OTWAY BASIN.
GEOCHEMICAL REPORT.

CRA.

NERITA - 1
KALANGADOO - 1
ARGONAUT - A1
CAROLINE - 1
EUMERALLA - 1
FLAXMAN - 1
HEATHFIELD - 1.

CRA- Surdam

Pyrolysis data on samples drilled from wells drilled in the Otway Basin.

R553

Otway
Basin
R 553

NERITA 1
NER-1

Otway Basin   38 38 s. lat.   144 14 e. long.

#	M	FT	%I-C	%O-C	%N	%H	S1	S2	TMAX	PI	HI	GP
1	375	1230	3.7	2.95	0.07	0.69	0.16	1.6	465	0.09	56	1.8
2	387	1270	29.7	0.64	bdl	0.26	0.08	bdl	ndm	...	...	0.2
3	543	1780	2.7	3.20	0.08	0.65	0.19	1.7	466	0.10	52	1.9
4	622	2040	6.8	3.90	0.07	0.54	0.21	1.6	473	0.12	54	1.8
5	683	2240	4.1	2.35	0.05	0.52	0.20	0.6	464	0.24	26	0.8
6	784	2570	0.1	54.99	0.58	4.54	5.98	238.0	455	0.02	433	244.0
7	814	2670	bdl	64.70	0.69	4.84	6.57	221.6	462	0.03	343	228.2
8	921	3020	7.6	41.69	0.61	3.11	3.98	124.1	462	0.03	298	128.1
9	951	3120	0.6	63.93	0.99	4.98	7.02	209.0	459	0.03	327	216.0
10	1049	3440	0.6	44.52	0.66	3.43	4.72	147.2	463	0.03	331	152.0
11	1125	3690	bdl	50.60	0.63	4.04	5.35	199.5	464	0.03	394	204.8
12	1189	3900	1.5	51.82	0.76	3.82	5.56	207.2	464	0.03	400	212.7
13	1265	4150	1.3	29.25	0.38	2.21	2.94	81.9	466	0.03	280	84.9
14	1424	4670	12.1	2.01	bdl	0.46	0.18	0.8	464	0.18	40	1.0
15	1491	4890	7.5	12.50	0.19	1.26	1.12	12.0	489	0.09	96	13.2
16	1671	5480	1.4	0.39	bdl	0.46	0.19	bdl	ndm	-----	---	0.3
17	1826	5990	1.6	0.61	0.06	0.43	bdl	0.2	481	----	34	0.2
18	1960	6430	2.7	1.88	0.06	0.47	0.24	1.8	473	0.12	94	2.0
19	2006	6580	0.9	5.25	0.09	0.79	0.66	7.5	485	0.03	143	8.1

Pyrolysis run with CDS Pyroprobe and modified interface: TMAX inaccurate.
M is sample depth in meters.
FT is sample depth in feet.
%I-C is inorganic carbon as % calcium carbonate in rock.
%O-C is organic carbon as % carbon in rock.
%N is % nitrogen in rock.
%H is % hydrogen in rock.
S1 is pyrolysis free-hydrocarbon signal (mg hydrocarbons/g rock).
S2 is pyrolysis kerogen signal (mg S2 hydrocarbons/g rock).
PI is production index [S1/(S1+S2)].
TMAX is temperature at which S2 signal is maximum (deg C).
HI is hydrogen index (mg hydrocarbons/g O-C).
GP is genetic potential (kg hydrocarbons/ton rock) (S1+S2).
'bdl' means 'below detection limit';   '----' means 'not determined'.
'ndm' means 'no definitive maximum'.

KALANGADOO 1
KAL-1

Otway Basin   37 34 s. lat.   140 41 e. long.

#	M	FT	%I-C	%O-C	%N	%H	S1	S2	TMAX	PI	HI	GP
1	390	1200	bdl	0.34	0.33	0.53	0.10	1.1	460	0.09	315	1.2
2	488	1600	bdl	5.31	0.09	0.41	0.57	10.3	473	0.05	195	10.9
3	835	2740	2.7	0.56	bdl	0.37	0.26	bdl	ndm	...	...	0.3
4	881	2890	1.5	0.53	bdl	0.30	0.13	bdl	ndm	...	...	0.2
5	1027	3370	7.2	0.31	bdl	0.35	0.07	bdl	ndm	...	...	0.1
6	1095	3590	3.7	0.63	bdl	0.31	0.13	bdl	ndm	...	...	0.3
7	1098	3600	3.6	0.87	bdl	0.33	0.15	0.3	479	0.35	32	0.4
8	1116	3660	6.3	0.41	bdl	0.35	0.14	bdl	ndm	---	----	0.2
10	1277	4190	5.3	0.19	bdl	0.36	0.13	bdl	ndm	....	...	0.1
11	1451	4760	1.2	1.90	0.13	0.54	0.16	2.3	478	0.06	119	2.4
12	1463	4800	0.3	3.00	0.11	0.68	0.23	7.0	481	0.03	235	7.3
13	1683	5520	7.1	4.37	0.14	0.79	0.55	12.3	468	0.04	280	12.8
14	1713	5620	2.4	4.50	0.13	0.80	0.55	8.1	475	0.06	181	8.7
15	1875	6150	7.0	0.97	bdl	0.55	0.20	0.8	478	0.20	83	1.0
16	2040	6690	19.4	0.59	bdl	0.42	0.15	0.6	454	0.20	98	0.7

Pyrolysis run with CDS Pyroprobe and modified interface: TMAX inaccurate.
M is sample depth in meters.
FT is sample depth in feet.
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%O-C is organic carbon as % carbon in rock.
%N is % nitrogen in rock.
%H is % hydrogen in rock.
S1 is pyrolysis free-hydrocarbon signal (mg hydrocarbons/g rock).
S2 is pyrolysis kerogen signal (mg S2 hydrocarbons/g rock).
PI is production index [S1/(S1+S2)].
TMAX is temperature at which S2 signal is maximum (deg C).
HI is hydrogen index (mg hydrocarbons/g O-C).
GP is genetic potential (kg hydrocarbons/ton rock) (S1+S2).
'bdl' means 'below detection limit';   '---' means 'not determined'.
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#	M	FT	%I-C	%O-C	%N	%H	S1	S2	TMAX	PI	HI	GP
1	351	1150	1.5	0.46	bdl	0.07	0.12	bdl	ndm	...	...	0.2
2	540	1770	7.9	1.90	0.06	0.61	0.40	bdl	ndm	...	...	0.2
3	851	2790	1.6	15.61	0.28	1.15	0.86	1.5	459	0.22	80	2.0
4	912	2990	1.1	2.00	bdl	0.15	0.09	7.6	457	0.10	48	8.4
5	930	3050	0.7	14.01	0.22	1.03	0.97	0.3	452	0.25	14	0.4
6	1024	3360	3.7	2.40	0.07	0.63	bdl	7.2	433	0.12	52	8.2
7	1479	4850	2.0	1.35	bdl	0.14	0.10	0.5	460	...	20	0.5
8	1665	5460	1.6	0.55	bdl	0.11	0.13	bdl	ndm	...	...	0.2
9	1902	6240	23.9	0.51	bdl	0.92	0.13	bdl	ndm	...	...	0.2
10	2363	7750	10.8	2.52	bdl	0.57	0.27	bdl	ndm	...	...	0.2
11	2780	9120	3.0	1.90	0.05	0.54	0.14	1.1	466	0.20	43	1.4
12	3034	9950	2.6	1.13	bdl	0.58	0.08	bdl	ndm	...	...	0.3
13	3116	10220	3.5	1.25	bdl	0.58	0.08	bdl	ndm	...	...	0.1
14	3183	10440	2.1	1.10	bdl	0.59	0.12	bdl	ndm	...	...	0.3
15	3296	10810	3.6	0.96	bdl	0.59	0.09	bdl	ndm	...	...	0.2
16	3305	10840	3.8	0.79	bdl	0.63	0.03	bdl	ndm	...	...	0.2
17	3450	11315	0.3	1.10	0.07	0.70	0.09	bdl	ndm	...	...	0.1
18	3451	11319	19.8	1.02	0.05	0.64	0.16	0.4	492	0.15	40	0.5
19	3494	11460	2.3	0.95	0.06	0.70	0.16	0.6	516	0.23	55	0.7
20	3500	11480	3.7	0.92	0.06	0.67	0.16	0.2	491	0.41	24	0.4
21	3534	11590	5.4	1.14	0.05	0.70	0.22	bdl	ndm	...	...	0.2
22	3694	12115	2.4	0.91	0.06	0.63	0.24	0.5	475	0.33	52	0.7

Pyrolysis run with CDS Pyroprobe and modified interface; TMAX inaccurate.
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S2 is pyrolysis kerogen signal (mg S2 hydrocarbons/g rock).
PI is production index [S1/(S1+S2)].
TMAX is temperature at which S2 signal is maximum (deg C).
HI is hydrogen index (mg hydrocarbons/g O-C).
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Otway Basin

CAROLINE 1
CRL-1
37 56 s. lat.   140 54 e. long.

#	M	FT	%I-C	%O-C	%N	%H	S1	S2	TMAX	PI	HI	GP
1	76	250	18.9	bdl	bdl	0.11	0.14	bdl	ndm	---	---	0.1
2	214	702	bdl	0.58	bdl	0.26	bdl	bdl	ndm	---	---	---
3	238	780	6.1	0.27	bdl	0.13	bdl	bdl	ndm	---	---	---
4	823	2700	16.4	0.80	bdl	0.35	0.25	0.6	461	0.28	81	0.9
5	1177	3860	3.2	0.69	bdl	0.18	0.39	bdl	ndm	---	---	0.6
6	1838	6030	3.1	1.11	bdl	0.50	0.33	0.3	466	0.57	23	0.6
7	1951	6400	10.3	0.83	bdl	0.38	0.14	0.3	468	0.30	30	0.4
8	2177	7140	8.8	1.59	bdl	0.74	0.21	1.2	475	0.15	78	1.4
9	2213	7260	7.9	1.17	bdl	0.62	0.16	0.5	468	0.24	44	0.7
10	2335	7660	4.9	1.36	bdl	0.68	0.18	0.9	478	0.17	64	1.0
11	2445	8020	4.5	1.01	0.05	0.58	0.14	0.5	482	0.23	45	0.6
12	2521	8270	7.0	1.36	0.05	0.55	0.19	0.9	479	0.18	66	1.1
13	2750	9020	6.6	0.96	0.05	0.53	0.09	0.6	487	0.13	61	0.7
14	2988	9800	3.3	0.94	bdl	0.58	0.11	0.7	487	0.13	79	0.9
15	3067	10059	0.1	2.01	0.06	0.68	0.25	2.0	492	0.11	97	2.2
16	3125	10250	9.4	0.66	0.11	0.48	0.12	0.4	489	0.22	65	0.6
17	3241	10630	4.5	0.88	0.06	0.62	0.15	0.7	487	0.18	75	0.8
18	3293	10800	5.8	1.47	0.08	0.61	0.23	1.1	488	0.17	78	1.4
19	3363	11030	3.5	1.01	0.07	0.57	0.15	0.6	528	0.21	59	0.8
20	3369	11051	0.6	1.16	0.07	0.58	0.18	0.8	505	0.17	73	1.0

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TMAX is temperature at which S2 signal is maximum (deg C).
HI is hydrogen index (mg hydrocarbons/g O-C).
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EUMERALLA 1
EUM-1

Otway Basin   38 13 s. lat.   141 56 e. long.

#	M	FT	%I-C	%O-C	%N	%H	S1	S2	TMAX	PI	HI	GP
1	355	1166	8.3	0.82	bdl	0.37	bdl	0.2	ndm	...	29	0.2
2	506	1660	13.0	0.81	bdl	0.25	bdl	bdl	ndm	...	---	----
3	655	2150	4.8	0.64	bdl	0.14	bdl	bdl	ndm	...	...	---
4	811	2660	12.9	0.23	bdl	0.12	bdl	bdl	ndm	...	---	---
5	1189	3900	3.8	0.56	bdl	0.44	0.05	0.2	463	0.20	39	0.3
6	1396	4580	5.9	0.63	bdl	0.46	bdl	0.3	432	----	48	0.3
7	1710	5610	2.7	0.77	bdl	0.43	bdl	0.6	462	---	72	0.6
8	1784	5850	2.5	1.11	bdl	0.51	bdl	0.4	465	---	36	0.4
9	1832	6010	1.5	5.86	0.15	0.92	0.43	17.5	467	0.02	299	17.9
10	1845	6050	0.5	0.79	0.05	0.56	0.18	0.3	458	0.36	40	0.5
11	2024	6640	0.9	0.83	0.06	0.62	bdl	0.4	460	---	48	0.4
12	2048	6716	bdl	20.09	0.36	1.84	1.09	68.1	452	0.02	339	69.2
13	2415	7920	1.7	3.02	0.14	0.61	0.30	1.6	459	0.16	54	1.9
14	2579	8459	0.3	0.42	0.06	0.47	0.16	0.5	461	0.26	108	0.6
15	2604	8540	1.7	2.27	0.09	0.59	0.25	1.8	465	0.12	80	2.1
16	2619	8590	2.5	4.19	0.16	0.74	0.74	7.8	464	0.09	185	8.5
17	2643	8670	2.2	13.24	0.39	1.23	3.20	36.9	438	0.08	279	40.1
18	2738	8980	2.0	1.99	0.10	0.58	0.30	3.1	497	0.09	154	3.4
19	2774	9100	2.3	1.53	0.10	0.53	0.18	2.1	465	0.08	135	2.2
20	2902	9520	1.8	0.85	0.08	0.50	0.19	0.8	473	0.19	93	1.0
21	2977	9764	0.1	0.48	0.08	0.50	0.08	0.3	473	0.24	54	0.3
22	3003	9850	1.2	0.48	0.05	0.41	0.17	0.5	464	0.25	110	0.7
23	3070	10070	1.7	0.54	0.06	0.39	0.31	0.7	464	0.30	133	1.0
24	3122	10240	1.0	0.92	0.08	0.54	0.11	0.5	464	0.20	49	0.6

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S2 is pyrolysis kerogen signal (mg S2 hydrocarbons/g rock).
PI is production index [S1/(S1+S2)].
TMAX is temperature at which S2 signal is maximum (deg C).
HI is hydrogen index (mg hydrocarbons/g O-C).
GP is genetic potential (kg hydrocarbons/ton rock) (S1+S2).
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FLAXMANS 1
FLX-1
Otway Basin
38 33 s. lat.   142 45 e. long.

#	M	FT	%I-C	%O-C	%N	%H	S1	S2	TMAX	PI	HI	GP
1	3422	11225	0.5	0.61	---	---	0.59	0.5	471	0.52	39	1.1

Pyrolysis run with CDS Pyroprobe and original interface: TMAX inaccurate.
M is sample depth in meters.
FT is sample depth in feet.
%I-C is inorganic carbon as % calcium carbonate in rock.
%O-C is organic carbon as % carbon in rock.
%N is % nitrogen in rock.
%H is % hydrogen in rock.
S1 is pyrolysis free-hydrocarbon signal (mg hydrocarbons/g rock).
S2 is pyrolysis kerogen signal (mg S2 hydrocarbons/g rock).
PI is production index [S1/(S1+S2)].
TMAX is temperature at which S2 signal is maximum (deg C).
HI is hydrogen index (mg hydrocarbons/g O-C).
GP is genetic potential (kg hydrocarbons/ton rock) (S1+S2).
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HEATHFIELD 1
HEA-1

Otway Basin   37 38 s. lat.   141 11 e. long.

#	M	FT	%I-C	%O-C	%N	%H	S1	S2	TMAX	PI	HI	GP
1	18	60	bdl	0.21	bdl	0.39	0.08	bdl	ndm	---	---	0.1
2	268	880	0.2	1.99	0.06	0.77	0.09	bdl	ndm	---	---	0.2
3	381	1250	0.3	9.65	0.09	0.72	0.41	5.4	453	0.07	56	5.8
4	420	1378	bdl	2.49	0.10	0.99	0.25	0.5	457	0.34	20	0.7
5	566	1857	0.8	1.08	bdl	0.20	0.16	bdl	ndm	---	---	0.2
6	707	2320	8.4	3.07	0.07	0.61	0.07	bdl	ndm	---	---	0.1
7	1091	3580	4.0	3.56	0.10	0.69	0.32	9.0	432	0.03	252	9.3
8	1651	5415	0.2	43.87	1.05	3.70	9.21	247.2	467	0.04	564	256.5
9	1651	5415	2.9	3.55	0.11	0.69	0.47	7.8	473	0.06	218	8.2
10	1780	5840	6.2	0.71	bdl	0.42	0.18	0.9	477	0.17	120	1.0
11	1835	6020	4.8	1.94	0.08	0.55	0.31	2.3	480	0.12	121	2.7
12	1930	6330	4.2	1.76	0.07	0.54	0.22	1.5	491	0.13	84	1.7
13	2021	6630	3.6	2.67	0.10	0.61	0.41	4.6	480	0.08	171	5.0
14	2192	7190	2.5	0.68	0.19	0.62	0.23	0.6	482	0.27	91	0.9
15	2238	7340	1.3	4.36	0.15	0.85	0.82	15.1	483	0.05	345	15.9
16	2286	7499	bdl	1.21	0.09	0.64	0.09	1.8	490	0.05	152	1.9

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S2 is pyrolysis kerogen signal (mg S2 hydrocarbons/g rock).
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TMAX is temperature at which S2 signal is maximum (deg C).
HI is hydrogen index (mg hydrocarbons/g O-C).
GP is genetic potential (kg hydrocarbons/ton rock) (S1+S2).
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