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PALYNOLOGY OF OUTCROP AND SUBSURFACE
SAMPLES, EASTERN OTWAY BASIN

BY:

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INTRODUCTION

Some 73 borehole and outcrop samples were submitted to Wayne Harris for palynological examination. All of the borehole samples are conventional cores. His reports are directly reproduced in this report with some additions, such as sample locations.

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MESSAGE:

The following preliminary results apply to the recent set of samples processed for you. Detailed studies may refine these determinations particularly where there is some doubt as to the assignment. If there are any samples which are of particular concern please call me.

Regards

Wayne Harris

Bell Point Outcrop	(xc 2357096)	L. balmei	(single taken from the base of the Bell Point - 6m)
Carlisle River Road Outcrop	(xc 20957709)	Barren	
Moomowroong #1	162m	L. balmei	
Moomowroong #1	87m	L. balmei	
Cat Reef Point Outcrop	(xc 2357074)	Barren	
Gellibrand River Road Outcrop	(xc 20957709)	L. balmei	(Barren - 100m)
Kennedys Creek Road - Upper Outcrop		Barren	(xc 20957709)
Kennedys Creek Road - Lower Outcrop		Barren	(xc 20957709)
Geranganate #13	1058-1069 ft 322m	N. asperus	
Geranganate #13	1182-1188 360m	N. asperus	
Geranganate #13	1260-1280 350m	? M. diversus	(?core misplaced)
Geranganate #13	1482-1490 452m	N. asperus	
Geranganate #13	1597-1604 457m	? M. diversus	
Whoorel #4	1138-1140 ft 347m	L. balmei	
Brucknell #2	3953-3978 ft 1206m		(v. low yield)
Parrumbete North #1	491.3-493.1M	? C. paradoxa	(low yield)
Waare #1	1538 ft 469m	L. balmei	
Waare #1	1807 551m	T. longus	
Waare #1	1947 593m	T. longus	
Waare #1	2234 681m	T. longus	
Waare #1	2628 801m	? N. senectus/T. apoxyxenus	
Waare #1	2901 884m		(v. low yield) - indeterminate
Waare #1	3203 976m	Xenascus asperatus/N. senectus	

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PALYNOLOGY OF 53 SAMPLES, OTWAY BASIN

PRELIMINARY REPORT

CLIENT: Geological Survey of Victoria

W.K. Harris & Associates Pty. Ltd.

1990

STUDY: 52 Core samples and one outcrop sample,
Otway Basin.

CLIENT: Geological Survey of Victoria

AIMS: Palynological determination of age and depositional
environment.

P R E L I M I N A R Y R E P O R T

RESULTS AND CONCLUSIONS:

All samples yielded fair to well preserved assemblages of organic walled microfossils and the majority were accompanied by high yields.

Marine dinoflagellates are preserved in most assemblages and indicate near shore marine conditions of deposition. Dinoflagellates in the Pliocene outcrop samples, however, may be reworked along with other obvious reworked microfossils.

The accompanying table, partly compiled from data supplied by the client summarizes the main findings of the study. Where there is a discrepancy between rock units assigned by the client and those assemblages assigned to a different rock unit, it can be explained in one of two ways. Either the initial assignment requires revision or that the core has become misplaced in the trays.

The core depths on the accompanying table are only an estimate of the true depth and were obtained by assuming that there was no core loss between the top of the core and the sample position.

The final report will include species distribution lists and a discussion of the assemblages.

Bore	Core Depth (feet)	Unit	Zone	Revised Unit
Brucknell 2	2091 (2373)	Nm	Lower N. asperus	Nm
	2238 (241)	Wd	M. diversus	Wd
Cooriejong 1	952 (251)	Nm	Lower N. asperus	Nm
	1079 (329)	Wd	M. diversus	Wd
Ecklin 3	2147 (254)	Nm	Lower N. asperus	Nm
	2238 (252)	Wd	Lower N. asperus	Nm
Laang 1	2480 (2015)	Nm	Lower N. asperus	Nm
	2638 (2025)	Wd	M. diversus	Wd
	2701.5 (2500)	Wpt	N. diversus	Wd
Letrobe 1	221 (274)	Nm	Lower N. asperus	Nm
	259 (269)	Wd	M. diversus	Wd
	357 (268)	Wd	M. diversus	Wd
	1380.5 (2208)	Wp	L. balnei	Wp
Mepunga 7	2155.5 (2570)	Nm	Lower N. asperus	Nm
	2384 (2204)	Wd	M. diversus	Wd
	2582 (2200)	Wp	M. longus	Wpt
	2606 (2553)	Wp	M. diversus	Wd
Mepunga 9	2747 (2532)	Nm	Lower N. asperus	Nm
	2833 (2500)	Wd	M. diversus	Wd
Mepunga 10	4045.5 (2233)	Wp	L. balnei	Wp
	4062.5 (2353)	Wpt	T. longus	Wpt
Narrawaturk 2	2316 (2050)	Nm	Lower N. asperus	Nm
	2442 (2003)	Wd	M. diversus	Wd
	2569 (2530)	Wd	M. diversus	Wd
	2837 (2607)	Wd	M. diversus	Wd
	3024 (2207)	Wd	M. diversus	Wd
	3418 (2005)	Wp	L. balnei	Wp
	3782 (2513)	Wpt	T. longus	Wpt
Nirranda 3	2802.5 (273)	Nm	Lower N. asperus	Nm
	2754.75 (2488)	Wd	M. diversus	Wd
	3261 (2020) Nlp/Wp		M. diversus	Wd
	3593 (2021)	Wpt	M. diversus	Wd
Nirranda 6	2178 (2234)	Wd	M. diversus	Wd
	3073.5 (2377)	Wp	T. longus	Wpt
	3097.5 (2220)	Wpt	T. longus	Wpt
Nollawarre 3	2408 (2355)	Nm	M. diversus	Wd
	2620 (2352)	Wd	M. diversus	Wd

	ft (metres)			
Paaratte 1	1492.5 (454.7)	Nm	Lower N. asperus	Nm
	1596 (486.5)	Wd	M. diversus	Wd
Panmure 2	2353 (717.2)	Nm	?M. diversus	Wd
	2473 (753.3)	Wd	?T. longus	Wpt
Port Campbell 1	2916 (888.5)	Wpt	T. longus	Wpt
Timboon 5	1377.5 (419.4)	Nm	Lower N. asperus	Nm
	1368.5 (417.2)	Wd	Lower N. asperus	Nm
	1473 (449.3)	Wd	M. diversus	Wd
	2287 (697.1)	Wpt	T. longus	Wpt
Wangoom 2	1985 (605.2)	Nm	Lower N. asperus	Nm
	2259 (688.5)	Wc	indeterminate	-
	2682 (808.3)	Wp	T. longus	Wpt
Wangoom 6	1838 (559.4)	Nm	Lower N. asperus	Nm
	1962 (598.0)	Wd	M. diversus	Wd
	2732.5 (832.9)	Wp	L. balmei	Wp
ST-2	Road cutting Williams Rd (46605 51314)	Tr6	unamed	Tr