



Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

DEPT. NAT. RES & ENV



PE903968

BONITA I-1A

WELL COMPLETION SUMMARY

1 Folio No	2 Referred to	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

- | | |
|--|---|
| <ul style="list-style-type: none"> (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). | <ul style="list-style-type: none"> (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). |
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REGISTRY MUST BE NOTIFIED OF ANY FILE MOVEMENTS BETWEEN OFFICERS

LOCATION

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BONITA 1-1A

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I WELL DATA RECORD

LOCATION

WELL NAME BONITA -1		STATE Victoria	PERMIT or LICENCE Victoria L-5	GEOLOGICAL BASIN Gippsland	FIELD NFWC
CO-ORDINATES			MAP PROJECTION	GEOGRAPHICAL DESCRIPTION	
Lat.	Long.	X	Y	Australian	Offshore
Surface	38° 33'47"	148° 17'10"	617,912	243,343	4.5 miles east of Kingfish -1.
Bottom Hole					
<u>ELEVATIONS & DEPTHS</u>					
ELEVATIONS		WATER DEPTH		TOTAL DEPTH	Avg. Angle
Ground		262 Feet		M.D. 4145 Feet	
KB	99			T.V.D.	
RT		PLUG BACK DEPTH		REASONS FOR P.B.	
Braden Head		400 Feet		ABANDONMENT	
Top Deck Platform				SURFACE CASING PARTED	
<u>DATES</u>					
MOVE IN		RIG UP		SPUDDED	
13.10.69.		14.10.69.		15.10.69.	
RIG DOWN COMPLETE		RIG RELEASED		PROD. UNIT - Start Rigging Up	
21.10.69.		21.10.69.			
PROD. UNIT - Rig Down Complete			I.P. ESTABLISHED		
<u>MISCELLANEOUS</u>					
OPERATOR		PERMITTEE or LICENCEE		ESSO INTEREST	OTHER INTEREST
Esso		Esso		50%	Hematite 50%
CONTRACTOR		RIG NAME		EQUIPMENT TYPE	
ODECO		OCEAN DIGGER		SEMI-SUBMERSIBLE DRILLING VESSEL	
TOTAL RIG DAYS	DRILLING AFE NO.	COMPLETION NO.		TYPE COMPLETION	
8.3	239110				
LAHEE WELL	Before Drilling	New Field Wildcat.			
CLASSIFICATION	After Drilling	Junked and abandoned unsuccessful NFW. Moved rig 70' to drill Bonita 1a.			

P.M. COONEY
Geologist

IV CASING - LINER - TUBING RECORD							
Type	Size	Weight	Grade	Thread	No. Joints	Amount	Depth
Conductor	30"x20"	Pile Joint		Cameron	1	40.55	
	20"	94	H-40	Cameron	7	296.65	691
Surface	10-3/4"	40.5	J-55	8-RD	56	2154.30	2512

V CEMENT RECORD			
String	20"	10-3/4"	
Type of Cement	500 sx w/2% gel plus 500sx w/2% CaCl ₂	675 sx w/2% CaCl ₂	
Number of FT ³	1395	797	
Average weight of slurry	13.7 / 15.6	15.6	
Cement Top	Sea Floor	650'± Calc.	
Casing Tested with	500 psi	1500 psi	
Number of Centralizers	0	5	
Number of Scratchers	0	0	
Stage Collar etc.	0	0	
Remarks	Gel Prehydrated	Shoe Joint Backed Off	

R.L. Wood
Engineer

2.0. Well Data Record

Bonita 1A

COMPLETION REPORT

CONFIDENTIAL

I. WELL DATA RECORD

Date 24-6-70

LOCATION

PRE ALBAACORE 1

WELL NAME BONITA -1a		STATE Victoria	PERMIT or LICENCE Victoria L/5	GEOLOGICAL BASIN Gippsland	FIELD NFWC
CO-ORDINATES Lat. Long. X Y Surface 38°33'47.4" 148°17'9.7" 617,912 243,343 Bottom Hole			MAP PROJECTION Australian Transverse Mercator	GEOGRAPHICAL DESCRIPTION Offshore 70' on a bearing of 065° from Bonita -1.	
<u>ELEVATIONS & DEPTHS</u>					
ELEVATIONS		WATER DEPTH		TOTAL DEPTH	
Ground				M.D. 10,431 Feet	Avg. Angle
KB 99		265 Feet		T.V.D.	
RT		PLUG BACK DEPTH		REASONS FOR P.B.	
Braden Head		400 Feet		ABANDONED SURFACE CASING PARTED ?	
Top Deck Platform					
<u>DATES</u>					
MOVE IN 21.10.69.		RIG UP 21.10.69.		SPUDED 22.10.69.	
RIG DOWN COMPLETE 15.11.69		RIG RELEASED 15.11.69.		PROD. UNIT - Start Rigging Up	
PROD. UNIT - Rig Down Complete				I.P. ESTABLISHED	
<u>MISCELLANEOUS</u>					
OPERATOR Esso		PERMITTEE or LICENCEE Esso		ESSO INTEREST 50%	
				OTHER INTEREST Hematite Petroleum Pty. Ltd. 50%	
CONTRACTOR ODECO		RIG NAME OCEAN DIGGER		EQUIPMENT TYPE SEMI-SUBMERSIBLE DRILLING VESSEL	
TOTAL RIG DAYS 24.8		DRILLING AFE NO. 239116		COMPLETION NO. TYPE COMPLETION	
LAHEE WELL		Before Drilling		New Field Wildcat	
CLASSIFICATION		After Drilling		Abandoned unsuccessful NFW.	

P.M. COONEY
Geologist

II INITIAL PRODUCTION TEST					
Date	WELL COMPLETION AS: Oil Well _____ Gas Well _____ Dry Hole _____				
Choke size, inch			Calculated P.I.		
Length of Test			Calculated A.O.F.		
Oil, BPD			Perforations		
Water, BPD			Shut-In BHP		
Gas, MCFD			Flowing BHP		
Gas Liquids, BPD			Shut-In Tubing Press		
Gas-Oil Ratio			Flowing-Tubing Press		
Gravity, API			Flowing Temperature		

III PERFORATING RECORD (Prod.test, Completion, DST, FIT)						
INTERVAL	HPF	TOTAL SHOTS	SERV. CO.	DIFF. PRESS.	PERFORATION FLUID	SIZE AND TYPE GUN

NOT VALID FOR PERFORATING RECORD

Engineer

IV CASING - LINER - TUBING RECORD							
Type	Size	Weight	Grade	Thread	No. Joints	Amount	Depth
Conductor	30" x 20'	Pile Joint		Vetco	1	41.45	
	20"	94	H-40	Vetco	6	259.56	658
Surface	10-3/4"	40.5	J-55	8-RD	56	2152.91	2517

V CEMENT RECORD			
String	20"	10-3/4"	
Type of Cement	500 sx w/2% gel plus 500 sx w/2% CaCl ₂	675 sx w/2% CaCl ₂	
Number of FT ³	1395	797	
Average weight of slurry	13.7 / 15.4	15.7	
Cement Top	Sea Floor	650'± Calc.	
Casing Tested with	No Test	1500 psi	
Number of Centralizers	0	5	
Number of Scratchers	0	0	
Stage Collar etc.	0	0	
Remarks	Gel Prehydrated		

R.L. Wood
Engineer

VI

SUBSURFACE COMPLETION EQUIPMENT

DATE COMPLETED _____

Schematic	Equipment Description	Length	Depth

NOT APPLICABLE

Engineer

VII SAMPLES, CONVENTIONAL CORES, SW CORES					
INTERVAL	TYPE	RECOVERED	INTERVAL	TYPE	RECOVERED
720-10,430 2707-10,394	Cuttings Sidewall Cores	Sample every 10' Shot 59 Recovered 57			
No Conventional Cores Cut.					
VIII WIRELINE LOGS AND SURVEYS (Incl. FIT)					
Type & Scale	From	To	Type & Scale	From	To
IES 2" & 5"	2512-10,431				
FDC/GR " " "	7900-10,431				
	GR to Sea Floor				
BHCS " " "	2512-10,431				
CDM	2512-10,431				
Velocity Survey	3000-	9750.			

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P.M. COONEY
Geologist

IX NAME	FORMATION TOPS/Zones					REMARKS
	Tops		Gross Interval (ft)	Net	Pay (ft).	
	M.D.	Sub-sea		Gas	Oil	
Gippsland Fmn.	Sea Floor	- 265	6116			
Lakes Entrance Fmn.	6480	-6381	1525			
Latrobe Group (<u>M. diversus</u>)	8005	-7906	250			
<u>L. balmei</u>	8255	-8156				

X GEOLOGIC ANALYSIS (Pre Drilling prognosis Vs actual results)

Pre-drilling: Bonita 1a is designed principally to test a top of Latrobe play located on a down-to-the-east faulted nose of the Kingfish structure. Excellent reservoir beds, top seal, and source potential are anticipated. The sealing ability of the fault is a high risk, as it must seal for the Bonita structure to be an effective trap. There is no seismic indicated deeper structure below the upper Latrobe but drilling the well to the proposed 10,000' will give stratigraphic information from the deeper section.

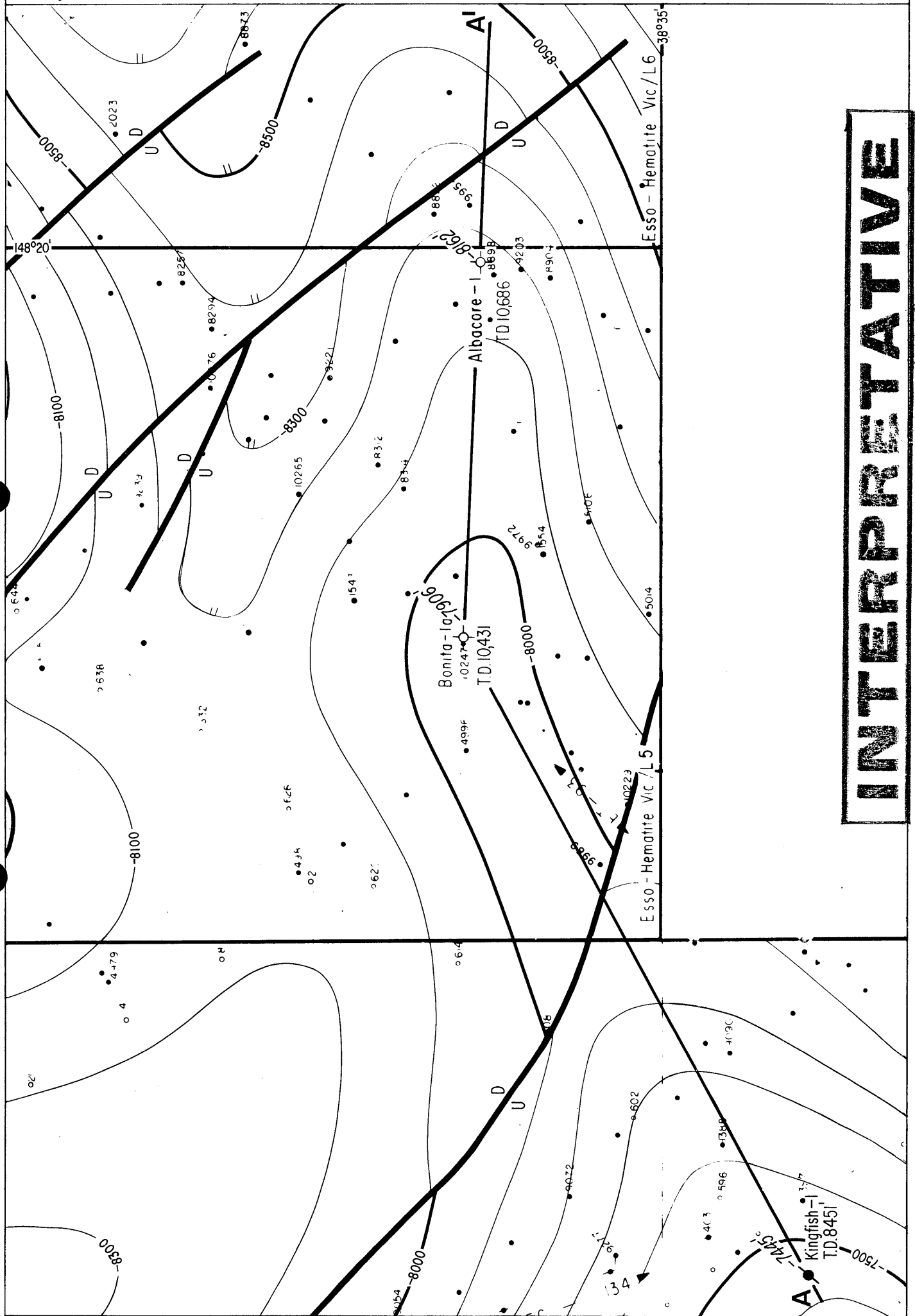
<u>Age</u>	<u>Formation</u>	<u>Depth (subsea)</u>
	Water	
Miocene	Gippsland Formation	-262'
Oligocene	Lakes Entrance Formation	-7100'
Eocene	Latrobe Formation	-8000'

Depths are from mean sea level; for drill depths add 99'.

Post-drill: Formation tops as in section IX.

Configuration of the structure is as predicted. The absence of hydrocarbons is attributed to a lack of seal by the down-to-the-east fault, separating the Kingfish field from the Bonita structure.

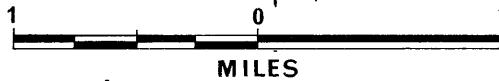
GEOLOGIC MAP OF AFTER DRILLING PICTURE



INTERPRETATIVE

STRUCTURE MAP ON TOP OF LATROBE GROUP

SCALE 1 : 50,000



MILES

DATUM:SEA LEVEL

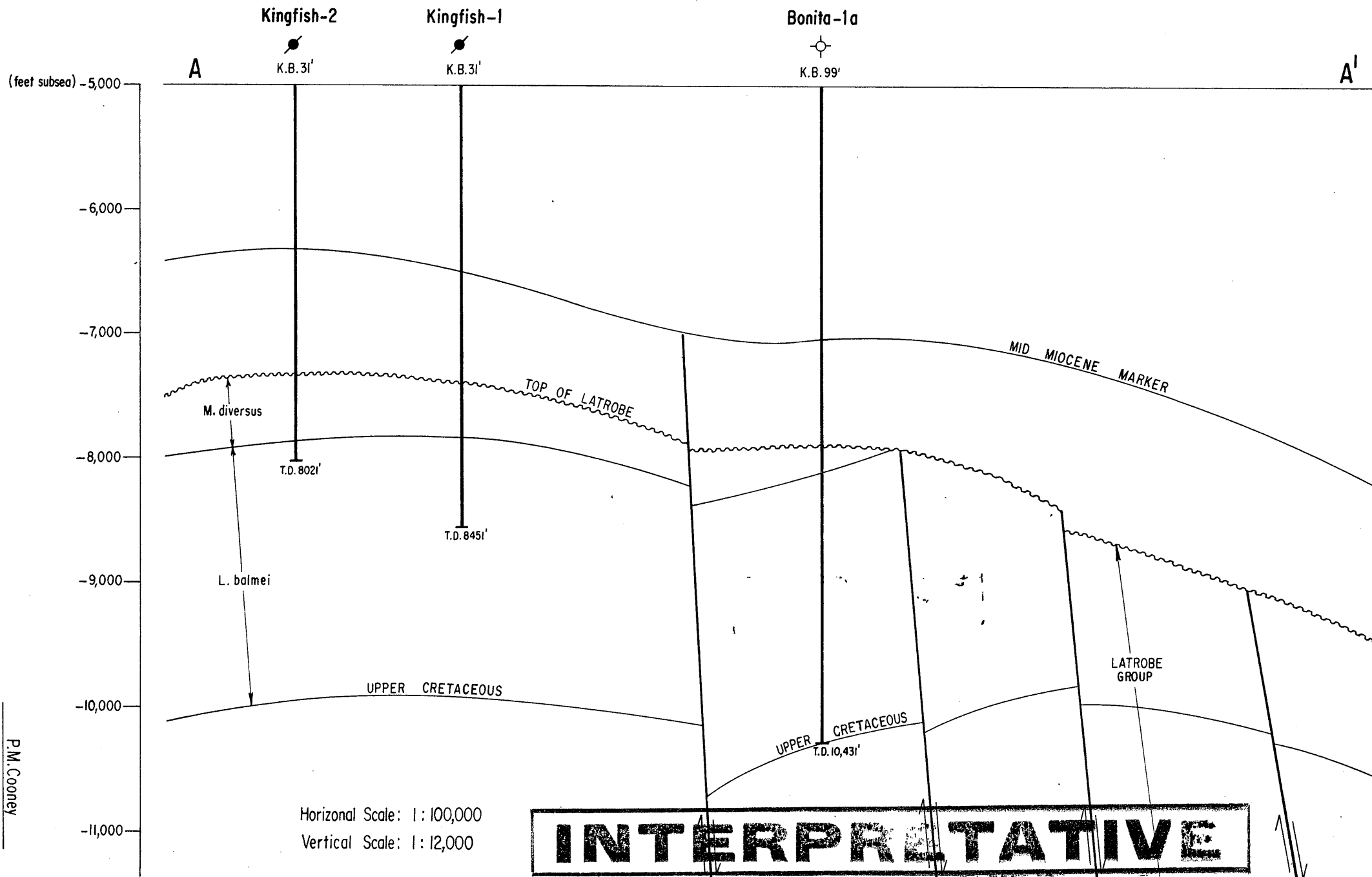
CONTOUR INTERVAL:100'

P.M.Cooney

Geologist

Dwg1211/OP/11

CROSS SECTION OF AFTER DRILLING PICTURE



INTERPRETATIVE

Horizontal Scale: 1 : 100,000
Vertical Scale: 1 : 12,000

P.M. Cooney
Geologist

Dwg: 1211/OP/10

3.0. Lithological Descriptions
Bonita 1A

Lithology:	2556-5611	<u>marl</u> -light grey-green, skeletal.
	5611-6270	<u>marl</u> - light grey, skeletal
	6290-6850	Interbedded <u>marl</u> and <u>mudstone</u> <u>marl</u> - as above. <u>mudstone</u> - light grey-green, calcareous, fossiliferous, glauconitic, pyritic in part.
	6850-7270	<u>mudstone</u> - as above
	7270-7930	<u>shale</u> - light to mid-grey, calcareous, slightly carbonaceous, fossiliferous, pyritic.
	7930-7995	Interbedded <u>shale</u> and <u>siltstone</u> <u>shale</u> - as above <u>siltstone</u> - grey-brown, calcareous, micaceous, sparsely glauconitic.
	7995-8020	<u>quartz silt</u> - trace coarse grained quartz sand, sparsely glauconitic. No hydrocarbon show.
	8020-8270	<u>sandstone</u> - light grey, unconsolidated, fine to coarse grained to pebbly, sub-angular to rounded, poorly sorted: trace clay matrix, trace pyrite and dolomite. No hydrocarbon show.
	8270-8510'	Interbedded <u>sandstone</u> and <u>siltstone</u> <u>sandstone</u> - as above. <u>siltstone</u> - grey-brown, argillaceous, very finely sandy, pyritic, glauconitic.
	8510-9590'	<u>Sandstone</u> with minor <u>shale</u> . <u>Sandstone</u> ; light grey, medium to coarse grained to pebbly, sub-angular to rounded, poorly sorted; trace argillaceous matrix. Porosity and permeability very good. <u>Sandstone</u> ; light grey, fine grained, sub-angular to sub rounded, well sorted; trace clay matrix, carbonaceous; porosity and permeability fair. <u>Shale</u> ; light brown, silty, very finely sandy, trace carbonaceous material.
	9590-10,430'	Interbedded <u>sandstone</u> , <u>siltstone</u> , <u>shale</u> & minor <u>coal</u> . <u>Sandstone</u> ; two types, as above. <u>Siltstone</u> ; light grey, argillaceous, very finely sandy, carbonaceous, micaceous. <u>Shale</u> ; light to dark brown, silty, carbonaceous, micaceous.

4.0. Sidewall Core Descriptions

Bonita 1A

CORE DESCRIPTIONS

WELL BONITA 1A

SERV. CO. Schlumberger

DATE 13/11/69

LOG RUN NO. 2

GEOLOGIST J. Black

REF. #

FIELD

STATE

ATT. 59 REC. 57

PAGE 1 OF 6 PAGE

DEPTH	REC	LITHOLOGY	COLOR	DISS CLAY	CONS	CALC	ODOR	FIDO	FLUORESCENCE			CUT		CUT FLUOR.		SHOW	PROB. PROD	
									DIST	INT	COL	QUAN	COL	INT	COL			
394	3/4"	Sandstone - GR. WH. M/V. CRSE w/ clay FAIR P&P NON CALC	GRAY WHITE	Yes	FRIAB LE	NON												WTR.
356	1/2"	SS - WH. M/CRSE, POOR SORTED, FRIAB, SOME clay MATRIX, Good POR. & PERM.	WH.	Yes	FRIAB	"												"
307	1/2"	SS - GR. WH. f/m. POOR SORT. FRIAB. FAIR POR. NON CALC.	GR. WH.	Yes	"	NON												"
306	3/4"	SS - WH. f/m. silty, MICAC. FRIAB, FAIR/POOR POR	WH.	NO	"	"												"
269	1/2"	SILTST. - GR. V. SOFT, DIRTY, MICAC. TR CARB.	GRAY	Yes	FIRM	"												
206	1/2"	SS - WH. f.g. TR. M.g., silty FRIAB. TR. MICA Good P&P	WH.	NO	FRIAB	"												
092	1/2"	SS - GR. f.g. silty w/ shale Pebbles, POOR P&P	GRAY	Yes	FIRM	"												
086	3/4"	SS - GR. WH. f/m.g., FRIAB. POORLY SORT. FAIR TO GOOD P&P	GR. WH	TR.	FRIAB	"												
044	3/4"	SS - WH f/m g. FRIAB. POORLY SORTED FAIR TO GOOD P&P	WH	NO	V. FRIAB	"												
007	1/2"	SS - GR. V.F./g., FRIAB FAIR POR, NON CALC.	GRAY	NO	FRIAB	"												

SIDEWALL CORE DESCRIPTIONS

WELL

BONITA 1A

SERV. CO. SCHLUMBER.

DATE 13/11/69

LOG RUN NO. 2

GEOLOGIST J. BLAC

REF. #

FIELD

STATE

ATT. 59 REC. 57

PAGE 2 OF 6 PA

NO.	DEPTH	REC	LITHOLOGY	COLOR	DISS CLAY	CONS	CALC	ODOR	FIDO	FLUORESCENCE			CUT		CUT FLUOR.		SHOW	PROB. PROD.
										DIST	INT	COL	QUAN	COL	INT	COL		
11	9,986	1/2"	SHALE - GR SILTY, CARB, SLI 1mm. NON CALC	GRAY		FIRM	NON											
12	9,833	1"	SHALE - CHOC. BRN, FISS, MASS. CARB, FIRM	CHOC. BRN.		"	"											
13	9,703	1"	SHALE - DK CHOC. BRN, FISS, CARB. MASS W/ THIN COAL STREAKS	CHOC. BRN		"	"											
14	9,612	1"	SHALE - DK GR. FIRM MASS	DK. GRAY		"	"											
15	9,511	3/4"	SS - LT. GR. F/V. CRSE POOR SORT. W/ SOME CHY, FAIR P&P	LT GRAY	Yes	FRIAB.	"											
16	9,502	1 1/4"	GREENSTONE - DK GRN W/ SOME LT. GRN 70-80% SPI IS GLAUC. SOME F. G. SD SOFT, FRIAB.	DK GREEN		FRIAB.	"											
17	9,490	1 1/4"	GREENSTONE - CHOC. BRN SILTY W/ 40% GLAUC. SOFT	GRN BRN		FRIAB.	"											
18	9,478	3/4"	SILTST. - CHOC BRN SLI CARB. V. GLAUC. SOFT	CHOC. BRN.		SOFT	"											
19	9,442	1/2"	SILTST. - DK BRN W/ V. F. G. SD. V. CARB. SOFT MICAC.	DK BRN		SOFT	"											
20	9,353	1/2"	SS - GR. WH. F/V. F. G. FAIR P&P V. CARB, SLI MICAC, FRIAB	GR. WH.	clean	FRIAB.	"											
21	9,228	1/2"	SS - GR. WH. F/M. G. POOR SORT. FRIAB. GOOD P&P	GR. WH	clean	FRIAB.	"											

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SIDEWALL CORE DESCRIPTIONS

WELL

Bonita 1A

SERV. CO. Schlumberger

DATE 13/11/67

LOG RUN NO. 2

GEOLOGIST

REF. #

FIELD

STATE

ATT. 59 REC. 57

PAGE 4 OF 6

NO.	DEPTH	REC	LITHOLOGY	COLOR	DISS CLAY	CONS	CALC	ODOR	FIDO	FLUORESCENCE			CUT		CUT FLUOR.		SHOW	PROB. P
										DIST	INT	COL	QUAN	COL	INT	COL		
31	8,146	1"	SHALE - choc. brn, silty, glnuc. carb w/ few CRSE RND QTZ.	choc BRN		FIRM	NON											
32	8,107	3/4"	SS - wh. f/m. g., w/ SOME CRSE, subang/subrind POOR SORT. Good P&P clean noncalc.	wh.	NO	FIRM BR	NON											
33	8,046	1/2"	Siltst - choc brn, avg., v. SDV w/ m. g. QTZ CARB, POOR P&P	choc BRN	yes	SOFT	NON											
34	8,022	3/4"	Siltst - choc brn avg. carb v. SDV w/ m/CRSE g. QTZ FAIR P&P noncalc. v. carb. soft	choc BRN	sli	SOFT	NON											
35	8,012	3/4"	SS - grn wh f. g. QTZ w/ some v. CRSE well RND QTZ v. glnuc. sli avg. Fair P&P	GRN WH	sli	FRAB	NON											
36	8006	3/4"	Shale - Red BRN silty w/ ferr. staining, abund. well RND. QTZ TR FOSS weathered ZONE	RED BRN		SOFT	NON											
37	7,998	1 3/4"	Shale - M. GR MASS FIRM CALC.	M. GR.		FIRM	calc.											
38	7,992	1 3/4"	Shale - M. GR. MASS FIRM CALC.	M GR		"	"											
39	7982	1 1/4"	Shale - M GR. MASS FIRM. CALC.	M GR		"	"											
40	7963	1 1/2"	Shale - M. GR MASS silty FIRM CALC.	M. GR.		"	"											

9/4

SIDEWALL CORE DESCRIPTIONS

WELL *BONITA 1A* SERV. CO. *Schlumberger* DATE *13/11/69* LOG. RUN NO. *2* GEOLOGIST *J. BLAIR*

REF. # FIELD STATE ATT. *59* REC. *57* PAGE *6* OF *6* PAGES

NO.	DEPTH	REC	LITHOLOGY	COLOR	DISS CLAY	CONS	CALC	ODOR	FIDO	FLUORESCENCE			CUT		CUT FLUOR.		SHOW	PROB. PROD.
										DIST	INT	COL	QUAN	COL	INT	COL		
53	4450	1/4"	MUDSTONE - GR. SOFT, MASS V. CALC.	GR		SOFT	✓ CALC.											
54	4030	1"	Shale - GR MASS FIRM CALC.	GR		FIRM	CALC.											
55	3728		NO RECOVERY															
56	3490	3/4"	Shale - M. GR MASS silty FIRM CALC.	M. GR.		FIRM	CALC.											
57	3390	1/2"	Shale - M. GR. MASS FIRM CALC.	M. GR.		"	"											
58	2860	1/2"	Shale - M. GR. MASS FIRM CALC.	M. GR.		"	"											
59	2707	1/2"	Shale - M. GR. MASS FIRM CALC.	M. GR.		"	"											

9/9

5.0 Palynology
Bonita 1A

INTERPRETATIVE

PALYNOLOGY OF BONITA -1a, GIPPSLAND BASIN

by

P.R. Evans

Palyn.Rept. 1970/11

May 1970.

INTRODUCTION

A series of sidewall cores from Bonita - covering virtually the entire interval of the Latrobe complex penetrated by the well was received for examination during November 1969. The following notes summarize the results of analysis.

SUMMARY

Sample	Depth(ft.)	Age	Zone
SWC 33	8046	Paleocene	l. <u>M. diversus</u>
" 31	8146	"	"
" 29	8278*	"	<u>L. balmei</u>
" 28	8365*	"	"
" 24	8814	"	"
" 18	9478*	"	"
" 16	9502*	"	"
" 14	9612	"	lower <u>L. balmei</u>
" 13	9703	"	"
" 12	9833	"	"
" 11	9986*	"	"
" 5	10269*	"	? "

COMMENT

The lower M. diversus Zone is characterized by abundant dinoflagellates. Rare dinoflagellates are present in samples marked (*), at the top of the L. balmei Zone. Their presence at 8814 feet is indeterminate because of insufficient yield. Adequate yields were obtained at 9612-9833 feet where it may be assumed dinoflagellates are absent.

The greensand, sampled at 9502 feet, contained a poor assemblage of spores, pollen and dinoflagellates but was found to yield relatively abundant nannoplankton which are good indicators of saline, either marine or estuarine environments. Samples at 8278, 8365 and 9478 feet were also tested for nannoplankton but yielded none.

Whereas most of the section is readily allocated to the L. balmei Zone, evidence suggests that horizons between 9612 and 9986 feet are referable to basal sections of the L. balmei Zone and that assignment of the deepest sample at 10,269 feet to the balmei Zone may be questionable.

Although key fossils are absent the bulk of the fairly small residue suggests a balmei age is preferable.

The sample at 10,269 feet is remarkable for a content of Deflandreid dinoflagellate of unknown designation. They match neither Cretaceous nor Tertiary forms of the genus which have been described so far.

INTERPRETATIVE

BASIN GIPPSLAND DATE _____

WELL NAME BONITA -1a ELEVATION +99 feet

AGE	PALYNOLOGIC ZONES	HIGHEST DATA					LOWEST DATA				
		Preferred Depth	Rtg	Alternate Depth	Rtg	2 way time	Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time
MIOC.	<u>T. bellus</u>										
	<u>P. tuberculatus</u>										
EOCENE	<u>U. N. asperus</u>										
	<u>L. N. asperus</u>										
	<u>P. asperopolus</u>										
	<u>U. M. diversus</u>										
	<u>L. M. diversus</u>	8022	1			1-642	8146	1			1-660
PALEO-Eocene	<u>L. balnei</u>	8278	1			1-682	9502	1			1-875
	<u>T. longus</u>	9612	1			1-892	9986	1			1-900
LATE CRETACEOUS	<u>T. lilliei</u>										
	<u>N. senectus</u>										
	<u>C. trip./T. pach.</u>										
	<u>C. distocarin.</u>										
	<u>T. pannosus</u>										
EARLY CRETACEOUS	<u>C. paradoxa</u>										
	<u>C. striatus</u>										
	<u>U. C. hughesii</u>										
	<u>L. C. hughesii</u>										
	<u>C. stylosus</u>										
	Pre-Cretaceous										

COMMENTS: _____

T.D. 10431 (2.04)

- RATINGS: 0; SWC or CORE, EXCELLENT CONFIDENCE, assemblage with zone species of spores, pollen and microplankton.
- 1; SWC or CORE, GOOD CONFIDENCE, assemblage with zone species of spores and pollen or microplankton.
- 2; SWC or CORE, POOR CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.
- 3; CUTTINGS, FAIR CONFIDENCE, assemblage with zone species of either spores and pollen or microplankton, or both.
- 4; CUTTINGS, NO CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.

NOTE: If a sample cannot be assigned to one particular zone, then no entry should be made. Also, if an entry is given a 3 or 4 confidence rating, an alternate depth with a better confidence rating should be entered, if possible.

DATE RECORDED BY: L.E.S./ A.D.P. DATE June 1971

DATE REVISED BY: L.E.S. DATE Dec. 1971

BASIN GIPPSLAND

DATE _____

WELL NAME BONITA - 1

ELEVATION +99 feet

AGE	PALYNOLOGIC ZONES	HIGHEST DATA					LOWEST DATA				
		Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time	Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time
Eocene	<u>P. tuberculatus</u>										
	<u>U. N. asperus</u>										
	<u>M. N. asperus</u>										
	<u>L. N. asperus</u>										
	<u>P. asperopolus</u>										
	<u>U. M. diversus</u>										
	<u>M. M. diversus</u>										
	<u>L. M. diversus</u>	8022	2				8146	2			
Paleocene	<u>U. L. balmei</u>	8208	2				8278	2			
	<u>L. L. balmei</u>										
	<u>T. longus</u>	9612	1	9502	2		10,269	1			
Cretaceous	<u>T. lilliei</u>										
	<u>N. senectus</u>										
	<u>C. trip./T.pach.</u>										
	<u>C. distocarin.</u>										
	<u>T. pannosus</u>										
EARLY CRETACEOUS											
E-CRETACEOUS											

COMMENTS: Deflandrea druggii Dinoflagellate Zone : 9800 (3) - 10,269 (1)

- RATINGS: 0; SWC or CORE, EXCELLENT CONFIDENCE, assemblage with zone species of spores, pollen and microplankton.
 1; SWC or CORE, GOOD CONFIDENCE, assemblage with zone species of spores and pollen or microplankton.
 2; SWC or CORE, POOR CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.
 3; CUTTINGS, FAIR CONFIDENCE, assemblage with zone species of either spore and pollen or microplankton, or both.
 4; CUTTINGS, NO CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.

NOTE: If a sample cannot be assigned to one particular zone, then no entry should be made. Also, if an entry is given a 3 or 4 confidence rating, an alternate depth with a better confidence rating should be entered, if possible.

DATA RECORDED BY: L.E.S. / A.D.P. DATE June 1971 ; Dec. 1971.

DATA REVISED BY: A.D.P. DATE Jan. 1975

Foram Zonules

		Highest Data	Quality	2 Way Time	Lowest Data	Quality	2 Way Time
MIOCENE	A	Alternate					
	B	Alternate					
	C	2040	3		3030	3	
	D	3050	3		5300	3	
	D ₁	Alternate					
	D ₂	5550	1		6600	3	
	E	6660	3		6840	0	
	F	7038	0		7292	1	
	F	Alternate					
	G	7300	3		7400	3	
	G	Alternate					
OLIGOCENE	H ₁	7634	1				
	H ₁	Alternate					
	H ₂				7809	1	
	H ₂	Alternate					
	I	7850	3		7900	3	
	I	Alternate					
	I ₂	Alternate					
	J	7904	1		7904	1	
EOC.	J ₁	Alternate					
	J ₂	7963	1		7998	1	
	J ₂	Alternate					
EOC.	K	8006	2		8006	2	
	K	Alternate					
EOC.	Pre K						

COMMENTS: The sample at 8006', a SWC is of very low confidence

Note: If highest or lowest data is a 3 or 4, then an alternate 0, 1, 2 highest or lowest data will be filled in if control is available.

If a sample cannot be interpreted to be one zonule, as apart from the other, no entry should be made.

- 0 SWC or Core - Complete assemblage (very high confidence).
- 1 SWC or Core - Almost complete assemblage (high confidence).
- 2 SWC or Core - Close to zonule change but able to interpret (low confidence).
- 3 Cuttings - Complete assemblage (low confidence).
- 4 Cuttings - Incomplete assemblage, next to uninterpretable or SWC with depth suspicion (very low confidence).

Date Revised 14/6/72

By DJT/ADP

WELL NAME: BONITA # 1

W560

DEPTH (FT)	SAMPLE TYPE	PRESER-VATION	DIVERSITY	SPORE/POLLEN ZONE	DINOFLAGELLATE ZONE	CONFIDENCE LEVEL	ENVIRONMENT
8022	SWC 34	Good	V. low	Indet.	?W. hyperacantha	5	Marine
8046	SWC 33	Fair-Good	V. low	M. diversus	?W. hyperacantha	5	Marginal marine
8107	SWC 32	Good	V. low	? M. diversus	Indet.	5	Marginal marine
8146	SWC 31	Good	Moderate	M. diversus	?W. hyperacantha	5	Marine
8208	SWC 30	Good	V. low	L. balmei	Indet.	5	Marginal marine
8278	SWC 29	Good	Low	U.L. balmei	Indet.	5	Marginal marine
8365	SWC 28	Good	Low	U.L. balmei	?A. homomorphum	5	Marine
8814	SWC 24	Fair	Low	L. balmei	-	5	Non-marine
9478	SWC 18	Fair	V. low	no older T. longus	-	3	Non-marine
9502	SWC 16	Good	Moderate	Lower L. balmei	Indet.	4	Marginal marine
9612	SWC 14	Fair	Moderate	L.L. balmei	-	5	Non-marine
9703	SWC 13	V. Poor	Moderate	?L. balmei	-	3	Non-marine
9833	SWC 12	Fair	High	T. longus	-	5	Non-marine
9986	SWC 11	Fair	Low	T. longus	Indet.	3	Marginal marine
10269	SWC 5	Poor	V. low	T. longus	-	4	Non-marine

OIL and GAS DIVISION

- 3 FEB 1983

BY W. K. HARRIS

FOR ACQUISITION, PHILLIPS, SHELL

6.0 velocity survey

Bonita 1A

VELOCITY SURVEY

Well BONITA-1 *a*
Basin GIPPSLAND

102/10

Date 24 FEB 1970 ~~1970~~

Lib/File No. ~~67/10/11~~

Please return to
Esso Standard Oil (Aust.)
EXPLORATION LIBRARY

INTRODUCTION

Esso personnel A. MARTENS
Contractor UNITED GEOPHYSICAL

OIL and GAS DIVISION

Supplied (1) Instruments 12 APR 1983
 (2) Personnel
 Seismic Observer J. Larsen
 Marine Shooter R. Moore
 (3) Licenced Shooting Boat
 name Wendy Maree
 date loaded
 date released
 Agent Desma Engineering
 amount of powder lbs
 size of cans lbs.
 number of cans
 number of caps
 number of boosters

Personnel and Instruments

assembled at Longford date 10/11/69
 boarded (rig) Ocean Digger date 10/11/69
 date of survey 10/11/69
 casing depth 2512
 T.D. when shot 10430 FTD
 water depth 260'

SURVEY PROCEDURE

Weather: sea Moderate
 rig movement Slight
 rig noise Low
 Hydrophones: number 2
 depth below sea level 20 ft
 position .1. adjacent to well
 .1. 185' SW well

Shot Positioning and Charges:

marker buoys (number
 (distance
 (direction
 charge depth 10' ft
 number of shots 16 charge size lbs
 number of shots charge size lbs
 number of misfires 1
 amount of powder used 666 lbs
 caps 20
 primers 20

amount of powder dumped 33.1/3 lbs. ^{2/10}

Well-phone positioning :

T-bar
 number of depths 8
 Time: first shot 800
 last shot 1025
 rig time 2.25

RESULTS

Quality of records (good 17
 (fair
 (poor
 (not used 2

Comparison of Interval Times
with sonic log

/Δ/average 1.5microsec/foot
 /Δmax/ 2.6microsec/foot

CONCLUSION

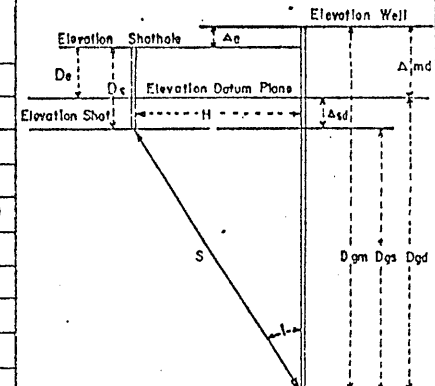
Reliability of T-D curve Good

COMMENTS:

Depth Rel.	Av. Vertical Travel Time (check shots)	Ti Check Shots (sec.)	Ti Sonic Log (sec.)	$T_i - T_c$ (Millisecs.)	Depth Interval (ft.)	Error (Microsec per ft.)
2901	.3761	.2128	.207	6	2500	2.4
5401	.5889					
5401	.5889	.0546	.052	-1.3	700	1.4 4.2
6101	.6435					
6101	.6435	.0548	.056	-1	630	-1.6
6731	.6983					
6731	.6983	.1215	.119	3	1180	2.6
7911	.8198					
7911	.8198	.0585	.060	-1	740	-1.4
8651	.8783					
8651	.8783	.0562	.057	-1	715	-1.4
9366	.9345					
9366	.9345	.0228	23	0	285	-
9651	.9573					

4/10

		Shothole Information: - Elevation, Distance & Direction from Well						Company		Well		Elevation (Derrick Floor)	Total Depth	LOCATION												
		Approx. 1000' Offset east and west of well.						ESSO EXPLORATION AUSTRALIA INC.		BONITA-1		99'		Coordinates 28° 33' 47.3" S 148° 17' 9.6" E		Section, Township, Range GIPPSLAND		County	Area or Field			DATUM:				
Record Number	Shothole Number	Time of Shot	Dgm	Ds	tus	tr	T			Dgs	H	TAN I	Cos I	Tgs	Δsd	Δsd/V	Tgd	Tgd Average	Dgd	ΔDgd	ΔTgd	VI Interval Velocity	Va Average Velocity	Elevation		
							Reading	Barly	Grade															Elevation Shot	Elevation Well	
		1	3000	10	.002	.165	.389	D	G	2890	825	.285	.962	.3759	10'	.002	.3761	.3761	2901				7714	Elevation Shot	Elevation Well	
																				2500	.2128	11748				
		2	5500	10'	.002	.206	.597	D	G	5390	1030	.191	.982	.5882	10'	.002	.5884	.5889	5401				9170			
		15	5500	10'	.002	.186	.596	D	G	5390	930	.173	.985	.5891	10'	.002	.5893				700	.0546	12820			
		3	6200	10'	.002	.182	.650	D	G	6090	910	.149	.989	.6447	10'	.002	.6449	.6435	6101				9482			
		14	6200	10'	.002	.193	.648	D	G	6090	965	.158	.988	.6418	10'	.002	.6420				630	.0548	11496			
		4	6830	10'	.002	.185	.705	D	G	6720	925	.138	.991	.7002	10'	.002	.7004	.6983	6731				9643			
		13	6830	10'	.002	.195	.701	D	G	6720	975	.145	.990	.6955	10'	.002	.6957				1180	.1215	9712			
		5	8010	10'	.002	.188	.826	D	G	7900	940	.119	.993	.8220	10'	.002	.8222	.8198	7911				9650			
		12	8010	10'	.002	.200	.822	D	G	7900	1000	.127	.992	.8173	10'	.002	.8175				740	.0585	12640			
		6	8750	10'	.002	.182	.882	D	G	8640	910	.105	.995	.8789	10'	.002	.8791	.8783	8651				9850			
		11	8750	10'	.002	.212	.882	D	G	8640	1060	.123	.993	.8772	10'	.002	.8774				715	.0562	12722			
		7	9465	10'	.002	.202	.939	D	G	9355	1010	.108	.994	.9354	10'	.002	.9356	.9345	9366				10023			
		10	9465	10'	.002	.207	.937	D	G	9355	1035	.111	.994	.9331	10'	.002	.9333				285	.0228	12500			
		8	9750	10'	.002	.239	.960	D	G	9640	1195	.124	.992	.9545	10'	.002	.9547	.9573	9651				10082			
		9	9750	10'	.002	.202	.963	D	G	9640	1010	.105	.995	.9596	10'	.002	.9598									



Dgm = Geophone depth measured from well elevation
 Dgs = " " " " " shot " "
 Dgd = " " " " " datum "
 Ds = Depth of shot
 De = Shothole elevation to datum plane
 H = Horizontal distance from well to shotpoint
 S = Straight line travel path from shot to well geophone
 tus = Uphole time of shotpoint
 T = Observed time from shotpoint to well geophones.
 tr = " " " to reference geophones.
 Δe = Difference in elevation between well & shotpoint.
 Δsd = " " " " " shot & datum plane
 Δsd = Ds - De
 $Dgs = Dgm - Ds \pm \Delta e$; $\tan i = \frac{H}{Dgs}$
 $Tgs = \cos i T = \text{Vert. travel time from shot elev. to geophone}$
 $Tgd = Tgs \pm \frac{\Delta sd}{V}$ " " " " datum plane " "
 $Dgd = Dgm - \Delta md$
 $VI = \text{Interval velocity} = \frac{\Delta Dgd}{\Delta Tgd}$
 $Va = \text{Average} = \frac{Dgd}{Tgd}$
 Surveyed by: _____
 Date: _____
 Weathering Data: _____
 Casing Record: _____

January 9, 1973

REVISION OF BONITA-1a TIME-DEPTH CURVE

The original Bonita-1a time-depth curve was drawn through Integrated Sonic Log picks, tied only to the check shot at KB 8010'. In doing this, the time from the sonic log at -5401' is .593 sec. compared to .589 sec. from the check shot. (The 5500' KB level was shot going in and coming out of the hole and the times recorded were .5884 sec. and .5893 sec.)

By tying the sonic log to this check shot, the revised curve above -5401' does not ignore the check shot at -2901' as was done with the original curve.

The new curve above (.589, 5401') passes through the following points.

<u>One-way time (sec) below S.L.</u>	<u>Depth (ft.) below S.L.</u>	<u>Interval Velocity (ft./sec.)</u>	<u>Average Velocity (ft./sec.)</u>
. 589	5401'		9170
		13280	
. 557	4976'		8930
		12900	
. 515	4434'		8610
		11430	
. 445	3634'		8170
		10940	
. 413	3284'		7950
		10350	
. 376	2901'		7715
		10500	
. 330	2418'		7330

Mark A. Henschke.

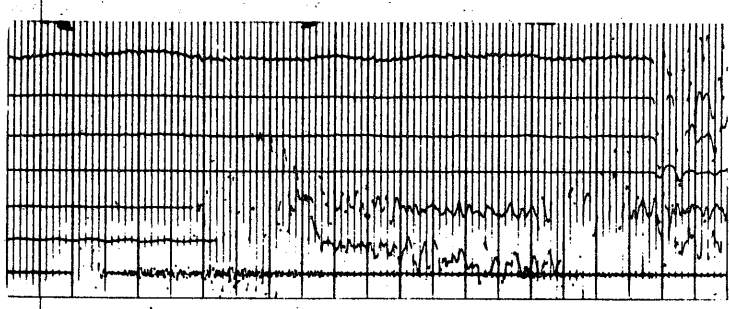
Mark A. Henschke

January 23, 1973.

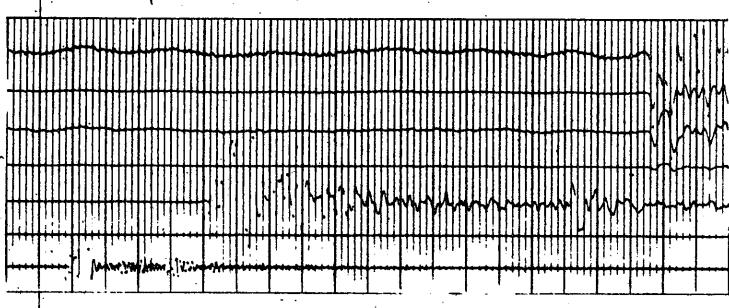
SONIC LOG CORRELATION PICKS

Depth	Time	Interval Time	Interval Distance	Interval Velocity	Average Velocity
2418	.3401				7109
		.0821	866	10548	
3284	.4222				7778
		.0989	1150	11628	
4434	.5211				8509
		1.269	1702	13412	
6136	.6480				9508
		.0503	564	11212	
6700	.6983				9594
		.0310	300	9677	
7000	.7293				9598
		.0461	450	9761	
7450	.7754				9608
		.0306	310	10131	
7760	.8060				9628
		.0139	150	10791	
7910	.8199				9650
		.0365	440	12055	
8350	.8564				9760
		.0239	300	12552	
8650	.8803				9826
		.0570	715	12544	
9365	.9373				9991
		.0739	935	12652	
10300	1.0112				10185

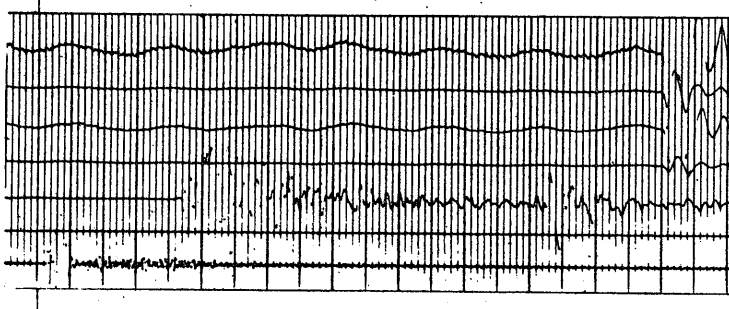
Bonita 1a
Shot K' 1000 NE
8750' K.B.
33 @ 10'
Time: 0950



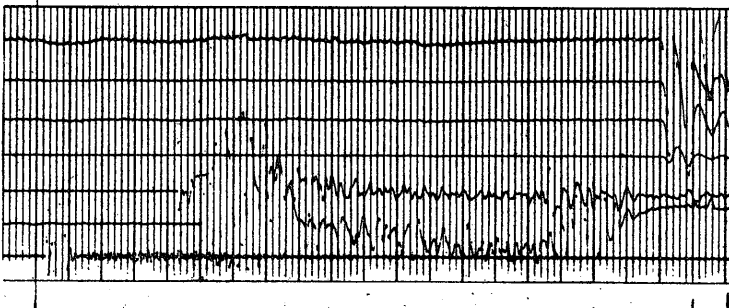
Bonita 1a
Shot F' 1000 SW
8750' K.B.
33 @ 10'
Time: 0900



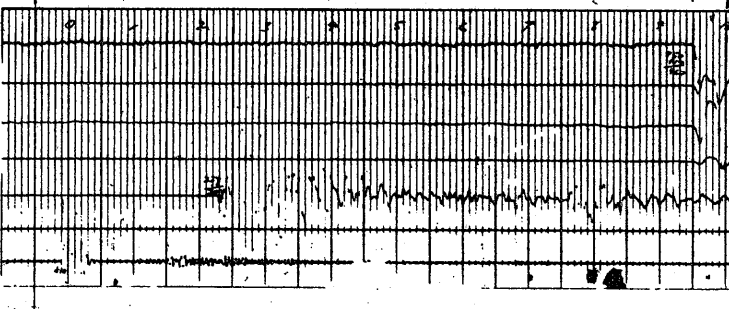
Bonita 1a
Shot G' 1000 SW
9465' K.B.
33 @ 10'
Time: 0915



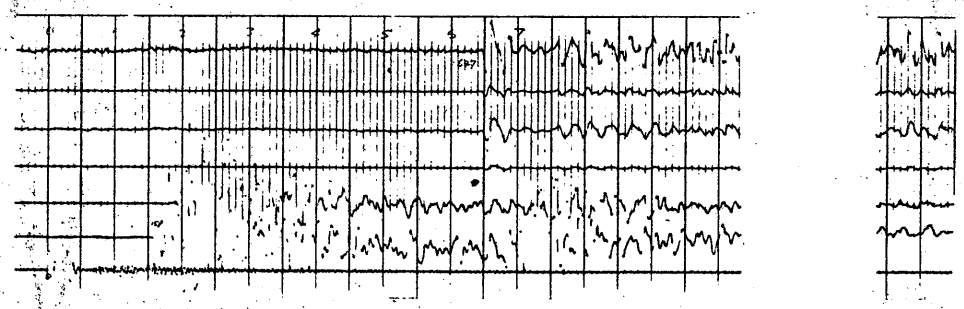
Bonita 1a
Shot J' 1000 NE
9465' K.B.
33 @ 10'
Time: 0945



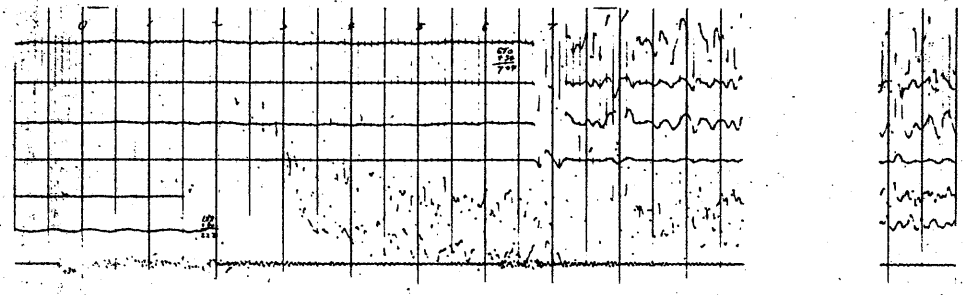
Bonita 1a
Shot H' 1000 SW
9750' K.B.
33 @ 10'
Time: 0925



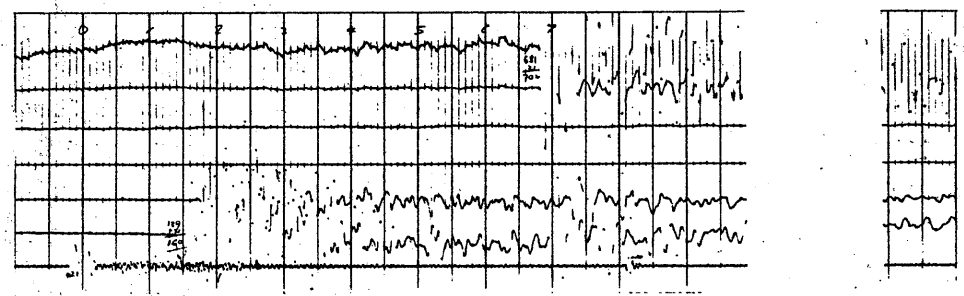
Bonita 1a
Shot C
6200' K.B.
33 @ 10'
Time: 0830



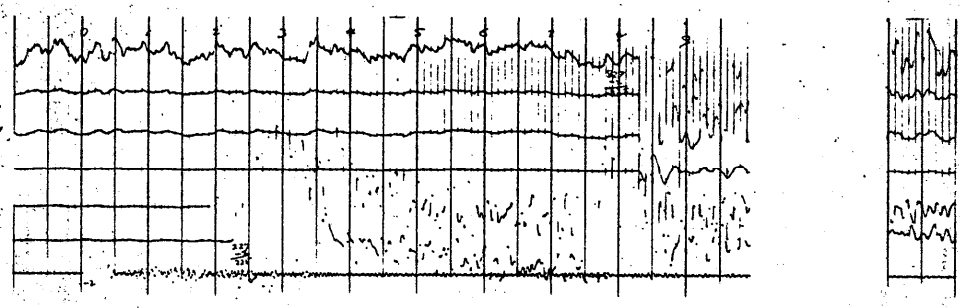
Bonita 1a
Shot M 1000' NE
6830' K.B.
33 @ 10'
Time: 1005



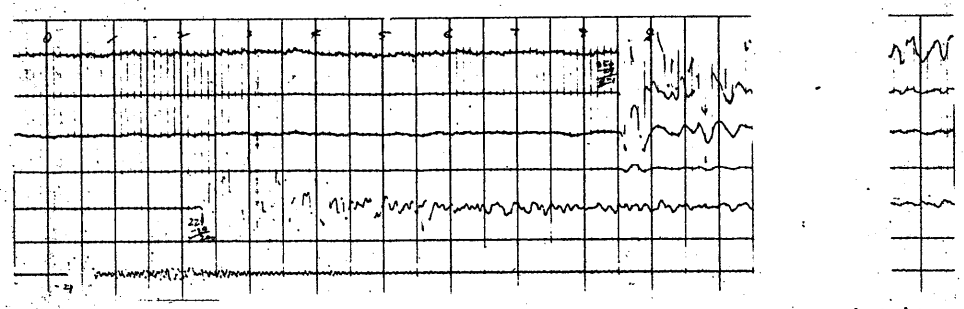
Bonita 1a
Shot D
6830' K.B.
33 @ 10'
Time: 0835



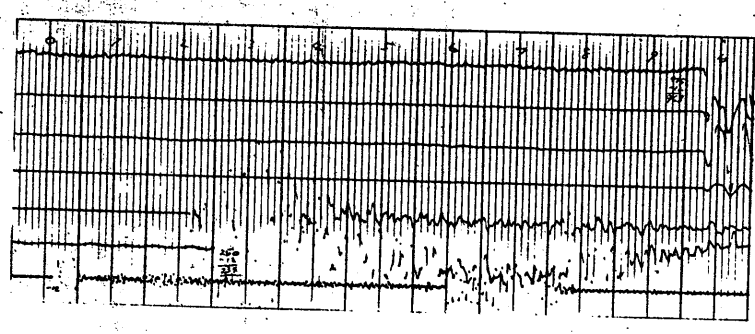
Bonita 1a
Shot L 1000' NE
8010' K.B.
33 @ 10'
Time: 1000



Bonita 1a
Shot E 1000' S
8010' K.B.
33 @ 10'
Time: 0850

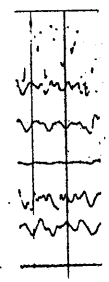
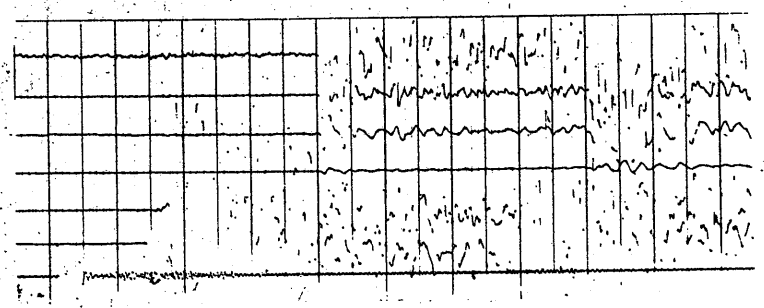


Bonita 1a
Shot 1
9750' K.B.
33 @ 10'
Time : 0940

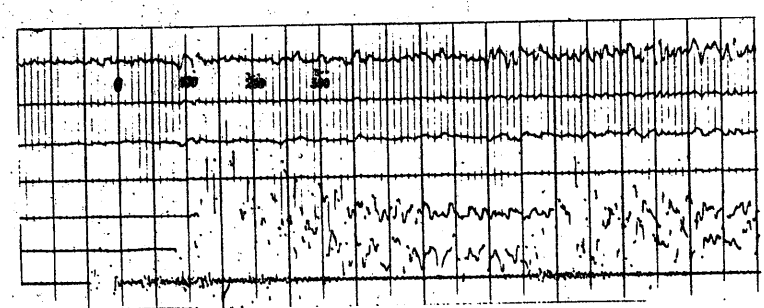


Dwg 1211/OP/5

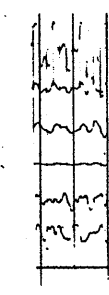
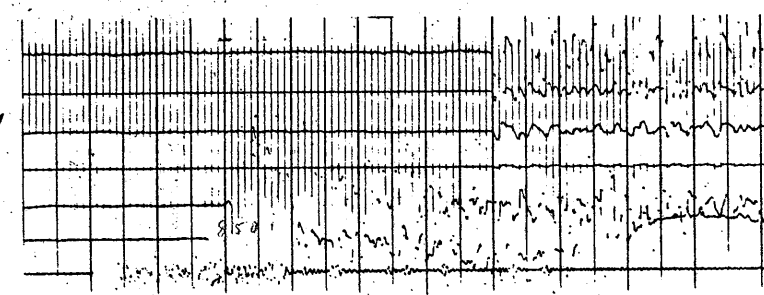
Bonita 1a
Offset 1000'
3000' K.B.
33 @ 10'
Time: 0800



Bonita 1a
S-1000'
5500' K.B.
33 @ 10'

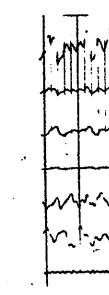
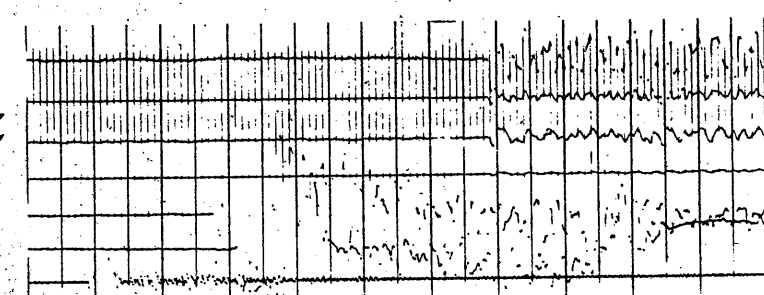


Bonita 1a
Shot P 1000' SW
5500' K.B.
33 @ 10'
Time: 1025



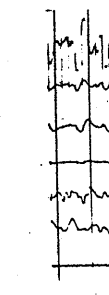
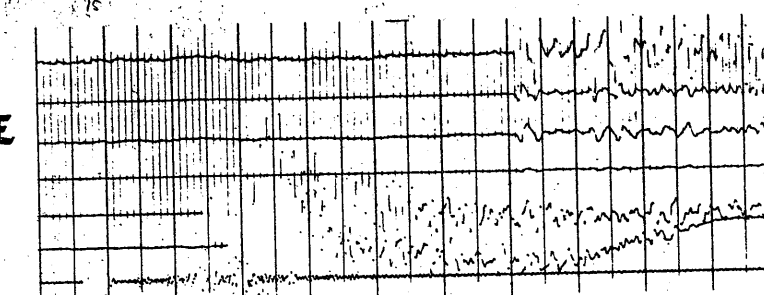
1190
595

Bonita 1a
Shot O 1000' NE
5500' K.B.
33 @ 10'
Time: 1015



38

Bonita 1a
Shot N 1000' NE
6200' K.B.
33 @ 10'
Time: 1010



PE907056

This is an enclosure indicator page.
The enclosure PE907056 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE907056 has the following characteristics:

ITEM_BARCODE = PE907056
CONTAINER_BARCODE = PE903968
NAME = Species List
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = DIAGRAM
DESCRIPTION = Species List, page 1 of 6, (enclosure
from Well Summary) for Bonita-1-1A
REMARKS = Cover page
DATE_CREATED =
DATE_RECEIVED =
W_NO = W560
WELL_NAME = Bonita-1A
CONTRACTOR =
CLIENT_OP_CO = ESSO STANDARD OIL

(Inserted by DNRE - Vic Govt Mines Dept)

PE907057

This is an enclosure indicator page.
The enclosure PE907057 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE907057 has the following characteristics:

ITEM_BARCODE = PE907057
CONTAINER_BARCODE = PE903968
 NAME = Species List
 BASIN = GIPPSLAND
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = DIAGRAM
DESCRIPTION = Species List, page 2 of 6, (enclosure
 from Well Summary) for Bonita-1-1A
REMARKS =
DATE_CREATED =
DATE_RECEIVED =
 W_NO = W560
 WELL_NAME = Bonita-1A
CONTRACTOR =
CLIENT_OP_CO = ESSO STANDARD OIL

(Inserted by DNRE - Vic Govt Mines Dept)

PE907058

This is an enclosure indicator page.
The enclosure PE907058 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE907058 has the following characteristics:

ITEM_BARCODE = PE907058
CONTAINER_BARCODE = PE903968
NAME = Species List
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = DIAGRAM
DESCRIPTION = Species List, page 3 of 6, (enclosure
from Well Summary) for Bonita-1-1A
REMARKS =
DATE_CREATED =
DATE_RECEIVED =
W_NO = W560
WELL_NAME = Bonita-1A
CONTRACTOR =
CLIENT_OP_CO = ESSO STANDARD OIL

(Inserted by DNRE - Vic Govt Mines Dept)

PE907059

This is an enclosure indicator page.
The enclosure PE907059 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE907059 has the following characteristics:

ITEM_BARCODE = PE907059
CONTAINER_BARCODE = PE903968
 NAME = Species List
 BASIN = GIPPSLAND
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = DIAGRAM
DESCRIPTION = Species List, page 4 of 6, (enclosure
 from Well Summary) for Bonita-1-1A
REMARKS =
DATE_CREATED =
DATE_RECEIVED =
 W_NO = W560
 WELL_NAME = Bonita-1A
CONTRACTOR =
CLIENT_OP_CO = ESSO STANDARD OIL

(Inserted by DNRE - Vic Govt Mines Dept)

PE907060

This is an enclosure indicator page.
The enclosure PE907060 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE907060 has the following characteristics:

ITEM_BARCODE = PE907060
CONTAINER_BARCODE = PE903968
 NAME = Species List
 BASIN = GIPPSLAND
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = DIAGRAM
DESCRIPTION = Species List, page 5 of 6, (enclosure
 from Well Summary) for Bonita-1-1A
REMARKS =
DATE_CREATED =
DATE_RECEIVED =
 W_NO = W560
 WELL_NAME = Bonita-1A
CONTRACTOR =
CLIENT_OP_CO = ESSO STANDARD OIL

(Inserted by DNRE - Vic Govt Mines Dept)

PE907061

This is an enclosure indicator page.
The enclosure PE907061 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE907061 has the following characteristics:

ITEM_BARCODE = PE907061
CONTAINER_BARCODE = PE903968
 NAME = Species List
 BASIN = GIPPSLAND
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = DIAGRAM
DESCRIPTION = Species List, page 6 of 6, (enclosure
 from Well Summary) for Bonita-1-1A
REMARKS =
DATE_CREATED =
DATE_RECEIVED =
 W_NO = W560
 WELL_NAME = Bonita-1A
CONTRACTOR =
CLIENT_OP_CO = ESSO STANDARD OIL

(Inserted by DNRE - Vic Govt Mines Dept)

PE902842

This is an enclosure indicator page.
The enclosure PE902842 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE902842 has the following characteristics:

ITEM_BARCODE = PE902842
CONTAINER_BARCODE = PE903968
NAME = Time Depth Curve
BASIN = GIPPSLAND
PERMIT =
TYPE = WELL
SUBTYPE = VELOCITY_CHART
DESCRIPTION = Time Depth Curve (enclosure from Well
Summary) for Bonita-1
REMARKS =
DATE_CREATED = 15/11/69.
DATE_RECEIVED =
W_NO = W560
WELL_NAME = Bonita-1
CONTRACTOR = ESSO Standard Oil
CLIENT_OP_CO = ESSO Standard Oil

(Inserted by DNRE - Vic Govt Mines Dept)

7.0 Vitrinite Reflectance Measurements
Bonita 1A

OIL & GAS

Jack Dawie

RECD
22.4.86
KSO



Amoco Australia Petroleum Company

(Inc. in Delaware, U.S.A., with Limited Liability - Registered as a Foreign Company in Tasmania)

15 Blue Street, North Sydney
P.O. Box 126, North Sydney 2060
Phone (02) 957 4500
Telex AA23359
Facsimile (02) 922 4886

April 16, 1986

The Director of Mines,
Department of Minerals and Energy,
East Tower, Princes Gate,
151 Flinders Street,
Melbourne. Vic. 3000

22 APR 1986

OIL and GAS DIVISION

Dear Sir,

Re: Gippsland Basin Vitrinite Reflectance Measurements
MISC-AUP-141-L-310-SCB

In 1985 Amoco Australia Petroleum Company collected core and cutting samples from thirteen Gippsland Basin wells for vitrinite reflectance determinations. The following attachments are a summary of the work.

Yours faithfully,

BONITA-1A

S.C. Bane
Exploration Manager

SCB/lrc

Attach.

Depth (ft)	Mean Maximum Reflectance (%)	Standard Deviation	Range	Number of Determinations
<u>ALBACORE -1</u>				
9380&9390	0.42	0.04	0.31-0.48	42
9720&2730	0.46	0.06	0.36-0.59	36
10070	0.46	0.04	0.36-0.55	39
10320	0.47	0.04	0.38-0.54	34
<u>BARRACOUTA-3</u>				
7310-7320	0.54	0.05	0.46-0.63	35
8590	0.60	0.08	0.43-0.71	35
9100-9120	0.62	0.10	0.41-0.80	41
9330-9360	0.64	0.10	0.43-0.93	36
9540-9560	0.73	0.05	0.63-0.84	33
<u>BATFISH-1</u>				
7560-7570	0.61	0.05	0.53-0.69	34
8170-8180	0.64	0.05	0.56-0.75	34
8640-8650	0.69	0.05	0.55-0.81	31
9170-9190	0.76	0.04	0.66-0.81	28
9430-9450	0.76	0.05	0.69-0.90	41
<u>BONITA-1A</u>				
9780-9790	0.54	0.06	0.46-0.68	36
10050	0.56	0.05	0.47-0.64	36
10280-10290	0.55	0.04	0.47-0.64	47
<u>BREAM-2</u>				
8070-8090	0.63	0.05	0.52-0.70	39
8380-8390	0.67	0.06	0.53-0.80	41
8933-8944	0.73	0.05	0.62-0.85	43
9730-9750	0.83	0.07	0.71-0.98	38
10638-10641	0.88	0.11	0.62-1.13	42

Depth (ft)	Mean Maximum Reflectance (%)	Standard Deviation	Range	Number of Determinations
<u>COD-1</u>				
7100-7120	0.63	0.06	0.53-0.81	41
8333-8339	0.59	0.05	0.47-0.67	34
9030-9060	0.75	0.06	0.61-0.85	32
9460-9470	0.77	0.06	0.61-0.86	41
<u>FLOUNDER-1</u>				
7430	0.44	0.05	0.36-0.56	39
8783-8795	0.64	0.04	0.56-0.77	36
9140	0.61	0.06	0.52-0.77	42
10395-10400	0.72	0.06	0.58-0.80	34
11350-11356	0.90	0.05	0.76-0.97	36
11676-11682	0.90	0.07	0.78-1.04	44
<u>HALIBUT-1</u>				
7888-7891	0.49	0.07	0.37-0.67	39
8450-8460	0.54	0.04	0.47-0.61	31
9250-9260	0.57	0.06	0.46-0.66	43
9630-9640	0.61	0.04	0.54-0.69	35
9870-9880	0.63	0.06	0.47-0.75	52
<u>MACKEREL-1</u>				
8760-8780	0.63	0.05	0.52-0.71	31
9630-9650	0.66	0.05	0.69-0.76	25
9870-9890	0.65	0.02	0.60-0.73	28

Depth (ft)	Mean Maximum Reflectance (%)	Standard Deviation	Range	Number of Determinations
<u>MARLIN-1</u>				
7070-7080	0.65	0.08	0.52-0.80	32
7497-7501	0.65	0.04	0.54-0.72	38
7780-7800	0.67	0.09	0.47-0.88	39
8230-8240	0.71	0.07	0.64-0.79	4
8455-8461	0.70	0.06	0.56-0.79	32
<u>NANNYGAI-1</u>				
7760-7670	0.052	0.07	0.39-0.65	33
8320-8340	0.50	0.05	0.42-0.65	32
9450-9470	0.64	0.04	0.57-0.71	35
9860-9880	0.64	0.06	0.51-0.75	31
<u>SALMON-1</u>				
7670-7690	0.50	0.06	0.38-0.64	35
8030-8050	0.56	0.05	0.45-0.67	37
8860	0.60	0.05	0.45-0.67	33
9250-9260	0.64	0.06	0.54-0.79	36
9856-9862	0.80	0.05	0.68-0.87	37
<u>SNAPPER-1</u>				
7280-7300	0.56	0.06	0.43-0.69	37
7754-7760	0.56	0.09	0.38-0.73	38
9254-9257	0.68	0.03	0.60-0.72	33
9900-9903	0.86	0.10	0.62-0.96	17
10140-10200	0.81	0.10	0.58-1.01	31
10495-10507	0.99	0.06	0.81-1.06	35

ENCLOSURES

- 1. Well Completion Log
- 2. Mud Log.

PE603684

This is an enclosure indicator page.
The enclosure PE603684 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603684 has the following characteristics:

- ITEM_BARCODE = PE603684
- CONTAINER_BARCODE = PE903968
- NAME = Bonita 1A Well Completion Log
- BASIN = GIPPSLAND
- ON_OFF = OFFSHORE
- PERMIT = VIC/L5
- TYPE = WELL
- SUBTYPE = LOG
- DESCRIPTION = Bonita 1A Well Completion Log
- REMARKS =
- DATE_CREATED = 15/11/69
- DATE_RECEIVED =
- W_NO = W560
- WELL_NAME = Bonita 1A
- CONTRACTOR = Esso Australia Ltd
- CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603685

This is an enclosure indicator page.
The enclosure PE603685 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603685 has the following characteristics:

ITEM_BARCODE = PE603685
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 1 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 1 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603686

This is an enclosure indicator page.
The enclosure PE603686 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603686 has the following characteristics:

ITEM_BARCODE = PE603686
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 2 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 2 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603687

This is an enclosure indicator page.
The enclosure PE603687 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603687 has the following characteristics:

ITEM_BARCODE = PE603687
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 3 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 3 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603688

This is an enclosure indicator page.
The enclosure PE603688 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603688 has the following characteristics:

ITEM_BARCODE = PE603688
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 4 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 4 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603689

This is an enclosure indicator page.
The enclosure PE603689 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603689 has the following characteristics:

ITEM_BARCODE = PE603689
CONTAINER_BARCODE = PE903968
 NAME = Bonita 1A Mud Log sheet 5 of 20
 BASIN = GIPPSLAND
 ON_OFF = OFFSHORE
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = LOG
 DESCRIPTION = Bonita 1A Mud Log sheet 5 of 20
 REMARKS =
 DATE_CREATED =
 DATE_RECEIVED = 19/11/69
 W_NO = W560
 WELL_NAME = Bonita 1A
 CONTRACTOR = Exploration Logging
 CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603690

This is an enclosure indicator page.
The enclosure PE603690 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603690 has the following characteristics:

ITEM_BARCODE = PE603690
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 6 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 6 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603691

This is an enclosure indicator page.
The enclosure PE603691 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603691 has the following characteristics:

ITEM_BARCODE = PE603691
CONTAINER_BARCODE = PE903968
 NAME = Bonita 1A Mud Log sheet 7 of 20
 BASIN = GIPPSLAND
 ON_OFF = OFFSHORE
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = LOG
 DESCRIPTION = Bonita 1A Mud Log sheet 7 of 20
 REMARKS =
 DATE_CREATED =
 DATE_RECEIVED = 19/11/69
 W_NO = W560
 WELL_NAME = Bonita 1A
 CONTRACTOR = Exploration Logging
 CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603692

This is an enclosure indicator page.
The enclosure PE603692 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603692 has the following characteristics:

ITEM_BARCODE = PE603692
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 8. of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 8 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603693

This is an enclosure indicator page.
The enclosure PE603693 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603693 has the following characteristics:

- ITEM_BARCODE = PE603693
- CONTAINER_BARCODE = PE903968
 - NAME = Bonita 1A Mud Log sheet 9 of 20
 - BASIN = GIPPSLAND
 - ON_OFF = OFFSHORE
 - PERMIT = VIC/L5
 - TYPE = WELL
 - SUBTYPE = LOG
- DESCRIPTION = Bonita 1A Mud Log sheet 9 of 20
- REMARKS =
- DATE_CREATED =
- DATE_RECEIVED = 19/11/69
 - W_NO = W560
 - WELL_NAME = Bonita 1A
 - CONTRACTOR = Exploration Logging
 - CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603694

This is an enclosure indicator page.
The enclosure PE603694 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603694 has the following characteristics:

ITEM_BARCODE = PE603694
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 10 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 10 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603695

This is an enclosure indicator page.
The enclosure PE603695 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603695 has the following characteristics:

ITEM_BARCODE = PE603695
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 11 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 11 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603696

This is an enclosure indicator page.
The enclosure PE603696 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603696 has the following characteristics:

ITEM_BARCODE = PE603696
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 12 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 12 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603697

This is an enclosure indicator page.
The enclosure PE603697 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603697 has the following characteristics:

ITEM_BARCODE = PE603697
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 13 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 13 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603698

This is an enclosure indicator page.
The enclosure PE603698 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603698 has the following characteristics:

ITEM_BARCODE = PE603698
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 14 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 14 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603699

This is an enclosure indicator page.
The enclosure PE603699 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603699 has the following characteristics:

ITEM_BARCODE = PE603699
CONTAINER_BARCODE = PE903968
 NAME = Bonita 1A Mud Log sheet 15 of 20
 BASIN = GIPPSLAND
 ON_OFF = OFFSHORE
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = LOG
 DESCRIPTION = Bonita 1A Mud Log sheet 15 of 20
 REMARKS =
 DATE_CREATED =
 DATE_RECEIVED = 19/11/69
 W_NO = W560
 WELL_NAME = Bonita 1A
 CONTRACTOR = Exploration Logging
 CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603700

This is an enclosure indicator page.
The enclosure PE603700 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603700 has the following characteristics:

ITEM_BARCODE = PE603700
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 16 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 16 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603701

This is an enclosure indicator page.
The enclosure PE603701 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603701 has the following characteristics:

ITEM_BARCODE = PE603701
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 17 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 17 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603702

This is an enclosure indicator page.
The enclosure PE603702 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603702 has the following characteristics:

ITEM_BARCODE = PE603702
CONTAINER_BARCODE = PE903968
 NAME = Bonita 1A Mud Log sheet 18 of 20
 BASIN = GIPPSLAND
 ON_OFF = OFFSHORE
 PERMIT = VIC/L5
 TYPE = WELL
 SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 18 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
 W_NO = W560
 WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603703

This is an enclosure indicator page.
The enclosure PE603703 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603703 has the following characteristics:

ITEM_BARCODE = PE603703
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 19 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 19 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE603704

This is an enclosure indicator page.
The enclosure PE603704 is enclosed within the
container PE903968 at this location in this
document.

The enclosure PE603704 has the following characteristics:

ITEM_BARCODE = PE603704
CONTAINER_BARCODE = PE903968
NAME = Bonita 1A Mud Log sheet 20 of 20
BASIN = GIPPSLAND
ON_OFF = OFFSHORE
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = LOG
DESCRIPTION = Bonita 1A Mud Log sheet 20 of 20
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 19/11/69
W_NO = W560
WELL_NAME = Bonita 1A
CONTRACTOR = Exploration Logging
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)