

Petroleum potential of the Bass Basin

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Well name	Unit	Core No.	Total organic carbon (TOC) (%)	Oil & gas content S ₁ (mg hydro-carbon/g rock)	Petroleum potential S ₁ +S ₂ (mg hydro-carbon/g rock)	Production index S ₁ /(S ₁ +S ₂)	Hydrogen index S ₂ /TOC (mg hydro-carbon/g TOC)	Oxygen index S ₃ /TOC (mg CO ₂ /g TOC)	Hydrogen: oxygen ratio (H/O)
Aroo No. 1	L. EVCM	1	6.05	0.82	22.80	0.04	365	10	37
Bass No. 2									
Bass No. 3	L. EVCM	9	2.40	0.21	10.00	0.02	409	29	14
	L. EVCM	10	20.10	1.21	46.70	0.03	226	10	23
	L. EVCM	11	2.40	0.13	4.74	0.03	192	11	18
	L. EVCM	13	0.60	0.02	0.03	0.67	2	18	0.1
Narimba No. 1	L. EVCM	1	7.10	1.81	17.70	0.10	223	9	24
	L. EVCM	2	0.85	0.09	0.73	0.12	76	271	0.3
	L. EVCM	3	1.85	0.19	1.72	0.11	83	148	0.6
Poonboon No. 1	L. EVCM	2	65.80*	19.60	160	0.12	213	13	16
	L. EVCM	4	1.75	0.11	1.49	0.07	79	132	0.6
	L. EVCM	5	1.20	0.13	0.88	0.15	63	100	0.6
Durroon No. 1	Otway Gp	3	4.15	3.03	3.14	0.96	3	150	0.02
	Otway Gp	3	1.80	0.01	0.60	0.02	33	69	0.5
	Otway Gp	4	4.50	0.17	0.98	0.17	18	9	2.0
	Otway Gp	5	3.75	0.23	2.28	0.10	55	9	5.9

* Coal

Rock-Eval pyrolysis data for some Bass Basin source rocks

Figure 31