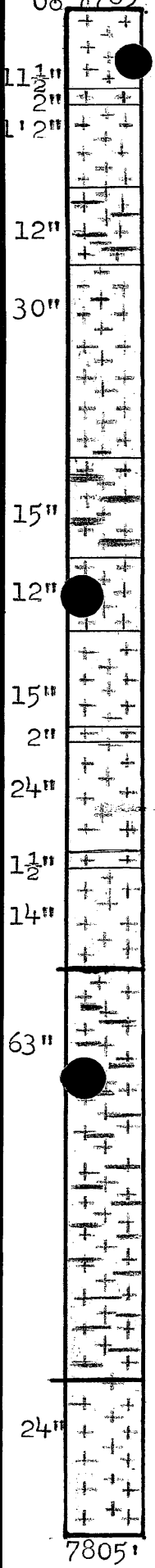
12' 9" Arkose.-
11½" Gray medium grained arkose.
2" Pinkish white medium grained arkose.
1'2" Gray medium grained arkose.
12" Gray medium grained arkose with streaks of coal.
2'6" Gray medium grained arkose,
1'3" Gray medium grained arkose with pellets of siltstone.
12" Gray fine grained arkose
1'3" Gray medium grained arkose.
2" Gray medium grained arkosewith pellet of pink arkose.
2' Gray medium grained arkose.
1½" Gray medium grained arkose wiyh pellet of pink arkose.
14" Gray medium grained arkose.

5'3" Arkose- gray medium grained with streaks of thin coal.

2' Arkose -gray fine grained.

Bottom of core.

4/18



Arkose, gray medium grained.

Arkose, pinkish white medium grained.

Arkose, gray medium grained.

Arkose with streaks of coal.

Arkose

Arkose, with streaks of siltstone pellets.

Arkose, fine grained.

Arkose, medium grained.

Arkose with pellet of pinkish white ark.

Arkose.

Arkose with pellet of pinkish-white ark.

Arkose.

Arkose with streaks of coal.

Arkose, fine grained.

5/18

W[redacted]dside No2 Core 7951'-7958' Rec. 6'6"

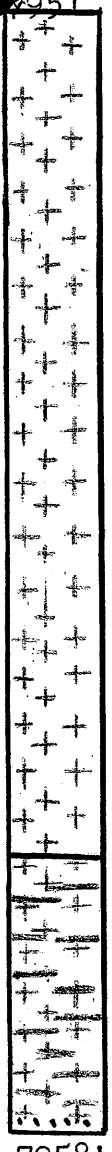
5' Gray arkose uniformly medium to fine grained, with a 2" long pellet of pink arkose.

1'6" Gray arkose medium grained with streaks of coal at angle 20 degrees to diameter of core, little pyrites associated wi with coal; few streaks of siltstone, one streak of calcite at 80 degrees to diam. of core.
Red quartzite grains in base of core. Displacement 1mm on calcite.

Bottom of core.

6/18

7951'



ARKOSE, gray;medium to fine grained.

5'

Pellet of pink arkose.

18 6" ARKOSE, with streaks of coal and siltstone.

7958'

7/18

Woodside No 2 Core 8843'-8862' Rec. 15'7"

6" Arkose, gray medium grained, veins of calcite at angle 80 degrees to diameter of core, also calcite with crystal faces emmbedded in arkose few specks of coal.
(This section of core in small broken pieces)

2'2" Arkose gray medium grained, with few very small streaks of coal and siltstone, 2 calcite veins as above.

3" Arkose pink as a pellet in gray arkose as above.

4'5" Arkose gray medi m grained with very many streaks of col throughout, few streaks of siltstone as pellets.
(This section of core many pieces not broken)

2'7" Arkose gray medium grained to fine grained with few thin streaks of coal and siltstone, several calcite veins as before.

1½" Arkose pink with few specks and streaks of coal,

10" Arkose, pink to gray, medium to fine grained, with calcite veins irregular and irregularily running along diameter of core, siltstone in veins intersecting calcite veins and slickensided, irregular.

3'2" Arkose, gray med-fine grained, with bands of siltstone; many calcite veins at angle 80 degrees to diam. of core. Occaisional patckes of coal.
(This section of core has many broken pieces)

4" Siltstone, black coarse grained, massive with pink calcite veins at 80 degrees to diam. of core.
(This section of core has many broken pieces)

Bottom of core.
Bottom of hole.

6960	Arkose, fine grained, gray, occaisional pieces siltsone, & few pieces calcite.
6970	"
6980	"
6990	"
7000	"
7010	"
7018 circ	"
7020	"
7030	Arkose as above with siltstone no calcite.
7040	"
[illegible]0	"
7054 circ	"
7060	"
7070	"
7080	"
7090	"
7100	"
7106 circ	"
7110	"
7120	"
7130	"
7140	"
7150	"

7160 Arkose, fine grained, some siltstone.

7164 circ "

7170 " plus little calcite.

7180 " plus little coal

7190 " plus little calcite

7200 " plus little calcite.

7210 "

7220 " plus little coal and calcite.

7230 " plus little calcite.

7240 "

7250 Arkose fine grained and medium grained, some siltstone and little calcite.

7260 Arkose, med grained, some siltstone & little calcite.

7270 Arkose med and fine grained, siltstone more than previously, little calcite. (Calcite assoc with med arkose)

7280 As for 7270 less fine grained arkose.

7290 As for 7270

7300 Med and fine grained arkose, some siltstone, little calcite.

7310 Med grained arkose, some siltstone, little coal, little calcit

7320 "

7330 " calcite greater than before.

7340 Med-fine grained arkose, some siltstone. little calcite.

7350 Med grained arkose some siltstone.

7360 Med grained arkose, some siltstone, little calcite.

7370 circ Arkose, med grained, siltstone present, few pieces calcite.

7370 As above but coal present in small amounts.

7380 Arkose, med grained (large chips) some siltstone and coal present.

7390 Arkose medium graine little siltstone.

7400 Arkose, medium grained, little siltstone, little calcite.

7410 Arkose, med-fine grained, little siltstone.

7420 Arkose, med & fine grained, little siltstone, little coal.

7430	Arkose, medium and fine grained, little siltstone, little coal.
7435 circ	Arkose, medium and fine grained, little siltstone, little coal and calcite.
7440	Arkose, medium an fine grained, little siltstone
7450	Arkose, medium and fine grained, little siltstone, little calcite.
7460	Arkose, medium grained, little siltstone, few piesec calcite.
7470	Arkose, medium and fine grained, some siltstone, little calcite
7480	"
7490	Arkose, medium grained, some siltstone, little coal, little calcite.
7500	Arkose, medium grained, some siltstone, little calcite.
7510	Arkose, medium grained, some siltstone, little calcite.
7520	Arkose, medium grained, some siltstone, little calcite.
7530	Arkose, medium grained, some siltstone, little coal & calcite.
7540	Arkose, medium and fine grained, little calcite.
7550	Arkose, medium and fine grained, some siltstone.
7558	Arkose, medium grained, some siltstone, much calcite.
7558 circ	Arkose, medium grained, some siltstone.
7560	Arkose, med & fine grained, some siltstone, little calcite.
7570	Arkose, medium grained, some calcite little siltstone.
7580	"
7590	Arkose, med & fine grained, sone siltstone, calcite.
7600	Arkose, med & fine grained, some siltstone, calcite , coal.
7610	"
7620	Arkose, med & fine grained, some siltstone.
7630	Arkose, med & fine grained, some siltstone, calcite.
7635 circ	Arkose, med and fine grained, some siltstone.
7640	Arkose, med & fine grained, some siltstone, calcite.
7650	Arkose, med & fine grained, some siltstone, calcite.

7660 Arkose, med grained, some siltstone, coal & calcite.

7670 "

7680 "

7690 "

7700 "

7710 Arkose, medium and fine grained, some siltstone, calcite.

7720 Arkose, medium grained, some siltstone, calcite.

----7723 Coal seen at shale shaker 50% coal, 50% arkose.---

7725 Arkose, medium grained, coal, some siltstone, calcite.

7730 Arkose, medium and fine grained, siltstone, coal, calcite.

7740 Arkose, medium and fine grained, siltstone, coal, calcite.

7750 "

7760 Arkose, med and fine grained, some siltstone and calcite.

7769 Arkose, med and fine grained, some siltstone little coal.

7769 circ Arkose, med and fine grained, some siltstone little calcite.

7780 Arkose, med grained some siltstone, some calcite.

7787 Arkose, med and fine grained; little siltstone, coal, calcite.

7800 Arkose, gray med to fine grained; very little siltstone.

7805 Arkose, gray med and fine grained; some siltstone, very little coal.

7810 Arkose, gray med& fine grained; little siltstone; few pieces calcite.

7820 "

7830 Arkose gray med & fine Grained.

7840 Afkose, gray med & fine grained, some siltstone.

7850 Arkose, gray med & fine grained, some siltstone.

7860 Arkose, Gray med & fine grained; some siltstone; some calcite.

7870 Arkose, gray med& fine grained; some siltstone; little calcite.

7875 circ Arkose, gray med & fine grained; some siltstone, little calcite.

7880 Arkose, gray med & fine grained.

7890 Arkose, gray med & fine Grained; some siltstone.

7900	Arkose, gray med & fine grained; some siltstone.
7910	Arkose, gray med & fine grained½ some siltstone;little calcite
7920	Arkose, gray med & fine grained; some siltstone;
7930	Arkose, gray med & fine grained; little siltstone; little calcite and coal.
7940	Arkose, gray med & fine grained; little siltstone; little calcite and coal.
7950	Gray arkose, med-fine grained, some siltstone; little coal.
7951 circ	Gray arkose, med-fine grained;some siltstone; little coal.
7960	Gray arkosem mdeium grained; some siltstone; little coal.
7970	Gray arkose, med-fine grained; some siltstone; little coal.
7980	Gray arkose, med-fine grained; some siltstone;
7990	Gray arkose, med-fine grained; some siltstone;little coal.
8000	"
8010	Gray arkose, med-fine grained; some siltstone;little calcite.
8020	Gray arkose, med-fine grained; some siltstone.
8030	"
8040	"
8050	"
8060	"
8065 circ	"
8070	Gray arkose, med-fine grained½ very little siltstone.
8080	"
8090	"
8100	"
8110	"
8116 circ	"
8120	"
8130	"
8140	"

8150 Arkose, gray, med-fine grained.

8160 Arkose, gray med-fine grained; little siltstone and calcite.

8170 circ Arkose, gray med-fine grained½ little siltstone.

8170 "

8180 Arkose, gray med-fine grained; some siltstone.

8190 Arkose, gray med-fine grained½ little siltstone and calcite.

8200 Arkose, gray med-fine grained;

8210 "

8220 Arkose, gray, med-fine grained; little siltstone.

8230 Arkose, gray, med-fine grained; little siltstone; coal present

8230 circ Arkose, gray, med-fine grained; little siltstone.

8[illegible]0 "

8250 Arkose, gray med-fine grained; siltstone.

8260 "

8270 Arkose, gray, med-fine grained; siltstone; some calcite.

8280 Arkose, gray, med-fine grained½ some coal and calcite.

8288 circ Arkose, gray, med-fine grained; little siltstone and calcite.

8290 Arkose, gray, med-fine grained; siltstone; few pieces red quartzite ; calcitw associated with arkose.

8300 Gray arkose, med-fine grained; little siltstone; few pieces calcite.

8310 Gray arkose, med-fine grained; little siltstone; few pieses calcite and coal.

8320 "

8330 Gray arkose, med-fine grained; little siltstone.

8340 "

8350 Gray arkose, med-fine grained; little siltstone.

8360 Gray arkose, med-fine grained; siltstone; little coal; few pieces calcite.

8370 Gray arkose,med-fine grained; siltstone.

8380 "

8390 Gray arkose, med-fine grained; little siltstone; few pieces calcite.

8390 circ Gray arkose, med-fine grained; little siltstone.

8400 Gray arkose, med-fine grained½ siltstone, coal.

8410 no sample.

8420 Gray arkose, medium and fine grained; siltstone.

8430 Gray arkose, medium and fine grained, few pieces doal.

8440 Gray arkose. med-fine grained, siltstone as pellets, few pieces of coal. calcite., ~~anhydrite~~.

8452 circ. Arkose, gray, med-fine grained, siltstone (~~one piece of siltstone together with anhydrite~~) few pieces coal, calcite, anhydrite.

8460 Arkose, gray, med-fine grained, less siltstone than 8452' occaisional pieces of coal, calcite, ~~anhydrite~~.

8469 Arkose, gray, med-fine grained, siltstone present(same amt as 8460) very small amounts of calcite, ~~anhydrite~~.

8469 circ 1 hr. Arkose; gray, med-fine grained, siltstone present, calcite associated with arkose- few pieces including a piece of pink calcite-, little coal, ~~anhydrite present~~.

8469 circ 1½ hr Arkose, gray med-fine grained, siltstone, few pieces of coal, calcite, ~~anhydrite~~.

8480 Arkose; gray med-fine grained, siltstone, few pieces of ~~anhydrite~~, coal, calcite.

8490 Arkose, gray med-fine grained, siltstone present few pieces calcite, ~~anhydrite~~; also rounded quartz grains diam 1/5mm.

8500 Arkose; gray, med-fine grained, siltstone present, few pieces coal, ~~anhydrite~~.

8508 circ. Arkose; gray med-fine grained, some siltstone present, several pieces of coal, few pieces calcite, ~~anhydrite~~.

8510 Arkose, gray, med-fine grained, siltstone , few pieces calcite coal, ~~anhydrite~~, several pieces rounded quartz grit.

8520 Gray arkose, medium to fine grained, siltstone, little calcite associated with arkose.

8530 Gray arkose, med-fine grained, siltstone, little calcite, little coal.

8540 Gray arkose, med-fine grained, less siltstone than before, little calcite.

8550 Gray arkose nedium grained, little fine grained; siltstone present, little calcite, ~~few pieces anhydrite~~.

8560 Gray arkose, med-fine grained, little siltstone, calcite pres.

8561 circ Gray arkose, med-fine grained, few pieces siltstone.

8570 Gray arkose, medium grained, little siltstone, few pieces coal

8580 Gray arkose, med-fine grained, little siltstone, few pieces of coal, ~~few pieces anhydrite~~.

8590 Gray arkose, med-fine grained, little siltstone, ~~few pieces anhydrite~~.

8600 Gray arkose, med-fine grained, siltstone present., few pieces coal. ~~anhydrite~~. calcite.

8602 circ Gray arkose, med-fine grained, siltstone; few pieces calcite, ~~anhydrite~~.

8610 Gray arkose, med-fine grained, (1 piece arkose with mica); siltstone present; little coal, little calcite.

8620 Gray arkose;, med-fine grained; siltstone present ; little coal; little calcite.

8630 Med-fine grained gray arkose, little siltstone present; few pieces coal and calcite.

8640 Med-fine grained gray arkose; siltstone present; little calcite, few pieces coal.

8646 circ Gray arkose, med-fine grained; siltstone present; few pieces calcite, ~~anhydrite~~, odd pieces of coal.

8650 Arkose, gray, medium grained; little siltstone; few pieces coal, calcite, one piece of shell fragment(?)

8655 Arkose, gray, med-fine grained; little siltstone; few pieces coal.

8660 Arkose, gray, med-fine grained; little siltstone; few pieces calcite, ~~anhydrite~~.

8665 Arkose, gray, med-fine grained; little siltstone; few pieces calcite, coal , ~~anhydrite~~.

8670 Arkose, gray, med-fine grained; little siltstone; few pieces ~~anhydrite~~. of calcite.

8675 Arkose, gray, med-fine grained; little siltstone; few pieces calcite, ~~anhydrite~~, coal.

8680 Arkose, gray, med-fine grained,; very little siltstone; few pieces coal, calcite, ~~anhydrite~~.

8685 Arkose, gray, med-fine grained, little siltstone; several pieces coal, few pieces calcite, ~~anhydrite~~.

8690 Arkose, gray, med-fine grained; little siltstone, few pieces coal, ~~anhydrite~~, calcite.

8695 Arkose, gray, med-fine grained; little silt stone; few pieces calcite, ~~anhydrite~~, coal.

8700 Arkose, gray, med-fine grained; siltstone present; few pieces calcite, ~~anhydrite~~ and occaisional piece of rounded quartz grit.

8705 Arkose, gray, med-fine grained; siltstone present; several pieces calcite, few pieces coal and rounded quartz grit.

8710 Arkose, gray, med-fine grained; little siltstone; few pieces calcite.

8715 Arkose, gray, med-fine grained; siltstone present; many pieces calcite.

8720 Arkose, gray, med-fine grained; little siltstone; little calcite, few pieces rounded quartz grit.

8725 Arkose, gray, med-fine grained; little siltstone; several pieces calcite, few pieces coal.

8730 Arkose, gray, med-fine grained, little siltstone; fewpieces calcite,coal.

8740 Arkose, gray, med-fine grained; siltstone present; much calcite, few pieces coal, ~~anhydrite~~.

8[illegible]5 Arkose, gray, med-fine grained; little siltstone; several pieces calcite.

8750 Arkose, gray, med-fine grained, little siltstone. few pieces coal, calcite, rounded quartz grit.

8755 Arkose, gray, med-fine grained; little siltstone, many pieces calcite; few pieces coal.

8760 Arkose, gray, med-fine grained, little siltstone; several pieces calcite, few pieces coal.

8765 Arkose, gray, med-fine grained, few pieces siltstone, occaisional piesec calcite, ~~anhydrite~~.

8770 Arkose, medium grained; few pieces siltstone, several pieces calcite, ~~few pieces anhydrite~~ .

8[illegible]5 Arkose, gray med-fine grained, few pieces siltstone. few piecescacite ~~very few piesec anhydrite~~.

8780 Arkose, gray, medium grained, few piesec siltstone., several pieces calcite, very few pieces coal.

8783 circ Arkose, gray, medium grained, very few piesecsiltstone, few piesec calcite.

8790 Arkose, gray med-fine grained, siltstone presemt, few pieces calcite, very few pieces coal. one rounded piece quartz grit.

8795 Arkose, gray medi m grained, mush siltstone, very few pieces calcite.

8800 Arkose, gray medium grained little siltstone. very few pieces aalcite, coal.

8805 Arkose, gray med-fine grained, little siltstone, very few pieces calcite.

8810 Arkose, gray, med-fine grained, little siltstone, few pieces calcite.

8815 Arkose, gray, med-fine grained, few pieces siltstone, many pieces coal, few piessecalcite, ~~xxxy xarxky pixcexxxnhydrxkte~~.

8820 Arkose, gray, med-fine grained, few pieces siltstone, much coa few pieces calcite.

8825 Arkose, gray, med-fine grained, few piecescoal, calcite.

8830 Arkose, gray, med-fine grained, very few piesec calcite, raely piece coal.

8835 Arkose, gray, med-fine grained, few pieces calcite, rarely piece coal.

8840 Arkose, gray, med-fine grained, very fewsiltstone, very few pi pieces coal, several pieces calcite.

8843 circ Arkose, gray, med-fine grained, few pieces siltstone, very many pieces calcite, few pieces coal.

8845 Arkose, gray, med-fine grained, little siltstone, many pieces calcite, very few pieces coal, calcite.

8850 Small sample -not valid.

8862 Arkose, gray, med-fine grained, siltstone present, many pieces coal, several pieces calcite, ~~xxxyxfewxpixcxxsxxnhydrxkte~~.

bottom of hole.

APPENDIX 5.0

OIL AND GAS OCCURRENCES IN WOODSIDE NO. 1 and 2 WELLS

The following data was obtained from lithologic logs and drilling reports of the Woodside wells. Oil and gas shows indicated on drilling reports are labelled "D.R".

WOODSIDE NO. 1.

Depth	Description of Show
1002'	Slight gas indication (D.R.)
2539'	Gas indication. Petroliferous odour (D.R.)
2556' - 2577'	Diffuse oil stains in marl. Marl, green, very glauconitic, no permeability and low porosity, oil smell. Immediately overlies Latrobe Valley Coal Measures
3650'	Gas Show (D.R.)
3720' - 3728'	Oil Show? (D.R.)
≈ 4430'	Arkose and mudstone, strongly smelling of crude petroleum. Dark yellow chloroform reaction.
5830'	Oil show in mud stream. No Gas (D.R.)

WOODSIDE NO. 2.

980' - 1000'	Gas Show and slight show of oil (D.R.)
1310' - 1500'	Oil show reported in this interval (D.R.)
1310' - 1350'	Oil show in sandy marl. Sandy marl, cream coloured, stained brown, containing large quartz grains. Foraminifera, scaphopods and Ditrupa. Oil described in Chemical Laboratory Report 50/52 - 56 of 10/2/56.
1966' - 1980'	Top of core showed brown oil sand (D.R.)
2493' - 2511'	Indications of oil in top section of core (D.R.)
3104'	After drilling through coal series mud became saturated with oil and coal and showed considerable gas constantly (D.R.)
3170'	Large flow of gas encountered with colour in mudstream (D.R.)
4962'	Positive chloroform test.
5022' - 5032'	Gas Show (D.R.)
5120' - 5290'	Light oil and paraffin in samples (D.R.)
5235' - 5266'	Gas Show (D.R.)
5351' - 5600'	Gas and oil show in mudstream continuous (D.R.)
5600' = 1707m — mentioned by Holdgate (5635-5640 BOUTAK.)	Strongly stained sample with free viscous green oil strongly smelling of crude petroleum. Sample 70% arkose, 30% shaly mudstone with a few⅛" bands of black coal. Chemical analysis of hydrocarbon in Chemical Laboratory Report 271/272/56 of 6/4/56.
6067' - 6088'	Oil sand (D.R.)

PERFORATION TESTS - WOODSIDE NO. 2.

Perforation tests were carried out by Lane Wells Ltd. with negative results. Well ~~was~~ cased to 6104' with 6⅝" Casing.

TEST 1.

Perforated interval 1310' - 1345'. Plug set at 1428' Packer set at 1305'. Test first gave mud mixed with water, then slightly brackish water and finally freshwater.

TEST 2.

Perforated interval 5582' - 5618'. Plug set at 5657' Packer set at 5570'. Nothing recovered from formation.

Reports on Oil Samples (Chemical Lab. Reports)

Samples 50 - 52/56 of 10/2/56

Oil from the 1310 - 1350 level in Woodside Well No. 2. Dark brown to black crude oil of S.G. 0.92 - 0.93. This oil is described as a heavy crude oil free from gasoline, kerosine and other light fractions of a mixed paraffinic asphaltic base.

Samples 271 - 272/56 of 6/4/56

Oil from 5635' - 5640' level in Woodside Well No. 2. This oil is described as a crude oil which in the 5640 level contains approximately 20% of light, low boiling point fractions of mixed paraggin - asphalt base, is of softening point 40 - 50° c and contains some sulphur.

COPY

WOODSIDE (LAKES ENTRANCE) OIL COMPANY N.L.

178 Victoria Parade,
East Melbourne.
25th February, 1957

The Secretary for Mines,
Mines Department,
Treasury Gardens,
MELBOURNE. C.2.

Dear Sir,

Testing operations on the Woodside No. 2 Hole have been completed.

The casing was perforated at the level of 1310' to 1345' level and also at 5583' to 5618' level.

Both tests failed to show any evidence of flow oil.

In deepening this hole to 8862' it was hoped to reach the base of the Jurassic formation in this locality. Unfortunately this has not been achieved and in view of this the Directors have decided to temporarily cease operations with the Company's large rig, until such time as the results of further geophysical work are known.

In the meantime it is proposed to intensify the work of scout drilling in the present vicinity and to extend these operations over the Company's more recently acquired areas.

Plans to make another call on Contributing Shares have now also been deferred as finance in hand is adequate for the Company's immediate needs.

Yours faithfully,

WOODSIDE (LAKES ENTRANCE) OIL CO. N.L.

Rees. B. Withers.
General-Manager.

~~A.O.F. 25~~

COPY

14/20

WOODSIDE (LAKES ENTRANCE) OIL COMPANY
NO LIABILITY.

178 Victoria Parade,
East Melbourne.

1st August, 1956.

The Secretary for Mines,
Department of Mines,
Treasury Gardens,
MELBOURNE. C.2.

Dear Sir,

The Directors of Woodside (Lakes Entrance) Oil Co. N.L. advise that it has been decided to cease drilling on No. 3 Well which is now at a depth of 5,985 ft. in hard sandstone and shale.

No 3 Well has provided important additional geological information which, together with structural data now made available by the Geophysical Section of the Bureau of Mineral Resources Geology and Geophysics, enables the Company to further its exploratory drilling programme.

Work will commence immediately on moving the Rig back to the No. 2 Well in which oil shows were encountered. This Well has been previously cased and cemented off at 6,108 feet preparatory to deepening.

The lighter drill pipe required for deepening Well No. 2 is expected to arrive next week and drilling will commence as soon as the rig has been mechanically overhauled and re-erected on the site.

After completion of the Well each level at which oil shows were recorded will be tested.

Yours faithfully,
WOODSIDE (LAKES ENTRANCE) OIL CO.N.L.

(Sgd.) Rees B. Withers.
Secretary.

STATE LABORATORIES

JEWELL

Memorandum for:-

Secretary for Mines

REPORT ON FURTHER OIL BEARING SAMPLES FROM

WOODSIDE No. 2. WELL.

Samples of sludge and chippings, representing 5635' (Lab. No. 271/56) and 5640' (Lab. 272/56) have been examined in the Departmental Laboratory.

Sample 271 weighed 777 grams and had an odour somewhat similar to that of kerosene. No. 272 weighed 758 grams and had no distinctive odour.

Each sample was steam distilled to recover any light fractions present without loss. From No. 271 no measurable quantity of light fraction was obtained but the distillate had a kerosene-type odour and a faint irridescence on the surface of the water. From No. 272, 0.1 millilitre of a straw coloured oil was obtained, which had a similar odour.

The residue, after suitable drying without loss of any oil constituent, was benzene-extracted yielding 0.85 grams in the case of No. 271, and 0.30 grams in the case of No. 272, of a brownish-black, heavy consistency crude oil.

These two small residues were combined (1.15 grams) and tested with the following results:-

Specific gravity	0.97
Softening point	40-50°C
Sulphur	present
Freezing test in appropriate solvent	produced crystals of a wax-like substance, softening at 25-30°C.

The combined residue was insufficient for a distillation test but it is unlikely that there would be any quantity of distillate boiling below 300°C; lighter fractions had already been removed by steam distillation.

As with previous samples examined from this well, the amount of oil present is very small (approximately 0.1% in No. 271, and 0.05% in No. 272.)

The amount of light fraction obtained from No. 272, although extremely small, represents an appreciable proportion (approx. 20%) of the total oil present.

The oil obtained from these two samples is described as a crude oil, probably of a mixed (paraffinic -asphaltic) base, with about 20% of low-boiling point fraction in the case of No. 272.

The main differences between these samples of oil and those previously tested (1310-1330') are:-

(a) The presence of a low boiling point fraction in one of the present samples, absent in the previous samples.

(b) A higher specific gravity (0.97) of the benzene extract of these samples, as compared with that (0.92) of the previous samples.

While it is probably possible to obtain some information regarding the nature and constitution of the oil, by a special type of test applied to the very small quantity of light fraction obtained by steam distillation, this was not done. The oil obtained from these samples is almost certainly different, both in quality and quantity, from that present in situ. It would be materially modified by the effect of gas stripping and temperature changes during its progress as a wet sludge up the bore. Further, the quantity of oil, especially of the light fractions, is likely to be greater within the actual oil-bearing horizon. Any special testing must therefore be postponed until a larger and more representative sample of oil is obtained.

While the proportion of oil present in these samples is very low and the nature of the oil not necessarily that of the oil in situ, the occurrence of such an oil, with a relatively high proportion of lighter fractions, amy be of significance in relation to ultimate oil discoveries in this region.

W. R. JEWELL
Chief Chemist.

b/

COPY

SCHLUMBERGER OVERSEAS S.A.
Chepstow House, Frederick Street,
PORT-OF-SPAIN,
TRINIDAD B.W.I.

Vice President Operations

Paris, April, 18, 1956.

Schlumberger Overseas S.A.
Australian Division Manager
Sydney.

File : F.I. Australia.

Interpretation Woodside #2

Dear Mr. de Coulon,

The maximum SP deflection between 2000 and 2050 is about 63 millivolts, which indicates a ratio Rmf/Rw of about 7.5. Assuming a temperature of about 110° F. - incidentally the unusually high temperature (116° F) of the mud sample measured surprises us - the Rmf would be about 2.6 and Rw about 0.35; this value of Rw corresponds to a salt content of about 12000 ppm, quite substantially smaller than that of sea water.

However we are not too sure of this value of Rw arrived at with the SP curve. At 2000' the short normal reads about 10 ohms and the long normal about 2 ohms. The ratio of these two readings is 5, which seems to indicate a ratio Rxo/Rt of no less than about 10, and also accordingly a ratio Rmf/Rw of no less than 10. This would indicate a connate water with a concentration of possibly as much as 20.000 ppm.

Above 1900 the resistivities increase to reach about some 25 ohms at 1130-1200. This increase of the resistivity is probably due to several factors : higher shale content, fresher connate water, presence of oil or gas. There is no evidence that the formation factors are appreciably greater at 1200 than at 2150 for example where the Rt is much smaller (about 3 ohms). As the reduction in SP deflection is not very important, it would seem that the greater shale content and the fresher connate water are not the main factors accounting for the higher resistivity at 1200 and it seems probable then that the upper part of the formation contains appreciable quantities of oil or gas.

The interpretation would certainly be more reliable if we

knew the position of the SP base line above the permeable interval.

In the interval 2500-2810 there are several beds which look permeable (unfortunately there is no Microlog over that section) : 2500-2570, 2700-2760 and 2775-2810. The connate water is fairly fresh, with Rw probably somewhat greater than 1 ohm. Porosities seem to be of the same order as in the 1130-220 interval. The true resistivities are not very high, no more than about 25 ohms. If any oil or gas is present the saturation would probably be less than 50%.

In the lower part of the well the only formation where the Microlog shows some permeability is the sand at 4360-4408. The SP indicates an Rw of the order of .8-1.0 ohm. Rt is probably less than 15 ohms. The 16" Normal reads as high as 25 ohms; with Rmf of the order of 2. ohms it seems then that the formation factor is greater than about 12. Chances that the sand contains appreciable amounts of oil or gas look rather poor.

It should be pointed out however that the above interpretation is very rough and takes no account of the fact that the sand contains less than 50% of fairly thin permeable streaks : as a result the readings of the Normals and Lateral are not easily interpretable, particularly that the ES is not at the same depth scale as the Microlog.

Yours truly,

Pa/nf (Signed) .....

cc. Houston + 1
Trinidad.

2nd Copy

STATE LABORATORIES

Memorandum for:-

Secretary for Mines

REPORT ON FURTHER OIL BEARING SAMPLES FROM

WOODSIDE No. 2. WELL.

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The residue, after suitable drying without loss of any oil constituent, was benzene-extracted yielding 0.85 grams in the case of No. 271, and 0.30 grams in the case of No. 272, of a brownish-black, heavy consistency crude oil.

These two small residues were combined (1.15 grams) and tested with the following results:-

Specific gravity	0.97
Softening point	40-50°C
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Freezing test in appropriate solvent	produced crystals of a wax-like substance, softening at 25-30°C.

The combined residue was insufficient for a distillation test but it is unlikely that there would be any quantity of distillate boiling below 300°C; lighter fractions had already been removed by steam distillation.

As with previous samples examined from this well, the amount of oil present is very small (approximately 0.1% in No. 271, and 0.05% in No. 272.)

The amount of light fraction obtained from No. 272, although extremely small, represents an appreciable proportion (approx. 20%) of the total oil present.

The oil obtained from these two samples is described as a crude oil, probably of a mixed (paraffinic -asphaltic) base, with about 20% of low-boiling point fraction in the case of No. 272.

The main differences between these samples of oil and those previously tested (1310-1330') are:-

(a) The presence of a low boiling point fraction in one of the present samples, absent in the previous samples.

(b) A higher specific gravity (0.97) of the benzene extract of these samples, as compared with that (0.92) of the previous samples.

While it is probably possible to obtain some information regarding the nature and constitution of the oil, by a special type of test applied to the very small quantity of light fraction obtained by steam distillation, this was not done. The oil obtained from these samples is almost certainly different, both in quality and quantity, from that present in situ. It would be materially modified by the effect of gas stripping and temperature changes during its progress as a wet sludge up the bore. Further, the quantity of oil, especially of the light fractions, is likely to be greater within the actual oil-bearing horizon. Any special testing must therefore be postponed until a larger and more representative sample of oil is obtained.

While the proportion of oil present in these samples is very low and the nature of the oil not necessarily that of the oil in situ, the occurrence of such an oil, with a relatively high proportion of lighter fractions, amy be of significance in relation to ultimate oil discoveries in this region.

W. R. JEWELL
Chief Chemist.

10th February, 1956.

/PO'H

KENNEDY REPORT

WOODSIDE-2

Secretary for Mines.

Report on Samples Nos. 50-52/56.

Samples: Oil-bearing Calcareous Sandstone

Locality: Woodside

Sender: Dr. D.E. Thomas, Mines Department.

Three samples of calcareous sandstone were submitted for separation of any contained oil and further examination of any such oil, to determine its chemical and physical characteristics.

The samples were obtained from Well No. 2 of the Woodside Oil Co., as follows:-

No.	Depth feet	Weight of Sample gms.
50	1310	189
51	1320	344
52	1330	137

Extractions of the samples with the solvents, diethyl ether and benzene, yielded the following results:-

No.	Diethyl ether extraction %	Benzene extraction %	Total Oil recovered %
50	0.008	0.004	0.01
51	1.26	0.38	1.64
52	0.17	0.018	0.19

Testing of Oil

Only sample No. 51 (1320' level) provided sufficient oil for testing and even here, the quantity was so small that normal A.S.T.M. or I.P.T. testing methods were out of the question and recourse was made to micro techniques with the following results:-

Colour: Ether Extract - Dark brown
Benzene " - Black

Setting Point: Ether Extract 14°C. approx.
Benzene " Insufficient sample to determine

Specific Gravity (of mixed extracts): 0.92 - 0.93

Distillation:-
0° - 300°C. No distillate obtained
340°C. Distillation with decomposition

REPORT ON SAMPLES Nos. 50-52/56

Remarks:-

As no portion of the oil distilled below 300°C, the oil contains no gasoline nor kerosene fractions.

No lubricating oil was obtained by ordinary distillation and an assessment of the lubricating oil content (if any), by means of a vacuum distillation was not possible with the amount of oil available.

On the analytical evidence available, the oil is described as heavy crude oil, free from gasoline, kerosene and other light fractions, probably of mixed (paraffinic-asphaltic) base origin.

(Signed:) John C. Kennedy

For Senior Chemist, Mines Department.

APPENDIX 6.0

Palaeontology

57

1956/57

REPORT ON SAMPLES FROM WOODSIDE Nº 2 WELL

1310'-1320', 1330', 2325'

A.N. CARTER. M.Sc.

START

REPORT ON SAMPLE FROM WOODSIDE NO. 2 WELL,

1310' - 1320'

by A. N. Carter, M.Sc., Field Geologist.

SOURCE OF SAMPLE: Dr. N. Boutakoff. Part received on 6. 2.1956 and remainder on 9. 2.1956.

MEGASCOPIC DESCRIPTION OF SAMPLE:

Lumps of calcareous sandstone, foraminifera and other fossils embedded in grey mud.

TREATMENT:

Sample was boiled in sodium carbonate solution, the fine material removed by decantation and the coarse residue dried and examined. The fine material was disregarded because of probable contamination by drilling mud.

DESCRIPTION OF RESIDUE:

(a) Lithology of Cuttings.

Grey calcareous sandstone, sometimes containing calcareous worm-tubes of. Ditrupa.

(b) Fossils.

The following have been identified:

Bryozoa - several species

Gastropod cast

Worm tubes of. Ditrupa

Irregular echinoids, 2 spp.

Operculina sp. (some specimens contain a black waxy substance).

Elphidium 2 spp.

Nodosaria sp.

Notorotalia sp.

Fragments of crustacean carapaces

Fragments of Pliocene mollusca, quite alien to the remainder of the fauna.

AGE AND CORRELATION.

The rock is closely comparable with that seen in the core sample at 1405 ft. in the Woodside Company's No. 1 Well, where the lithology is identical and Operculina and Ditrupa tubes are the commonest fossils. The thickness of this facies in the No. 1 well is not known.

Lepidocyclina sp. is present in the No. 1 well at 1,465 ft., so the beds at 1,405 ft. containing Globigerinoides bispherica are provisionally considered to be of Balcombian age.

Consequently, rocks at 1310' - 1320' in the No. 2 well are tentatively placed in the Balcombian Stage.

A.N. Carter.

(A. N. Carter)
10. 2. 1956.

REPORT ON SAMPLE FROM WOODSIDE No. 2 WELL

1330 FEET.

SOURCE OF SAMPLE: Received from Dr. N. Boutakoff on 6 : 2 : 1956.

MEGASCOPIC DESCRIPTION AND TREATMENT:

See previous report on sample 1310 - 1330.

CONTENTS OF RESIDUE:

Operculina sp. (abundant)

Elphidium sp. (common)

Clypeaster sp.

Pliocene mollusca (contamination)

Quartz sand and occasional large quartz grains, probably derived from beds higher up the sequence.

AGE:

The fossils listed above give no age indications other than "Balcombian Stage" sensu Crespin 1943.

A.N. Carter.

(A. N. Carter)
FIELD GEOLOGIST

2 : 3 : 1956

REPORT ON SAMPLE FROM WOODSIDE NO. 2 WELL, NO. 2325

by A. N. Carter, M.Sc., Field Geologist

SOURCE OF SAMPLE:

Collected by Dr. N. Boutakoff from the Company's Field Superintendent on 29. 1.1956. Received for examination on 30. 1.1956.

MEGASCOPIC DESCRIPTION OF SAMPLE:

Screen sample - fairly large cuttings of a grey to greenish grey rock could be observed in a matrix of pale greenish-grey drilling mud.

TREATMENT:

The sample, as received, was divided into two parts and each was placed in a basin of water. A teaspoonful of sodium carbonate was added to each basin, which was then brought to the boil and allowed to boil for about 5 minutes. The clay suspension was then poured off and the process repeated. After the second boiling and decanting, all the residue was poured into a 10-mesh screen and such material as was held by the screen was washed carefully upon it until all traces of drilling mud had disappeared.

DESCRIPTION OF MATERIAL HELD BY 10-MESH SIEVE:

The sieve retained lumps of hard clay of various sizes, the largest being about 1½" x ¾" x ⅜". Two types of clay were represented by the fragments:

1. Evenly finegrained, pale green clay without visible fossils.
2. Dark grey clay with plentiful grains of glauconite, bryozoa and foraminifera.

This material was dried and after a representative sample had been taken for a permanent record, the remainder was again boiled in a solution of sodium carbonate to release the microfossils.

DESCRIPTION OF MATERIAL PASSED BY 10-MESH SIEVE:

This residue consisted of finer particles of the same two types of hard clay described above. Numerous glauconite grains were also present. This material is probably contaminated by fossils from the drilling mud. This material was also dried and again boiled in a solution of sodium carbonate.

FOSSILS OBTAINED BY RE-BOILING THE WASHED AND DRIED CUTTINGS:

It is reasonably certain that fossils obtained in this way were free from contamination. Sponge spicules were abundant in the residue, molluscan fragments were common, echinoid spines and plates were rare. The following foraminifera were obtained:

Vaginulinopsis gippslandica (Chapman & Crespin)

Victoriella sp. (crushed and unidentifiable, but probably V. plecte.)

Ammodiscus sp. cf. A. parri Crespin.

Anomalina colligeroides Carter MS.

Cibicides temperata Vella.

Cyclammina incisa Stache.

Cyclammina longicompressa Chapman & Crespin.

Parrellina n.sp. (in Micaceous Series at Lakes Entrance).

Glauconite grains were common in the washings and a few pyritic nodules were present.

AGE AND CORRELATION.

The sample is from rocks of Janjukian age (Zone of Victoriella plecte) and they are correlated with the Lakes Entrance Formation of the eastern part of the Gippsland Basin.

A.N. Carter.

(A. N. Carter)
Field Geologist
10. 2.1956.

ENCLOSURES

PE603971

This is an enclosure indicator page.
The enclosure PE603971 is enclosed within the container PE905579 at this location in this document.

The enclosure PE603971 has the following characteristics:

ITEM_BARCODE	= PE603971
CONTAINER_BARCODE	= PE905579
NAME	= Composite Well Log
BASIN	= GIPPSLAND
PERMIT	= PPL/174
TYPE	= WELL
SUBTYPE	= COMPOSITE_LOG
DESCRIPTION	= Composite Well Log of Woodside 1-3 (from WCR) for Woodside-2
REMARKS	=
DATE_CREATED	= 31/12/56
DATE_RECEIVED	=
W_NO	= W442
WELL_NAME	= WOODSIDE-2
CONTRACTOR	=
CLIENT_OP_CO	=

(Inserted by DNRE - Vic Govt Mines Dept)

PE603970

This is an enclosure indicator page.
The enclosure PE603970 is enclosed within the container PE905579 at this location in this document.

The enclosure PE603970 has the following characteristics:

ITEM_BARCODE	= PE603970
CONTAINER_BARCODE	= PE905579
NAME	= Electrical Log
BASIN	= GIPPSLAND
PERMIT	= PPL/174
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Electrical Log (from WCR) for Woodside-2
REMARKS	=
DATE_CREATED	= 22/03/56
DATE_RECEIVED	=
W_NO	= W442
WELL_NAME	= WOODSIDE-2
CONTRACTOR	= SCHLUMBERGER
CLIENT_OP_CO	= WOODSIDE (LAKES ENTRANCE) OIL COMPANY N.L.

(Inserted by DNRE - Vic Govt Mines Dept)

PE905577

This is an enclosure indicator page.
The enclosure PE905577 is enclosed within the container PE905579 at this location in this document.

The enclosure PE905577 has the following characteristics:

ITEM_BARCODE	= PE905577
CONTAINER_BARCODE	= PE905579
NAME	= Geological Cross-section
BASIN	= GIPPSLAND
PERMIT	= PPL/174
TYPE	= WELL
SUBTYPE	= CROSS_SECTION
DESCRIPTION	= Geological Cross-section for Woodside wells 1-3 (from WCR) for Woodside-2
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W442
WELL_NAME	= WOODSIDE-2
CONTRACTOR	=
CLIENT_OP_CO	=

(Inserted by DNRE - Vic Govt Mines Dept)

PE905578

This is an enclosure indicator page.
The enclosure PE905578 is enclosed within the container PE905579 at this location in this document.

The enclosure PE905578 has the following characteristics:

ITEM_BARCODE	= PE905578
CONTAINER_BARCODE	= PE905579
NAME	= Feildnote Survey Map
BASIN	= GIPPSLAND
PERMIT	= PPL/174
TYPE	= GENERAL
SUBTYPE	= SRVY_MAP
DESCRIPTION	= Feildnote Survey Map (from WCR) for Woodside-2
REMARKS	=
DATE_CREATED	= 13/03/56
DATE_RECEIVED	=
W_NO	= W442
WELL_NAME	= WOODSIDE-2
CONTRACTOR	=
CLIENT_OP_CO	=

(Inserted by DNRE - Vic Govt Mines Dept)

PE905609

This is an enclosure indicator page.
The enclosure PE905609 is enclosed within the container PE905579 at this location in this document.

The enclosure PE905609 has the following characteristics:

ITEM_BARCODE	= PE905609
CONTAINER_BARCODE	= PE905579
NAME	= Electric Log
BASIN	= GIPPSLAND
PERMIT	= PPL/174
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Electric Log Characteristics of the Lakes Entrance formation (from WCR) for Woodside-2
REMARKS	=
DATE_CREATED	= 30/04/65
DATE_RECEIVED	=
W_NO	= W442
WELL_NAME	= WOODSIDE-2
CONTRACTOR	=
CLIENT_OP_CO	= WOODSIDE (LAKES ENTRANCE) OIL COMPANY N.L.

(Inserted by DNRE - Vic Govt Mines Dept)