

## Rock-Eval data, bitumen content, fractions and stable carbon isotope composition

Sample code	Lithology	Zone	Rock-Eval data									Total	Fractions (wt. %)				TE/ TOC (mg/g)	Stable carbon isotopes (‰)					
			TOC (wt. %)	Tmax (°C)	S1	S2	S3	S2/S3	PI	HI	OI		Extract (TE) (mg/g rock)	sat.	aro.	res.		asph.	sat.	bit.	aro.	res.	asph.
95/PG-1/4	black shale	R	11.0	437	3.05	33.8	0.50	67.6	0.08	307	5	7.7	22	33	29	16	70	-27.1	-27.4	-27.6	-27.5	-27.8	-27.5
95/PW-1/2	black shale	R	7.0	434	0.95	18.4	1.11	16.5	0.05	262	16												
DgI-R	grey shale (bottom green)	R	4.9	360	2.70	19.9	1.18	16.9	0.12	408	24												
L-PS/89	black shale (dolomitic?)	R	10.9	435	2.38	42.3	0.41	103	0.05	389	4												
PZ-24/4	grey shale	R	1.9	440	0.34	0.98	0.29	3.4	0.26	52	15	1.67	9	34	29	28	88						
RG-1	black shale	R	9.4	436	2.22	27.9	0.47	59.4	0.07	297	5												
Sz12-238/115	black shale	R	3.2	461	0.11	0.83	0.22	3.8	0.07	26	7												
95/PG2/2s	dolomitic shale (d. g.)	T	4.1	446	0.22	2.26	0.83	2.7	0.09	55	20												
95/S-8/2	black shale	T	5.9	460	0.25	0.78	2.54	0.31	0.25	13	43												
PR14/7001/107	dark brown pitch shale	T	1.48	n.a.	0.08	0.26	0.23	1.1	0.24	18	16	1.25	6	17	32	45	84	-28.0	-28.4	-28.5	-28.5	-28.4	-28.2
PR4-2527/113	light grey shale	T	1.48	n.a.	0.09	0.19	0.26	0.73	0.32	13	18	1.91	4	12	18	66	129						
PZ-17/2s	dolomitic shale (grey)	T	1.06	437	0.47	1.15	0.56	2.1	0.30	108	53	1.43	11	18	35	36	135	-27.2	-28.1	-27.9	-28.2	-28.4	-27.1
PZ-31/3c	dolomitic shale (red)	T	0.43	n.a.	0.23	0.50	0.32	1.6	0.33	116	74	0.54					126						
PZ-31/3s	dolomitic shale (grey)	T	1.15	n.a.	0.09	0.22	0.14	1.6	0.30	19	12												
PZ-Isz/2 (a)	drawer-type shale (d. g.)	T	1.50	460	0.12	0.33	0.35	0.94	0.27	22	23	0.85	9	28	25	38	57						
PZ-Isz/3	drawer-type shale (black)	T	0.85	n.a.	0.26	0.52	0.23	2.3	0.33	61	27	1.46	9	25	35	31	172	-27.3	-28.0	-28.2	-28.2	-27.9	-27.4
RG-2	pitch	T	12.7	436	1.64	21.0	10.7	2.0	0.07	165	84	6.6	12	32	32	24	52	-26.4	-27.2	-27.1	-27.1	-27.0	-27.1
SR-23-518/115	grey shale	T	5.1	488	0.16	0.62	1.32	0.47	0.21	12	26												
Sz6-1086/116	grey shale	T	1.69	n.a.	0.10	0.20	0.14	1.4	0.19	12	8												
95/PG-2/2c	dolomitic shale (red)	O	0.04	n.a.	0.03	0.05	0.08	0.63	0.37	125	200												
DgII-R	dolomitic shale (red)	O	0.14	n.a.	0.06	0.21	0.34	0.62	0.23	150	243												
JB-2	grey shale	O	0.43	n.a.	0.01	0.03	0.61	0.05	0.25	7	142	0.45	9	20	21	50	105	-29.8	-28.4	-28.2	-28.1	-28.3	-27.5
JB-3 ł cz	red shale	O	0.94	n.a.	0.09	0.12	0.32	0.38	0.45	13	34	0.92	4	20	21	55	98	-30.1	-28.6	-28.8	-28.5	-28.4	-28.0
JB-3 ł sz	grey shale	O	0.91	n.a.	0.01	0.04	0.60	0.07	0.20	4	66	0.74	13	29	16	42	81	-30.3	-28.5	-28.3	-28.3	-28.3	-27.8
N/IV/6	shale/sandstone	O	0.12	n.a.	0.05	0.07	0.39	0.18	0.42	58	325												
PZ/G-31/2	red shale	O	0.21	n.a.	0.11	0.23	0.30	0.77	0.32	110	143	0.38					181						
PZ-101	red pitch shale	O	0.30	n.a.	0.05	0.13	0.30	0.43	0.28	43	100	0.35	10	14	26	50	117	-29.2	-28.6	-28.2	-28.1	-28.4	-27.2
PZ-102	dark brown pitch shale	O	0.12	n.a.	0.05	0.02	0.18	0.11	0.27	17	150												
PZ-17/2c	dolomitic shale (red)	O	0.54	n.a.	0.08	0.12	0.49	0.24	0.40	22	91	0.56	17	21	41	21	104	-27.5	-28.3	-28.2	-28.6	-28.6	-27.5
PZ-18/2c	dolomitic shale (red)	O	0.23	n.a.	0.05	0.06	0.98	0.06	0.50	26	426												
PZ-18/2s	dolomitic shale (grey)	O	0.35	n.a.	0.05	0.09	0.96	0.09	0.36	26	274												
PZ-21/1	red shale	O	0.69	n.a.	0.22	0.36	0.56	0.64	0.38	52	81	1.13					164						
PZ-22/1	red shale	O	0.13	n.a.	0.12	0.23	0.60	0.38	0.35	177	462												
PZ-24/1	red shale	O	0.16	n.a.	0.08	0.12	0.48	0.25	0.40	75	300												
PZ-34/3	red shale	O	0.24	n.a.	0.06	0.11	0.44	0.25	0.37	46	183	0.44					183						
PZ-Isz/1	drawer-type shale (red)	O	0.18	n.a.	0.07	0.09	0.23	0.39	0.44	50	128												
PZ-Isz/1 AP4	drawer-type shale (red)	O	0.22	n.a.	0.01	0.04	0.16	0.25	0.25	18	73												
PZ-Isz/1 AP5	drawer-type shale (red)	O	0.23	n.a.	0.02	0.06	0.19	0.32	0.25	26	82	0.28	14	18	29	39	122	-28.3	-27.8	-27.9	-27.9	-27.6	-27.3
PZ-Isz/2	drawer-type shale (d. g.)	O	0.42	n.a.	0.09	0.17	0.19	0.89	0.35	40	45												
N/III/5	red sandstone	O	0.00																				
N/III/6	red sandstone	O	0.00																				
N/III/6a	red sandstone	O	0.00																				
SR-18/1628/101	dolomite/sandstone	O	0.07																				
Sz12-238/116	sandstone	O	0.03																				
W/IV/6	red shale	O	0.15	n.a.	0.16	0.08	0.28	0.29	0.67	53	187												

TOC – total organic carbon, S1 – oil and gas yield (mg HC/g rock), S2 – residual petroleum potential (mg HC/g rock), S3 – (mg CO<sub>2</sub>/g rock), PI – production index = S1/(S1+S2), HI – hydrogen index (mg HC/g TOC), OI – oxygen index (mg CO<sub>2</sub>/g TOC), sat. – saturates, aro. – aromatics, res. – resins, asph. – asphaltenes, bit. – bitumen (extract), ker. – kerogen, HC – hydrocarbons (saturates + aromatics), d. – dark, g. – grey, R – reduced, T – transitional, O – oxidized, n.a. – not applicable