

APPENDIX 2

Petrophysical characteristics of rock samples

No.	Borehole	Sample	Age	Lithology	Depth [m]	Geological unit	Pycnometry		Permeameter	Electric	Ultrasonic	NMR				CT		Hg porosimetry			XRD			Gamma spectrometry			Compression test		
							Bulk density (δ_b)	Total porosity (K_p)	Absolute permeability (k)	Cementation factor (m)	P- and S-wave velocity ratio (V_p/V_s ratio)	Clay-bound water (K_{p1})	Capillary-bound water (K_{p2})	Moveable water (K_{p3})	Logarithmic T_2 mean (T_{2ML})	Total porosity ($K_p \mu$ -CT)	Homogeneity parameter (J)	Effective porosity ($K_p mp\ ef$)	Average pore diameter (D_{av})	Swanson parameter (S_1)	Clay content (V_c)	Potassium content (K)	Uranium content (U)	Thorium content (Th)	Compressional strength (R_c)				
							[g/cm ³]	[%]	[mD]	[-]	[-]	[%]	[%]	[%]	[us]	[%]	[-]	[%]	[um]	[frac/psia]	[%]	[%]	[ppm]	[ppm]	[ppm]	[MPa]			
1	Zakrzyn IG-1	891	P1	s	4425	Fore-Sudetic Homocline	2.48	10.3	0.1	1.88	1.65	-	-	-	-	3.44	0.34	-	0.08	2.60E-04	9	-	-	-	-	-	-	-	-
2	Czaplinek IG-2	892	P1	s	4016	Pomeranian Anticlinorium	2.66	1.31	0.03	1.27	1.78	0.8	1.08	0.64	9225	0.93	0.51	0.26	0.21	4.00E-04	4	0.52	1.29	1.2	95	-	-	-	-
3	Zabartowo-1	893	P1	c	3956	Pomeranian Anticlinorium	2.69	0.47	0.01	1.46	1.7	1.06	0.42	0.04	1671	0.85	0.58	0.15	0.06	3.49E-04	42	2.27	2.3	7.65	96	-	-	-	-
4	Brudzewek-1	889	C	c	3818	Fore-Sudetic Homocline	2.69	3.36	0.07	1.4	1.76	1.23	0.27	0.07	1335	0.86	0.56	0.18	0.03	1.24E-04	41	3.08	2.67	11.32	26	-	-	-	-
5	Zabartowo-2	894	C	s	4500	Pomeranian Anticlinorium	2.6	2.46	0.01	1.82	1.94	0.62	0.15	0.03	1389	1.25	0.36	4.44	0.39	7.93E-03	3	-	-	-	131	-	-	-	-
6	Bielsk-2	129	Cw	s	4545	Warsaw Synclinorium	2.39	10.9	0.42	s	1.9	3.51	3.48	0.1	3222	2.7	0.29	2.45	0.16	9.37E-04	14.6	0.45	3.33	7.81	36	-	-	-	-
7	Bielsk-2	141	Cw	s	4589	Warsaw Synclinorium	2.35	11.52	1.07	2.23	1.89	3.08	3.88	1.05	5525	5.5	0.48	2.09	0.32	1.02E-03	10.6	0.32	1.48	3.71	34	-	-	-	-
8	Koszalin IG-1	887	Cwi	s	3008	Pomeranian Synclinorium	2.4	11.71	27.19	1.55	1.84	3.25	1.57	9.93	44241	8.26	0.57	1.81	0.53	7.97E-04	2	-	-	-	60	-	-	-	-
9	Moracz IG-1	890	Cwi	s	4650	Pomeranian Anticlinorium	2.68	1.5	0.01	1.55	1.96	1.12	0.49	0.15	2305	0.69	0.68	0.23	0.06	1.27E-04	1	-	-	-	167	-	-	-	-
10	Opoczno PIG-2	896	Cwi	s	3045	Holy Cross Mts. Anticlinorium	2.7	1.5	0.01	1.74	2.06	0.74	0.28	0.04	1989	0.5	0.63	0.09	0.04	2.89E-14	21	1.32	2.3	9.15	47	-	-	-	-
11	Ustronie IG-1	888	Ct	s	3154	Pomeranian Anticlinorium	2.3	13.31	94.43	1.7	1.7	1.18	1.41	10.19	126768	12.71	0.16	2.2	0.35	6.71E-04	1	-	-	-	63	-	-	-	-
12	Dygowo-1	137	Ct	s	3790	Pomeranian Anticlinorium	2.56	2.42	0.13	1.33	1.69	1.07	0.52	0.14	2508	1.79	0.53	0.22	0.82	1.41E-04	14.8	4.94	2.04	2.9	47	-	-	-	-
13	Lublin IG-1	883	D2	s	4508	Lublin Synclinorium	2.64	1.5	0.01	1.65	1.9	-	-	-	-	0.66	0.57	0.03	50.02	5.82E-05	8	-	-	-	71	-	-	-	-
14	Radawiec Mały-1	139	De	c	4304	Lublin Synclinorium	2.73	0.42	0.05	-	-	1.1	0.12	0.07	1120	1.2	0.67	0.42	1.05	1.46E-03	32.8	2.12	1.23	6.6	45	-	-	-	-
15	Maciejowice IG-1	881	D1	s	4374	Warsaw Synclinorium	2.7	1.5	0.01	1.5	1.96	1.18	0.24	0.18	1994	1.03	0.36	0.1	2.66	1.29E-04	19	-	-	-	78	-	-	-	-
16	Krępiec-1	130	Dem	c	4501	Lublin Synclinorium	2.7	0.13	0	1.14	1.94	0.31	0.05	0.03	1405	0.83	0.66	0.17	0.05	4.37E-04	35.3	2.74	3.01	9.56	59	-	-	-	-
17	Ulhówek IG-1	886	Dem	s	3037	Lublin Synclinorium	2.61	1.32	0.01	1.74	1.62	3.21	1.42	0.19	2185	1.76	0.36	0.79	0.09	1.67E-04	1	0.16	0.73	1.12	126	-	-	-	-
18	Stupsk IG-1	872	Sw	c	3546	Peri-Baltic Syncline	2.62	3.15	0.01	1.75	1.84	3.29	0.25	0.18	1293	3.72	0.26	0.77	0.06	1.69E-04	17	1.32	3.91	7.61	57	-	-	-	-
19	Lębork IG-1	879	Sla	c	3247	Peri-Baltic Syncline	2.73	1.5	0.01	1.71	1.77	0.7	0.33	0.09	3090	0.41	0.56	0.13	0.03	1.49E-04	33	-	-	-	102	-	-	-	-
20	Terebin IG-5	877	Ot	s	3034	Lublin Synclinorium	2.57	3.25	0.01	1.77	1.85	0.84	2.22	1.76	17894	3.83	0.3	0.82	0.1	2.98E-04	2	0.14	1.5	1.77	227	-	-	-	-
21	Goczałkowice IG-1	873	Cm	s	3012	Upper Silesian Trough	2.66	1.76	0.02	1.54	1.72	0.66	0.19	0.22	3741	1.61	0.4	0.37	0.06	1.58E-04	11	1.05	1.01	1.83	89	-	-	-	-
22	Łopiennik IG-1	874	Cm2	s	4588	Lublin Synclinorium	2.61	1.22	0.28	1.47	2.06	0.86	1.94	0.45	9549	1.63	0.4	0.24	0.05	9.53E-05	1	-	-	-	126	-	-	-	-
23	Prabuty IG-1	871	Cm2	s	3460	Peri-Baltic Syncline	2.61	0.8	0.01	1.59	1.79	0.95	0.91	0.45	6623	0.55	0.36	0.29	0.66	4.72E-04	-	-	-	-	114	-	-	-	-
24	Hel IG-1	869	Cm1	s	3457	Peri-Baltic Syncline	2.57	3.18	0.05	1.69	1.97	3.31	3.02	0.65	4040	1.34	0.53	0.83	0.07	3.11E-04	6	-	-	-	84	-	-	-	-
25	Okuniew IG-1	870	Cm1	s	4106	Warsaw Synclinorium	2.55	4.79	0.01	1.98	1.84	1.86	3.56	0.26	5658	2.45	0.24	0.74	0.07	1.88E-04	5	-	-	-	120	-	-	-	-
26	Siedliska IG-1	876	Cm1	s	3007	Mazovia-Lublin Graben	2.57	4.41	0.06	1.73	2.08	5.05	0.5	0.31	1292	2.64	0.33	0.18	0.02	1.96E-05	15	-	-	-	84	-	-	-	-
27	Żarnowiec IG-1	878	Cm1	s	3233	Peri-Baltic Syncline	2.47	8.47	0.01	1.92	1.78	3.29	3.98	0.95	5863	2.26	1.04	1.21	0.07	1.96E-04	16	1.39	1.43	9.27	-	-	-	-	-
28	Busówno IG-1	868	Pt	s	4153	Lublin Synclinorium	2.64	1.5	0.02	1.57	2.03	-	-	-	-	1.34	0.41	0.42	0.07	4.43E-04	2	-	-	-	93	-	-	-	-

NMR – nuclear magnetic resonance spectroscopy, CT – computed X-ray tomography, XRD – X-ray diffraction analysis, others as in Appendix 1