Projekce iGEO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 24.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 1

hloubka sondy	**H**	11.3	m
hladina vody	**HPV**	2	m
obj. hm. vody	**γH2O**	9.81	kN/m3
hmotnost beranu	**Mh**	50	kg
pád beranu	**Hh**	0.5	m
hmotnost válce	**Ma**	17	kg
hmotnost tyče	**Mt**	4.75	
gravit. zrychlení	**g**	9.81	m/s2
úhel hrotu	**α**	90	deg
průměr hrotu	**D**	0.04	m
plocha kužele	**A**	0.002	m2

s	0.031	m
pa	101	kPa
V	100	kPa

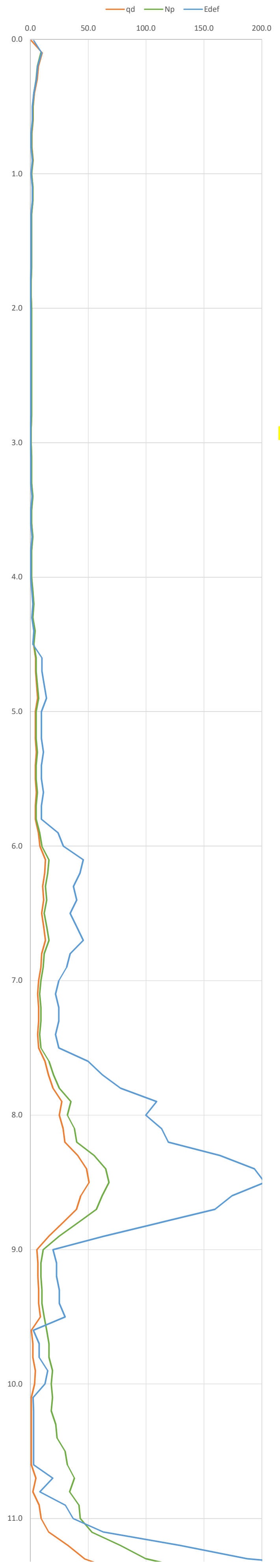
Vyhodnotil: I. Poul **Prováděl:** J. Víšek

Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

	IC	ID	cu
přepočet	0.01	5	1

podle qdyn

																				ČSN EN 1997-2	Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)	z Eoed (ČSN EN 1997-2)	Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	Konzistence (IC) podle qd	Ulehlost písek + štěrk	Stanoveno v laboratoři		Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001)	Kombinace podle qdyn
H	**γ**	**Np**	**Npc**	**typ**	**S**	**Npcc**	**Nc**	**N60**	**IC**	**ID**	**cu**	**φef**	**rd**	**tyč**	**qd**	**σ**	**u**	**σvo'**	**w1**	**Eoed**	**ν**	**β**	**Edef**	**Edef**							**IC**	**ID**	**φef**	**cef**	**φef**	**ID**	**Eoed**	**Edef**	**Edef**
(m)	**kN/**			**zem.**							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa									(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0					2	0	**1**	1	0.29	-	29	18	1.2	1.00	0.9	0.0	0	0.0	#####	#####	0.41	0.44	#####	0.3	1.4	1.5	1.9	2.6	3.0	3.4	0.55	0.13			-	-			3.0
0.1	18	9		J	2	0	**9**	18	2.41	-	241	22	14.7	1.00	10.3	1.8	0	1.8	104	7.0	0.38	0.52	3.7	9.7	16.4	18.5	22.6	30.8	35.9	41.0	1.92	0.38			-	-			9.7
0.2	18	6		J	2	0	**6**	12	1.64	-	164	21	9.8	1.00	6.8	3.6	0	3.6	86	5.9	0.39	0.49	2.9	6.3	10.9	12.3	15.0	20.5	23.9	27.3	1.57	0.29			-	-			6.3
0.3	18	5		J	2	0	**5**	10	1.38	-	138	20	8.2	1.00	5.7	5.4	0	5.4	80	5.6	0.40	0.48	2.7	5.1	9.1	10.3	12.5	17.1	19.9	22.8	1.43	0.26			-	-			5.1
0.4	18	3		J	2	0	**3**	6	0.87	-	87	19	4.9	1.00	3.4	7.2	0	7.2	68	4.9	0.40	0.46	2.2	2.8	5.5	6.2	7.5	10.3	12.0	13.7	1.11	0.20			-	-			2.8
0.5	18	2	0	J	2	0	**2**	4	0.61	-	61	19	3.3	1.00	2.3	9.0	0	9.0	62	4.5	0.40	0.45	2.0	1.7	3.6	4.1	5.0	6.8	8.0	9.1	0.91	0.17			-	-			1.7
0.6	18	2		J	2	0	**2**	4	0.61	-	61	19	3.3	1.00	2.3	10.8	0	10.8	62	4.6	0.40	0.45	2.1	1.7	3.6	4.1	5.0	6.8	8.0	9.1	0.91	0.17			-	-			1.7
0.7	18	1		J	2	0	**1**	2	0.36	-	36	18	1.6	1.00	1.1	12.6	0	12.6	56	4.2	0.41	0.44	1.9	0.6	1.8	2.1	2.5	3.4	4.0	4.6	0.64	0.14			-	-			0.6
0.8	18	1		J	2	0	**1**	2	0.36	-	36	18	1.6	1.00	1.1	14.4	0	14.4	56	4.3	0.41	0.44	1.9	0.6	1.8	2.1	2.5	3.4	4.0	4.6	0.64	0.14			-	-			0.6
0.9	18	2		J	2	0	**2**	4	0.61	-	61	19	3.3	1.00	2.3	16.2	0	16.2	62	4.9	0.40	0.45	2.2	1.7	3.6	4.1	5.0	6.8	8.0	9.1	0.91	0.17			-	-			1.7
1.0	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	18.0	0	18.0	56	4.5	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.1	18	2		J	2	0	**2**	4	0.58	-	58	19	3.3	2.00	2.1	19.8	0	19.8	62	5.0	0.41	0.45	2.3	1.6	3.4	3.8	4.7	6.4	7.5	8.5	0.88	0.16			-	-			1.6
1.2	18	2		J	2	0	**2**	4	0.58	-	58	19	3.3	2.00	2.1	21.6	0	21.6	62	5.1	0.41	0.45	2.3	1.6	3.4	3.8	4.7	6.4	7.5	8.5	0.88	0.16			-	-			1.6
1.3	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	23.4	0	23.4	56	4.7	0.41	0.44	2.1	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.4	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	25.2	0	25.2	56	4.7	0.41	0.44	2.1	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.5	18	1	0	J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	27.0	0	27.0	56	4.8	0.41	0.44	2.1	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.6	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	28.8	0	28.8	56	4.9	0.41	0.44	2.1	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.7	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	30.6	0	30.6	56	4.9	0.41	0.44	2.2	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.8	18	1		J	2	0	**1**	1	0.22	-	22	18	0.8	2.00	0.5	32.4	0	32.4	53	4.7	0.41	0.43	2.1	0.1	0.9	1.0	1.2	1.6	1.9	2.1	0.44	0.12			-	-			0.1
1.9	18	1		J	2	0	**1**	1	0.22	-	22	18	0.8	2.00	0.5	34.2	0	34.2	53	4.8	0.41	0.43	2.1	0.1	0.9	1.0	1.2	1.6	1.9	2.1	0.44	0.12			-	-			0.1
2.0	18	1		J	2	0	**1**	2	0.33	-	33	18	1.6	3.00	1.0	36.0	0	36.0	56	5.1	0.41	0.44	2.3	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.1	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	37.8	0.981	36.8	56	5.2	0.41	0.44	2.3	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.2	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	39.6	1.962	37.6	56	5.3	0.41	0.44	2.3	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.3	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	41.4	2.943	38.5	56	5.3	0.41	0.44	2.3	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.4	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	43.2	3.924	39.3	56	5.4	0.41	0.44	2.4	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.5	18	1	0	J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	45.0	4.905	40.1	56	5.5	0.41	0.44	2.4	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.6	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	46.8	5.886	40.9	56	5.5	0.41	0.44	2.4	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.7	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	48.6	6.867	41.7	56	5.6	0.41	0.44	2.4	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.8	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	50.4	7.848	42.6	56	5.6	0.41	0.44	2.5	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.9	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	3.00	0.5	52.2	8.829	43.4	53	5.4	0.41	0.43	2.3	0.1	0.8	0.9	1.1	1.5	1.8	2.0	0.43	0.12			-	-			0.1
3.0	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	4.00	0.5	54.0	9.81	44.2	53	5.4	0.41	0.43	2.4	0.1	0.8	0.9	1.0	1.4	1.7	1.9	0.41	0.12			-	-			0.1
3.1	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	55.8	10.79	45.0	56	5.8	0.41	0.44	2.5	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.2	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	57.6	11.77	45.8	56	5.9	0.41	0.44	2.6	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.3	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	59.4	12.75	46.6	56	5.9	0.41	0.44	2.6	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.4	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	61.2	13.73	47.5	62	6.6	0.41	0.45	3.0	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.5	18	1	0	J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	63.0	14.72	48.3	56	6.1	0.41	0.44	2.6	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.6	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	64.8	15.7	49.1	56	6.1	0.41	0.44	2.7	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.7	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	66.6	16.68	49.9	62	6.8	0.41	0.45	3.0	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.8	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	68.4	17.66	50.7	56	6.2	0.41	0.44	2.7	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.9	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	70.2	18.64	51.6	56	6.3	0.41	0.44	2.7	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
4.0	18	1		J	2	0	**1**	2	0.25	-	25	18	1.6	5.00	0.9	72.0	19.62	52.4	56	6.3	0.41	0.44	2.8	0.3	1.4	1.6	2.0	2.7	3.2	3.6	0.57	0.13			-	-			0.3
4.1	18	2		J	2	0	**2**	4	0.51	-	51	18	3.3	5.00	1.8	73.8	20.6	53.2	62	7.1	0.41	0.45	3.2	1.2	2.9	3.2	4.0	5.4	6.3	7.2	0.81	0.15			-	-			1.2
4.2	18	3		J	2	0	**3**	6	0.71	-	71	19	4.9	5.00	2.7	75.6	21.58	54.0	68	7.8	0.40	0.45	3.6	2.1	4.3	4.9	5.9	8.1	9.5	10.8	0.99	0.18			-	-			2.1
4.3	18	2		J	2	0	**2**	4	0.51	-	51	18	3.3	5.00	1.8	77.4	22.56	54.8	62	7.2	0.41	0.45	3.2	1.2	2.9	3.2	4.0	5.4	6.3	7.2	0.81	0.15			-	-			1.2
4.4	18	4		J	2	0	**4**	8	0.91	-	91	19	6.5	5.00	3.6	79.2	23.54	55.7	74	8.7	0.40	0.46	4.0	3.0	5.8	6.5	7.9	10.8	12.6	14.4	1.14	0.20			-	-			3.0
4.5	18	3	0	J	2	0	**3**	6	0.71	-	71	19	4.9	5.00	2.7	81.0	24.53	56.5	68	8.0	0.40	0.45	3.6	2.1	4.3	4.9	5.9	8.1	9.5	10.8	0.99	0.18			-	-			2.1
4.6	18	5		Pjm	2	0	**5**	10	1.11	0.40	111	39	8.2	5.00	4.5	82.8	25.51	57.3	335	38.8	0.31	0.73	28.4	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.7	18	5		Pjm	2	0	**5**	10	1.11	0.40	111	39	8.2	5.00	4.5	84.6	26.49	58.1	335	39.1	0.31	0.73	28.6	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.8	18	6		Pjm	2	0	**6**	12	1.32	0.45	132	40	9.8	5.00	5.4	86.4	27.47	58.9	355	41.6	0.30	0.74	31.0	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.9	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	88.2	28.45	59.8	371	43.9	0.29	0.76	33.1	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
5.0	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	90.0	29.43	60.6	335	39.8	0.31	0.73	29.0	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.1	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	91.8	30.41	61.4	335	40.1	0.31	0.73	29.2	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.2	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	93.6	31.39	62.2	335	40.3	0.31	0.73	29.3	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.3	18	6		Pjm	2	0	**6**	12	1.26	0.45	126	40	9.8	6.00	5.1	95.4	32.37	63.0	355	43.0	0.30	0.74	31.8	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.4	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	97.2	33.35	63.8	335	40.9	0.31	0.73	29.7	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.5	18	5	0	Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	99.0	34.34	64.7	335	41.1	0.31	0.73	29.9	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.6	18	6		Pjm	2	0	**6**	12	1.26	0.45	126	40	9.8	6.00	5.1	100.8	35.32	65.5	355	43.8	0.30	0.74	32.4	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.7	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	102.6	36.3	66.3	335	41.6	0.31	0.73	30.2	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.8	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	104.4	37.28	67.1	335	41.8	0.31	0.73	30.4	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.9	18	8		Šjm	2	0	**8**	16	-	0.53	164	40	13.1	6.00	6.8	106.2	38.26	67.9	386	48.5	0.29	0.76	36.9	6.3	11.0	12.3	15.1	20.5	24.0	27.4	-	0.29			36	0.55			24.0
6.0	18	10		Šjm	2	0	**10**	20	-	0.59	193	41	16.4	7.00	8.2	108.0	39.24	68.8	410	51.8	0.28	0.77	40.0	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			28.5
6.1	18	16		Šjm	2	0	**16**	32	-	0.74	304	42	26.2	7.00	13.0	109.8	40.22	69.6	461	58.5	0.27	0.80	47.1	12.5	20.9	23.5	28.7	39.1	45.7	52.2	-	0.45			39	0.65			45.7
6.2	18	15		Šjm	2	0	**15**	30	-	0.71	285	42	24.5	7.00	12.2	111.6	41.2	70.4	454	58.0	0.27	0.80	46.4	11.7	19.6	22.0	26.9	36.7	42.8	48.9	-	0.43			39	0.64			42.8
6.3	18	13		Šjm	2	0	**13**	26	-	0.67	249	42	21.3	7.00	10.6	113.4	42.18	71.2	438	56.3	0.28	0.79	44.5	10.0	17.0	19.1	23.3	31.8	37.1	42.4	-	0.39			38	0.62			37.1
6.4	18	14		Šjm	2	0	**14**	28	-	0.69	267	42	22.9	7.00	11.4	115.2	43.16	72.0	446	57.7	0.27	0.80	45.9	10.8	18.3	20.5	25.1	34.2	40.0	45.7	-	0.41			39	0.63			40.0
6.5	18	12	0	Šjm	2	0	**12**	24	-	0.64	230	41	19.6	7.00	9.8	117.0	44.15	72.9	430	55.8	0.28	0.79	43.8	9.2	15.7	17.6	21.5	29.4	34.2	39.1	-	0.36			38	0.61			34.2
6.6	18	14		Šjm	2	0	**14**	28	-	0.69	267	42	22.9	7.00	11.4	118.8	45.13	73.7	446	58.3	0.27	0.80	46.4	10.8	18.3	20.5	25.1	34.2	40.0	45.7	-	0.41			39	0.63			40.0
6.7	18	16		Šjm	2	0	**16**	32	-	0.74	304	42	26.2	7.00	13.0	120.6	46.11	74.5	461	60.5	0.27	0.80	48.6	12.5	20.9	23.5	28.7	39.1	45.7	52.2	-	0.45			39	0.65			45.7
6.8	18	12		Šjm	2	0	**12**	24	-	0.64	230	41	19.6	7.00	9.8	122.4	47.09	75.3	430	56.7	0.28	0.79	44.5	9.2	15.7	17.6	21.5	29.4	34.2	39.1	-	0.36			38	0.61			34.2
6.9	18	11		Šjm	2	0	**11**	22	-	0.62	212	41	18.0	7.00	9.0	124.2	48.07	76.1	420	55.8	0.28	0.78	43.5	8.4	14.4	16.1	19.7	26.9	31.4	35.9	-	0.34			37	0.59			31.4
7.0	18	9		Šjm	2	0	**9**	18	-	0.56	168	40	14.7	8.00	7.0	126.0	49.05	76.9	399	53.1	0.29	0.76	40.5	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			24.5
7.1	18	8		Šjm	2	0	**8**	16	-	0.53	150	40	13.1	8.00	6.2	127.8	50.03	77.8	386	51.7	0.29	0.75	39.0	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			21.8
7.2	18	9		Šjm	2	0	**9**	18	-	0.56	168	40	14.7	8.00	7.0	129.6	51.01	78.6	399	53.7	0.29	0.76	40.9	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			24.5
7.3	18	9		Šjm	2	0	**9**	18	-	0.56	168	40	14.7	8.00	7.0	131.4	51.99	79.4	399	54.0	0.29	0.76	41.2	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			24.5
7.4	18	8		Šjm	2	0	**8**	16	-	0.53	150	40	13.1	8.00	6.2	133.2	52.97	80.2	386	52.5	0.29	0.75	39.6	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			21.8
7.5	18	9	0	Šjm	2	0	**9**	18	-	0.56	168	40	14.7	8.00	7.0	135.0	53.95	81.0	399	54.5	0.29	0.76	41.6	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			24.5
7.6	18	16		Š	2	0	**16**	32	-	0.74	290	42	26.2	8.00	12.5	136.8	54.94	81.9	461	63.3	0.27	0.80	50.7	11.9	19.9	22.4	27.4	37.4	43.6	49.8	-	0.43			39	0.65			49.8
7.7	18	20		Š	2	0	**20**	40	-	0.85	360	43	32.7	8.00	15.6	138.6	55.92	82.7	485	66.9	0.26	0.81	54.5	15.0	24.9	28.0	34.3	46.7	54.5	62.3	-	0.52			40	0.68			62.3
7.8	18	25		Š	2	0	**25**	50	-	1.01	448	44	40.9	8.00	19.5	140.4	56.9	83.5	509	70.6	0.25	0.83	58.4	18.9	31.1	35.0	42.8	58.4	68.1	77.9	-	0.62			41	0.72			77.9
7.9	18	35		Š	2	0	**35**	69	-	1.06	623	45	57.2	8.00	27.3	142.2	57.88	84.3	545	76.0	0.24	0.85	64.4	26.7	43.6	49.1	60.0	81.8	95.4	109.0	-	0.82			43	0.78			109.0
8.0	18	32		Š	2	0	**32**	63	-	1.12	571	45	52.3	8.00	24.9	144.0	58.86	85.1	536	75.0	0.24	0.84	63.1	24.3	39.9	44.8	54.8	74.7	87.2	99.7	-	0.76			43	0.76			99.7
8.1	18	38		Š	2	0	**38**	75	-	0.86	647	45	62.1	9.00	28.3	145.8	59.84	86.0	554	78.0	0.24	0.85	66.2	27.7	45.3	50.9	62.3	84.9	99.1	113.2	-	0.85			43	0.78			113.2
8.2	18	40		Š	2	0	**40**	79	-	0.62	680	45	65.4	9.00	29.8	147.6	60.82	86.8	560	79.1	0.24	0.85	67.4	29.2	47.7	53.6	65.5	89.4	104.3	119.2	-	0.89			43	0.79			119.2
8.3	18	55		Š	2	0	**55**	109	-	-5.99	932	45	89.9	9.00	41.0	149.4	61.8	87.6	594	84.3	0.23	0.87	73.2	40.4	65.5	73.7	90.1	122.9	143.4	163.9	-	1.18			45	0.84			163.9
8.4	18	65		Š	2	0	**65**	129	-	-19.10	####	44	106.3	9.00	48.4	151.2	62.78	88.4	612	87.3	0.22	0.88	76.5	47.8	77.5	87.2	106.5	145.3	169.5	193.7	-	1.38			46	0.87			193.7
8.5	18	68	4	Š	2	0	**68**	135	-	-25.18	####	43	111.2	9.00	50.7	153.0	63.76	89.2	617	88.4	0.22	0.88	77.6	50.1	81.0	91.2	111.4	152.0	177.3	202.6	-	1.43			46	0.88			202.6
8.6	18	62		Š	2	4	**59**	116	-	-9.50	990	45	95.6	9.00	43.6	154.8	64.75	90.1	607	87.3	0.22	0.87	76.1	43.0	69.7	78.4	95.9	130.7	152.5	174.3	-	1.25			45	0.85			174.3
8.7	18	57		Š	2	4	**54**	106	-	-4.78	907	45	87.5	9.00	39.9	156.6	65.73	90.9	598	86.4	0.23	0.87	74.9	39.3	63.8	71.7	87.7	119.6	139.5	159.4	-	1.15			45	0.84			159.4
8.8	18	41		Š	2	4	**38**	74	-	0.90	638	45	61.3	9.00	27.9	158.4	66.71	91.7	563	81.6	0.24	0.85	69.2	27.4	44.7	50.3	61.5	83.8	97.8	111.7	-	0.84			43	0.78			111.7
8.9	18	25	7	Š	2	4	**22**	43	-	0.90	370	43	35.2	9.00	16.0	160.2	67.69	92.5	509	74.2	0.26	0.82	60.6	15.4	25.6	28.8	35.2	48.0	56.1	64.1	-	0.53			40	0.69			64.1
9.0	18	11		Šjm	2	4	**8**	15	-	0.51	136	40	12.3	9.00	5.6	162.0	68.67	93.3	420	61.5	0.30	0.75	45.9	5.0	8.9	10.1	12.3	16.8	19.6	22.3	-	0.25			35	0.51			19.6
9.1	18	9		Šjm	2	0	**9**	18	-	0.56	155	40	14.7	10.00	6.4	163.8	69.65	94.1	399	58.6	0.29	0.76	44.3	5.9	10.3	11.6	14.1	19.3	22.5	25.7	-	0.28			36	0.54			22.5
9.2	18	9		Šjm	2	0	**9**	18	-	0.56	155	40	14.7	10.00	6.4	165.6	70.63	95.0	399	58.8	0.29	0.76	44.5	5.9	10.3	11.6	14.1	19.3	22.5	25.7	-	0.28			36	0.54			22.5
9.3	18	10		Šjm	2	0	**10**	20	-	0.59	171	40	16.4	10.00	7.1	167.4	71.61	95.8	410	60.8	0.29	0.76	46.4	6.6	11.4	12.9	15.7	21.4	25.0	28.6	-	0.29			36	0.55			25.0
9.4	18	10		Šjm	2	0	**10**	20	-	0.59	171	40	16.4	10.00	7.1	169.2	72.59	96.6	410	61.0	0.29	0.76	46.6	6.6	11.4	12.9	15.7	21.4	25.0	28.6	-	0.29			36	0.55			25.0
9.5	18	12	10	Šjm	2	0	**12**	24	-	0.64	203	41	19.6	10.00	8.6	171.0	73.57	97.4	430	64.2	0.28	0.78	49.9	8.0	13.7	15.4	18.8	25.7	30.0	34.3	-	0.33			37	0.58			30.0
9.6	18	14		Šjm	2	13	**1**	2	-	-	24	38	1.6	10.00	0.7	172.8	74.56	98.2	446	67.0	0.37	0.57	38.5	0.1	1.1	1.3	1.6	2.1	2.5	2.9	-	0.13			25	0.17			2.5
9.7	18	16		Šjm	2	13	**3**	6	-	0.28	58	38	4.9	10.00	2.1	174.6	75.54	99.1	461	69.4	0.33	0.67	46.7	1.6	3.4	3.9	4.7	6.4	7.5	8.6	-	0.16			30	0.36			7.5
9.8	18	16		Šjm	2	13	**3**	6	-	0.28	58	38	4.9	10.00	2.1	176.4	76.52	99.9	461	69.7	0.33	0.67	46.8	1.6	3.4	3.9	4.7	6.4	7.5	8.6	-	0.16			30	0.36			7.5
9.9	18	19		Šjm	2	13	**6**	12	-	0.45	106	39	9.8	10.00	4.3	178.2	77.5	100.7	479	72.8	0.31	0.73	52.9	3.7	6.9	7.7	9.4	12.9	15.0	17.1	-	0.22			34	0.47			15.0
10.0	19	18	13	Šjm	2	13	**5**	10	-	0.40	90	39	8.2	10.00	3.6	180.1	78.48	101.6	474	72.2	0.31	0.71	51.5	3.0	5.7	6.4	7.9	10.7	12.5	14.3	-	0.20			33	0.44			12.5
10.1	19	19		Šjm	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	182.0	79.46	102.5	479	73.4	0.37	0.57	41.9	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.4
10.2	19	18		R	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	183.9	80.44	103.5	474	72.8	0.37	0.57	41.5	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.3	19	22		R	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	185.8	81.42	104.4	495	76.4	0.37	0.57	43.6	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.4	19	23		R	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	187.7	82.4	105.3	500	77.5	0.37	0.57	44.2	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.5	19	30	22	R	3	31	**1**	2	-	-	24	38	1.6	11.00	0.7	189.6	83.39	106.2	529	82.3	0.37	0.57	46.9	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.6	19	32		R	3	31	**1**	2	-	-	24	38	1.6	11.00	0.7	191.5	84.37	107.1	536	83.7	0.37	0.57	47.7	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.7	19	38		R	3	31	**7**	14	-	0.49	82	39	11.4	11.00	4.8	193.4	85.35	108.1	554	86.9	0.30	0.74	63.9	4.2	7.7	8.6	10.6	14.4	16.8	19.2	-	0.23			34	0.49			19.2
10.8	19	34		R	3	31	**3**	6	-	0.28	41	38	4.9	11.00	2.1	195.3	86.33	109.0	542	85.4	0.33	0.67	57.1	1.5	3.3	3.7	4.5	6.2	7.2	8.2	-	0.16			30	0.35			8.2
10.9	19	42		R	3	31	**11**	22	-	0.62	123	41	18.0	11.00	7.5	197.2	87.31	109.9	565	89.3	0.29	0.77	68.6	7.0	12.1	13.6	16.6	22.6	26.4	30.2	-	0.31			37	0.56			30.2
11.0	19	43	31	R	3	29	**14**	28	-	0.69	148	41	22.9	12.00	9.2	199.1	88.29	110.8	568	90.1	0.28	0.78	70.4	8.7	14.8	16.6	20.3	27.7	32.3	36.9	-	0.35			38	0.60			36.9
11.1	19	53		R	3	29	**24**	48	-	0.97	247	43	39.2	12.00	15.8	201.0	89.27	111.7	590	94.0	0.26	0.82	76.7	15.3	25.3	28.5	34.8	47.5	55.4	63.3	-	0.52			40	0.69			63.3
11.2	19	78		R	3	29	**49**	97	-	-2.02	495	46	80.1	12.00	32.3	202.9	90.25	112.6	632	101.0	0.23	0.86	86.5	31.7	51.7	58.1	71.1	96.9	113.1	129.2	-	0.95			44	0.80			129.2
11.3	19	100		R	3	29	**71**	141	-	-32.50	712	44	116.1	12.00	46.8	204.8	91.23	113.6	659	105.7	0.22	0.87	92.4	46.2	74.9	84.3	103.0	140.4	163.8	187.2	-	1.33			46	0.86			187.2



Projekce iGEO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 23.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 2

hloubka sondy	**H**	11	m
hladina vody	**HPV**	1.5	m
obj. hm. vody	**γH2O**	9.81	kN/m3
hmotnost beranu	**Mh**	50	kg
pád beranu	**Hh**	0.5	m
hmotnost válce	**Ma**	17	kg
hmotnost tyče	**Mt**	4.75	
gravit. zrychlení	**g**	9.81	m/s2
úhel hrotu	**α**	90	deg
průměr hrotu	**D**	0.04	m
plocha kužele	**A**	0.002	m2

s	0.031	m
pa	101	kPa
V	100	kPa

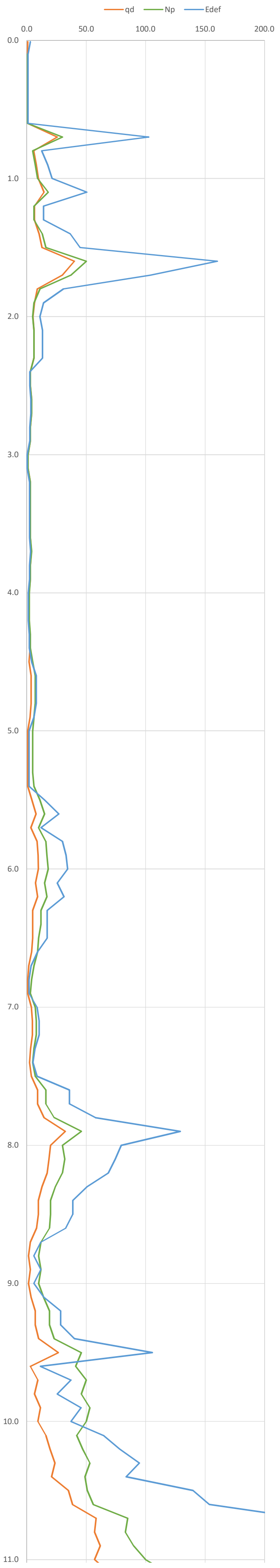
Vyhodnotil: I. Poul **Prováděl:** J. Víšek

Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

podle qdyn

	IC	ID	cu
přepočet	0.01	5	1

																				ČSN EN 1997-2	Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)	z Eoed (ČSN EN 1997-2)	Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	Konzistence (IC) podle qd	Ulehlost písek + štěrk	Stanoveno v laboratoři		Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001)	Kombinace podle qdyn
H	**γ**	**Np**	**Npc**	**typ**	**S**	**Npcc**	**Nc**	**N60**	**IC**	**ID**	**cu**	**φef**	**rd**	**tyč**	**qd**	**σ**	**u**	**σvo'**	**w1**	**Eoed**	**ν**	**β**	**Edef**	**Edef**							**IC**	**ID**	**φef**	**cef**	**φef**	**ID**	**Eoed**	**Edef**	**Edef**
(m)	**kN/**			**zem.**							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa									(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0					2	0	**1**	1	0.29	-	29	18	1.2	1.00	0.9	0.0	0	0.0	#####	#####	0.41	0.44	#####	0.3	1.4	1.5	1.9	2.6	3.0	3.4	0.55	0.13			-	-			3.0
0.1	18	1		Pr	2	0	**1**	1	0.23	-	23	28	0.8	1.00	0.6	1.8	0	1.8	53	3.6	0.35	0.63	2.3	0.1	0.9	1.0	1.3	1.7	2.0	2.3	0.45	0.12			-	-			1.0
0.2	18	1		Pr	2	0	**1**	1	0.23	-	23	28	0.8	1.00	0.6	3.6	0	3.6	53	3.7	0.35	0.63	2.3	0.1	0.9	1.0	1.3	1.7	2.0	2.3	0.45	0.12			-	-			1.0
0.3	18	1		Pr	2	0	**1**	1	0.23	-	23	28	0.8	1.00	0.6	5.4	0	5.4	53	3.7	0.35	0.63	2.4	0.1	0.9	1.0	1.3	1.7	2.0	2.3	0.45	0.12			-	-			1.0
0.4	18	1		Pr	2	0	**1**	1	0.23	-	23	28	0.8	1.00	0.6	7.2	0	7.2	53	3.8	0.35	0.63	2.4	0.1	0.9	1.0	1.3	1.7	2.0	2.3	0.45	0.12			-	-			1.0
0.5	18	1	0	Pr	2	0	**1**	1	0.23	-	23	28	0.8	1.00	0.6	9.0	0	9.0	53	3.9	0.35	0.63	2.4	0.1	0.9	1.0	1.3	1.7	2.0	2.3	0.45	0.12			-	-			1.0
0.6	18	1		Pr	2	0	**1**	1	0.23	-	23	28	0.8	1.00	0.6	10.8	0	10.8	53	3.9	0.35	0.63	2.5	0.1	0.9	1.0	1.3	1.7	2.0	2.3	0.45	0.12			-	-			1.0
0.7	18	30		Š	2	0	**23**	45	-	0.93	587	45	36.8	1.00	25.6	12.6	0	12.6	529	42.0	0.24	0.84	35.5	25.1	41.0	46.1	56.4	76.9	89.7	102.5	-	0.78			43	0.71			102.5
0.8	18	5		Pjm	2	0	**5**	10	1.38	0.40	138	40	8.2	1.00	5.7	14.4	0	14.4	335	27.0	0.30	0.75	20.2	5.1	9.1	10.3	12.5	17.1	19.9	22.8	-	0.26			35	0.43			12.5
0.9	18	7		Pjm	2	0	**7**	14	1.89	0.49	189	41	11.4	1.00	8.0	16.2	0	16.2	371	30.4	0.29	0.77	23.4	7.4	12.8	14.4	17.5	23.9	27.9	31.9	-	0.32			37	0.49			17.5
1.0	18	9		Pjm	2	0	**9**	18	2.26	0.56	226	41	14.7	2.00	9.6	18.0	0	18.0	399	33.0	0.28	0.78	25.9	9.0	15.4	17.3	21.2	28.9	33.7	38.5	-	0.36			38	0.53			21.2
1.1	18	18		Šjm	2	0	**14**	27	-	0.68	335	43	22.1	2.00	14.4	19.8	0	19.8	474	39.8	0.26	0.81	32.2	13.9	23.1	26.0	31.7	43.3	50.5	57.7	-	0.49			40	0.60			50.5
1.2	18	6		Pjm	2	0	**6**	12	1.54	0.45	154	40	9.8	2.00	6.4	21.6	0	21.6	355	30.2	0.29	0.76	22.8	5.8	10.3	11.5	14.1	19.2	22.4	25.6	-	0.28			36	0.45			14.1
1.3	18	6		Pjm	2	0	**6**	12	1.54	0.45	154	40	9.8	2.00	6.4	23.4	0	23.4	355	30.5	0.29	0.76	23.1	5.8	10.3	11.5	14.1	19.2	22.4	25.6	-	0.28			36	0.45			14.1
1.4	18	13		Šjm	2	0	**10**	19	-	0.58	244	42	15.9	2.00	10.4	25.2	0	25.2	438	38.2	0.28	0.79	30.2	9.8	16.7	18.8	22.9	31.3	36.5	41.7	-	0.38			38	0.54			36.5
1.5	18	16	0	Šjm	2	0	**12**	24	-	0.64	299	42	19.6	2.00	12.8	27.0	0	27.0	461	40.6	0.27	0.80	32.6	12.3	20.5	23.1	28.2	38.5	44.9	51.3	-	0.44			39	0.65			44.9
1.6	18	50		Š	2	0	**38**	74	-	0.90	912	45	61.3	2.00	40.1	28.8	0.981	27.8	584	52.1	0.23	0.87	45.2	39.5	64.1	72.1	88.2	120.2	140.3	160.3	-	1.16			45	0.84			160.3
1.7	18	37		Šjm	2	0	**28**	55	-	1.08	677	45	45.4	2.00	29.7	30.6	1.962	28.6	551	49.8	0.24	0.85	42.4	29.1	47.4	53.4	65.2	89.0	103.8	118.6	-	0.88			43	0.79			103.8
1.8	18	11		Šjm	2	0	**8**	16	-	0.54	208	41	13.5	2.00	8.8	32.4	2.943	29.5	420	38.3	0.28	0.78	29.8	8.2	14.1	15.9	19.4	26.4	30.9	35.3	-	0.34			37	0.59			30.9
1.9	18	6		Pjm	2	0	**6**	12	1.54	0.45	154	40	9.8	2.00	6.4	34.2	3.924	30.3	355	32.7	0.29	0.76	24.7	5.8	10.3	11.5	14.1	19.2	22.4	25.6	-	0.28			36	0.54			14.1
2.0	18	5		Pjm	2	0	**5**	10	1.23	0.40	123	39	8.2	3.00	5.0	36.0	4.905	31.1	335	31.2	0.30	0.74	23.1	4.5	8.0	9.1	11.1	15.1	17.6	20.1	-	0.24			35	0.50			11.1
2.1	18	6		Pjm	2	0	**6**	12	1.46	0.45	146	40	9.8	3.00	6.0	37.8	5.886	31.9	355	33.4	0.30	0.75	25.1	5.5	9.7	10.9	13.3	18.1	21.1	24.1	-	0.27			35	0.53			13.3
2.2	18	6		Pjm	2	0	**6**	12	1.46	0.45	146	40	9.8	3.00	6.0	39.6	6.867	32.7	355	33.7	0.30	0.75	25.4	5.5	9.7	10.9	13.3	18.1	21.1	24.1	-	0.27			35	0.53			13.3
2.3	18	6		Pjm	2	0	**6**	12	1.46	0.45	146	40	9.8	3.00	6.0	41.4	7.848	33.6	355	34.1	0.30	0.75	25.6	5.5	9.7	10.9	13.3	18.1	21.1	24.1	-	0.27			35	0.53			13.3
2.4	18	3		J	2	0	**3**	6	0.78	-	78	19	4.9	3.00	3.0	43.2	8.829	34.4	68	6.5	0.40	0.46	3.0	2.4	4.8	5.4	6.6	9.1	10.6	12.1	1.04	0.19			-	-			2.4
2.5	18	3	0	J	2	0	**3**	6	0.78	-	78	19	4.9	3.00	3.0	45.0	9.81	35.2	68	6.6	0.40	0.46	3.0	2.4	4.8	5.4	6.6	9.1	10.6	12.1	1.04	0.19			-	-			2.4
2.6	18	4		J	2	0	**4**	8	1.01	-	101	19	6.5	3.00	4.0	46.8	10.79	36.0	74	7.3	0.40	0.47	3.4	3.5	6.4	7.2	8.9	12.1	14.1	16.1	1.20	0.21			-	-			3.5
2.7	18	4		J	2	0	**4**	8	1.01	-	101	19	6.5	3.00	4.0	48.6	11.77	36.8	74	7.4	0.40	0.47	3.4	3.5	6.4	7.2	8.9	12.1	14.1	16.1	1.20	0.21			-	-			3.5
2.8	18	3		J	2	0	**3**	6	0.78	-	78	19	4.9	3.00	3.0	50.4	12.75	37.6	68	6.8	0.40	0.46	3.1	2.4	4.8	5.4	6.6	9.1	10.6	12.1	1.04	0.19			-	-			2.4
2.9	18	3		J	2	0	**3**	6	0.78	-	78	19	4.9	3.00	3.0	52.2	13.73	38.5	68	6.9	0.40	0.46	3.2	2.4	4.8	5.4	6.6	9.1	10.6	12.1	1.04	0.19			-	-			2.4
3.0	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	54.0	14.72	39.3	56	5.8	0.41	0.44	2.5	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.1	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	55.8	15.7	40.1	56	5.8	0.41	0.44	2.5	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.2	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	57.6	16.68	40.9	68	7.1	0.40	0.45	3.2	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.3	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	59.4	17.66	41.7	68	7.2	0.40	0.45	3.3	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.4	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	61.2	18.64	42.6	68	7.3	0.40	0.45	3.3	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.5	18	3	0	J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	63.0	19.62	43.4	68	7.3	0.40	0.45	3.3	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.6	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	64.8	20.6	44.2	68	7.4	0.40	0.45	3.4	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.7	18	4		J	2	0	**4**	8	0.96	-	96	19	6.5	4.00	3.8	66.6	21.58	45.0	74	8.1	0.40	0.46	3.8	3.2	6.1	6.8	8.4	11.4	13.3	15.2	1.17	0.21			-	-			3.2
3.8	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	68.4	22.56	45.8	68	7.6	0.40	0.45	3.4	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.9	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	70.2	23.54	46.7	68	7.6	0.40	0.45	3.5	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
4.0	18	2		J	2	0	**2**	4	0.51	-	51	18	3.3	5.00	1.8	72.0	24.53	47.5	62	7.0	0.41	0.45	3.1	1.2	2.9	3.2	4.0	5.4	6.3	7.2	0.81	0.15			-	-			1.2
4.1	18	2		J	2	0	**2**	4	0.51	-	51	18	3.3	5.00	1.8	73.8	25.51	48.3	62	7.1	0.41	0.45	3.2	1.2	2.9	3.2	4.0	5.4	6.3	7.2	0.81	0.15			-	-			1.2
4.2	18	2		J	2	0	**2**	4	0.51	-	51	18	3.3	5.00	1.8	75.6	26.49	49.1	62	7.1	0.41	0.45	3.2	1.2	2.9	3.2	4.0	5.4	6.3	7.2	0.81	0.15			-	-			1.2
4.3	18	3		J	2	0	**3**	6	0.71	-	71	19	4.9	5.00	2.7	77.4	27.47	49.9	68	7.9	0.40	0.45	3.6	2.1	4.3	4.9	5.9	8.1	9.5	10.8	0.99	0.18			-	-			2.1
4.4	18	3		J	2	0	**3**	6	0.71	-	71	19	4.9	5.00	2.7	79.2	28.45	50.8	68	8.0	0.40	0.45	3.6	2.1	4.3	4.9	5.9	8.1	9.5	10.8	0.99	0.18			-	-			2.1
4.5	18	5	3	Pjm	2	3	**2**	4	0.51	-	51	38	3.3	5.00	1.8	81.0	29.43	51.6	335	38.5	0.34	0.66	25.3	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.6	18	7		Pjm	2	3	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	82.8	30.41	52.4	371	43.0	0.31	0.71	30.7	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.7	18	7		Pjm	2	3	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	84.6	31.39	53.2	371	43.3	0.31	0.71	30.9	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.8	18	7		Pjm	2	3	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	86.4	32.37	54.0	371	43.6	0.31	0.71	31.1	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.9	18	6		Pjm	2	3	**3**	6	0.71	0.28	71	38	4.9	5.00	2.7	88.2	33.35	54.8	355	41.9	0.32	0.69	29.0	2.1	4.3	4.9	5.9	8.1	9.5	10.8	-	0.18			31	0.39			5.9
5.0	18	5	6	Pjm	2	6	**1**	2	0.25	-	25	38	1.6	6.00	0.9	90.0	34.34	55.7	335	39.8	0.36	0.59	23.6	0.3	1.4	1.5	1.9	2.6	3.0	3.4	-	0.13			26	0.20			1.9
5.1	18	5		Pjm	2	6	**1**	2	0.25	-	25	38	1.6	6.00	0.9	91.8	35.32	56.5	335	40.1	0.36	0.59	23.7	0.3	1.4	1.5	1.9	2.6	3.0	3.4	-	0.13			26	0.20			1.9
5.2	18	5		Pjm	2	6	**1**	2	0.25	-	25	38	1.6	6.00	0.9	93.6	36.3	57.3	335	40.3	0.36	0.59	23.9	0.3	1.4	1.5	1.9	2.6	3.0	3.4	-	0.13			26	0.20			1.9
5.3	18	5		Pjm	2	6	**1**	2	0.25	-	25	38	1.6	6.00	0.9	95.4	37.28	58.1	335	40.6	0.36	0.59	24.0	0.3	1.4	1.5	1.9	2.6	3.0	3.4	-	0.13			26	0.20			1.9
5.4	18	6		Pjm	2	6	**1**	2	0.25	-	25	38	1.6	6.00	0.9	97.2	38.26	58.9	355	43.3	0.36	0.59	25.6	0.3	1.4	1.5	1.9	2.6	3.0	3.4	-	0.13			26	0.20			1.9
5.5	18	11	6	Šjm	2	6	**5**	10	-	0.40	106	39	8.2	6.00	4.3	99.0	39.24	59.8	420	51.6	0.31	0.73	37.5	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			15.0
5.6	18	15		Šjm	2	6	**9**	18	-	0.56	183	41	14.7	6.00	7.7	100.8	40.22	60.6	454	56.0	0.29	0.77	43.1	7.1	12.3	13.9	16.9	23.1	27.0	30.8	-	0.31			37	0.57			27.0
5.7	18	10		Šjm	2	6	**4**	8	-	0.34	87	39	6.5	6.00	3.4	102.6	41.2	61.4	410	50.9	0.32	0.71	36.1	2.9	5.5	6.2	7.5	10.3	12.0	13.7	-	0.20			33	0.43			12.0
5.8	18	16		Šjm	2	6	**10**	20	-	0.59	203	41	16.4	6.00	8.6	104.4	42.18	62.2	461	57.5	0.28	0.78	44.7	8.0	13.7	15.4	18.8	25.7	30.0	34.2	-	0.33			37	0.58			30.0
5.9	18	17		Šjm	2	6	**11**	22	-	0.62	222	41	18.0	6.00	9.4	106.2	43.16	63.0	467	58.7	0.28	0.78	46.0	8.8	15.1	16.9	20.7	28.2	33.0	37.7	-	0.35			38	0.60			33.0
6.0	18	18	6	Šjm	2	6	**12**	24	-	0.64	230	41	19.6	7.00	9.8	108.0	44.15	63.9	474	59.8	0.28	0.79	47.0	9.2	15.7	17.6	21.5	29.4	34.2	39.1	-	0.36			38	0.61			34.2
6.1	18	15		Šjm	2	6	**9**	18	-	0.56	175	40	14.7	7.00	7.3	109.8	45.13	64.7	454	57.7	0.29	0.77	44.2	6.8	11.7	13.2	16.1	22.0	25.7	29.4	-	0.30			36	0.56			25.7
6.2	18	17		Šjm	2	6	**11**	22	-	0.62	212	41	18.0	7.00	9.0	111.6	46.11	65.5	467	59.7	0.28	0.78	46.6	8.4	14.4	16.1	19.7	26.9	31.4	35.9	-	0.34			37	0.59			31.4
6.3	18	12		Šjm	2	6	**6**	12	-	0.45	120	39	9.8	7.00	4.9	113.4	47.09	66.3	430	55.2	0.30	0.74	40.7	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			17.1
6.4	18	12		Šjm	2	6	**6**	12	-	0.45	120	39	9.8	7.00	4.9	115.2	48.07	67.1	430	55.5	0.30	0.74	40.9	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			17.1
6.5	18	10	4	Šjm	2	4	**6**	12	-	0.45	120	39	9.8	7.00	4.9	117.0	49.05	67.9	410	53.2	0.30	0.74	39.2	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			17.1
6.6	18	9		Pjm	2	4	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	118.8	50.03	68.8	399	52.0	0.31	0.72	37.6	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.7	18	6		Pjm	2	4	**2**	4	0.47	-	47	38	3.3	7.00	1.6	120.6	51.01	69.6	355	46.6	0.34	0.65	30.2	1.1	2.6	2.9	3.6	4.9	5.7	6.5	-	0.15			29	0.31			3.6
6.8	18	4		Pjm	2	4	**1**	2	0.25	-	25	38	1.6	7.00	0.8	122.4	51.99	70.4	311	41.0	0.36	0.59	24.1	0.2	1.3	1.5	1.8	2.4	2.9	3.3	-	0.13			26	0.20			1.8
6.9	18	3		Pjm	2	4	**1**	2	0.25	-	25	38	1.6	7.00	0.8	124.2	52.97	71.2	280	37.1	0.36	0.59	21.8	0.2	1.3	1.5	1.8	2.4	2.9	3.3	-	0.13			26	0.20			1.8
7.0	18	7	2	Pjm	2	2	**5**	10	0.98	0.40	98	39	8.2	8.00	3.9	126.0	53.96	72.0	371	49.5	0.31	0.72	35.6	3.3	6.2	7.0	8.6	11.7	13.6	15.6	-	0.21			33	0.45			8.6
7.1	18	8		Pjm	2	2	**6**	12	1.15	0.45	115	39	9.8	8.00	4.7	127.8	54.94	72.9	386	51.7	0.30	0.73	37.9	4.1	7.5	8.4	10.3	14.0	16.4	18.7	-	0.23			34	0.48			10.3
7.2	18	8		Pjm	2	2	**6**	12	1.15	0.45	115	39	9.8	8.00	4.7	129.6	55.92	73.7	386	52.0	0.30	0.73	38.1	4.1	7.5	8.4	10.3	14.0	16.4	18.7	-	0.23			34	0.48			10.3
7.3	18	6		Pjm	2	2	**4**	8	0.80	0.34	80	39	6.5	8.00	3.1	131.4	56.9	74.5	355	48.0	0.32	0.70	33.7	2.5	5.0	5.6	6.9	9.3	10.9	12.5	-	0.19			32	0.42			6.9
7.4	18	5		Pjm	2	2	**3**	6	0.63	0.28	63	38	4.9	8.00	2.3	133.2	57.88	75.3	335	45.6	0.33	0.68	31.0	1.8	3.7	4.2	5.1	7.0	8.2	9.3	-	0.17			31	0.37			5.1
7.5	18	7	5	Pjm	2	2	**5**	10	0.98	0.40	98	39	8.2	8.00	3.9	135.0	58.86	76.1	371	50.8	0.31	0.72	36.5	3.3	6.2	7.0	8.6	11.7	13.6	15.6	-	0.21			33	0.45			8.6
7.6	18	16		Š	2	5	**12**	23	-	0.63	211	41	18.8	8.00	9.0	136.8	59.84	77.0	461	63.3	0.28	0.78	49.3	8.4	14.3	16.1	19.7	26.9	31.3	35.8	-	0.34			37	0.59			35.8
7.7	18	16		Š	2	5	**12**	23	-	0.63	211	41	18.8	8.00	9.0	138.6	60.82	77.8	461	63.6	0.28	0.78	49.6	8.4	14.3	16.1	19.7	26.9	31.3	35.8	-	0.34			37	0.59			35.8
7.8	18	23		Š	2	5	**19**	37	-	0.81	334	43	30.2	8.00	14.4	140.4	61.8	78.6	500	69.3	0.26	0.81	56.2	13.8	23.0	25.9	31.7	43.2	50.4	57.6	-	0.49			40	0.67			57.6
7.9	18	46		Š	2	5	**42**	82	-	0.38	737	46	67.9	8.00	32.3	142.2	62.78	79.4	575	80.1	0.23	0.86	68.6	31.7	51.7	58.2	71.1	96.9	113.1	129.2	-	0.95			44	0.80			129.2
8.0	18	30	7	Š	2	5	**26**	51	-	1.02	457	44	41.7	8.00	19.9	144.0	63.76	80.2	529	74.0	0.25	0.83	61.4	19.3	31.8	35.7	43.7	59.6	69.5	79.4	-	0.63			41	0.72			79.4
8.1	18	32		Š	2	7	**25**	50	-	1.01	429	44	40.9	9.00	18.6	145.8	64.75	81.1	536	75.3	0.26	0.83	62.2	18.1	29.8	33.5	41.0	55.9	65.2	74.5	-	0.60			41	0.71			74.5
8.2	18	30		Š	2	7	**23**	46	-	0.94	395	44	37.6	9.00	17.1	147.6	65.73	81.9	529	74.7	0.26	0.82	61.3	16.6	27.4	30.8	37.7	51.4	60.0	68.5	-	0.56			41	0.70			68.5
8.3	18	24		Š	2	7	**17**	34	-	0.77	295	42	27.8	9.00	12.7	149.4	66.71	82.7	505	71.6	0.27	0.80	57.4	12.1	20.3	22.8	27.9	38.0	44.3	50.7	-	0.44			39	0.65			50.7
8.4	18	20		Š	2	7	**13**	26	-	0.67	228	41	21.3	9.00	9.7	151.2	67.69	83.5	485	69.1	0.28	0.78	54.2	9.1	15.5	17.4	21.3	29.1	33.9	38.7	-	0.36			38	0.60			38.7
8.5	18	20	8	Š	2	7	**13**	26	-	0.67	228	41	21.3	9.00	9.7	153.0	68.67	84.3	485	69.4	0.28	0.78	54.5	9.1	15.5	17.4	21.3	29.1	33.9	38.7	-	0.36			38	0.60			38.7
8.6	18	19		Š	2	8	**11**	22	-	0.62	194	41	18.0	9.00	8.2	154.8	69.65	85.1	479	68.9	0.28	0.77	53.3	7.6	13.1	14.7	18.0	24.6	28.7	32.8	-	0.32			37	0.58			32.8
8.7	18	12		Š	2	8	**4**	8	-	0.34	77	39	6.5	9.00	3.0	156.6	70.63	86.0	430	62.1	0.32	0.70	43.4	2.4	4.8	5.4	6.6	8.9	10.4	11.9	-	0.19			32	0.41			11.9
8.8	18	10		Š	2	8	**2**	4	-	-	44	38	3.3	9.00	1.5	158.4	71.61	86.8	410	59.5	0.34	0.64	38.1	0.9	2.4	2.7	3.3	4.5	5.2	6.0	-	0.15			29	0.30			6.0
8.9	18	12		Š	2	8	**4**	8	-	0.34	77	39	6.5	9.00	3.0	160.2	72.59	87.6	430	62.6	0.32	0.70	43.8	2.4	4.8	5.4	6.6	8.9	10.4	11.9	-	0.19			32	0.41			11.9
9.0	18	10	9	Š	2	8	**2**	4	-	-	44	38	3.3	9.00	1.5	162.0	73.57	88.4	410	60.0	0.34	0.64	38.5	0.9	2.4	2.7	3.3	4.5	5.2	6.0	-	0.15			29	0.30			6.0
9.1	18	14		Š	2	9	**5**	10	-	0.40	90	39	8.2	10.00	3.6	163.8	74.56	89.2	446	65.6	0.31	0.71	46.8	3.0	5.7	6.4	7.9	10.7	12.5	14.3	-	0.20			33	0.44			14.3
9.2	18	19		Š	2	9	**10**	20	-	0.59	171	40	16.4	10.00	7.1	165.6	75.54	90.1	479	70.7	0.29	0.76	54.1	6.6	11.4	12.9	15.7	21.4	25.0	28.6	-	0.29			36	0.55			28.6
9.3	18	19		Š	2	9	**10**	20	-	0.59	171	40	16.4	10.00	7.1	167.4	76.52	90.9	479	71.0	0.29	0.76	54.3	6.6	11.4	12.9	15.7	21.4	25.0	28.6	-	0.29			36	0.55			28.6
9.4	18	23		Š	2	9	**14**	28	-	0.69	235	41	22.9	10.00	10.0	169.2	77.5	91.7	500	74.4	0.28	0.79	58.5	9.4	16.0	18.0	22.0	30.0	35.0	40.0	-	0.37			38	0.61			40.0
9.5	18	46	23	R	2	9	**37**	73	-	0.94	604	45	60.5	10.00	26.4	171.0	78.48	92.5	575	85.9	0.24	0.85	72.6	25.8	42.3	47.6	58.1	79.3	92.5	105.7	-	0.80			43	0.77			105.7
9.6	18	41		R	2	37	**4**	8	-	0.34	74	39	6.5	10.00	2.9	172.8	79.46	93.3	563	84.4	0.32	0.70	58.7	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			11.4
9.7	18	50		R	2	37	**13**	26	-	0.67	219	41	21.3	10.00	9.3	174.6	80.44	94.2	584	88.0	0.28	0.78	68.8	8.7	14.9	16.7	20.4	27.8	32.5	37.1	-	0.35			38	0.60			37.1
9.8	18	46		R	2	37	**9**	18	-	0.56	155	40	14.7	10.00	6.4	176.4	81.42	95.0	575	87.0	0.29	0.76	65.8	5.9	10.3	11.6	14.1	19.3	22.5	25.7	-	0.28			36	0.54			25.7
9.9	18	53		R	2	37	**16**	32	-	0.74	267	42	26.2	10.00	11.4	178.2	82.4	95.8	590	89.6	0.27	0.80	71.3	10.9	18.3	20.6	25.1	34.3	40.0	45.7	-	0.41			39	0.63			45.7
10.0	19	50	37	R	2	37	**13**	26	-	0.67	219	41	21.3	10.00	9.3	180.1	83.38	96.7	584	89.0	0.28	0.78	69.6	8.7	14.9	16.7	20.4	27.8	32.5	37.1	-	0.35			38	0.60			37.1
10.1	19	42		R	3	19	**24**	47	-	0.96	252	43	38.4	11.00	16.1	182.0	84.37	97.6	565	86.5	0.26	0.82	70.7	15.5	25.8	29.0	35.4	48.3	56.4	64.4	-	0.53			40	0.69			64.4
10.2	19	47		R	3	19	**29**	57	-	1.10	303	44	46.6	11.00	19.5	183.9	85.35	98.6	577	88.7	0.25	0.83	73.5	19.0	31.3	35.2	43.0	58.6	68.4	78.2	-	0.62			41	0.72			78.2
10.3	19	53		R	3	19	**35**	68	-	1.08	365	45	56.4	11.00	23.7	185.8	86.33	99.5	590	91.1	0.25	0.84	76.4	23.1	37.8	42.6	52.0	71.0	82.8	94.6	-	0.73			42	0.75			94.6
10.4	19	49		R	3	19	**31**	61	-	1.12	324	44	49.9	11.00	20.9	187.7	87.31	100.4	582	90.2	0.25	0.83	75.0	20.3	33.5	37.6	46.0	62.7	73.2	83.6	-	0.66			42	0.73			83.6
10.5	19	51	19	R	3	0	**51**	101	-	-3.09	534	46	83.4	11.00	35.0	189.6	88.29	101.3	586	91.2	0.23	0.86	78.4	34.4	55.9	62.9	76.9	104.9	122.4	139.8	-	1.02			44	0.82			139.8
10.6	19	56		R	3	0	**56**	111	-	-6.89	586	45	91.6	11.00	38.4	191.5	89.27	102.2	596	93.1	0.23	0.86	80.5	37.8	61.4	69.1	84.5	115.2	134.4	153.6	-	1.11			45	0.83			153.6
10.7	19	85		R	3	0	**85**	169	-	-87.88	884	41	139.0	11.00	58.3	193.4	90.25	103.1	641	100.6	0.21	0.88	89.0	57.7	93.2	104.9	128.2	174.8	203.9	233.1	-	1.63			47	0.90			233.1
10.8	19	83		R	3	0	**83**	165	-	-77.43	863	41	135.7	11.00	56.9	195.3	91.23	104.1	639	100.6	0.21	0.88	88.8	56.3	91.0	102.4	125.2	170.7	199.1	227.6	-	1.60			47	0.90			227.6
10.9	19	90		R	3	0	**90**	179	-	######	935	40	147.2	11.00	61.7	197.2	92.21	105.0	648	102.3	0.21	0.89	90.8	61.1	98.7	111.1	135.7	185.1	215.9	246.8	-	1.72			47	0.91			246.8
11.0	19	100		R	3	14	**87**	172	-	-96.36	865	41	141.4	12.00	57.0	199.1	93.2	105.9	659	104.5	0.21	0.88	92.4	56.5	91.2	102.6	125.5	171.1	199.6	228.1	-	1.60			47	0.90			228.1



Projekce iGEO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 24.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 3

hloubka sondy	**H**	9.9	m
hladina vody	**HPV**	1.5	m
obj. hm. vody	**γH2O**	9.81	kN/m3
hmotnost beranu	**Mh**	50	kg
pád beranu	**Hh**	0.5	m
hmotnost válce	**Ma**	17	kg
hmotnost tyče	**Mt**	4.75	
gravit. zrychlení	**g**	9.81	m/s2
úhel hrotu	**α**	90	deg
průměr hrotu	**D**	0.04	m
plocha kužele	**A**	0.002	m2

s	0.031	m
pa	101	kPa
V	100	kPa

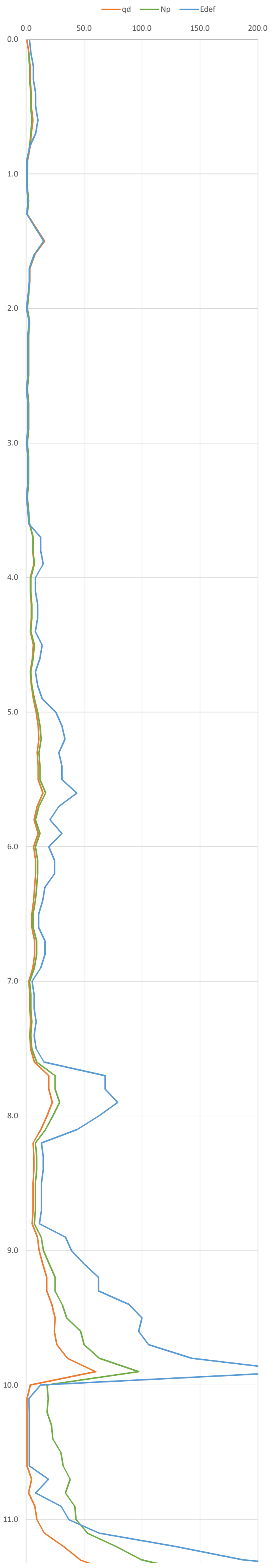
Vyhodnotil: I. Poul **Prováděl:** J. Víšek

Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

	IC	ID	cu
přepočet	0.01	5	1

podle qdyn

																				ČSN EN 1997-2	Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)	z Eoed (ČSN EN 1997-2)	Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	Konzistence (IC) podle qd	Ulehlost písek + štěrk	Stanoveno v laboratoři		Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001)	Kombinace podle qdyn
H	**γ**	**Np**	**Npc**	**typ**	**S**	**Npcc**	**Nc**	**N60**	**IC**	**ID**	**cu**	**φef**	**rd**	**tyč**	**qd**	**σ**	**u**	**σvo'**	**w1**	**Eoed**	**ν**	**β**	**Edef**	**Edef**							**IC**	**ID**	**φef**	**cef**	**φef**	**ID**	**Eoed**	**Edef**	**Edef**
(m)	**kN/**			**zem.**							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa									(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0					2	0	**1**	1	0.29	-	29	18	1.2	1.00	0.9	0.0	0	0.0	#####	#####	0.41	0.44	#####	0.3	1.4	1.5	1.9	2.6	3.0	3.4	0.55	0.13			-	-			3.0
0.1	18	2		Pr	2	0	**2**	4	0.61	-	61	29	3.3	1.00	2.3	1.8	0	1.8	62	4.2	0.34	0.64	2.7	1.7	3.6	4.1	5.0	6.8	8.0	9.1	0.91	0.17			-	-			4.1
0.2	18	3		Pr	2	0	**3**	6	0.87	-	87	29	4.9	1.00	3.4	3.6	0	3.6	68	4.7	0.34	0.65	3.1	2.8	5.5	6.2	7.5	10.3	12.0	13.7	1.11	0.20			-	-			6.2
0.3	18	3		Pr	2	0	**3**	6	0.87	-	87	29	4.9	1.00	3.4	5.4	0	5.4	68	4.8	0.34	0.65	3.1	2.8	5.5	6.2	7.5	10.3	12.0	13.7	1.11	0.20			-	-			6.2
0.4	18	4		Pr	2	0	**4**	8	1.13	-	113	30	6.5	1.00	4.6	7.2	0	7.2	74	5.3	0.34	0.66	3.5	4.0	7.3	8.2	10.0	13.7	16.0	18.2	1.28	0.23			-	-			8.2
0.5	18	4	0	Pr	2	0	**4**	8	1.13	-	113	30	6.5	1.00	4.6	9.0	0	9.0	74	5.4	0.34	0.66	3.6	4.0	7.3	8.2	10.0	13.7	16.0	18.2	1.28	0.23			-	-			8.2
0.6	18	5		Pr	2	0	**5**	10	1.38	-	138	30	8.2	1.00	5.7	10.8	0	10.8	80	6.0	0.33	0.67	4.0	5.1	9.1	10.3	12.5	17.1	19.9	22.8	1.43	0.26			-	-			10.3
0.7	18	4		Pr	2	0	**4**	8	1.13	-	113	30	6.5	1.00	4.6	12.6	0	12.6	74	5.6	0.34	0.66	3.7	4.0	7.3	8.2	10.0	13.7	16.0	18.2	1.28	0.23			-	-			8.2
0.8	18	3		J	2	0	**3**	6	0.87	-	87	19	4.9	1.00	3.4	14.4	0	14.4	68	5.2	0.40	0.46	2.4	2.8	5.5	6.2	7.5	10.3	12.0	13.7	1.11	0.20			-	-			2.8
0.9	18	1		J	2	0	**1**	2	0.36	-	36	18	1.6	1.00	1.1	16.2	0	16.2	56	4.4	0.41	0.44	1.9	0.6	1.8	2.1	2.5	3.4	4.0	4.6	0.64	0.14			-	-			0.6
1.0	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	18.0	0	18.0	56	4.5	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.1	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	19.8	0	19.8	56	4.5	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.2	18	2		J	2	0	**2**	4	0.58	-	58	19	3.3	2.00	2.1	21.6	0	21.6	62	5.1	0.41	0.45	2.3	1.6	3.4	3.8	4.7	6.4	7.5	8.5	0.88	0.16			-	-			1.6
1.3	18	1		J	2	0	**1**	2	0.34	-	34	18	1.6	2.00	1.1	23.4	0	23.4	56	4.7	0.41	0.44	2.1	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.4	18	8		J	2	0	**8**	16	2.02	-	202	21	13.1	2.00	8.5	25.2	0	25.2	98	8.3	0.39	0.50	4.2	8.0	13.7	15.4	18.8	25.6	29.9	34.2	1.75	0.33			-	-			8.0
1.5	18	15	0	J	2	0	**15**	30	3.71	-	371	24	24.5	2.00	16.0	27.0	0	27.0	140	12.0	0.37	0.57	6.8	15.5	25.6	28.9	35.3	48.1	56.1	64.1	2.40	0.53			-	-			15.5
1.6	18	7		J	2	0	**7**	14	1.78	-	178	21	11.4	2.00	7.5	28.8	0.981	27.8	92	8.0	0.39	0.50	4.0	6.9	12.0	13.5	16.5	22.4	26.2	29.9	1.64	0.30			-	-			6.9
1.7	18	3		J	2	0	**3**	6	0.82	-	82	19	4.9	2.00	3.2	30.6	1.962	28.6	68	6.0	0.40	0.46	2.7	2.6	5.1	5.8	7.1	9.6	11.2	12.8	1.07	0.19			-	-			2.6
1.8	18	3		J	2	0	**3**	6	0.82	-	82	19	4.9	2.00	3.2	32.4	2.943	29.5	68	6.1	0.40	0.46	2.8	2.6	5.1	5.8	7.1	9.6	11.2	12.8	1.07	0.19			-	-			2.6
1.9	18	2		J	2	0	**2**	4	0.58	-	58	19	3.3	2.00	2.1	34.2	3.924	30.3	62	5.6	0.41	0.45	2.5	1.6	3.4	3.8	4.7	6.4	7.5	8.5	0.88	0.16			-	-			1.6
2.0	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	36.0	4.905	31.1	56	5.1	0.41	0.44	2.3	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.1	18	3		J	2	0	**3**	6	0.78	-	78	19	4.9	3.00	3.0	37.8	5.886	31.9	68	6.3	0.40	0.46	2.9	2.4	4.8	5.4	6.6	9.1	10.6	12.1	1.04	0.19			-	-			2.4
2.2	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	39.6	6.867	32.7	62	5.8	0.41	0.45	2.6	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.3	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	41.4	7.848	33.6	62	5.9	0.41	0.45	2.6	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.4	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	43.2	8.829	34.4	62	6.0	0.41	0.45	2.7	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.5	18	2	0	J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	45.0	9.81	35.2	62	6.0	0.41	0.45	2.7	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.6	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	46.8	10.79	36.0	56	5.5	0.41	0.44	2.4	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.7	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	48.6	11.77	36.8	62	6.2	0.41	0.45	2.8	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.8	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	50.4	12.75	37.6	62	6.2	0.41	0.45	2.8	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.9	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	52.2	13.73	38.5	62	6.3	0.41	0.45	2.8	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
3.0	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	54.0	14.72	39.3	56	5.8	0.41	0.44	2.5	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.1	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	55.8	15.7	40.1	62	6.4	0.41	0.45	2.9	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.2	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	57.6	16.68	40.9	62	6.5	0.41	0.45	2.9	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.3	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	59.4	17.66	41.7	62	6.6	0.41	0.45	2.9	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.4	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	61.2	18.64	42.6	56	6.0	0.41	0.44	2.6	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.5	18	2	0	J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	63.0	19.62	43.4	62	6.7	0.41	0.45	3.0	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.6	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	64.8	20.6	44.2	68	7.4	0.40	0.45	3.4	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.7	18	6		Pjm	2	0	**6**	12	1.38	0.45	138	40	9.8	4.00	5.7	66.6	21.58	45.0	355	38.5	0.30	0.75	28.8	5.1	9.1	10.3	12.5	17.1	20.0	22.8	-	0.26			35	0.52			12.5
3.8	18	6		Pjm	2	0	**6**	12	1.38	0.45	138	40	9.8	4.00	5.7	68.4	22.56	45.8	355	38.8	0.30	0.75	29.0	5.1	9.1	10.3	12.5	17.1	20.0	22.8	-	0.26			35	0.52			12.5
3.9	18	7		Pjm	2	0	**7**	14	1.60	0.49	160	40	11.4	4.00	6.7	70.2	23.54	46.7	371	40.9	0.29	0.76	31.1	6.1	10.6	12.0	14.6	20.0	23.3	26.6	-	0.28			36	0.54			14.6
4.0	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	72.0	24.53	47.5	311	34.5	0.31	0.71	24.6	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.1	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	73.8	25.51	48.3	311	34.8	0.31	0.71	24.8	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.2	18	5		Pjm	2	0	**5**	10	1.11	0.40	111	39	8.2	5.00	4.5	75.6	26.49	49.1	335	37.7	0.31	0.73	27.6	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.3	18	5		Pjm	2	0	**5**	10	1.11	0.40	111	39	8.2	5.00	4.5	77.4	27.47	49.9	335	38.0	0.31	0.73	27.8	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.4	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	79.2	28.45	50.8	311	35.5	0.31	0.71	25.4	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.5	18	7	0	Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	81.0	29.43	51.6	371	42.7	0.29	0.76	32.3	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.6	18	6		Pjm	2	0	**6**	12	1.32	0.45	132	40	9.8	5.00	5.4	82.8	30.41	52.4	355	41.1	0.30	0.74	30.6	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.7	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	84.6	31.39	53.2	311	36.3	0.31	0.71	25.9	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.8	18	5		Pjm	2	0	**5**	10	1.11	0.40	111	39	8.2	5.00	4.5	86.4	32.37	54.0	335	39.3	0.31	0.73	28.7	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.9	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	88.2	33.35	54.8	371	43.9	0.29	0.76	33.1	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
5.0	18	10		P	2	0	**10**	20	-	0.59	203	41	16.4	6.00	8.6	90.0	34.34	55.7	410	48.8	0.28	0.78	37.9	8.0	13.7	15.4	18.8	25.7	30.0	34.2	-	0.33			37	0.58			25.7
5.1	18	12		P	2	0	**12**	24	-	0.64	241	42	19.6	6.00	10.3	91.8	35.32	56.5	430	51.4	0.28	0.79	40.6	9.7	16.4	18.5	22.6	30.8	36.0	41.1	-	0.38			38	0.61			30.8
5.2	18	13		P	2	0	**13**	26	-	0.67	260	42	21.3	6.00	11.1	93.6	36.3	57.3	438	52.8	0.27	0.79	41.9	10.6	17.8	20.0	24.5	33.4	38.9	44.5	-	0.40			39	0.63			33.4
5.3	18	11		P	2	0	**11**	22	-	0.62	222	41	18.0	6.00	9.4	95.4	37.28	58.1	420	50.9	0.28	0.78	39.9	8.8	15.1	16.9	20.7	28.2	33.0	37.7	-	0.35			38	0.60			28.2
5.4	18	12		P	2	0	**12**	24	-	0.64	241	42	19.6	6.00	10.3	97.2	38.26	58.9	430	52.4	0.28	0.79	41.3	9.7	16.4	18.5	22.6	30.8	36.0	41.1	-	0.38			38	0.61			30.8
5.5	18	12	0	P	2	0	**12**	24	-	0.64	241	42	19.6	6.00	10.3	99.0	39.24	59.8	430	52.7	0.28	0.79	41.6	9.7	16.4	18.5	22.6	30.8	36.0	41.1	-	0.38			38	0.61			30.8
5.6	18	17		P	2	0	**17**	34	-	0.77	337	43	27.8	6.00	14.6	100.8	40.22	60.6	467	57.7	0.26	0.81	46.8	14.0	23.3	26.2	32.0	43.7	50.9	58.2	-	0.49			40	0.67			43.7
5.7	18	11		P	2	0	**11**	22	-	0.62	222	41	18.0	6.00	9.4	102.6	41.2	61.4	420	52.2	0.28	0.78	40.8	8.8	15.1	16.9	20.7	28.2	33.0	37.7	-	0.35			38	0.60			28.2
5.8	18	8		P	2	0	**8**	16	-	0.53	164	40	13.1	6.00	6.8	104.4	42.18	62.2	386	48.2	0.29	0.76	36.7	6.3	11.0	12.3	15.1	20.5	24.0	27.4	-	0.29			36	0.55			20.5
5.9	18	12		P	2	0	**12**	24	-	0.64	241	42	19.6	6.00	10.3	106.2	43.16	63.0	430	54.0	0.28	0.79	42.6	9.7	16.4	18.5	22.6	30.8	36.0	41.1	-	0.38			38	0.61			30.8
6.0	18	8		P	2	0	**8**	16	-	0.53	157	40	13.1	7.00	6.5	108.0	44.15	63.9	386	48.7	0.29	0.76	36.9	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			19.6
6.1	18	10		P	2	0	**10**	20	-	0.59	193	41	16.4	7.00	8.2	109.8	45.13	64.7	410	52.1	0.28	0.77	40.3	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			24.5
6.2	18	10		P	2	0	**10**	20	-	0.59	193	41	16.4	7.00	8.2	111.6	46.11	65.5	410	52.4	0.28	0.77	40.5	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			24.5
6.3	18	9		Pjm	2	0	**9**	18	1.75	0.56	175	40	14.7	7.00	7.3	113.4	47.09	66.3	399	51.2	0.29	0.77	39.2	6.8	11.7	13.2	16.1	22.0	25.7	29.4	-	0.30			36	0.56			16.1
6.4	18	8		Pjm	2	0	**8**	16	1.57	0.53	157	40	13.1	7.00	6.5	115.2	48.07	67.1	386	49.8	0.29	0.76	37.8	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			14.4
6.5	18	6	0	Pjm	2	0	**6**	12	1.20	0.45	120	39	9.8	7.00	4.9	117.0	49.05	67.9	355	46.1	0.30	0.74	34.0	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
6.6	18	6		Pjm	2	0	**6**	12	1.20	0.45	120	39	9.8	7.00	4.9	118.8	50.03	68.8	355	46.3	0.30	0.74	34.1	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
6.7	18	9		Pjm	2	0	**9**	18	1.75	0.56	175	40	14.7	7.00	7.3	120.6	51.01	69.6	399	52.3	0.29	0.77	40.1	6.8	11.7	13.2	16.1	22.0	25.7	29.4	-	0.30			36	0.56			16.1
6.8	18	9		Pjm	2	0	**9**	18	1.75	0.56	175	40	14.7	7.00	7.3	122.4	51.99	70.4	399	52.6	0.29	0.77	40.3	6.8	11.7	13.2	16.1	22.0	25.7	29.4	-	0.30			36	0.56			16.1
6.9	18	7		Pjm	2	0	**7**	14	1.38	0.49	138	40	11.4	7.00	5.7	124.2	52.97	71.2	371	49.3	0.30	0.75	36.9	5.1	9.1	10.3	12.6	17.1	20.0	22.8	-	0.26			35	0.52			12.6
7.0	18	3		Pjm	2	0	**3**	6	0.63	0.28	63	38	4.9	8.00	2.3	126.0	53.96	72.0	280	37.3	0.33	0.68	25.3	1.8	3.7	4.2	5.1	7.0	8.2	9.3	-	0.17			31	0.37			5.1
7.1	18	4		Pjm	2	0	**4**	8	0.80	0.34	80	39	6.5	8.00	3.1	127.8	54.94	72.9	311	41.7	0.32	0.70	29.3	2.5	5.0	5.6	6.9	9.3	10.9	12.5	-	0.19			32	0.42			6.9
7.2	18	4		Pjm	2	0	**4**	8	0.80	0.34	80	39	6.5	8.00	3.1	129.6	55.92	73.7	311	41.9	0.32	0.70	29.4	2.5	5.0	5.6	6.9	9.3	10.9	12.5	-	0.19			32	0.42			6.9
7.3	18	5		Pjm	2	0	**5**	10	0.98	0.40	98	39	8.2	8.00	3.9	131.4	56.9	74.5	335	45.4	0.31	0.72	32.6	3.3	6.2	7.0	8.6	11.7	13.6	15.6	-	0.21			33	0.45			8.6
7.4	18	4		Pjm	2	0	**4**	8	0.80	0.34	80	39	6.5	8.00	3.1	133.2	57.88	75.3	311	42.3	0.32	0.70	29.7	2.5	5.0	5.6	6.9	9.3	10.9	12.5	-	0.19			32	0.42			6.9
7.5	18	5	0	Pjm	2	0	**5**	10	0.98	0.40	98	39	8.2	8.00	3.9	135.0	58.86	76.1	335	45.8	0.31	0.72	33.0	3.3	6.2	7.0	8.6	11.7	13.6	15.6	-	0.21			33	0.45			8.6
7.6	18	9		Pjm	2	0	**9**	18	1.68	0.56	168	40	14.7	8.00	7.0	136.8	59.84	77.0	399	54.8	0.29	0.76	41.8	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			15.4
7.7	18	25		Šjm	2	0	**25**	50	-	1.01	448	44	40.9	8.00	19.5	138.6	60.82	77.8	509	70.3	0.25	0.83	58.2	18.9	31.1	35.0	42.8	58.4	68.1	77.9	-	0.62			41	0.72			68.1
7.8	18	25		Šjm	2	0	**25**	50	-	1.01	448	44	40.9	8.00	19.5	140.4	61.8	78.6	509	70.6	0.25	0.83	58.4	18.9	31.1	35.0	42.8	58.4	68.1	77.9	-	0.62			41	0.72			68.1
7.9	18	29		Šjm	2	0	**29**	58	-	1.10	518	45	47.4	8.00	22.6	142.2	62.78	79.4	525	73.2	0.25	0.84	61.2	22.0	36.1	40.6	49.7	67.7	79.0	90.3	-	0.70			42	0.74			79.0
8.0	18	23		Šjm	2	0	**23**	46	-	0.94	413	44	37.6	8.00	17.9	144.0	63.76	80.2	500	70.0	0.26	0.82	57.6	17.3	28.7	32.2	39.4	53.7	62.7	71.6	-	0.58			41	0.71			62.7
8.1	18	17		Šjm	2	0	**17**	34	-	0.77	295	42	27.8	9.00	12.7	145.8	64.75	81.1	467	65.7	0.27	0.80	52.7	12.1	20.3	22.8	27.9	38.0	44.3	50.7	-	0.44			39	0.65			44.3
8.2	18	8		Pjm	2	0	**8**	16	1.44	0.53	144	40	13.1	9.00	6.0	147.6	65.73	81.9	386	54.5	0.30	0.75	41.0	5.4	9.5	10.7	13.1	17.9	20.9	23.8	-	0.26			35	0.52			13.1
8.3	18	9		Pjm	2	0	**9**	18	1.61	0.56	161	40	14.7	9.00	6.7	149.4	66.71	82.7	399	56.6	0.29	0.76	43.0	6.1	10.7	12.1	14.7	20.1	23.5	26.8	-	0.28			36	0.54			14.7
8.4	18	9		Pjm	2	0	**9**	18	1.61	0.56	161	40	14.7	9.00	6.7	151.2	67.69	83.5	399	56.8	0.29	0.76	43.2	6.1	10.7	12.1	14.7	20.1	23.5	26.8	-	0.28			36	0.54			14.7
8.5	18	8	0	Pjm	2	0	**8**	16	1.44	0.53	144	40	13.1	9.00	6.0	153.0	68.67	84.3	386	55.3	0.30	0.75	41.5	5.4	9.5	10.7	13.1	17.9	20.9	23.8	-	0.26			35	0.52			13.1
8.6	18	8		Pjm	2	0	**8**	16	1.44	0.53	144	40	13.1	9.00	6.0	154.8	69.65	85.1	386	55.5	0.30	0.75	41.7	5.4	9.5	10.7	13.1	17.9	20.9	23.8	-	0.26			35	0.52			13.1
8.7	18	8		Pjm	2	0	**8**	16	1.44	0.53	144	40	13.1	9.00	6.0	156.6	70.63	86.0	386	55.7	0.30	0.75	41.9	5.4	9.5	10.7	13.1	17.9	20.9	23.8	-	0.26			35	0.52			13.1
8.8	18	7		Pjm	2	0	**7**	14	1.27	0.49	127	40	11.4	9.00	5.2	158.4	71.61	86.8	371	53.9	0.30	0.74	40.0	4.6	8.3	9.4	11.5	15.6	18.2	20.9	-	0.24			35	0.50			11.5
8.9	18	13		Šjm	2	0	**13**	26	-	0.67	228	41	21.3	9.00	9.7	160.2	72.59	87.6	438	63.9	0.28	0.78	50.1	9.1	15.5	17.4	21.3	29.1	33.9	38.7	-	0.36			38	0.60			33.9
9.0	18	15		Šjm	2	0	**15**	30	-	0.71	261	42	24.5	9.00	11.2	162.0	73.57	88.4	454	66.4	0.27	0.79	52.7	10.6	17.9	20.1	24.6	33.5	39.1	44.7	-	0.40			39	0.63			39.1
9.1	18	20		Šjm	2	0	**20**	40	-	0.85	331	43	32.7	10.00	14.3	163.8	74.56	89.2	485	71.3	0.26	0.81	57.7	13.7	22.8	25.7	31.4	42.8	50.0	57.1	-	0.48			40	0.67			50.0
9.2	18	25		Šjm	2	0	**25**	50	-	1.01	412	44	40.9	10.00	17.8	165.6	75.54	90.1	509	75.1	0.26	0.82	61.8	17.3	28.6	32.1	39.3	53.5	62.5	71.4	-	0.58			41	0.71			62.5
9.3	18	25		Šjm	2	0	**25**	50	-	1.01	412	44	40.9	10.00	17.8	167.4	76.52	90.9	509	75.4	0.26	0.82	62.1	17.3	28.6	32.1	39.3	53.5	62.5	71.4	-	0.58			41	0.71			62.5
9.4	18	31		R	2	0	**31**	61	-	1.13	508	45	50.7	10.00	22.1	169.2	77.5	91.7	532	79.2	0.25	0.84	66.2	21.6	35.4	39.8	48.7	66.4	77.5	88.5	-	0.69			42	0.74			88.5
9.5	18	35	7	R	2	0	**35**	69	-	1.06	572	45	57.2	10.00	25.0	171.0	78.48	92.5	545	81.5	0.24	0.84	68.6	24.4	40.0	45.0	55.0	75.0	87.5	100.0	-	0.76			43	0.76			100.0
9.6	18	47		R	2	13	**34**	67	-	1.09	556	45	55.6	10.00	24.3	172.8	79.46	93.3	577	86.6	0.25	0.84	72.8	23.7	38.8	43.7	53.4	72.8	85.0	97.1	-	0.74			42	0.76			97.1
9.7	18	50		R	2	13	**37**	73	-	0.94	604	45	60.5	10.00	26.4	174.6	80.44	94.2	584	88.0	0.24	0.85	74.3	25.8	42.3	47.6	58.1	79.3	92.5	105.7	-	0.80			43	0.77			105.7
9.8	18	63		R	2	13	**50**	99	-	-2.53	813	45	81.8	10.00	35.7	176.4	81.42	95.0	609	92.1	0.23	0.86	79.3	35.1	57.1	64.3	78.5	107.1	124.9	142.8	-	1.04			44	0.82			142.8
9.9	18	97		R	2	13	**84**	167	-	-82.53	####	40	137.3	10.00	60.0	178.2	82.4	95.8	656	99.5	0.21	0.89	88.2	59.4	96.0	108.0	131.9	179.9	209.9	239.9	-	1.68			47	0.91			239.9
10.0	19	18	13	Šjm	2	13	**5**	10	-	0.40	90	39	8.2	10.00	3.6	180.1	83.38	96.7	474	72.2	0.31	0.71	51.5	3.0	5.7	6.4	7.9	10.7	12.5	14.3	-	0.20			33	0.44			12.5
10.1	19	19		Šjm	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	182.0	84.37	97.6	479	73.4	0.37	0.57	41.9	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.4
10.2	19	18		R	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	183.9	85.35	98.6	474	72.8	0.37	0.57	41.5	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.3	19	22		R	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	185.8	86.33	99.5	495	76.4	0.37	0.57	43.6	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.4	19	23		R	3	22	**1**	2	-	-	24	38	1.6	11.00	0.7	187.7	87.31	100.4	500	77.5	0.37	0.57	44.2	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.5	19	30	22	R	3	31	**1**	2	-	-	24	38	1.6	11.00	0.7	189.6	88.29	101.3	529	82.3	0.37	0.57	46.9	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.6	19	32		R	3	31	**1**	2	-	-	24	38	1.6	11.00	0.7	191.5	89.27	102.2	536	83.7	0.37	0.57	47.7	0.1	1.1	1.2	1.5	2.1	2.4	2.7	-	0.13			25	0.17			2.7
10.7	19	38		R	3	31	**7**	14	-	0.49	82	39	11.4	11.00	4.8	193.4	90.25	103.1	554	86.9	0.30	0.74	63.9	4.2	7.7	8.6	10.6	14.4	16.8	19.2	-	0.23			34	0.49			19.2
10.8	19	34		R	3	31	**3**	6	-	0.28	41	38	4.9	11.00	2.1	195.3	91.23	104.1	542	85.4	0.33	0.67	57.1	1.5	3.3	3.7	4.5	6.2	7.2	8.2	-	0.16			30	0.35			8.2
10.9	19	42		R	3	31	**11**	22	-	0.62	123	41	18.0	11.00	7.5	197.2	92.21	105.0	565	89.3	0.29	0.77	68.6	7.0	12.1	13.6	16.6	22.6	26.4	30.2	-	0.31			37	0.56			30.2
11.0	19	43	31	R	3	29	**14**	28	-	0.69	148	41	22.9	12.00	9.2	199.1	93.2	105.9	568	90.1	0.28	0.78	70.4	8.7	14.8	16.6	20.3	27.7	32.3	36.9	-	0.35			38	0.60			36.9
11.1	19	53		R	3	29	**24**	48	-	0.97	247	43	39.2	12.00	15.8	201.0	94.18	106.8	590	94.0	0.26	0.82	76.7	15.3	25.3	28.5	34.8	47.5	55.4	63.3	-	0.52			40	0.69			63.3
11.2	19	78		R	3	29	**49**	97	-	-2.02	495	46	80.1	12.00	32.3	202.9	95.16	107.7	632	101.0	0.23	0.86	86.5	31.7	51.7	58.1	71.1	96.9	113.1	129.2	-	0.95			44	0.80			129.2
11.3	19	100		R	3	29	**71**	141	-	-32.50	712	44	116.1	12.00	46.8	204.8	96.14	108.7	659	105.7	0.22	0.87	92.4	46.2	74.9	84.3	103.0	140.4	163.8	187.2	-	1.33			46	0.86			187.2



Projekce iGeO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 26.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

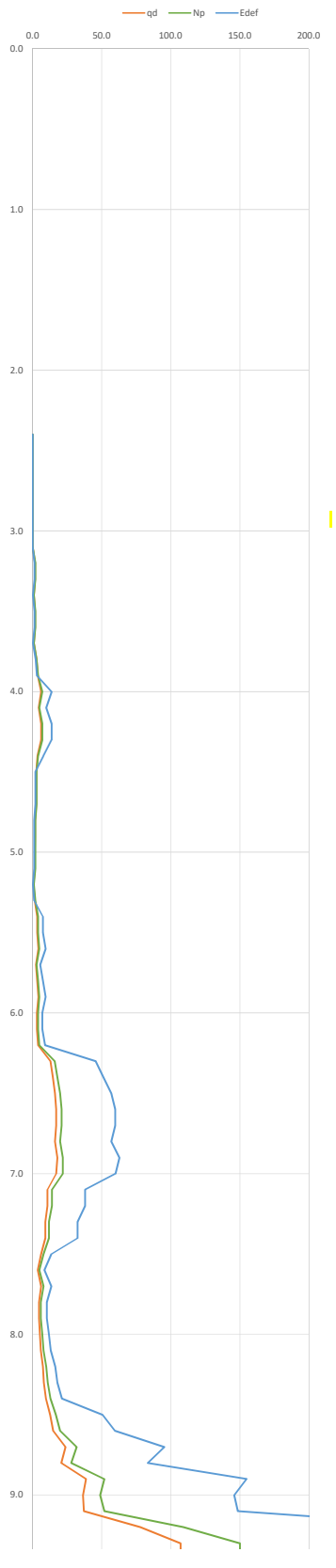
DPH 4

hloubka sondy	**H**	9.3	m	s	0.031	m
hladina vody	**HPV**	0	m	**pa**	101	kPa
obj. hm. vody	**γH2O**	9.81	kN/m3	**V**	100	kPa
hmotnost beranu	**Mh**	50	kg			
pád beranu	**Hh**	0.5	m			
hmotnost válce	**Ma**	17	kg			
hmotnost tyče	**Mt**	4.75				
gravit. zrychlení	**g**	9.81	m/s2			
úhel hrotu	**α**	90	deg			
průměr hrotu	**D**	0.04	m			
plocha kužele	**A**	0.002	m2			

Vyhodnotil: I. Poul **Prováděl:** J. Víšek
Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

	IC	ID	cu
přepočet	0.01	5	1

H	γ	Np	Npc	typ	S	Npcc	Nc	N60	IC	ID	cu	φef	rd	tyč	qd	σ	u	σvo'	w1	Eoed	ν	β	Edef	Edef								IC	ID	φef	cef	φef	ID	Eoed	Edef	Edef
(m)	kN/			zem.							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa										(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0				voda, vrtáno z volné hladiny													0.098																							
0.1																	0.981																							
0.2																	1.962																							
0.3																	2.943																							
0.4																	3.924																							
0.5																	4.905																							
0.6																	5.886																							
0.7																	6.867																							
0.8																	7.848																							
0.9																	8.829																							
1.0																	9.81																							
1.1																	10.79																							
1.2																	11.77																							
1.3																	12.75																							
1.4																	13.73																							
1.5																	14.72																							
1.6																	15.7																							
1.7																	16.68																							
1.8																	17.66																							
1.9																	18.64																							
2.0																	19.62																							
2.1																	20.6																							
2.2																	21.58																							
2.3																	22.56																							
2.4	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	1.8	23.54	1.8	51	3.4	0.41	0.43	1.5	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
2.5	18	0	0	J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	3.6	24.53	3.6	51	3.5	0.41	0.43	1.5	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
2.6	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	5.4	25.51	5.4	51	3.6	0.41	0.43	1.5	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
2.7	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	7.2	26.49	7.2	51	3.6	0.41	0.43	1.6	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
2.8	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	9.0	27.47	9.0	51	3.7	0.41	0.43	1.6	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
2.9	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	10.8	28.45	10.8	51	3.8	0.41	0.43	1.6	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.0	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	12.6	29.43	12.6	51	3.8	0.41	0.43	1.7	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.1	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	14.4	30.41	14.4	51	3.9	0.41	0.43	1.7	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.2	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	16.2	31.39	16.2	62	4.9	0.41	0.45	2.2	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.3	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	18.0	32.37	18.0	62	4.9	0.41	0.45	2.2	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.4	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	19.8	33.35	19.8	56	4.5	0.41	0.44	2.0	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.5	18	2	0	J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	21.6	34.34	21.6	62	5.1	0.41	0.45	2.3	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.6	18	2		J	2	0	**2**	4	0.53	-	53	19	3.3	4.00	1.9	23.4	35.32	23.4	62	5.2	0.41	0.45	2.3	1.3	3.0	3.4	4.2	5.7	6.7	7.6	0.83	0.16			-	-			1.3
3.7	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	4.00	1.0	25.2	36.3	25.2	56	4.7	0.41	0.44	2.1	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.8	18	3		J	2	0	**3**	6	0.74	-	74	19	4.9	4.00	2.9	27.0	37.28	27.0	68	5.8	0.40	0.45	2.7	2.3	4.6	5.1	6.3	8.6	10.0	11.4	1.01	0.18			-	-			2.3
3.9	18	4		J	2	0	**4**	8	0.96	-	96	19	6.5	4.00	3.8	28.8	38.26	28.8	74	6.4	0.40	0.46	3.0	3.2	6.1	6.8	8.4	11.4	13.3	15.2	1.17	0.21			-	-			3.2
4.0	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	30.6	39.24	30.6	371	33.5	0.29	0.76	25.3	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.1	18	5		Pjm	2	0	**5**	10	1.11	0.40	111	39	8.2	5.00	4.5	32.4	40.22	32.4	335	30.6	0.31	0.73	22.3	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.2	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	34.2	41.2	34.2	371	34.3	0.29	0.76	25.9	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.3	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	36.0	42.18	36.0	371	34.6	0.29	0.76	26.1	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.4	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	37.8	43.16	37.8	311	29.3	0.31	0.71	20.9	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.5	18	3	0	J	2	0	**3**	6	0.71	-	71	19	4.9	5.00	2.7	39.6	44.15	39.6	68	6.4	0.40	0.45	2.9	2.1	4.3	4.9	5.9	8.1	9.5	10.8	0.99	0.18			-	-			2.1
4.6	18	3		J	2	0	**3**	6	0.71	-	71	19	4.9	5.00	2.7	41.4	45.13	41.4	68	6.5	0.40	0.45	2.9	2.1	4.3	4.9	5.9	8.1	9.5	10.8	0.99	0.18			-	-			2.1
4.7	18	3		J	2	0	**3**	6	0.71	-	71	19	4.9	5.00	2.7	43.2	46.11	43.2	68	6.5	0.40	0.45	3.0	2.1	4.3	4.9	5.9	8.1	9.5	10.8	0.99	0.18			-	-			2.1
4.8	18	2		J	2	0	**2**	4	0.51	-	51	18	3.3	5.00	1.8	45.0	47.09	45.0	62	6.0	0.41	0.45	2.7	1.2	2.9	3.2	4.0	5.4	6.3	7.2	0.81	0.15			-	-			1.2
4.9	18	2		J	2	0	**2**	4	0.51	-	51	18	3.3	5.00	1.8	46.8	48.07	46.8	62	6.1	0.41	0.45	2.7	1.2	2.9	3.2	4.0	5.4	6.3	7.2	0.81	0.15			-	-			1.2
5.0	18	2		J	2	0	**2**	4	0.49	-	49	18	3.3	6.00	1.7	48.6	49.05	48.6	62	6.2	0.41	0.44	2.7	1.1	2.7	3.1	3.8	5.1	6.0	6.8	0.79	0.15			-	-			1.1
5.1	18	2		J	2	0	**2**	4	0.49	-	49	18	3.3	6.00	1.7	50.4	50.03	50.4	62	6.2	0.41	0.44	2.8	1.1	2.7	3.1	3.8	5.1	6.0	6.8	0.79	0.15			-	-			1.1
5.2	18	1		J	2	0	**1**	2	0.25	-	25	18	1.6	6.00	0.9	52.2	51.01	52.2	56	5.7	0.41	0.44	2.5	0.3	1.4	1.5	1.9	2.6	3.0	3.4	0.56	0.13			-	-			0.3
5.3	18	2		J	2	0	**2**	4	0.49	-	49	18	3.3	6.00	1.7	54.0	51.99	54.0	62	6.4	0.41	0.44	2.8	1.1	2.7	3.1	3.8	5.1	6.0	6.8	0.79	0.15			-	-			1.1
5.4	18	4		Pjm	2	0	**4**	8	0.87	0.34	87	39	6.5	6.00	3.4	55.8	52.97	55.8	311	32.1	0.32	0.71	22.8	2.9	5.5	6.2	7.5	10.3	12.0	13.7	-	0.20			33	0.43			7.5
5.5	18	4	0	Pjm	2	0	**4**	8	0.87	0.34	87	39	6.5	6.00	3.4	57.6	53.96	57.6	311	32.4	0.32	0.71	23.0	2.9	5.5	6.2	7.5	10.3	12.0	13.7	-	0.20			33	0.43			7.5
5.6	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	59.4	54.94	59.4	335	35.2	0.31	0.73	25.6	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.7	18	3		Pjm	2	0	**3**	6	0.68	0.28	68	38	4.9	6.00	2.6	61.2	55.92	61.2	280	29.7	0.32	0.69	20.4	2.0	4.1	4.6	5.6	7.7	9.0	10.3	-	0.17			31	0.39			5.6
5.8	18	4		Pjm	2	0	**4**	8	0.87	0.34	87	39	6.5	6.00	3.4	63.0	56.9	63.0	311	33.2	0.32	0.71	23.6	2.9	5.5	6.2	7.5	10.3	12.0	13.7	-	0.20			33	0.43			7.5
5.9	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	64.8	57.88	64.8	335	36.1	0.31	0.73	26.2	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
6.0	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	66.6	58.86	66.6	311	33.7	0.32	0.71	23.8	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.1	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	68.4	59.84	68.4	311	34.0	0.32	0.71	24.0	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.2	18	5		Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	70.2	60.82	70.2	335	36.9	0.31	0.72	26.7	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.3	18	16		Šjm	2	0	**16**	32	-	0.74	304	42	26.2	7.00	13.0	72.0	61.8	72.0	461	51.2	0.27	0.80	41.1	12.5	20.9	23.5	28.7	39.1	45.7	52.2	-	0.45			39	0.65			45.7
6.4	18	18		Šjm	2	0	**18**	36	-	0.79	340	43	29.4	7.00	14.7	73.8	62.78	73.8	474	53.0	0.26	0.81	43.0	14.1	23.5	26.4	32.3	44.0	51.4	58.7	-	0.49			40	0.67			51.4
6.5	18	20	0	Šjm	2	0	**20**	40	-	0.85	377	43	32.7	7.00	16.3	75.6	63.77	75.6	485	54.6	0.26	0.82	44.7	15.7	26.1	29.4	35.9	48.9	57.1	65.2	-	0.54			40	0.69			57.1
6.6	18	21		Šjm	2	0	**21**	42	-	0.88	395	44	34.3	7.00	17.1	77.4	64.75	77.4	490	55.6	0.26	0.82	45.6	16.6	27.4	30.8	37.7	51.4	59.9	68.5	-	0.56			41	0.70			59.9
6.7	18	21		Šjm	2	0	**21**	42	-	0.88	395	44	34.3	7.00	17.1	79.2	65.73	79.2	490	56.0	0.26	0.82	45.9	16.6	27.4	30.8	37.7	51.4	59.9	68.5	-	0.56			41	0.70			59.9
6.8	18	20		Šjm	2	0	**20**	40	-	0.85	377	43	32.7	7.00	16.3	81.0	66.71	81.0	485	55.8	0.26	0.82	45.6	15.7	26.1	29.4	35.9	48.9	57.1	65.2	-	0.54			40	0.69			57.1
6.9	18	22		Šjm	2	0	**22**	44	-	0.91	414	44	36.0	7.00	17.9	82.8	67.69	82.8	495	57.4	0.26	0.82	47.2	17.4	28.7	32.3	39.5	53.8	62.8	71.8	-	0.58			41	0.71			62.8
7.0	18	22		Šjm	2	0	**22**	44	-	0.91	395	44	36.0	8.00	17.1	84.6	68.67	84.6	495	57.7	0.26	0.82	47.4	16.6	27.4	30.8	37.7	51.4	60.0	68.5	-	0.56			41	0.70			60.0
7.1	18	14		Šjm	2	0	**14**	28	-	0.69	255	42	22.9	8.00	10.9	86.4	69.65	86.4	446	52.4	0.27	0.79	41.5	10.3	17.4	19.6	24.0	32.7	38.2	43.6	-	0.39			38	0.62			38.2
7.2	18	14		Šjm	2	0	**14**	28	-	0.69	255	42	22.9	8.00	10.9	88.2	70.63	88.2	446	52.7	0.27	0.79	41.8	10.3	17.4	19.6	24.0	32.7	38.2	43.6	-	0.39			38	0.62			38.2
7.3	18	12		Šjm	2	0	**12**	24	-	0.64	220	41	19.6	8.00	9.3	90.0	71.61	90.0	430	51.1	0.28	0.78	40.0	8.8	14.9	16.8	20.6	28.0	32.7	37.4	-	0.35			38	0.60			32.7
7.4	18	12		Šjm	2	0	**12**	24	-	0.64	220	41	19.6	8.00	9.3	91.8	72.59	91.8	430	51.4	0.28	0.78	40.2	8.8	14.9	16.8	20.6	28.0	32.7	37.4	-	0.35			38	0.60			32.7
7.5	18	8	0	Pjm	2	0	**8**	16	1.50	0.53	150	40	13.1	8.00	6.2	93.6	73.57	93.6	386	46.5	0.29	0.75	35.1	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			13.7
7.6	18	5		Pjm	2	0	**5**	10	0.98	0.40	98	39	8.2	8.00	3.9	95.4	74.56	95.4	335	40.6	0.31	0.72	29.2	3.3	6.2	7.0	8.6	11.7	13.6	15.6	-	0.21			33	0.45			8.6
7.7	18	8		Pjm	2	0	**8**	16	1.50	0.53	150	40	13.1	8.00	6.2	97.2	75.54	97.2	386	47.0	0.29	0.75	35.5	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			13.7
7.8	18	6		Pjm	2	0	**6**	12	1.15	0.45	115	39	9.8	8.00	4.7	99.0	76.52	99.0	355	43.5	0.30	0.73	31.9	4.1	7.5	8.4	10.3	14.0	16.4	18.7	-	0.23			34	0.48			10.3
7.9	18	6		Pjm	2	0	**6**	12	1.15	0.45	115	39	9.8	8.00	4.7	100.8	77.5	100.8	355	43.8	0.30	0.73	32.1	4.1	7.5	8.4	10.3	14.0	16.4	18.7	-	0.23			34	0.48			10.3
8.0	18	7		Pjm	2	0	**7**	14	1.33	0.49	133	40	11.4	8.00	5.5	102.6	78.48	102.6	371	46.1	0.30	0.74	34.3	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			12.0
8.1	18	8		Pjm	2	0	**8**	16	1.44	0.53	144	40	13.1	9.00	6.0	104.4	79.46	104.4	386	48.2	0.30	0.75	36.2	5.4	9.5	10.7	13.1	17.9	20.9	23.8	-	0.26			35	0.52			13.1
8.2	18	10		Pjm	2	0	**10**	20	1.78	0.59	178	40	16.4	9.00	7.4	106.2	80.44	106.2	410	51.5	0.29	0.77	39.5	6.9	11.9	13.4	16.4	22.3	26.1	29.8	-	0.30			37	0.56			16.4
8.3	18	11		Pjm	2	0	**11**	22	1.94	0.62	194	41	18.0	9.00	8.2	108.0	81.42	108.0	420	53.1	0.28	0.77	41.1	7.6	13.1	14.7	18.0	24.6	28.7	32.8	-	0.32			37	0.58			18.0
8.4	18	13		Pjm	2	0	**13**	26	2.28	0.67	228	41	21.3	9.00	9.7	109.8	82.4	109.8	438	55.7	0.28	0.78	43.7	9.1	15.5	17.4	21.3	29.1	33.9	38.7	-	0.36			38	0.60			21.3
8.5	18	17	0	R	2	0	**17**	34	-	0.77	295	42	27.8	9.00	12.7	111.6	83.38	111.6	467	59.7	0.27	0.80	47.9	12.1	20.3	22.8	27.9	38.0	44.3	50.7	-	0.44			39	0.65			50.7
8.6	18	20		R	2	0	**20**	40	-	0.85	345	43	32.7	9.00	14.9	113.4	84.37	113.4	485	62.3	0.26	0.81	50.6	14.3	23.8	26.8	32.8	44.7	52.1	59.6	-	0.50			40	0.68			59.6
8.7	18	32		R	2	0	**32**	63	-	1.12	546	45	52.3	9.00	23.8	115.2	85.35	115.2	536	69.2	0.25	0.84	58.1	23.3	38.1	42.9	52.4	71.5	83.4	95.3	-	0.73			42	0.75			95.3
8.8	18	28		R	2	0	**28**	56	-	1.08	479	44	45.8	9.00	20.9	117.0	86.33	117.0	521	67.7	0.25	0.83	56.3	20.3	33.4	37.5	45.9	62.6	73.0	83.4	-	0.65			42	0.73			83.4
8.9	18	52		R	2	0	**52**	103	-	-3.72	882	45	85.0	9.00	38.7	118.8	87.31	118.8	588	76.8	0.23	0.87	66.4	38.2	62.0	69.7	85.2	116.2	135.6	154.9	-	1.12			45	0.83			154.9
9.0	18	49		R	2	0	**49**	97	-	-2.02	831	45	80.1	9.00	36.5	120.6	88.29	120.6	582	76.4	0.23	0.86	65.8	35.9	58.4	65.7	80.3	109.5	127.7	146.0	-	1.06			44	0.82			146.0
9.1	18	52		R	2	0	**52**	103	-	-3.72	845	45	85.0	10.00	37.1	122.4	89.27	122.4	588	77.6	0.23	0.86	67.0	36.6	59.4	66.8	81.7	111.4	129.9	148.5	-	1.08			45	0.83			148.5
9.2	18	109		R	2	0	**109**	216	-	######	####	31	178.2	10.00	77.8	124.2	90.25	124.2	668	88.6	0.20	0.90	79.5	77.3	124.5	140.1	171.2	233.5	272.4	311.3	-	2.15			48	0.95			311.3
9.3	18	150		R	2	0	**150**	298	-	######	####	5	245.3	10.00	107.1	126.0	91.23	126.0	703	93.7	0.19	0.91	85.3	106.5	171.4	192.8	235.6	321.3	374.8	428.4	-	2.91			50	1.00			428.4



Projekce iGEO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 23.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 5

hloubka sondy	**H**	9.8	m	s	0.031	m
hladina vody	**HPV**	0.1	m	**pa**	101	kPa
obj. hm. vody	**γH2O**	9.81	kN/m3	**V**	100	kPa
hmotnost beranu	**Mh**	50	kg			
pád beranu	**Hh**	0.5	m			
hmotnost válce	**Ma**	17	kg			
hmotnost tyče	**Mt**	4.75				
gravit. zrychlení	**g**	9.81	m/s2			
úhel hrotu	**α**	90	deg			
průměr hrotu	**D**	0.04	m			
plocha kužele	**A**	0.002	m2			

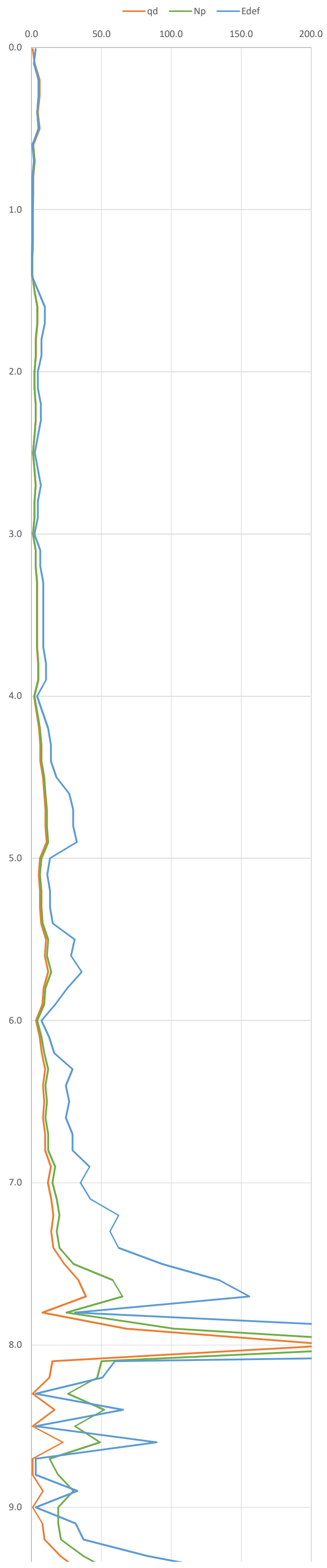
Vyhodnotil: I. Poul **Prováděl:** J. Víšek

Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

	IC	ID	cu
přepočet	0.01	5	1

podle qdyn

																				ČSN EN 1997-2	Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)	z Eoed (ČSN EN 1997-2)	Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	Konzistence (IC) podle qd	Ulehlost písek + štěrk	Stanoveno v laboratoři		Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001	Kombinace podle qdyn
H	**γ**	**Np**	**Npc**	**typ**	**S**	**Npcc**	**Nc**	**N60**	**IC**	**ID**	**cu**	**φef**	**rd**	**tyč**	**qd**	**σ**	**u**	**σvo'**	**w1**	**Eoed**	**ν**	**β**	**Edef**	**Edef**							**IC**	**ID**	**φef**	**cef**	**φef**	**ID**	**Eoed**	**Edef**	**Edef**
(m)	**kN/**			**zem.**							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa									(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0					2	0	**1**	1	0.29	-	29	18	1.2	1.00	0.9	0.0	0	0.0	#####	#####	0.41	0.44	#####	0.3	1.4	1.5	1.9	2.6	3.0	3.4	0.55	0.13			-	-			3.0
0.1	18	2		J	2	0	**2**	4	0.61	-	61	19	3.3	1.00	2.3	1.8	0	1.8	62	4.2	0.40	0.45	1.9	1.7	3.6	4.1	5.0	6.8	8.0	9.1	0.91	0.17			-	-			1.7
0.2	18	5		J	2	0	**5**	10	1.38	-	138	20	8.2	1.00	5.7	3.6	0.981	2.6	80	5.5	0.40	0.48	2.7	5.1	9.1	10.3	12.5	17.1	19.9	22.8	1.43	0.26			-	-			5.1
0.3	18	5		J	2	0	**5**	10	1.38	-	138	20	8.2	1.00	5.7	5.4	0	5.4	80	5.6	0.40	0.48	2.7	5.1	9.1	10.3	12.5	17.1	19.9	22.8	1.43	0.26			-	-			5.1
0.4	18	4		J	2	0	**4**	8	1.13	-	113	20	6.5	1.00	4.6	7.2	2.943	4.3	74	5.3	0.40	0.47	2.5	4.0	7.3	8.2	10.0	13.7	16.0	18.2	1.28	0.23			-	-			4.0
0.5	18	5	0	J	2	0	**5**	10	1.38	-	138	20	8.2	1.00	5.7	9.0	3.924	5.1	80	5.9	0.40	0.48	2.8	5.1	9.1	10.3	12.5	17.1	19.9	22.8	1.43	0.26			-	-			5.1
0.6	18	1		J	2	0	**1**	2	0.27	-	27	18	1.6	1.00	1.1	10.8	4.905	5.9	56	4.2	0.41	0.44	1.8	0.6	1.8	2.1	2.5	3.4	4.0	4.6	0.64	0.14			-	-			0.6
0.7	18	2		J	2	0	**2**	4	0.61	-	61	19	3.3	1.00	2.3	12.6	5.886	6.7	62	4.7	0.40	0.45	2.1	1.7	3.6	4.1	5.0	6.8	8.0	9.1	0.91	0.17			-	-			1.7
0.8	18	1		J	2	0	**1**	2	0.27	-	27	18	1.6	1.00	1.1	14.4	6.867	7.5	56	4.3	0.41	0.44	1.9	0.6	1.8	2.1	2.5	3.4	4.0	4.6	0.64	0.14			-	-			0.6
0.9	18	1		J	2	0	**1**	2	0.27	-	27	18	1.6	1.00	1.1	16.2	7.848	8.4	56	4.4	0.41	0.44	1.9	0.6	1.8	2.1	2.5	3.4	4.0	4.6	0.64	0.14			-	-			0.6
1.0	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	2.00	1.1	18.0	8.829	9.2	56	4.5	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.1	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	2.00	1.1	19.8	9.81	10.0	56	4.5	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.2	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	2.00	1.1	21.6	10.79	10.8	56	4.6	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.3	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	2.00	0.5	23.4	11.77	11.6	53	4.4	0.41	0.43	1.9	0.1	0.9	1.0	1.2	1.6	1.9	2.1	0.44	0.12			-	-			0.1
1.4	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	2.00	0.5	25.2	12.75	12.4	53	4.5	0.41	0.43	1.9	0.1	0.9	1.0	1.2	1.6	1.9	2.1	0.44	0.12			-	-			0.1
1.5	18	2	0	Pjm	2	0	**2**	4	0.58	-	58	38	3.3	2.00	2.1	27.0	13.73	13.3	236	20.8	0.33	0.67	14.0	1.6	3.4	3.8	4.7	6.4	7.5	8.5	-	0.16			30	0.36			4.7
1.6	18	4		Pjm	2	0	**4**	8	1.06	0.34	106	39	6.5	2.00	4.3	28.8	14.72	14.1	311	27.7	0.31	0.73	20.2	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
1.7	18	4		Pjm	2	0	**4**	8	1.06	0.34	106	39	6.5	2.00	4.3	30.6	15.7	14.9	311	28.1	0.31	0.73	20.4	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
1.8	18	3		Pjm	2	0	**3**	6	0.82	0.28	82	39	4.9	2.00	3.2	32.4	16.68	15.7	280	25.5	0.32	0.70	18.0	2.6	5.1	5.8	7.1	9.6	11.2	12.8	-	0.19			32	0.42			7.1
1.9	18	3		Pjm	2	0	**3**	6	0.82	0.28	82	39	4.9	2.00	3.2	34.2	17.66	16.5	280	25.8	0.32	0.70	18.2	2.6	5.1	5.8	7.1	9.6	11.2	12.8	-	0.19			32	0.42			7.1
2.0	18	2		Pjm	2	0	**2**	4	0.55	-	55	38	3.3	3.00	2.0	36.0	18.64	17.4	236	22.0	0.33	0.67	14.7	1.4	3.2	3.6	4.4	6.0	7.0	8.0	-	0.16			30	0.35			4.4
2.1	18	2		Pjm	2	0	**2**	4	0.55	-	55	38	3.3	3.00	2.0	37.8	19.62	18.2	236	22.2	0.33	0.67	14.8	1.4	3.2	3.6	4.4	6.0	7.0	8.0	-	0.16			30	0.35			4.4
2.2	18	3		Pjm	2	0	**3**	6	0.78	0.28	78	39	4.9	3.00	3.0	39.6	20.6	19.0	280	26.6	0.32	0.70	18.6	2.4	4.8	5.4	6.6	9.1	10.6	12.1	-	0.19			32	0.41			6.6
2.3	18	3		Pjm	2	0	**3**	6	0.78	0.28	78	39	4.9	3.00	3.0	41.4	21.58	19.8	280	26.9	0.32	0.70	18.8	2.4	4.8	5.4	6.6	9.1	10.6	12.1	-	0.19			32	0.41			6.6
2.4	18	2		Pjm	2	0	**2**	4	0.55	-	55	38	3.3	3.00	2.0	43.2	22.56	20.6	236	22.9	0.33	0.67	15.3	1.4	3.2	3.6	4.4	6.0	7.0	8.0	-	0.16			30	0.35			4.4
2.5	18	1	0	Pjm	2	0	**1**	2	0.26	-	26	38	1.6	3.00	1.0	45.0	23.54	21.5	161	15.8	0.36	0.61	9.6	0.4	1.6	1.8	2.2	3.0	3.5	4.0	-	0.13			27	0.23			2.2
2.6	18	2		Pjm	2	0	**2**	4	0.55	-	55	38	3.3	3.00	2.0	46.8	24.53	22.3	236	23.3	0.33	0.67	15.6	1.4	3.2	3.6	4.4	6.0	7.0	8.0	-	0.16			30	0.35			4.4
2.7	18	3		Pjm	2	0	**3**	6	0.78	0.28	78	39	4.9	3.00	3.0	48.6	25.51	23.1	280	27.9	0.32	0.70	19.5	2.4	4.8	5.4	6.6	9.1	10.6	12.1	-	0.19			32	0.41			6.6
2.8	18	2		Pjm	2	0	**2**	4	0.55	-	55	38	3.3	3.00	2.0	50.4	26.49	23.9	236	23.8	0.33	0.67	15.8	1.4	3.2	3.6	4.4	6.0	7.0	8.0	-	0.16			30	0.35			4.4
2.9	18	2		Pjm	2	0	**2**	4	0.55	-	55	38	3.3	3.00	2.0	52.2	27.47	24.7	236	24.0	0.33	0.67	16.0	1.4	3.2	3.6	4.4	6.0	7.0	8.0	-	0.16			30	0.35			4.4
3.0	18	1		Pjm	2	0	**1**	2	0.26	-	26	38	1.6	4.00	1.0	54.0	28.45	25.6	161	16.5	0.36	0.60	9.9	0.4	1.5	1.7	2.1	2.9	3.3	3.8	-	0.13			26	0.22			2.1
3.1	18	3		Pjm	2	0	**3**	6	0.74	0.28	74	39	4.9	4.00	2.9	55.8	29.43	26.4	280	28.9	0.32	0.70	20.1	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			6.3
3.2	18	3		Pjm	2	0	**3**	6	0.74	0.28	74	39	4.9	4.00	2.9	57.6	30.41	27.2	280	29.2	0.32	0.70	20.3	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			6.3
3.3	18	4		Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	59.4	31.39	28.0	311	32.7	0.31	0.72	23.5	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.4	18	4		Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	61.2	32.37	28.8	311	32.9	0.31	0.72	23.7	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.5	18	4	0	Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	63.0	33.35	29.6	311	33.2	0.31	0.72	23.8	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.6	18	4		Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	64.8	34.34	30.5	311	33.5	0.31	0.72	24.0	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.7	18	4		Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	66.6	35.32	31.3	311	33.7	0.31	0.72	24.2	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.8	18	5		Pjm	2	0	**5**	10	1.17	0.40	117	39	8.2	4.00	4.8	68.4	36.3	32.1	335	36.6	0.30	0.73	26.9	4.2	7.6	8.6	10.5	14.3	16.6	19.0	-	0.23			34	0.49			10.5
3.9	18	5		Pjm	2	0	**5**	10	1.17	0.40	117	39	8.2	4.00	4.8	70.2	37.28	32.9	335	36.9	0.30	0.73	27.1	4.2	7.6	8.6	10.5	14.3	16.6	19.0	-	0.23			34	0.49			10.5
4.0	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	72.0	38.26	33.7	236	26.2	0.34	0.66	17.2	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.1	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	73.8	39.24	34.6	311	34.8	0.31	0.71	24.8	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.2	18	6		Pjm	2	0	**6**	12	1.32	0.45	132	40	9.8	5.00	5.4	75.6	40.22	35.4	355	40.0	0.30	0.74	29.7	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.3	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	77.4	41.2	36.2	371	42.1	0.29	0.76	31.8	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.4	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	79.2	42.18	37.0	371	42.4	0.29	0.76	32.0	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.5	18	9	0	Pjm	2	0	**9**	18	1.92	0.56	192	41	14.7	5.00	8.1	81.0	43.16	37.8	399	45.9	0.29	0.77	35.4	7.5	13.0	14.6	17.8	24.3	28.4	32.4	-	0.32			37	0.58			17.8
4.6	18	10		P	2	0	**10**	20	-	0.59	213	41	16.4	5.00	9.0	82.8	44.15	38.7	410	47.5	0.28	0.78	37.0	8.4	14.4	16.2	19.8	27.0	31.5	36.0	-	0.34			37	0.59			27.0
4.7	18	11		P	2	0	**11**	22	-	0.62	233	41	18.0	5.00	9.9	84.6	45.13	39.5	420	49.0	0.28	0.79	38.5	9.3	15.9	17.8	21.8	29.7	34.7	39.6	-	0.37			38	0.61			29.7
4.8	18	11		P	2	0	**11**	22	-	0.62	233	41	18.0	5.00	9.9	86.4	46.11	40.3	420	49.3	0.28	0.79	38.8	9.3	15.9	17.8	21.8	29.7	34.7	39.6	-	0.37			38	0.61			29.7
4.9	18	12		P	2	0	**12**	24	-	0.64	253	42	19.6	5.00	10.8	88.2	47.09	41.1	430	50.8	0.27	0.79	40.2	10.2	17.3	19.5	23.8	32.4	37.8	43.2	-	0.39			38	0.62			32.4
5.0	18	7		Pjm	2	0	**7**	14	1.45	0.49	145	40	11.4	6.00	6.0	90.0	48.07	41.9	371	44.2	0.30	0.75	33.2	5.4	9.6	10.8	13.2	18.0	21.0	24.0	-	0.26			35	0.53			13.2
5.1	18	6		Pjm	2	0	**6**	12	1.26	0.45	126	40	9.8	6.00	5.1	91.8	49.05	42.7	355	42.5	0.30	0.74	31.4	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.2	18	7		Pjm	2	0	**7**	14	1.45	0.49	145	40	11.4	6.00	6.0	93.6	50.03	43.6	371	44.7	0.30	0.75	33.6	5.4	9.6	10.8	13.2	18.0	21.0	24.0	-	0.26			35	0.53			13.2
5.3	18	7		Pjm	2	0	**7**	14	1.45	0.49	145	40	11.4	6.00	6.0	95.4	51.01	44.4	371	45.0	0.30	0.75	33.8	5.4	9.6	10.8	13.2	18.0	21.0	24.0	-	0.26			35	0.53			13.2
5.4	18	8		Pjm	2	0	**8**	16	1.64	0.53	164	40	13.1	6.00	6.8	97.2	51.99	45.2	386	47.0	0.29	0.76	35.8	6.3	11.0	12.3	15.1	20.5	24.0	27.4	-	0.29			36	0.55			15.1
5.5	18	12	0	P	2	0	**12**	24	-	0.64	241	42	19.6	6.00	10.3	99.0	52.97	46.0	430	52.7	0.28	0.79	41.6	9.7	16.4	18.5	22.6	30.8	36.0	41.1	-	0.38			38	0.61			30.8
5.6	18	11		P	2	0	**11**	22	-	0.62	222	41	18.0	6.00	9.4	100.8	53.96	46.8	420	51.9	0.28	0.78	40.6	8.8	15.1	16.9	20.7	28.2	33.0	37.7	-	0.35			38	0.60			28.2
5.7	18	14		P	2	0	**14**	28	-	0.69	280	42	22.9	6.00	12.0	102.6	54.94	47.7	446	55.4	0.27	0.80	44.3	11.4	19.2	21.6	26.4	36.0	41.9	47.9	-	0.42			39	0.64			36.0
5.8	18	10		P	2	0	**10**	20	-	0.59	203	41	16.4	6.00	8.6	104.4	55.92	48.5	410	51.2	0.28	0.78	39.8	8.0	13.7	15.4	18.8	25.7	30.0	34.2	-	0.33			37	0.58			25.7
5.9	18	9		Pjm	2	0	**9**	18	1.83	0.56	183	41	14.7	6.00	7.7	106.2	56.9	49.3	399	50.1	0.29	0.77	38.5	7.1	12.3	13.9	16.9	23.1	27.0	30.8	-	0.31			37	0.57			16.9
6.0	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	108.0	57.88	50.1	311	39.3	0.32	0.71	27.7	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.1	18	7		Pjm	2	0	**7**	14	1.38	0.49	138	40	11.4	7.00	5.7	109.8	58.86	50.9	371	47.2	0.30	0.75	35.3	5.1	9.1	10.3	12.6	17.1	20.0	22.8	-	0.26			35	0.52			12.6
6.2	18	9		Pjm	2	0	**9**	18	1.75	0.56	175	40	14.7	7.00	7.3	111.6	59.84	51.8	399	50.9	0.29	0.77	39.0	6.8	11.7	13.2	16.1	22.0	25.7	29.4	-	0.30			36	0.56			16.1
6.3	18	12		P	2	0	**12**	24	-	0.64	230	41	19.6	7.00	9.8	113.4	60.82	52.6	430	55.2	0.28	0.79	43.4	9.2	15.7	17.6	21.5	29.4	34.2	39.1	-	0.36			38	0.61			29.4
6.4	18	10		P	2	0	**10**	20	-	0.59	193	41	16.4	7.00	8.2	115.2	61.8	53.4	410	53.0	0.28	0.77	40.9	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			24.5
6.5	18	11	0	P	2	0	**11**	22	-	0.62	212	41	18.0	7.00	9.0	117.0	62.78	54.2	420	54.6	0.28	0.78	42.6	8.4	14.4	16.1	19.7	26.9	31.4	35.9	-	0.34			37	0.59			26.9
6.6	18	10		P	2	0	**10**	20	-	0.59	193	41	16.4	7.00	8.2	118.8	63.77	55.0	410	53.5	0.28	0.77	41.4	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			24.5
6.7	18	12		P	2	0	**12**	24	-	0.64	230	41	19.6	7.00	9.8	120.6	64.75	55.9	430	56.4	0.28	0.79	44.3	9.2	15.7	17.6	21.5	29.4	34.2	39.1	-	0.36			38	0.61			29.4
6.8	18	12		P	2	0	**12**	24	-	0.64	230	41	19.6	7.00	9.8	122.4	65.73	56.7	430	56.7	0.28	0.79	44.5	9.2	15.7	17.6	21.5	29.4	34.2	39.1	-	0.36			38	0.61			29.4
6.9	18	17		P	2	0	**17**	34	-	0.77	322	43	27.8	7.00	13.9	124.2	66.71	57.5	467	62.0	0.27	0.81	50.1	13.3	22.2	25.0	30.5	41.6	48.5	55.5	-	0.47			40	0.66			41.6
7.0	18	15		P	2	0	**15**	30	-	0.71	273	42	24.5	8.00	11.7	126.0	67.69	58.3	454	60.5	0.27	0.80	48.2	11.1	18.7	21.0	25.7	35.0	40.9	46.7	-	0.41			39	0.64			35.0
7.1	18	18		P	2	0	**18**	36	-	0.79	325	43	29.4	8.00	14.0	127.8	68.67	59.1	474	63.5	0.27	0.81	51.3	13.4	22.4	25.2	30.8	42.0	49.1	56.1	-	0.47			40	0.67			42.0
7.2	18	20		Š	2	0	**20**	40	-	0.85	360	43	32.7	8.00	15.6	129.6	69.65	59.9	485	65.3	0.26	0.81	53.2	15.0	24.9	28.0	34.3	46.7	54.5	62.3	-	0.52			40	0.68			62.3
7.3	18	18		Š	2	0	**18**	36	-	0.79	325	43	29.4	8.00	14.0	131.4	70.63	60.8	474	64.1	0.27	0.81	51.8	13.4	22.4	25.2	30.8	42.0	49.1	56.1	-	0.47			40	0.67			56.1
7.4	18	20		Š	2	0	**20**	40	-	0.85	360	43	32.7	8.00	15.6	133.2	71.61	61.6	485	66.0	0.26	0.81	53.7	15.0	24.9	28.0	34.3	46.7	54.5	62.3	-	0.52			40	0.68			62.3
7.5	18	30	15	Š	2	0	**30**	60	-	1.12	536	45	49.1	8.00	23.4	135.0	72.59	62.4	529	72.3	0.25	0.84	60.6	22.8	37.4	42.0	51.4	70.1	81.8	93.4	-	0.72			42	0.75			93.4
7.6	18	58		Š	2	15	**43**	85	-	0.07	763	46	70.3	8.00	33.5	136.8	73.57	63.2	600	82.4	0.23	0.86	70.7	32.9	53.6	60.3	73.7	100.4	117.2	133.9	-	0.98			44	0.81			133.9
7.7	18	65		Š	2	15	**50**	99	-	-2.53	886	45	81.8	8.00	38.9	138.6	74.56	64.0	612	84.5	0.23	0.87	73.1	38.4	62.3	70.1	85.6	116.8	136.3	155.7	-	1.13			45	0.83			155.7
7.8	18	25		Š	2	15	**10**	20	-	0.59	185	41	16.4	8.00	7.8	140.4	75.54	64.9	509	70.6	0.29	0.77	54.4	7.2	12.5	14.0	17.1	23.4	27.3	31.1	-	0.31			37	0.57			31.1
7.9	18	102		Š	2	15	**87**	173	-	-99.31	####	37	142.2	8.00	67.7	142.2	76.52	65.7	661	92.1	0.21	0.89	82.1	67.2	108.4	121.9	149.0	203.2	237.1	270.9	-	1.88			48	0.93			270.9
8.0	18	295	30	Š	2	15	**280**	555	-	######	####	-207	457.8	8.00	218.0	144.0	77.5	66.5	776	108.6	0.16	0.93	101.6	217.4	348.8	392.4	479.6	654.0	763.0	872.0	-	5.82			53	1.12			872.0
8.1	18	50		R	2	30	**20**	40	-	0.85	345	43	32.7	9.00	14.9	145.8	78.48	67.3	584	82.1	0.26	0.81	66.7	14.3	23.8	26.8	32.8	44.7	52.1	59.6	-	0.50			40	0.68			59.6
8.2	18	47		R	2	30	**17**	34	-	0.77	295	42	27.8	9.00	12.7	147.6	79.46	68.1	577	81.6	0.27	0.80	65.4	12.1	20.3	22.8	27.9	38.0	44.3	50.7	-	0.44			39	0.65			50.7
8.3	18	26		R	2	30	**1**	2	-	-	24	38	1.6	9.00	0.7	149.4	80.44	69.0	513	72.8	0.37	0.58	42.1	0.2	1.2	1.3	1.6	2.2	2.6	3.0	-	0.13			25	0.18			3.0
8.4	18	52		R	2	30	**22**	44	-	0.91	379	43	36.0	9.00	16.4	151.2	81.42	69.8	588	83.9	0.26	0.82	68.6	15.8	26.2	29.5	36.1	49.2	57.4	65.5	-	0.54			40	0.69			65.5
8.5	18	31	19	R	2	30	**1**	2	-	-	24	38	1.6	9.00	0.7	153.0	82.4	70.6	532	76.2	0.37	0.58	44.1	0.2	1.2	1.3	1.6	2.2	2.6	3.0	-	0.13			25	0.18			3.0
8.6	18	49		R	2	19	**30**	60	-	1.12	513	45	49.1	9.00	22.3	154.8	83.38	71.4	582	83.7	0.25	0.84	69.9	21.8	35.8	40.2	49.2	67.0	78.2	89.4	-	0.69			42	0.74			89.4
8.7	18	13		R	2	19	**1**	2	-	-	24	38	1.6	9.00	0.7	156.6	84.37	72.2	438	63.3	0.37	0.58	36.6	0.2	1.2	1.3	1.6	2.2	2.6	3.0	-	0.13			25	0.18			3.0
8.8	18	19		R	2	19	**1**	2	-	-	24	38	1.6	9.00	0.7	158.4	85.35	73.1	479	69.6	0.37	0.58	40.2	0.2	1.2	1.3	1.6	2.2	2.6	3.0	-	0.13			25	0.18			3.0
8.9	18	30		R	2	19	**11**	22	-	0.62	194	41	18.0	9.00	8.2	160.2	86.33	73.9	529	77.0	0.28	0.77	59.6	7.6	13.1	14.7	18.0	24.6	28.7	32.8	-	0.32			37	0.58			32.8
9.0	18	19	8	R	2	19	**1**	2	-	-	24	38	1.6	9.00	0.7	162.0	87.31	74.7	479	70.2	0.37	0.58	40.6	0.2	1.2	1.3	1.6	2.2	2.6	3.0	-	0.13			25	0.18			3.0
9.1	18	19		R	2	8	**11**	22	-	0.62	187	41	18.0	10.00	7.9	163.8	88.29	75.5	479	70.4	0.29	0.77	54.3	7.3	12.6	14.1	17.3	23.6	27.5	31.4	-	0.31			37	0.57			31.4
9.2	18	21		R	2	8	**13**	26	-	0.67	219	41	21.3	10.00	9.3	165.6	89.27	76.3	490	72.3	0.28	0.78	56.6	8.7	14.9	16.7	20.4	27.8	32.5	37.1	-	0.35			38	0.60			37.1
9.3	18	37		R	2	8	**29**	58	-	1.10	476	44	47.4	10.00	20.7	167.4	90.25	77.1	551	81.7	0.25	0.83	67.9	20.1	33.1	37.3	45.6	62.1	72.5	82.8	-	0.65			42	0.73			82.8



Projekce iGEO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 26.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 6

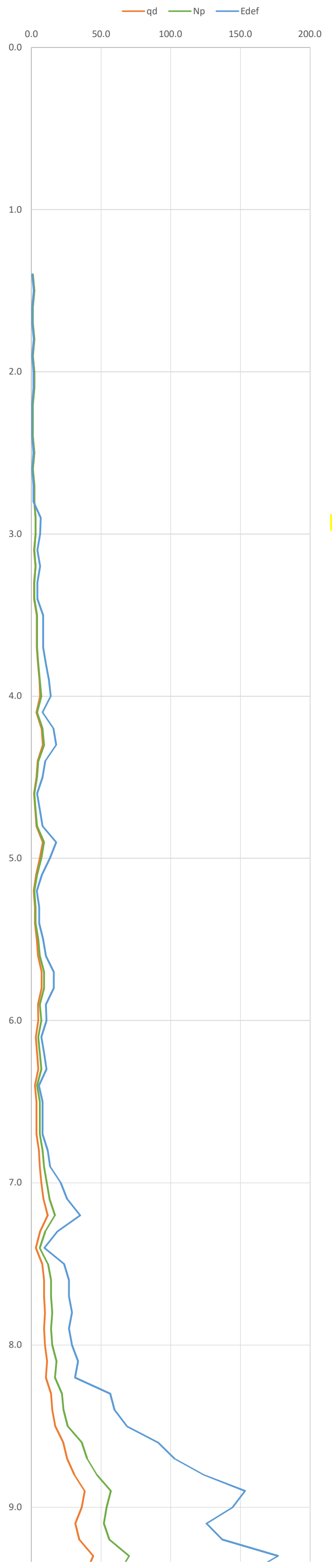
hloubka sondy	**H**	9.9	m	s	0.031	m
hladina vody	**HPV**	0	m	**pa**	101	kPa
obj. hm. vody	**γH2O**	9.81	kN/m3	**V**	100	kPa
hmotnost beranu	**Mh**	50	kg			
pád beranu	**Hh**	0.5	m			
hmotnost válce	**Ma**	17	kg			
hmotnost tyče	**Mt**	4.75				
gravit. zrychlení	**g**	9.81	m/s2			
úhel hrotu	**α**	90	deg			
průměr hrotu	**D**	0.04	m			
plocha kužele	**A**	0.002	m2			

Vyhodnotil: I. Poul **Prováděl:** J. Víšek

Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

	IC	ID	cu
přepočet	0.01	5	1

																				ČSN EN 1997-2	Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)	z Eoed (ČSN EN 1997-2)	Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	Konzistence (IC) podle qd	Ulehlost písek + štěrk	Stanoveno v laboratoři		Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001	Kombinace podle qdyn
																								podle qdyn															
H	**γ**	**Np**	**Npc**	**typ**	**S**	**Npcc**	**Nc**	**N60**	**IC**	**ID**	**cu**	**φef**	**rd**	**tyč**	**qd**	**σ**	**u**	**σvo'**	**w1**	**Eoed**	**ν**	**β**	**Edef**	**Edef**							**IC**	**ID**	**φef**	**cef**	**φef**	**ID**	**Eoed**	**Edef**	**Edef**
(m)	**kN/**			**zem.**							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa									(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0				voda, penetrováno z volné hladiny													0.098																						
0.1																	0.981																						
0.2																	1.962																						
0.3																	2.943																						
0.4																	3.924																						
0.5																	4.905																						
0.6																	5.886																						
0.7																	6.867																						
0.8																	7.848																						
0.9																	8.829																						
1.0																	9.81																						
1.1																	10.79																						
1.2																	11.77																						
1.3																	12.75																						
1.4	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	2.00	1.1	15.5	13.73	15.5	56	4.4	0.41	0.44	1.9	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.5	18	2	0	J	2	0	**2**	4	0.58	-	58	19	3.3	2.00	2.1	17.3	14.72	17.3	62	4.9	0.41	0.45	2.2	1.6	3.4	3.8	4.7	6.4	7.5	8.5	0.88	0.16			-	-			1.6
1.6	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	2.00	1.1	19.1	15.7	19.1	56	4.5	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.7	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	2.00	1.1	20.9	16.68	20.9	56	4.6	0.41	0.44	2.0	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.8	18	2		J	2	0	**2**	4	0.58	-	58	19	3.3	2.00	2.1	22.7	17.66	22.7	62	5.1	0.41	0.45	2.3	1.6	3.4	3.8	4.7	6.4	7.5	8.5	0.88	0.16			-	-			1.6
1.9	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	2.00	1.1	24.5	18.64	24.5	56	4.7	0.41	0.44	2.1	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
2.0	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	26.3	19.62	26.3	62	5.3	0.41	0.45	2.4	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.1	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	28.1	20.6	28.1	62	5.4	0.41	0.45	2.4	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.2	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	29.9	21.58	29.9	56	4.9	0.41	0.44	2.2	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.3	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	31.7	22.56	31.7	56	5.0	0.41	0.44	2.2	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.4	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	33.5	23.54	33.5	56	5.0	0.41	0.44	2.2	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.5	18	2	0	J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	35.3	24.53	35.3	62	5.7	0.41	0.45	2.5	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.6	18	1		J	2	0	**1**	2	0.26	-	26	18	1.6	3.00	1.0	37.1	25.51	37.1	56	5.2	0.41	0.44	2.3	0.4	1.6	1.8	2.2	3.0	3.5	4.0	0.60	0.13			-	-			0.4
2.7	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	38.9	26.49	38.9	62	5.8	0.41	0.45	2.6	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.8	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	40.7	27.47	40.7	62	5.9	0.41	0.45	2.6	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.9	18	3		Pjm	2	0	**3**	6	0.78	0.28	78	39	4.9	3.00	3.0	42.5	28.45	42.5	280	27.0	0.32	0.70	18.9	2.4	4.8	5.4	6.6	9.1	10.6	12.1	-	0.19			32	0.41			6.6
3.0	18	3		Pjm	2	0	**3**	6	0.74	0.28	74	39	4.9	4.00	2.9	44.3	29.43	44.3	280	27.3	0.32	0.70	19.0	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			6.3
3.1	18	2		Pjm	2	0	**2**	4	0.53	-	53	38	3.3	4.00	1.9	46.1	30.41	46.1	236	23.3	0.34	0.66	15.4	1.3	3.0	3.4	4.2	5.7	6.7	7.6	-	0.16			30	0.34			4.2
3.2	18	3		Pjm	2	0	**3**	6	0.74	0.28	74	39	4.9	4.00	2.9	47.9	31.39	47.9	280	27.8	0.32	0.70	19.4	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			6.3
3.3	18	2		Pjm	2	0	**2**	4	0.53	-	53	38	3.3	4.00	1.9	49.7	32.37	49.7	236	23.7	0.34	0.66	15.7	1.3	3.0	3.4	4.2	5.7	6.7	7.6	-	0.16			30	0.34			4.2
3.4	18	2		Pjm	2	0	**2**	4	0.53	-	53	38	3.3	4.00	1.9	51.5	33.35	51.5	236	23.9	0.34	0.66	15.8	1.3	3.0	3.4	4.2	5.7	6.7	7.6	-	0.16			30	0.34			4.2
3.5	18	4	0	Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	53.3	34.34	53.3	311	31.8	0.31	0.72	22.8	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.6	18	4		Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	55.1	35.32	55.1	311	32.0	0.31	0.72	23.0	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.7	18	4		Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	56.9	36.3	56.9	311	32.3	0.31	0.72	23.2	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.8	18	5		Pjm	2	0	**5**	10	1.17	0.40	117	39	8.2	4.00	4.8	58.7	37.28	58.7	335	35.1	0.30	0.73	25.8	4.2	7.6	8.6	10.5	14.3	16.6	19.0	-	0.23			34	0.49			10.5
3.9	18	6		Pjm	2	0	**6**	12	1.38	0.45	138	40	9.8	4.00	5.7	60.5	38.26	60.5	355	37.5	0.30	0.75	28.0	5.1	9.1	10.3	12.5	17.1	20.0	22.8	-	0.26			35	0.52			12.5
4.0	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	62.3	39.24	62.3	371	39.6	0.29	0.76	29.9	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.1	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	64.1	40.22	64.1	311	33.4	0.31	0.71	23.8	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.2	18	8		Pjm	2	0	**8**	16	1.72	0.53	172	40	13.1	5.00	7.2	65.9	41.2	65.9	386	41.8	0.29	0.76	31.9	6.6	11.5	13.0	15.9	21.6	25.2	28.8	-	0.30			36	0.56			15.9
4.3	18	9		Pjm	2	0	**9**	18	1.92	0.56	192	41	14.7	5.00	8.1	67.7	42.18	67.7	399	43.5	0.29	0.77	33.6	7.5	13.0	14.6	17.8	24.3	28.4	32.4	-	0.32			37	0.58			17.8
4.4	18	5		Pjm	2	0	**5**	10	1.11	0.40	111	39	8.2	5.00	4.5	69.5	43.16	69.5	335	36.8	0.31	0.73	26.9	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.5	18	4	0	Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	71.3	44.15	71.3	311	34.4	0.31	0.71	24.6	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.6	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	73.1	45.13	73.1	236	26.3	0.34	0.66	17.3	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.7	18	3		Pjm	2	0	**3**	6	0.71	0.28	71	38	4.9	5.00	2.7	74.9	46.11	74.9	280	31.4	0.32	0.69	21.7	2.1	4.3	4.9	5.9	8.1	9.5	10.8	-	0.18			31	0.39			5.9
4.8	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	76.7	47.09	76.7	311	35.2	0.31	0.71	25.1	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.9	18	9		Pjm	2	0	**9**	18	1.92	0.56	192	41	14.7	5.00	8.1	78.5	48.07	78.5	399	45.4	0.29	0.77	35.1	7.5	13.0	14.6	17.8	24.3	28.4	32.4	-	0.32			37	0.58			17.8
5.0	18	7		Pjm	2	0	**7**	14	1.45	0.49	145	40	11.4	6.00	6.0	80.3	49.05	80.3	371	42.6	0.30	0.75	32.0	5.4	9.6	10.8	13.2	18.0	21.0	24.0	-	0.26			35	0.53			13.2
5.1	18	4		Pjm	2	0	**4**	8	0.87	0.34	87	39	6.5	6.00	3.4	82.1	50.03	82.1	311	35.9	0.32	0.71	25.5	2.9	5.5	6.2	7.5	10.3	12.0	13.7	-	0.20			33	0.43			7.5
5.2	18	2		Pjm	2	0	**2**	4	0.49	-	49	38	3.3	6.00	1.7	83.9	51.01	83.9	236	27.4	0.34	0.65	17.9	1.1	2.7	3.1	3.8	5.1	6.0	6.8	-	0.15			29	0.32			3.8
5.3	18	3		Pjm	2	0	**3**	6	0.68	0.28	68	38	4.9	6.00	2.6	85.7	51.99	85.7	280	32.8	0.32	0.69	22.5	2.0	4.1	4.6	5.6	7.7	9.0	10.3	-	0.17			31	0.39			5.6
5.4	18	3		Pjm	2	0	**3**	6	0.68	0.28	68	38	4.9	6.00	2.6	87.5	52.97	87.5	280	33.0	0.32	0.69	22.7	2.0	4.1	4.6	5.6	7.7	9.0	10.3	-	0.17			31	0.39			5.6
5.5	18	5	1	Pjm	2	1	**5**	9	0.97	0.37	97	39	7.4	6.00	3.9	89.3	53.96	89.3	335	39.7	0.31	0.72	28.6	3.3	6.2	6.9	8.5	11.6	13.5	15.4	-	0.21			33	0.45			8.5
5.6	18	6		Pjm	2	1	**6**	11	1.16	0.43	116	39	9.0	6.00	4.7	91.1	54.94	91.1	355	42.4	0.30	0.73	31.1	4.1	7.5	8.5	10.4	14.1	16.5	18.8	-	0.23			34	0.49			10.4
5.7	18	9		Pjm	2	1	**9**	17	1.74	0.55	174	40	13.9	6.00	7.3	92.9	55.92	92.9	399	47.9	0.29	0.77	36.7	6.7	11.6	13.1	16.0	21.8	25.5	29.1	-	0.30			36	0.56			16.0
5.8	18	9		Pjm	2	1	**9**	17	1.74	0.55	174	40	13.9	6.00	7.3	94.7	56.9	94.7	399	48.2	0.29	0.77	36.9	6.7	11.6	13.1	16.0	21.8	25.5	29.1	-	0.30			36	0.56			16.0
5.9	18	6		Pjm	2	1	**6**	11	1.16	0.43	116	39	9.0	6.00	4.7	96.5	57.88	96.5	355	43.2	0.30	0.73	31.7	4.1	7.5	8.5	10.4	14.1	16.5	18.8	-	0.23			34	0.49			10.4
6.0	18	7	1	Pjm	2	1	**6**	12	1.20	0.45	120	39	9.8	7.00	4.9	98.3	58.86	98.3	371	45.5	0.30	0.74	33.5	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
6.1	18	5		Pjm	2	1	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	100.1	59.84	100.1	335	41.3	0.32	0.71	29.1	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.2	18	6		Pjm	2	1	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	101.9	60.82	101.9	355	43.9	0.31	0.72	31.8	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.3	18	7		Pjm	2	1	**6**	12	1.20	0.45	120	39	9.8	7.00	4.9	103.7	61.8	103.7	371	46.3	0.30	0.74	34.1	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
6.4	18	4		Pjm	2	1	**3**	6	0.65	0.28	65	38	4.9	7.00	2.4	105.5	62.78	105.5	311	39.0	0.33	0.68	26.6	1.9	3.9	4.4	5.4	7.3	8.6	9.8	-	0.17			31	0.38			5.4
6.5	18	6	2	Pjm	2	2	**5**	9	0.93	0.37	93	39	7.4	7.00	3.7	107.3	63.77	107.3	355	44.7	0.31	0.72	32.0	3.1	5.9	6.6	8.1	11.0	12.8	14.7	-	0.20			33	0.44			8.1
6.6	18	6		Pjm	2	2	**5**	9	0.93	0.37	93	39	7.4	7.00	3.7	109.1	64.75	109.1	355	45.0	0.31	0.72	32.2	3.1	5.9	6.6	8.1	11.0	12.8	14.7	-	0.20			33	0.44			8.1
6.7	18	6		Pjm	2	2	**5**	9	0.93	0.37	93	39	7.4	7.00	3.7	110.9	65.73	110.9	355	45.2	0.31	0.72	32.4	3.1	5.9	6.6	8.1	11.0	12.8	14.7	-	0.20			33	0.44			8.1
6.8	18	8		Pjm	2	2	**7**	13	1.29	0.47	129	40	10.6	7.00	5.3	112.7	66.71	112.7	386	49.5	0.30	0.74	36.7	4.7	8.5	9.5	11.7	15.9	18.6	21.2	-	0.25			35	0.51			11.7
6.9	18	9		Pjm	2	2	**8**	15	1.48	0.51	148	40	12.3	7.00	6.1	114.5	67.69	114.5	399	51.4	0.29	0.75	38.7	5.5	9.8	11.0	13.5	18.3	21.4	24.5	-	0.27			36	0.53			13.5
7.0	18	11	2	P	2	2	**9**	18	-	0.56	168	40	14.7	8.00	7.0	116.3	68.67	116.3	420	54.5	0.29	0.76	41.6	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			21.0
7.1	18	13		P	2	2	**11**	22	-	0.62	203	41	18.0	8.00	8.6	118.1	69.65	118.1	438	57.1	0.28	0.78	44.4	8.0	13.7	15.4	18.8	25.7	30.0	34.3	-	0.33			37	0.58			25.7
7.2	18	17		P	2	2	**15**	30	-	0.71	273	42	24.5	8.00	11.7	119.9	70.63	119.9	467	61.2	0.27	0.80	48.8	11.1	18.7	21.0	25.7	35.0	40.9	46.7	-	0.41			39	0.64			35.0
7.3	18	10		P	2	2	**8**	16	-	0.53	150	40	13.1	8.00	6.2	121.7	71.61	121.7	410	54.0	0.29	0.75	40.7	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			18.7
7.4	18	6		P	2	2	**4**	8	-	0.34	80	39	6.5	8.00	3.1	123.5	72.59	123.5	355	47.0	0.32	0.70	33.0	2.5	5.0	5.6	6.9	9.3	10.9	12.5	-	0.19			32	0.42			9.3
7.5	18	12	3	P	2	2	**10**	20	-	0.59	185	41	16.4	8.00	7.8	125.3	73.57	125.3	430	57.2	0.29	0.77	44.0	7.2	12.5	14.0	17.1	23.4	27.3	31.1	-	0.31			37	0.57			23.4
7.6	18	14		P	2	3	**12**	23	-	0.63	211	41	18.8	8.00	9.0	127.1	74.56	127.1	446	59.7	0.28	0.78	46.5	8.4	14.3	16.1	19.7	26.9	31.3	35.8	-	0.34			37	0.59			26.9
7.7	18	14		P	2	3	**12**	23	-	0.63	211	41	18.8	8.00	9.0	128.9	75.54	128.9	446	60.0	0.28	0.78	46.8	8.4	14.3	16.1	19.7	26.9	31.3	35.8	-	0.34			37	0.59			26.9
7.8	18	15		P	2	3	**13**	25	-	0.65	229	41	20.4	8.00	9.7	130.7	76.52	130.7	454	61.3	0.28	0.79	48.1	9.2	15.6	17.5	21.4	29.2	34.1	38.9	-	0.36			38	0.61			29.2
7.9	18	14		P	2	3	**12**	23	-	0.63	211	41	18.8	8.00	9.0	132.5	77.5	132.5	446	60.6	0.28	0.78	47.2	8.4	14.3	16.1	19.7	26.9	31.3	35.8	-	0.34			37	0.59			26.9
8.0	18	15	3	P	2	3	**13**	25	-	0.65	229	41	20.4	8.00	9.7	134.3	78.48	134.3	454	61.9	0.28	0.79	48.6	9.2	15.6	17.5	21.4	29.2	34.1	38.9	-	0.36			38	0.61			29.2
8.1	18	18		P	2	3	**15**	30	-	0.71	261	42	24.5	9.00	11.2	136.1	79.46	136.1	474	64.9	0.27	0.79	51.6	10.6	17.9	20.1	24.6	33.5	39.1	44.7	-	0.40			39	0.63			33.5
8.2	18	17		P	2	3	**14**	28	-	0.69	245	42	22.9	9.00	10.4	137.9	80.44	137.9	467	64.4	0.28	0.79	50.8	9.9	16.7	18.8	22.9	31.3	36.5	41.7	-	0.38			38	0.62			31.3
8.3	18	22		R	2	3	**19**	38	-	0.82	328	43	31.1	9.00	14.2	139.7	81.42	139.7	495	68.6	0.27	0.81	55.5	13.6	22.6	25.5	31.1	42.5	49.5	56.6	-	0.48			40	0.67			56.6
8.4	18	23		R	2	3	**20**	40	-	0.85	345	43	32.7	9.00	14.9	141.5	82.4	141.5	500	69.6	0.26	0.81	56.5	14.3	23.8	26.8	32.8	44.7	52.1	59.6	-	0.50			40	0.68			59.6
8.5	18	26	6	R	2	3	**23**	46	-	0.94	395	44	37.6	9.00	17.1	143.3	83.38	143.3	513	71.7	0.26	0.82	58.9	16.6	27.4	30.8	37.7	51.4	60.0	68.5	-	0.56			41	0.70			68.5
8.6	18	36		R	2	6	**31**	61	-	1.12	521	45	49.9	9.00	22.7	145.1	84.37	145.1	549	77.0	0.25	0.84	64.4	22.1	36.3	40.9	50.0	68.2	79.5	90.9	-	0.70			42	0.75			90.9
8.7	18	40		R	2	6	**35**	68	-	1.08	588	45	56.4	9.00	25.7	146.9	85.35	146.9	560	79.0	0.24	0.84	66.6	25.1	41.1	46.3	56.5	77.1	89.9	102.8	-	0.78			43	0.77			102.8
8.8	18	47		R	2	6	**42**	82	-	0.38	706	45	67.9	9.00	30.9	148.7	86.33	148.7	577	81.8	0.24	0.85	69.8	30.3	49.5	55.6	68.0	92.7	108.2	123.6	-	0.92			44	0.80			123.6
8.9	18	57		R	2	6	**52**	102	-	-3.40	873	45	84.2	9.00	38.4	150.5	87.31	150.5	598	85.1	0.23	0.86	73.6	37.8	61.4	69.0	84.4	115.1	134.3	153.4	-	1.11			45	0.83			153.4
9.0	18	54	8	R	2	6	**49**	96	-	-1.78	823	45	79.3	9.00	36.1	152.3	88.29	152.3	592	84.7	0.23	0.86	73.0	35.6	57.8	65.0	79.5	108.4	126.4	144.5	-	1.05			44	0.82			144.5
9.1	18	52		R	2	8	**44**	87	-	-0.18	717	45	71.9	10.00	31.4	154.1	89.27	154.1	588	84.5	0.24	0.85	72.2	30.8	50.3	56.5	69.1	94.2	110.0	125.7	-	0.93			44	0.80			125.7
9.2	18	56		R	2	8	**48**	95	-	-1.56	781	46	78.5	10.00	34.3	155.9	90.25	155.9	596	86.0	0.23	0.86	73.9	33.7	54.8	61.7	75.4	102.8	119.9	137.1	-	1.01			44	0.81			137.1
9.3	18	70		R	2	8	**62**	123	-	-14.12	####	45	101.4	10.00	44.3	157.7	91.23	157.7	620	89.9	0.22	0.87	78.3	43.7	70.8	79.7	97.4	132.8	154.9	177.1	-	1.27			45	0.86			177.1



Projekce iGeo s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 26.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

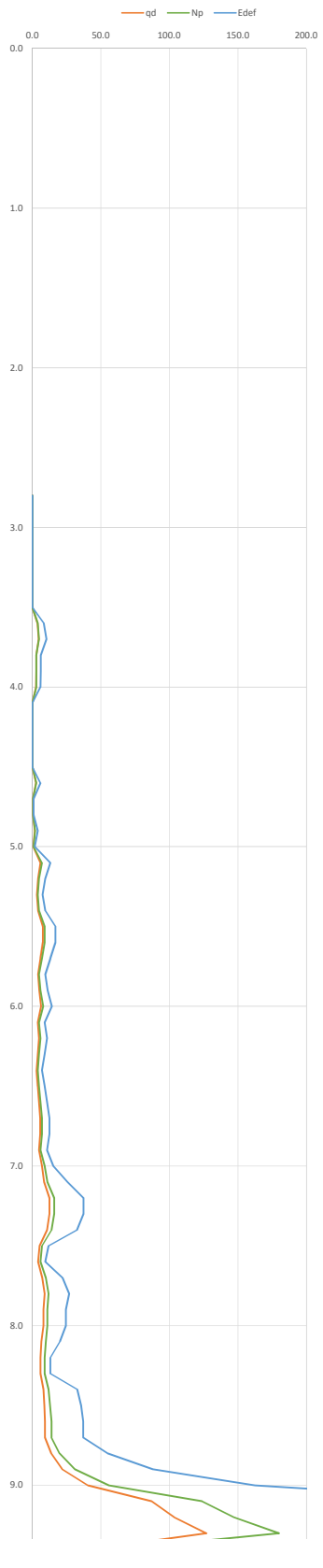
DPH 7

hloubka sondy	**H**	9.3	m	s	0.031	m
hladina vody	**HPV**	0	m	**pa**	101	kPa
obj. hm. vody	**γH2O**	9.81	kN/m3	**V**	100	kPa
hmotnost beranu	**Mh**	50	kg			
pád beranu	**Hh**	0.5	m			
hmotnost válce	**Ma**	17	kg			
hmotnost tyče	**Mt**	4.75				
gravit. zrychlení	**g**	9.81	m/s2			
úhel hrotu	**α**	90	deg			
průměr hrotu	**D**	0.04	m			
plocha kužele	**A**	0.002	m2			

Vyhodnotil: I. Poul **Prováděl:** J. Víšek
Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

	IC	ID	cu
přepočet	0.01	5	1

H	γ	Np	Npc	typ	S	Npcc	Nc	N60	IC	ID	cu	φef	rd	tyč	qd	σ	u	σvo'	w1	Eoed	ν	β	Edef	Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	IC	ID	φef	cef	φef	ID	Eoed	Edef	Edef
									ČSN EN 1997-2		Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)											z Eoed (ČSN EN 1997-2)				podle qdyn				Konzistence (IC) podle qd	Ulehlost písek + štěrk		Stanoveno v laboratoři	Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001	Kombinace podle qdyn
(m)	kN/			zem.							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)										(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0				voda, penetrováno z vodní hladiny													0.098																						
0.1																	0.981																						
0.2																	1.962																						
0.3																	2.943																						
0.4																	3.924																						
0.5			0														4.905																						
0.6																	5.886																						
0.7																	6.867																						
0.8																	7.848																						
0.9																	8.829																						
1.0																	9.81																						
1.1																	10.79																						
1.2																	11.77																						
1.3																	12.75																						
1.4																	13.73																						
1.5			0														14.72																						
1.6																	15.7																						
1.7																	16.68																						
1.8																	17.66																						
1.9																	18.64																						
2.0																	19.62																						
2.1																	20.6																						
2.2																	21.58																						
2.3																	22.56																						
2.4																	23.54																						
2.5			0														24.53																						
2.6																	25.51																						
2.7																	26.49																						
2.8	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	29.3	27.47	29.3	51	4.4	0.41	0.43	1.9	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
2.9	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	3.00	0.1	31.1	28.45	31.1	51	4.5	0.41	0.43	1.9	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.0	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	32.9	29.43	32.9	51	4.6	0.41	0.43	2.0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.1	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	34.7	30.41	34.7	51	4.6	0.41	0.43	2.0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.2	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	36.5	31.39	36.5	51	4.7	0.41	0.43	2.0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.3	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	38.3	32.37	38.3	51	4.7	0.41	0.43	2.0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.4	18	0		J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	40.1	33.35	40.1	51	4.8	0.41	0.43	2.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.20	0.11			-	-			0.1
3.5	18	0	0	J	2	0	**0**	0	0.21	-	21	18	0.2	4.00	0.1	41.9	34.34	41.9	51	4.8	0.41	0.43	2.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.21	0.11			-	-			0.1
3.6	18	4		Pjm	2	0	**4**	8	0.96	0.34	96	39	6.5	4.00	3.8	43.7	35.32	43.7	311	30.2	0.31	0.72	21.7	3.2	6.1	6.8	8.4	11.4	13.3	15.2	-	0.21			33	0.45			8.4
3.7	18	5		Pjm	2	0	**5**	10	1.17	0.40	117	39	8.2	4.00	4.8	45.5	36.3	45.5	335	32.9	0.30	0.73	24.2	4.2	7.6	8.6	10.5	14.3	16.6	19.0	-	0.23			34	0.49			10.5
3.8	18	3		Pjm	2	0	**3**	6	0.74	0.28	74	39	4.9	4.00	2.9	47.3	37.28	47.3	280	27.7	0.32	0.70	19.3	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			6.3
3.9	18	3		Pjm	2	0	**3**	6	0.74	0.28	74	39	4.9	4.00	2.9	49.1	38.26	49.1	280	28.0	0.32	0.70	19.5	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			6.3
4.0	18	3		Pjm	2	0	**3**	6	0.71	0.28	71	38	4.9	5.00	2.7	50.9	39.24	50.9	280	28.2	0.32	0.69	19.5	2.1	4.3	4.9	5.9	8.1	9.5	10.8	-	0.18			31	0.39			5.9
4.1	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	5.00	0.2	52.7	40.22	52.7	51	5.2	0.41	0.43	2.3	0.1	0.3	0.3	0.4	0.5	0.6	0.7	0.25	0.11			-	-			0.1
4.2	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	5.00	0.2	54.5	41.2	54.5	51	5.3	0.41	0.43	2.3	0.1	0.3	0.3	0.4	0.5	0.6	0.7	0.25	0.11			-	-			0.1
4.3	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	5.00	0.2	56.3	42.18	56.3	51	5.3	0.41	0.43	2.3	0.1	0.3	0.3	0.4	0.5	0.6	0.7	0.25	0.11			-	-			0.1
4.4	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	5.00	0.2	58.1	43.16	58.1	51	5.4	0.41	0.43	2.3	0.1	0.3	0.3	0.4	0.5	0.6	0.7	0.25	0.11			-	-			0.1
4.5	18	0	0	J	2	0	**0**	0	0.21	-	21	18	0.3	5.00	0.2	59.9	44.15	59.9	51	5.4	0.41	0.43	2.3	0.1	0.3	0.3	0.4	0.5	0.6	0.7	0.25	0.11			-	-			0.1
4.6	18	3		Pjm	2	0	**3**	6	0.71	0.28	71	38	4.9	5.00	2.7	61.7	45.13	61.7	280	29.7	0.32	0.69	20.5	2.1	4.3	4.9	5.9	8.1	9.5	10.8	-	0.18			31	0.39			5.9
4.7	18	1		Pjm	2	0	**1**	1	0.23	-	23	37	0.8	5.00	0.5	63.5	46.11	63.5	86	9.2	0.38	0.53	4.9	0.1	0.7	0.8	1.0	1.4	1.6	1.8	-	0.12			23	0.10			1.0
4.8	18	1		Pjm	2	0	**1**	1	0.23	-	23	37	0.8	5.00	0.5	65.3	47.09	65.3	86	9.3	0.38	0.53	4.9	0.1	0.7	0.8	1.0	1.4	1.6	1.8	-	0.12			23	0.10			1.0
4.9	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	67.1	48.07	67.1	236	25.7	0.34	0.66	16.9	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
5.0	18	1		Pjm	2	0	**1**	2	0.25	-	25	38	1.6	6.00	0.9	68.9	49.05	68.9	161	17.6	0.36	0.59	10.4	0.3	1.4	1.5	1.9	2.6	3.0	3.4	-	0.13			26	0.20			1.9
5.1	18	7		Pjm	2	0	**7**	14	1.45	0.49	145	40	11.4	6.00	6.0	70.7	50.03	70.7	371	41.0	0.30	0.75	30.8	5.4	9.6	10.8	13.2	18.0	21.0	24.0	-	0.26			35	0.53			13.2
5.2	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	72.5	51.01	72.5	335	37.3	0.31	0.73	27.1	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.3	18	4		Pjm	2	0	**4**	8	0.87	0.34	87	39	6.5	6.00	3.4	74.3	51.99	74.3	311	34.8	0.32	0.71	24.7	2.9	5.5	6.2	7.5	10.3	12.0	13.7	-	0.20			33	0.43			7.5
5.4	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	76.1	52.97	76.1	335	37.8	0.31	0.73	27.5	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.5	18	9	0	Pjm	2	0	**9**	18	1.83	0.56	183	41	14.7	6.00	7.7	77.9	53.96	77.9	399	45.3	0.29	0.77	34.8	7.1	12.3	13.9	16.9	23.1	27.0	30.8	-	0.31			37	0.57			16.9
5.6	18	9		Pjm	2	0	**9**	18	1.83	0.56	183	41	14.7	6.00	7.7	79.7	54.94	79.7	399	45.6	0.29	0.77	35.1	7.1	12.3	13.9	16.9	23.1	27.0	30.8	-	0.31			37	0.57			16.9
5.7	18	7		Pjm	2	0	**7**	14	1.45	0.49	145	40	11.4	6.00	6.0	81.5	55.92	81.5	371	42.8	0.30	0.75	32.2	5.4	9.6	10.8	13.2	18.0	21.0	24.0	-	0.26			35	0.53			13.2
5.8	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	83.3	56.9	83.3	335	38.9	0.31	0.73	28.3	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.9	18	6		Pjm	2	0	**6**	12	1.26	0.45	126	40	9.8	6.00	5.1	85.1	57.88	85.1	355	41.4	0.30	0.74	30.7	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
6.0	18	8		Pjm	2	0	**8**	16	1.57	0.53	157	40	13.1	7.00	6.5	86.9	58.86	86.9	386	45.4	0.29	0.76	34.4	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			14.4
6.1	18	5		Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	88.7	59.84	88.7	335	39.7	0.31	0.72	28.7	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.2	18	6		Pjm	2	0	**6**	12	1.20	0.45	120	39	9.8	7.00	4.9	90.5	60.82	90.5	355	42.3	0.30	0.74	31.1	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
6.3	18	5		Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	92.3	61.8	92.3	335	40.2	0.31	0.72	29.1	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.4	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	94.1	62.78	94.1	311	37.5	0.32	0.71	26.5	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.5	18	5	0	Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	95.9	63.77	95.9	335	40.7	0.31	0.72	29.4	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.6	18	6		Pjm	2	0	**6**	12	1.20	0.45	120	39	9.8	7.00	4.9	97.7	64.75	97.7	355	43.3	0.30	0.74	31.9	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
6.7	18	7		Pjm	2	0	**7**	14	1.38	0.49	138	40	11.4	7.00	5.7	99.5	65.73	99.5	371	45.6	0.30	0.75	34.1	5.1	9.1	10.3	12.6	17.1	20.0	22.8	-	0.26			35	0.52			12.6
6.8	18	7		Pjm	2	0	**7**	14	1.38	0.49	138	40	11.4	7.00	5.7	101.3	66.71	101.3	371	45.9	0.30	0.75	34.4	5.1	9.1	10.3	12.6	17.1	20.0	22.8	-	0.26			35	0.52			12.6
6.9	18	6		Pjm	2	0	**6**	12	1.20	0.45	120	39	9.8	7.00	4.9	103.1	67.69	103.1	355	44.1	0.30	0.74	32.5	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
7.0	18	9		Pjm	2	0	**9**	18	1.68	0.56	168	40	14.7	8.00	7.0	104.9	68.67	104.9	399	49.9	0.29	0.76	38.0	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			15.4
7.1	18	11		P	2	0	**11**	22	-	0.62	203	41	18.0	8.00	8.6	106.7	69.65	106.7	420	52.9	0.28	0.78	41.1	8.0	13.7	15.4	18.8	25.7	30.0	34.3	-	0.33			37	0.58			25.7
7.2	18	16		P	2	0	**16**	32	-	0.74	290	42	26.2	8.00	12.5	108.5	70.63	108.5	461	58.3	0.27	0.80	46.7	11.9	19.9	22.4	27.4	37.4	43.6	49.8	-	0.43			39	0.65			37.4
7.3	18	16		P	2	0	**16**	32	-	0.74	290	42	26.2	8.00	12.5	110.3	71.61	110.3	461	58.6	0.27	0.80	47.0	11.9	19.9	22.4	27.4	37.4	43.6	49.8	-	0.43			39	0.65			37.4
7.4	18	14		P	2	0	**14**	28	-	0.69	255	42	22.9	8.00	10.9	112.1	72.59	112.1	446	57.1	0.27	0.79	45.3	10.3	17.4	19.6	24.0	32.7	38.2	43.6	-	0.39			38	0.62			32.7
7.5	18	7	1	Pjm	2	0	**7**	14	1.33	0.49	133	40	11.4	8.00	5.5	113.9	73.57	113.9	371	47.8	0.30	0.74	35.6	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			12.0
7.6	18	6		Pjm	2	1	**6**	11	1.06	0.43	106	39	9.0	8.00	4.3	115.7	74.56	115.7	355	45.9	0.31	0.73	33.4	3.7	6.9	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
7.7	18	10		P	2	1	**10**	19	-	0.58	176	40	15.5	8.00	7.4	117.5	75.54	117.5	410	53.3	0.29	0.77	40.9	6.8	11.8	13.3	16.3	22.2	25.9	29.6	-	0.30			37	0.56			22.2
7.8	18	12		P	2	1	**12**	23	-	0.63	211	41	18.8	8.00	9.0	119.3	76.52	119.3	430	56.2	0.28	0.78	43.8	8.4	14.3	16.1	19.7	26.9	31.3	35.8	-	0.34			37	0.59			26.9
7.9	18	11		P	2	1	**11**	21	-	0.60	194	41	17.2	8.00	8.2	121.1	77.5	121.1	420	55.2	0.28	0.77	42.7	7.6	13.1	14.7	18.0	24.5	28.6	32.7	-	0.32			37	0.58			24.5
8.0	18	11	1	P	2	1	**11**	21	-	0.60	194	41	17.2	8.00	8.2	122.9	78.48	122.9	420	55.5	0.28	0.77	43.0	7.6	13.1	14.7	18.0	24.5	28.6	32.7	-	0.32			37	0.58			24.5
8.1	18	10		P	2	1	**9**	18	-	0.56	161	40	14.7	9.00	6.7	124.7	79.46	124.7	410	54.5	0.29	0.76	41.4	6.1	10.7	12.1	14.7	20.1	23.5	26.8	-	0.28			36	0.54			20.1
8.2	18	9		Pjm	2	1	**8**	16	1.44	0.53	144	40	13.1	9.00	6.0	126.5	80.44	126.5	399	53.2	0.30	0.75	40.0	5.4	9.5	10.7	13.1	17.9	20.9	23.8	-	0.26			35	0.52			13.1
8.3	18	9		Pjm	2	1	**8**	16	1.44	0.53	144	40	13.1	9.00	6.0	128.3	81.42	128.3	399	53.5	0.30	0.75	40.2	5.4	9.5	10.7	13.1	17.9	20.9	23.8	-	0.26			35	0.52			13.1
8.4	18	12		Š	2	1	**11**	22	-	0.62	194	41	18.0	9.00	8.2	130.1	82.4	130.1	430	58.0	0.28	0.77	44.8	7.6	13.1	14.7	18.0	24.6	28.7	32.8	-	0.32			37	0.58			32.8
8.5	18	13	2	Š	2	1	**12**	24	-	0.64	211	41	19.6	9.00	8.9	131.9	83.38	131.9	438	59.4	0.28	0.78	46.3	8.4	14.3	16.1	19.7	26.8	31.3	35.8	-	0.34			37	0.59			35.8
8.6	18	14		Š	2	2	**13**	25	-	0.65	219	41	20.4	9.00	9.3	133.7	84.37	133.7	446	60.8	0.28	0.78	47.5	8.7	14.9	16.8	20.5	27.9	32.6	37.2	-	0.35			38	0.60			37.2
8.7	18	14		Š	2	2	**13**	25	-	0.65	219	41	20.4	9.00	9.3	135.5	85.35	135.5	446	61.1	0.28	0.78	47.8	8.7	14.9	16.8	20.5	27.9	32.6	37.2	-	0.35			38	0.60			37.2
8.8	18	20		Š	2	2	**19**	37	-	0.81	320	43	30.2	9.00	13.8	137.3	86.33	137.3	485	66.7	0.27	0.81	53.8	13.2	22.0	24.8	30.3	41.3	48.2	55.1	-	0.47			40	0.66			55.1
8.9	18	31		Š	2	2	**30**	59	-	1.11	504	45	48.2	9.00	22.0	139.1	87.31	139.1	532	73.6	0.25	0.83	61.4	21.4	35.2	39.6	48.3	65.9	76.9	87.9	-	0.68			42	0.74			87.9
9.0	18	56	2	R	2	2	**55**	108	-	-5.57	923	45	89.1	9.00	40.6	140.9	88.29	140.9	596	82.8	0.23	0.87	71.8	40.0	65.0	73.1	89.3	121.8	142.1	162.4	-	1.17			45	0.84			162.4
9.1	18	124		R	2	2	**122**	242	-	######	####	24	199.5	10.00	87.1	142.7	89.27	142.7	682	95.2	0.20	0.90	85.8	86.5	139.4	156.8	191.6	261.3	304.9	348.4	-	2.39			49	0.97			348.4
9.2	18	147		R	2	2	**145**	288	-	######	####	9	237.1	10.00	103.5	144.5	90.25	144.5	701	98.2	0.19	0.91	89.2	103.0	165.6	186.3	227.8	310.6	362.3	414.1	-	2.82			50	1.00			414.1
9.3	18	180		R	2	2	**178**	353	-	######	####	-19	291.0	10.00	127.1	146.3	91.23	146.3	723	101.7	0.18	0.92	93.2	126.5	203.3	228.8	279.6	381.3	444.8	508.3	-	3.44			51	1.03			508.3



Projekce iGEO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 26.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 8

hloubka sondy	**H**	9.8	m
hladina vody	**HPV**	0.16	m
obj. hm. vody	**γH2O**	9.81	kN/m3
hmotnost beranu	**Mh**	50	kg
pád beranu	**Hh**	0.5	m
hmotnost válce	**Ma**	17	kg
hmotnost tyče	**Mt**	4.75	
gravit. zrychlení	**g**	9.81	m/s2
úhel hrotu	**α**	90	deg
průměr hrotu	**D**	0.04	m
plocha kužele	**A**	0.002	m2

s	0.031	m
pa	101	kPa
V	100	kPa

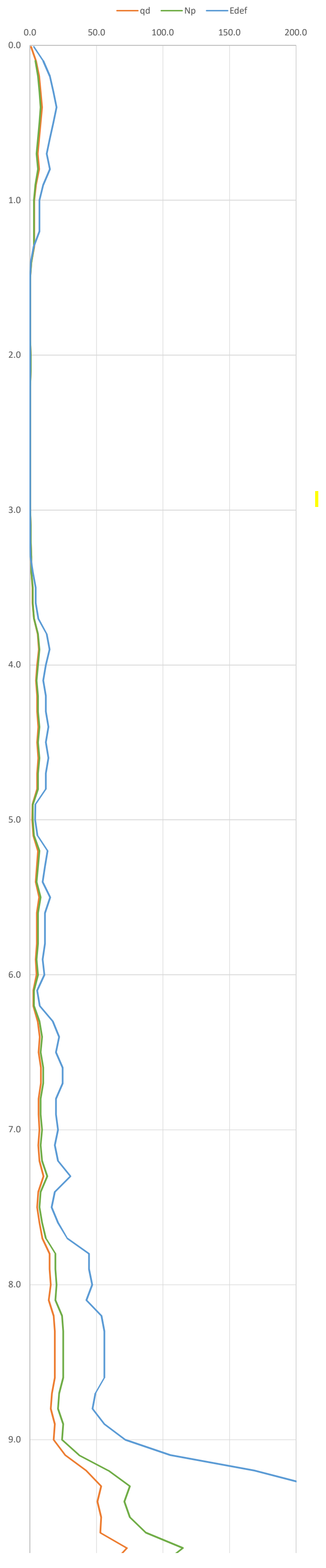
	IC	ID	cu
přepočet	0.01	5	1

Vyhodnotil: I. Poul **Prováděl:** J. Víšek

Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

podle qdyn

																				ČSN EN 1997-2	Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)	z Eoed (ČSN EN 1997-2)	Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	Konzistence (IC) podle qd	Ulehlost písek + štěrk	Stanoveno v laboratoři		Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001	Kombinace podle qdyn
H	**γ**	**Np**	**Npc**	**typ**	**S**	**Npcc**	**Nc**	**N60**	**IC**	**ID**	**cu**	**φef**	**rd**	**tyč**	**qd**	**σ**	**u**	**σvo'**	**w1**	**Eoed**	**ν**	**β**	**Edef**	**Edef**							**IC**	**ID**	**φef**	**cef**	**φef**	**ID**	**Eoed**	**Edef**	**Edef**
(m)	**kN/**			**zem.**							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa									(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0					2	0	1	1	0.29	-	29	18	1.2	1.00	0.9	0.0	0	0.0	#####	#####	0.41	0.44	#####	0.3	1.4	1.5	1.9	2.6	3.0	3.4	0.55	0.13			-	-			3.0
0.1	18	4		Pjm	2	0	4	8	1.13	0.34	113	39	6.5	1.00	4.6	1.8	0	1.8	311	22.5	0.31	0.73	16.5	4.0	7.3	8.2	10.0	13.7	16.0	18.2	-	0.23			34	0.39			10.0
0.2	18	6		Pjm	2	0	6	12	1.64	0.45	164	40	9.8	1.00	6.8	3.6	0.392	3.2	355	26.1	0.29	0.76	19.9	6.3	10.9	12.3	15.0	20.5	23.9	27.3	-	0.29			36	0.55			15.0
0.3	18	7		Pjm	2	0	7	14	1.89	0.49	189	41	11.4	1.00	8.0	5.4	1.373	4.0	371	27.8	0.29	0.77	21.4	7.4	12.8	14.4	17.5	23.9	27.9	31.9	-	0.32			37	0.57			17.5
0.4	18	8		Pjm	2	0	8	16	2.15	0.53	215	41	13.1	1.00	9.1	7.2	2.354	4.8	386	29.3	0.28	0.78	22.9	8.5	14.6	16.4	20.1	27.3	31.9	36.5	-	0.35			38	0.59			20.1
0.5	18	7	0	Pjm	2	0	7	14	1.89	0.49	189	41	11.4	1.00	8.0	9.0	3.335	5.7	371	28.7	0.29	0.77	22.1	7.4	12.8	14.4	17.5	23.9	27.9	31.9	-	0.32			37	0.57			17.5
0.6	18	6		Pjm	2	0	6	12	1.64	0.45	164	40	9.8	1.00	6.8	10.8	4.316	6.5	355	27.8	0.29	0.76	21.2	6.3	10.9	12.3	15.0	20.5	23.9	27.3	-	0.29			36	0.55			15.0
0.7	18	5		Pjm	2	0	5	10	1.38	0.40	138	40	8.2	1.00	5.7	12.6	5.297	7.3	335	26.6	0.30	0.75	19.9	5.1	9.1	10.3	12.5	17.1	19.9	22.8	-	0.26			35	0.52			12.5
0.8	18	6		Pjm	2	0	6	12	1.64	0.45	164	40	9.8	1.00	6.8	14.4	6.278	8.1	355	28.6	0.29	0.76	21.8	6.3	10.9	12.3	15.0	20.5	23.9	27.3	-	0.29			36	0.55			15.0
0.9	18	4		Pjm	2	0	4	8	1.13	0.34	113	39	6.5	1.00	4.6	16.2	7.259	8.9	311	25.4	0.31	0.73	18.6	4.0	7.3	8.2	10.0	13.7	16.0	18.2	-	0.23			34	0.48			10.0
1.0	18	3		Pjm	2	0	3	6	0.82	0.28	82	39	4.9	2.00	3.2	18.0	8.24	9.8	280	23.2	0.32	0.70	16.3	2.6	5.1	5.8	7.1	9.6	11.2	12.8	-	0.19			32	0.42			7.1
1.1	18	3		Pjm	2	0	3	6	0.82	0.28	82	39	4.9	2.00	3.2	19.8	9.221	10.6	280	23.5	0.32	0.70	16.6	2.6	5.1	5.8	7.1	9.6	11.2	12.8	-	0.19			32	0.42			7.1
1.2	18	3		Pjm	2	0	3	6	0.82	0.28	82	39	4.9	2.00	3.2	21.6	10.2	11.4	280	23.8	0.32	0.70	16.8	2.6	5.1	5.8	7.1	9.6	11.2	12.8	-	0.19			32	0.42			7.1
1.3	18	3		J	2	0	3	6	0.82	-	82	19	4.9	2.00	3.2	23.4	11.18	12.2	68	5.7	0.40	0.46	2.6	2.6	5.1	5.8	7.1	9.6	11.2	12.8	1.07	0.19			-	-			2.6
1.4	18	1		J	2	0	1	2	0.26	-	26	18	1.6	2.00	1.1	25.2	12.16	13.0	56	4.7	0.41	0.44	2.1	0.5	1.7	1.9	2.4	3.2	3.7	4.3	0.62	0.14			-	-			0.5
1.5	18	0	0	J	2	0	0	0	0.21	-	21	18	0.3	2.00	0.2	27.0	13.15	13.9	51	4.4	0.41	0.43	1.9	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
1.6	18	0		J	2	0	0	0	0.21	-	21	18	0.3	2.00	0.2	28.8	14.13	14.7	51	4.5	0.41	0.43	1.9	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
1.7	18	0		J	2	0	0	0	0.21	-	21	18	0.3	2.00	0.2	30.6	15.11	15.5	51	4.5	0.41	0.43	1.9	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
1.8	18	0		J	2	0	0	0	0.21	-	21	18	0.3	2.00	0.2	32.4	16.09	16.3	51	4.6	0.41	0.43	2.0	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
1.9	18	0		J	2	0	0	0	0.21	-	21	18	0.3	2.00	0.2	34.2	17.07	17.1	51	4.6	0.41	0.43	2.0	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
2.0	18	1		J	2	0	1	1	0.23	-	23	18	0.8	3.00	0.5	36.0	18.05	17.9	53	4.9	0.41	0.43	2.1	0.1	0.8	0.9	1.1	1.5	1.8	2.0	0.43	0.12			-	-			0.1
2.1	18	1		J	2	0	1	1	0.23	-	23	18	0.8	3.00	0.5	37.8	19.03	18.8	53	4.9	0.41	0.43	2.1	0.1	0.8	0.9	1.1	1.5	1.8	2.0	0.43	0.12			-	-			0.1
2.2	18	0		J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	39.6	20.01	19.6	51	4.8	0.41	0.43	2.0	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
2.3	18	0		J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	41.4	20.99	20.4	51	4.8	0.41	0.43	2.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
2.4	18	0		J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	43.2	21.97	21.2	51	4.9	0.41	0.43	2.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
2.5	18	0	0	J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	45.0	22.96	22.0	51	4.9	0.41	0.43	2.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
2.6	18	0		J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	46.8	23.94	22.9	51	5.0	0.41	0.43	2.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
2.7	18	0		J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	48.6	24.92	23.7	51	5.0	0.41	0.43	2.2	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
2.8	18	0		J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	50.4	25.9	24.5	51	5.1	0.41	0.43	2.2	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
2.9	18	0		J	2	0	0	0	0.21	-	21	18	0.2	3.00	0.1	52.2	26.88	25.3	51	5.2	0.41	0.43	2.2	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.20	0.11			-	-			0.1
3.0	18	0		J	2	0	0	0	0.21	-	21	18	0.2	4.00	0.1	54.0	27.86	26.1	51	5.2	0.41	0.43	2.2	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.19	0.11			-	-			0.1
3.1	18	1		J	2	0	1	1	0.23	-	23	18	0.8	4.00	0.5	55.8	28.84	27.0	53	5.5	0.41	0.43	2.4	0.1	0.8	0.9	1.0	1.4	1.7	1.9	0.41	0.12			-	-			0.1
3.2	18	1		J	2	0	1	1	0.23	-	23	18	0.8	4.00	0.5	57.6	29.82	27.8	53	5.6	0.41	0.43	2.4	0.1	0.8	0.9	1.0	1.4	1.7	1.9	0.41	0.12			-	-			0.1
3.3	18	1		J	2	0	1	2	0.26	-	26	18	1.6	4.00	1.0	59.4	30.8	28.6	56	5.9	0.41	0.44	2.6	0.4	1.5	1.7	2.1	2.9	3.3	3.8	0.58	0.13			-	-			0.4
3.4	18	1		Pjm	2	0	1	2	0.26	-	26	38	1.6	4.00	1.0	61.2	31.78	29.4	161	17.1	0.36	0.60	10.3	0.4	1.5	1.7	2.1	2.9	3.3	3.8	-	0.13			26	0.22			2.1
3.5	18	2	0	Pjm	2	0	2	4	0.53	-	53	38	3.3	4.00	1.9	63.0	32.77	30.2	236	25.2	0.34	0.66	16.7	1.3	3.0	3.4	4.2	5.7	6.7	7.6	-	0.16			30	0.34			4.2
3.6	18	2		Pjm	2	0	2	4	0.53	-	53	38	3.3	4.00	1.9	64.8	33.75	31.1	236	25.4	0.34	0.66	16.8	1.3	3.0	3.4	4.2	5.7	6.7	7.6	-	0.16			30	0.34			4.2
3.7	18	3		Pjm	2	0	3	6	0.74	0.28	74	39	4.9	4.00	2.9	66.6	34.73	31.9	280	30.4	0.32	0.70	21.1	2.3	4.6	5.1	6.3	8.6	10.0	11.4	-	0.18			32	0.40			6.3
3.8	18	6		Pjm	2	0	6	12	1.38	0.45	138	40	9.8	4.00	5.7	68.4	35.71	32.7	355	38.8	0.30	0.75	29.0	5.1	9.1	10.3	12.5	17.1	20.0	22.8	-	0.26			35	0.52			12.5
3.9	18	7		Pjm	2	0	7	14	1.60	0.49	160	40	11.4	4.00	6.7	70.2	36.69	33.5	371	40.9	0.29	0.76	31.1	6.1	10.6	12.0	14.6	20.0	23.3	26.6	-	0.28			36	0.54			14.6
4.0	18	6		Pjm	2	0	6	12	1.32	0.45	132	40	9.8	5.00	5.4	72.0	37.67	34.3	355	39.4	0.30	0.74	29.3	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.1	18	5		Pjm	2	0	5	10	1.11	0.40	111	39	8.2	5.00	4.5	73.8	38.65	35.1	335	37.5	0.31	0.73	27.4	3.9	7.2	8.1	9.9	13.5	15.8	18.0	-	0.23			34	0.48			9.9
4.2	18	6		Pjm	2	0	6	12	1.32	0.45	132	40	9.8	5.00	5.4	75.6	39.63	36.0	355	40.0	0.30	0.74	29.7	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.3	18	6		Pjm	2	0	6	12	1.32	0.45	132	40	9.8	5.00	5.4	77.4	40.61	36.8	355	40.2	0.30	0.74	30.0	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.4	18	7		Pjm	2	0	7	14	1.52	0.49	152	40	11.4	5.00	6.3	79.2	41.59	37.6	371	42.4	0.29	0.76	32.0	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.5	18	6	0	Pjm	2	0	6	12	1.32	0.45	132	40	9.8	5.00	5.4	81.0	42.58	38.4	355	40.8	0.30	0.74	30.4	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.6	18	7		Pjm	2	0	7	14	1.52	0.49	152	40	11.4	5.00	6.3	82.8	43.56	39.2	371	43.0	0.29	0.76	32.5	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.7	18	6		Pjm	2	0	6	12	1.32	0.45	132	40	9.8	5.00	5.4	84.6	44.54	40.1	355	41.4	0.30	0.74	30.8	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.8	18	6		Pjm	2	0	6	12	1.32	0.45	132	40	9.8	5.00	5.4	86.4	45.52	40.9	355	41.6	0.30	0.74	31.0	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.9	18	2		Pjm	2	0	2	4	0.51	-	51	38	3.3	5.00	1.8	88.2	46.5	41.7	236	27.9	0.34	0.66	18.3	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
5.0	18	2		Pjm	2	0	2	4	0.49	-	49	38	3.3	6.00	1.7	90.0	47.48	42.5	236	28.1	0.34	0.65	18.3	1.1	2.7	3.1	3.8	5.1	6.0	6.8	-	0.15			29	0.32			3.8
5.1	18	3		Pjm	2	0	3	6	0.68	0.28	68	38	4.9	6.00	2.6	91.8	48.46	43.3	280	33.5	0.32	0.69	23.0	2.0	4.1	4.6	5.6	7.7	9.0	10.3	-	0.17			31	0.39			5.6
5.2	18	7		Pjm	2	0	7	14	1.45	0.49	145	40	11.4	6.00	6.0	93.6	49.44	44.2	371	44.7	0.30	0.75	33.6	5.4	9.6	10.8	13.2	18.0	21.0	24.0	-	0.26			35	0.53			13.2
5.3	18	6		Pjm	2	0	6	12	1.26	0.45	126	40	9.8	6.00	5.1	95.4	50.42	45.0	355	43.0	0.30	0.74	31.8	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.4	18	5		Pjm	2	0	5	10	1.06	0.40	106	39	8.2	6.00	4.3	97.2	51.4	45.8	335	40.9	0.31	0.73	29.7	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.5	18	8	0	Pjm	2	0	8	16	1.64	0.53	164	40	13.1	6.00	6.8	99.0	52.39	46.6	386	47.3	0.29	0.76	36.0	6.3	11.0	12.3	15.1	20.5	24.0	27.4	-	0.29			36	0.55			15.1
5.6	18	6		Pjm	2	0	6	12	1.26	0.45	126	40	9.8	6.00	5.1	100.8	53.37	47.4	355	43.8	0.30	0.74	32.4	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.7	18	6		Pjm	2	0	6	12	1.26	0.45	126	40	9.8	6.00	5.1	102.6	54.35	48.3	355	44.0	0.30	0.74	32.6	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.8	18	6		Pjm	2	0	6	12	1.26	0.45	126	40	9.8	6.00	5.1	104.4	55.33	49.1	355	44.3	0.30	0.74	32.8	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.9	18	5		Pjm	2	0	5	10	1.06	0.40	106	39	8.2	6.00	4.3	106.2	56.31	49.9	335	42.1	0.31	0.73	30.6	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
6.0	18	6		Pjm	2	0	6	12	1.20	0.45	120	39	9.8	7.00	4.9	108.0	57.29	50.7	355	44.8	0.30	0.74	33.0	4.3	7.8	8.8	10.8	14.7	17.1	19.6	-	0.24			34	0.49			10.8
6.1	18	3		Pjm	2	0	3	6	0.65	0.28	65	38	4.9	7.00	2.4	109.8	58.27	51.5	280	35.5	0.33	0.68	24.3	1.9	3.9	4.4	5.4	7.3	8.6	9.8	-	0.17			31	0.38			5.4
6.2	18	3		P	2	0	3	6	-	0.28	65	38	4.9	7.00	2.4	111.6	59.25	52.3	280	35.7	0.33	0.68	24.4	1.9	3.9	4.4	5.4	7.3	8.6	9.8	-	0.17			31	0.38			7.3
6.3	18	7		P	2	0	7	14	-	0.49	138	40	11.4	7.00	5.7	113.4	60.23	53.2	371	47.7	0.30	0.75	35.7	5.1	9.1	10.3	12.6	17.1	20.0	22.8	-	0.26			35	0.52			17.1
6.4	18	9		P	2	0	9	18	-	0.56	175	40	14.7	7.00	7.3	115.2	61.21	54.0	399	51.5	0.29	0.77	39.4	6.8	11.7	13.2	16.1	22.0	25.7	29.4	-	0.30			36	0.56			22.0
6.5	18	8	0	P	2	0	8	16	-	0.53	157	40	13.1	7.00	6.5	117.0	62.2	54.8	386	50.1	0.29	0.76	38.0	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			19.6
6.6	18	10		P	2	0	10	20	-	0.59	193	41	16.4	7.00	8.2	118.8	63.18	55.6	410	53.5	0.28	0.77	41.4	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			24.5
6.7	18	10		P	2	0	10	20	-	0.59	193	41	16.4	7.00	8.2	120.6	64.16	56.4	410	53.8	0.28	0.77	41.6	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			24.5
6.8	18	8		P	2	0	8	16	-	0.53	157	40	13.1	7.00	6.5	122.4	65.14	57.3	386	50.9	0.29	0.76	38.6	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			19.6
6.9	18	8		P	2	0	8	16	-	0.53	157	40	13.1	7.00	6.5	124.2	66.12	58.1	386	51.2	0.29	0.76	38.8	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			19.6
7.0	18	9		P	2	0	9	18	-	0.56	168	40	14.7	8.00	7.0	126.0	67.1	58.9	399	53.1	0.29	0.76	40.5	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			21.0
7.1	18	8		P	2	0	8	16	-	0.53	150	40	13.1	8.00	6.2	127.8	68.08	59.7	386	51.7	0.29	0.75	39.0	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			18.7
7.2	18	9		P	2	0	9	18	-	0.56	168	40	14.7	8.00	7.0	129.6	69.06	60.5	399	53.7	0.29	0.76	40.9	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			21.0
7.3	18	13		P	2	0	13	26	-	0.67	238	41	21.3	8.00	10.1	131.4	70.04	61.4	438	59.3	0.28	0.79	46.7	9.6	16.2	18.2	22.3	30.4	35.4	40.5	-	0.37			38	0.61			30.4
7.4	18	8		P	2	0	8	16	-	0.53	150	40	13.1	8.00	6.2	133.2	71.02	62.2	386	52.5	0.29	0.75	39.6	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			18.7
7.5	18	7	0	P	2	0	7	14	-	0.49	133	40	11.4	8.00	5.5	135.0	72.01	63.0	371	50.8	0.30	0.74	37.8	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			16.4
7.6	18	9		P	2	0	9	18	-	0.56	168	40	14.7	8.00	7.0	136.8	72.99	63.8	399	54.8	0.29	0.76	41.8	6.4	11.2	12.6	15.4	21.0	24.5	28.0	-	0.29			36	0.55			21.0
7.7	18	12		P	2	0	12	24	-	0.64	220	41	19.6	8.00	9.3	138.6	73.97	64.6	430	59.3	0.28	0.78	46.4	8.8	14.9	16.8	20.6	28.0	32.7	37.4	-	0.35			38	0.60			28.0
7.8	18	19		P	2	0	19	38	-	0.82	343	43	31.1	8.00	14.8	140.4	74.95	65.5	479	66.5	0.26	0.81	54.0	14.2	23.7	26.6	32.5	44.4	51.8	59.2	-	0.50			40	0.67			44.4
7.9	18	19		P	2	0	19	38	-	0.82	343	43	31.1	8.00	14.8	142.2	75.93	66.3	479	66.8	0.26	0.81	54.2	14.2	23.7	26.6	32.5	44.4	51.8	59.2	-	0.50			40	0.67			44.4
8.0	18	20		P	2	0	20	40	-	0.85	360	43	32.7	8.00	15.6	144.0	76.91	67.1	485	67.9	0.26	0.81	55.3	15.0	24.9	28.0	34.3	46.7	54.5	62.3	-	0.52			40	0.68			46.7
8.1	18	19		P	2	0	19	38	-	0.82	328	43	31.1	9.00	14.2	145.8	77.89	67.9	479	67.4	0.27	0.81	54.5	13.6	22.6	25.5	31.1	42.5	49.5	56.6	-	0.48			40	0.67			42.5
8.2	18	24		P	2	0	24	48	-	0.97	412	44	39.2	9.00	17.9	147.6	78.87	68.7	505	71.3	0.26	0.82	58.7	17.3	28.6	32.2	39.3	53.6	62.6	71.5	-	0.58			41	0.71			53.6
8.3	18	25		P	2	0	25	50	-	1.01	429	44	40.9	9.00	18.6	149.4	79.85	69.5	509	72.2	0.26	0.83	59.6	18.1	29.8	33.5	41.0	55.9	65.2	74.5	-	0.60			41	0.71			55.9
8.4	18	25		P	2	0	25	50	-	1.01	429	44	40.9	9.00	18.6	151.2	80.83	70.4	509	72.6	0.26	0.83	59.9	18.1	29.8	33.5	41.0	55.9	65.2	74.5	-	0.60			41	0.71			55.9
8.5	18	25	0	P	2	0	25	50	-	1.01	429	44	40.9	9.00	18.6	153.0	81.82	71.2	509	72.9	0.26	0.83	60.2	18.1	29.8	33.5	41.0	55.9	65.2	74.5	-	0.60			41	0.71			55.9
8.6	18	25		P	2	0	25	50	-	1.01	429	44	40.9	9.00	18.6	154.8	82.8	72.0	509	73.2	0.26	0.83	60.4	18.1	29.8	33.5	41.0	55.9	65.2	74.5	-	0.60			41	0.71			55.9
8.7	18	22		P	2	0	22	44	-	0.91	379	43	36.0	9.00	16.4	156.6	83.78	72.8	495	71.5	0.26	0.82	58.5	15.8	26.2	29.5	36.1	49.2	57.4	65.5	-	0.54			40	0.69			49.2
8.8	18	21		P	2	0	21	42	-	0.88	362	43	34.3	9.00	15.6	158.4	84.76	73.6	490	71.1	0.26	0.81	58.0	15.1	25.0	28.2	34.4	46.9	54.7	62.6	-	0.52			40	0.68			46.9
8.9	18	25		P	2	0	25	50	-	1.01	429	44	40.9	9.00	18.6	160.2	85.74	74.5	509	74.2	0.26	0.83	61.2	18.1	29.8	33.5	41.0	55.9	65.2	74.5	-	0.60			41	0.71			55.9
9.0	18	24		Š	2	0	24	48	-	0.97	412	44	39.2	9.00	17.9	162.0	86.72	75.3	505	73.8	0.26	0.82	60.8	17.3	28.6	32.2	39.3	53.6	62.6	71.5	-	0.58			41	0.71			71.5
9.1	18	37		Š	2	0	37	73	-	0.94	604	45	60.5	10.00	26.4	163.8	87.7	76.1	551	81.0	0.24	0.85	68.5	25.8	42.3	47.6	58.1	79.3	92.5	105.7	-	0.80			43	0.77			105.7
9.2	18	59		R	2	0	59	117	-	-10.09	958	45	96.5	10.00	42.1	165.6	88.68	76.9	602	88.8	0.23	0.87	77.2	41.6	67.4	75.8	92.7	126.4	147.4	168.5	-	1.21			45	0.85			168.5
9.3	18	75		R	2	0	75	149	-	-44.47	####	43	122.6	10.00	53.5	167.4	89.66	77.7	628	93.0	0.22	0.88	81.9	53.0	85.7	96.4	117.8	160.6	187.4	214.2	-	1.51			46	0.89			214.2
9.4	18	71		R	2	0	71	141	-	-32.50	####	43	116.1	10.00	50.7	169.2	90.64	78.6	622	92.5	0.22	0.88	81.3	50.1	81.1	91.2	111.5	152.1	177.4	202.8	-	1.44			46	0.88			202.8
9.5	18	75	7	R	2	0	75	149	-	-44.47	####	43	122.6	10.00	53.5	171.0	91.63	79.4	628	93.8	0.22	0.88	82.6	53.0	85.7	96.4	117.8	160.6	187.4	214.2	-	1.51			46	0.89			214.2
9.6	18	87		R	2	13	74	147	-	-41.22	####	43	121.0	10.00	52.8	172.8	92.61	80.2	644	96.6	0.22	0.88	85.0	52.3	84.5	95.1	116.2	158.5	184.9	211.3	-	1.49			46	0.88			211.3
9.7	18	115		R	2	13	102	202	-	######	####	34	166.8	10.00	72.8	174.6	93.59	81.0	674	101.5	0.20	0.89	90.8	72.3	116.5	131.1	160.2	218.5	254.9	291.3	-	2.02			48	0.94			291.3



Projekce iGEO s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 25.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 9

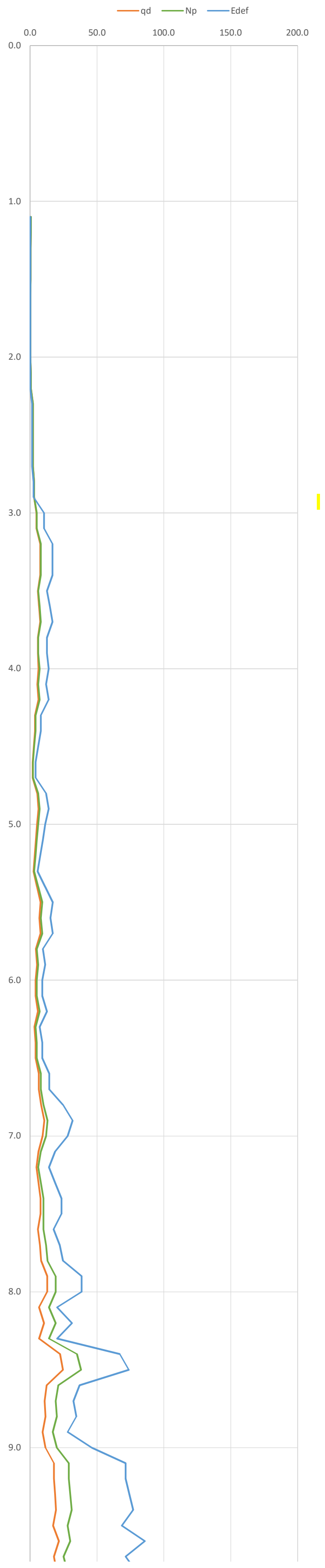
hloubka sondy	**H**	10.2	m	s	0.031	m	
hladina vody	**HPV**	0	m	**pa**	101	kPa	
obj. hm. vody	**γH2O**	9.81	kN/m3	**V**	100	kPa	
hmotnost beranu	**Mh**	50	kg				
pád beranu	**Hh**	0.5	m				
hmotnost válce	**Ma**	17	kg				
hmotnost tyče	**Mt**	4.75					
gravit. zrychlení	**g**	9.81	m/s2				
úhel hrotu	**α**	90	deg				
průměr hrotu	**D**	0.04	m				
plocha kužele	**A**	0.002	m2				

Vyhodnotil: I. Poul **Prováděl:** J. Víšek

Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

přepočet IC 0.01 ID 5 cu 1

																				ČSN EN 1997-2	Poissonovo číslo	koef. přepočet Edef - Eoed (ČSN 73 1001)	z Eoed (ČSN EN 1997-2)	podle qdyn Jíl (J)	Jíl neogenní (NG)	Prach (Pr)	Písek jemnozrnný (Pjm)	Písek (P)	Štěrk jemnozrnný (Šjm)	Štěrk hrubozrnný (Š)	Konzistence (IC) podle qd	Ulehlost písek + štěrk	Stanoveno v laboratoři		Podle qdyn	Ulehlost P nad/pod HPV ČSN EN 1997-2	Eoed stanoveno v laboratoři	přepočet Edef - Eoed (ČSN 73 1001	Kombinace podle qdyn
H	**γ**	**Np**	**Npc**	**typ**	**S**	**Npcc**	**Nc**	**N60**	**IC**	**ID**	**cu**	**φef**	**rd**	**tyč**	**qd**	**σ**	**u**	**σvo'**	**w1**	**Eoed**	**ν**	**β**	**Edef**	**Edef**							**IC**	**ID**	**φef**	**cef**	**φef**	**ID**	**Eoed**	**Edef**	**Edef**
(m)	**kN/**			**zem.**							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa									(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0				voda													0.098																						
0.1																	0.981																						
0.2																	1.962																						
0.3																	2.943																						
0.4																	3.924																						
0.5			0														4.905																						
0.6																	5.886																						
0.7																	6.867																						
0.8																	7.848																						
0.9																	8.829																						
1.0																	9.81																						
1.1	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	2.00	0.5	10.8	10.79	0.0	53	3.9	0.41	0.43	1.7	0.1	0.9	1.0	1.2	1.6	1.9	2.1	0.44	0.12			-	-			0.1
1.2	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	2.00	0.5	12.6	11.77	0.8	53	4.0	0.41	0.43	1.7	0.1	0.9	1.0	1.2	1.6	1.9	2.1	0.44	0.12			-	-			0.1
1.3	18	0		J	2	0	**0**	1	0.22	-	22	18	0.5	2.00	0.4	14.4	12.75	1.6	52	4.0	0.41	0.43	1.7	0.1	0.6	0.6	0.8	1.1	1.2	1.4	0.36	0.12			-	-			0.1
1.4	18	0		J	2	0	**0**	1	0.22	-	22	18	0.5	2.00	0.4	16.2	13.73	2.5	52	4.1	0.41	0.43	1.8	0.1	0.6	0.6	0.8	1.1	1.2	1.4	0.36	0.12			-	-			0.1
1.5	18	0	0	J	2	0	**0**	1	0.22	-	22	18	0.5	2.00	0.4	18.0	14.72	3.3	52	4.1	0.41	0.43	1.8	0.1	0.6	0.6	0.8	1.1	1.2	1.4	0.36	0.12			-	-			0.1
1.6	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	2.00	0.2	19.8	15.7	4.1	51	4.1	0.41	0.43	1.8	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
1.7	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	2.00	0.2	21.6	16.68	4.9	51	4.2	0.41	0.43	1.8	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
1.8	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	2.00	0.2	23.4	17.66	5.7	51	4.3	0.41	0.43	1.8	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
1.9	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	2.00	0.2	25.2	18.64	6.6	51	4.3	0.41	0.43	1.9	0.1	0.3	0.4	0.5	0.6	0.7	0.9	0.28	0.11			-	-			0.1
2.0	18	0		J	2	0	**0**	0	0.21	-	21	18	0.3	3.00	0.2	27.0	19.62	7.4	51	4.4	0.41	0.43	1.9	0.1	0.3	0.4	0.4	0.6	0.7	0.8	0.27	0.11			-	-			0.1
2.1	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	3.00	0.5	28.8	20.6	8.2	53	4.6	0.41	0.43	2.0	0.1	0.8	0.9	1.1	1.5	1.8	2.0	0.43	0.12			-	-			0.1
2.2	18	1		J	2	0	**1**	1	0.23	-	23	18	0.8	3.00	0.5	30.6	21.58	9.0	53	4.7	0.41	0.43	2.0	0.1	0.8	0.9	1.1	1.5	1.8	2.0	0.43	0.12			-	-			0.1
2.3	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	32.4	22.56	9.8	62	5.5	0.41	0.45	2.5	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.4	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	34.2	23.54	10.6	62	5.6	0.41	0.45	2.5	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.5	18	2	0	J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	36.0	24.53	11.5	62	5.7	0.41	0.45	2.5	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.6	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	37.8	25.51	12.3	62	5.8	0.41	0.45	2.6	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.7	18	2		J	2	0	**2**	4	0.55	-	55	19	3.3	3.00	2.0	39.6	26.49	13.1	62	5.8	0.41	0.45	2.6	1.4	3.2	3.6	4.4	6.0	7.0	8.0	0.85	0.16			-	-			1.4
2.8	18	3		J	2	0	**3**	6	0.78	-	78	19	4.9	3.00	3.0	41.4	27.47	13.9	68	6.5	0.40	0.46	3.0	2.4	4.8	5.4	6.6	9.1	10.6	12.1	1.04	0.19			-	-			2.4
2.9	18	3		J	2	0	**3**	6	0.78	-	78	19	4.9	3.00	3.0	43.2	28.45	14.7	68	6.5	0.40	0.46	3.0	2.4	4.8	5.4	6.6	9.1	10.6	12.1	1.04	0.19			-	-			2.4
3.0	18	5		Pjm	2	0	**5**	10	1.17	0.40	117	39	8.2	4.00	4.8	45.0	29.43	15.6	335	32.8	0.30	0.73	24.1	4.2	7.6	8.6	10.5	14.3	16.6	19.0	-	0.23			34	0.49			10.5
3.1	18	5		Pjm	2	0	**5**	10	1.17	0.40	117	39	8.2	4.00	4.8	46.8	30.41	16.4	335	33.1	0.30	0.73	24.3	4.2	7.6	8.6	10.5	14.3	16.6	19.0	-	0.23			34	0.49			10.5
3.2	18	8		Pjm	2	0	**8**	16	1.81	0.53	181	41	13.1	4.00	7.6	48.6	31.39	17.2	386	38.5	0.29	0.77	29.6	7.0	12.2	13.7	16.7	22.8	26.6	30.4	-	0.31			37	0.56			16.7
3.3	18	8		Pjm	2	0	**8**	16	1.81	0.53	181	41	13.1	4.00	7.6	50.4	32.37	18.0	386	38.9	0.29	0.77	29.9	7.0	12.2	13.7	16.7	22.8	26.6	30.4	-	0.31			37	0.56			16.7
3.4	18	8		Pjm	2	0	**8**	16	1.81	0.53	181	41	13.1	4.00	7.6	52.2	33.35	18.8	386	39.2	0.29	0.77	30.1	7.0	12.2	13.7	16.7	22.8	26.6	30.4	-	0.31			37	0.56			16.7
3.5	18	6	0	Pjm	2	0	**6**	12	1.38	0.45	138	40	9.8	4.00	5.7	54.0	34.34	19.7	355	36.4	0.30	0.75	27.2	5.1	9.1	10.3	12.5	17.1	20.0	22.8	-	0.26			35	0.52			12.5
3.6	18	7		Pjm	2	0	**7**	14	1.60	0.49	160	40	11.4	4.00	6.7	55.8	35.32	20.5	371	38.4	0.29	0.76	29.1	6.1	10.6	12.0	14.6	20.0	23.3	26.6	-	0.28			36	0.54			14.6
3.7	18	8		Pjm	2	0	**8**	16	1.81	0.53	181	41	13.1	4.00	7.6	57.6	36.3	21.3	386	40.2	0.29	0.77	30.9	7.0	12.2	13.7	16.7	22.8	26.6	30.4	-	0.31			37	0.56			16.7
3.8	18	6		Pjm	2	0	**6**	12	1.38	0.45	138	40	9.8	4.00	5.7	59.4	37.28	22.1	355	37.3	0.30	0.75	27.9	5.1	9.1	10.3	12.5	17.1	20.0	22.8	-	0.26			35	0.52			12.5
3.9	18	6		Pjm	2	0	**6**	12	1.38	0.45	138	40	9.8	4.00	5.7	61.2	38.26	22.9	355	37.6	0.30	0.75	28.1	5.1	9.1	10.3	12.5	17.1	20.0	22.8	-	0.26			35	0.52			12.5
4.0	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	63.0	39.24	23.8	371	39.7	0.29	0.76	30.0	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.1	18	6		Pjm	2	0	**6**	12	1.32	0.45	132	40	9.8	5.00	5.4	64.8	40.22	24.6	355	38.2	0.30	0.74	28.4	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.2	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	66.6	41.2	25.4	371	40.3	0.29	0.76	30.4	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
4.3	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	68.4	42.18	26.2	311	34.0	0.31	0.71	24.3	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.4	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	70.2	43.16	27.0	311	34.3	0.31	0.71	24.5	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.5	18	3	0	Pjm	2	0	**3**	6	0.71	0.28	71	38	4.9	5.00	2.7	72.0	44.15	27.8	280	31.1	0.32	0.69	21.5	2.1	4.3	4.9	5.9	8.1	9.5	10.8	-	0.18			31	0.39			5.9
4.6	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	73.8	45.13	28.7	236	26.4	0.34	0.66	17.4	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.7	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	75.6	46.11	29.5	236	26.6	0.34	0.66	17.5	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.8	18	6		Pjm	2	0	**6**	12	1.32	0.45	132	40	9.8	5.00	5.4	77.4	47.09	30.3	355	40.2	0.30	0.74	30.0	4.8	8.6	9.7	11.9	16.2	18.9	21.6	-	0.25			35	0.51			11.9
4.9	18	7		Pjm	2	0	**7**	14	1.52	0.49	152	40	11.4	5.00	6.3	79.2	48.07	31.1	371	42.4	0.29	0.76	32.0	5.7	10.1	11.4	13.9	18.9	22.1	25.2	-	0.27			36	0.53			13.9
5.0	18	6		Pjm	2	0	**6**	12	1.26	0.45	126	40	9.8	6.00	5.1	81.0	49.05	31.9	355	40.8	0.30	0.74	30.2	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.1	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	82.8	50.03	32.8	335	38.8	0.31	0.73	28.2	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.2	18	4		Pjm	2	0	**4**	8	0.87	0.34	87	39	6.5	6.00	3.4	84.6	51.01	33.6	311	36.2	0.32	0.71	25.7	2.9	5.5	6.2	7.5	10.3	12.0	13.7	-	0.20			33	0.43			7.5
5.3	18	3		Pjm	2	0	**3**	6	0.68	0.28	68	38	4.9	6.00	2.6	86.4	51.99	34.4	280	32.8	0.32	0.69	22.6	2.0	4.1	4.6	5.6	7.7	9.0	10.3	-	0.17			31	0.39			5.6
5.4	18	6		Pjm	2	0	**6**	12	1.26	0.45	126	40	9.8	6.00	5.1	88.2	52.97	35.2	355	41.9	0.30	0.74	31.0	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
5.5	18	9	0	Pjm	2	0	**9**	18	1.83	0.56	183	41	14.7	6.00	7.7	90.0	53.96	36.0	399	47.4	0.29	0.77	36.5	7.1	12.3	13.9	16.9	23.1	27.0	30.8	-	0.31			37	0.57			16.9
5.6	18	8		Pjm	2	0	**8**	16	1.64	0.53	164	40	13.1	6.00	6.8	91.8	54.94	36.9	386	46.2	0.29	0.76	35.1	6.3	11.0	12.3	15.1	20.5	24.0	27.4	-	0.29			36	0.55			15.1
5.7	18	9		Pjm	2	0	**9**	18	1.83	0.56	183	41	14.7	6.00	7.7	93.6	55.92	37.7	399	48.0	0.29	0.77	36.9	7.1	12.3	13.9	16.9	23.1	27.0	30.8	-	0.31			37	0.57			16.9
5.8	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	95.4	56.9	38.5	335	40.6	0.31	0.73	29.5	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.9	18	6		Pjm	2	0	**6**	12	1.26	0.45	126	40	9.8	6.00	5.1	97.2	57.88	39.3	355	43.3	0.30	0.74	32.0	4.6	8.2	9.2	11.3	15.4	18.0	20.5	-	0.24			35	0.50			11.3
6.0	18	5		Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	99.0	58.86	40.1	335	41.1	0.31	0.72	29.7	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.1	18	5		Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	100.8	59.84	40.9	335	41.3	0.31	0.72	29.9	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.2	18	7		Pjm	2	0	**7**	14	1.38	0.49	138	40	11.4	7.00	5.7	102.6	60.82	41.8	371	46.1	0.30	0.75	34.5	5.1	9.1	10.3	12.6	17.1	20.0	22.8	-	0.26			35	0.52			12.6
6.3	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	104.4	61.8	42.6	311	38.8	0.32	0.71	27.4	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.4	18	5		Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	106.2	62.78	43.4	335	42.1	0.31	0.72	30.4	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.5	18	5	0	Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	108.0	63.77	44.2	335	42.3	0.31	0.72	30.6	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.6	18	8		Pjm	2	0	**8**	16	1.57	0.53	157	40	13.1	7.00	6.5	109.8	64.75	45.0	386	49.0	0.29	0.76	37.1	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			14.4
6.7	18	8		Pjm	2	0	**8**	16	1.57	0.53	157	40	13.1	7.00	6.5	111.6	65.73	45.9	386	49.3	0.29	0.76	37.4	6.0	10.4	11.7	14.4	19.6	22.8	26.1	-	0.28			36	0.54			14.4
6.8	18	10		P	2	0	**10**	20	-	0.59	193	41	16.4	7.00	8.2	113.4	66.71	46.7	410	52.7	0.28	0.77	40.7	7.6	13.0	14.7	17.9	24.5	28.5	32.6	-	0.32			37	0.58			24.5
6.9	18	13		P	2	0	**13**	26	-	0.67	249	42	21.3	7.00	10.6	115.2	67.69	47.5	438	56.6	0.28	0.79	44.8	10.0	17.0	19.1	23.3	31.8	37.1	42.4	-	0.39			38	0.62			31.8
7.0	18	12		P	2	0	**12**	24	-	0.64	220	41	19.6	8.00	9.3	117.0	68.67	48.3	430	55.8	0.28	0.78	43.7	8.8	14.9	16.8	20.6	28.0	32.7	37.4	-	0.35			38	0.60			28.0
7.1	18	8		P	2	0	**8**	16	-	0.53	150	40	13.1	8.00	6.2	118.8	69.65	49.1	386	50.4	0.29	0.75	38.0	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			18.7
7.2	18	6		P	2	0	**6**	12	-	0.45	115	39	9.8	8.00	4.7	120.6	70.63	50.0	355	46.6	0.30	0.73	34.2	4.1	7.5	8.4	10.3	14.0	16.4	18.7	-	0.23			34	0.48			14.0
7.3	18	8		P	2	0	**8**	16	-	0.53	150	40	13.1	8.00	6.2	122.4	71.61	50.8	386	50.9	0.29	0.75	38.4	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			18.7
7.4	18	10		P	2	0	**10**	20	-	0.59	185	41	16.4	8.00	7.8	124.2	72.59	51.6	410	54.4	0.29	0.77	41.9	7.2	12.5	14.0	17.1	23.4	27.3	31.1	-	0.31			37	0.57			23.4
7.5	18	10	3	P	2	0	**10**	20	-	0.59	185	41	16.4	8.00	7.8	126.0	73.57	52.4	410	54.7	0.29	0.77	42.1	7.2	12.5	14.0	17.1	23.4	27.3	31.1	-	0.31			37	0.57			23.4
7.6	18	10		P	2	3	**8**	15	-	0.51	141	40	12.3	8.00	5.8	127.8	74.56	53.2	410	54.9	0.30	0.75	41.2	5.3	9.3	10.5	12.8	17.5	20.4	23.4	-	0.26			35	0.52			17.5
7.7	18	12		P	2	3	**10**	19	-	0.58	176	40	15.5	8.00	7.4	129.6	75.54	54.1	430	57.9	0.29	0.77	44.4	6.8	11.8	13.3	16.3	22.2	25.9	29.6	-	0.30			37	0.56			22.2
7.8	18	13		P	2	3	**11**	21	-	0.60	194	41	17.2	8.00	8.2	131.4	76.52	54.9	438	59.3	0.28	0.77	45.9	7.6	13.1	14.7	18.0	24.5	28.6	32.7	-	0.32			37	0.58			24.5
7.9	18	19		P	2	3	**17**	33	-	0.75	299	42	27.0	8.00	12.8	133.2	77.5	55.7	479	65.2	0.27	0.80	52.4	12.3	20.6	23.1	28.3	38.5	45.0	51.4	-	0.44			39	0.65			38.5
8.0	18	19	5	P	2	3	**17**	33	-	0.75	299	42	27.0	8.00	12.8	135.0	78.48	56.5	479	65.5	0.27	0.80	52.6	12.3	20.6	23.1	28.3	38.5	45.0	51.4	-	0.44			39	0.65			38.5
8.1	18	14		P	2	5	**9**	18	-	0.56	161	40	14.7	9.00	6.7	136.8	79.46	57.3	446	61.3	0.29	0.76	46.6	6.1	10.7	12.1	14.7	20.1	23.5	26.8	-	0.28			36	0.54			20.1
8.2	18	19		P	2	5	**14**	28	-	0.69	245	42	22.9	9.00	10.4	138.6	80.44	58.1	479	66.2	0.28	0.79	52.2	9.9	16.7	18.8	22.9	31.3	36.5	41.7	-	0.38			38	0.62			31.3
8.3	18	14		P	2	5	**9**	18	-	0.56	161	40	14.7	9.00	6.7	140.4	81.42	59.0	446	61.9	0.29	0.76	47.0	6.1	10.7	12.1	14.7	20.1	23.5	26.8	-	0.28			36	0.54			20.1
8.4	18	35		P	2	5	**30**	60	-	1.12	513	45	49.1	9.00	22.3	142.2	82.4	59.8	545	76.0	0.25	0.84	63.5	21.8	35.8	40.2	49.2	67.0	78.2	89.4	-	0.69			42	0.74			67.0
8.5	18	38	5	P	2	5	**33**	65	-	1.11	563	45	54.0	9.00	24.6	144.0	83.38	60.6	554	77.6	0.24	0.84	65.3	24.0	39.3	44.2	54.1	73.7	86.0	98.3	-	0.75			43	0.76			73.7
8.6	18	21		P	2	5	**17**	33	-	0.75	287	42	27.0	9.00	12.3	145.8	84.37	61.4	490	68.9	0.27	0.80	55.2	11.7	19.7	22.1	27.0	36.9	43.0	49.2	-	0.43			39	0.64			36.9
8.7	18	19		P	2	5	**15**	29	-	0.70	253	42	23.7	9.00	10.8	147.6	85.35	62.2	479	67.7	0.27	0.79	53.6	10.2	17.3	19.4	23.8	32.4	37.8	43.2	-	0.39			38	0.62			32.4
8.8	18	20		P	2	5	**16**	31	-	0.73	270	42	25.3	9.00	11.5	149.4	86.33	63.1	485	68.8	0.27	0.80	54.8	11.0	18.5	20.8	25.4	34.6	40.4	46.2	-	0.41			39	0.63			34.6
8.9	18	17		P	2	5	**13**	25	-	0.65	219	41	20.4	9.00	9.3	151.2	87.31	63.9	467	66.6	0.28	0.78	52.1	8.7	14.9	16.8	20.5	27.9	32.6	37.2	-	0.35			38	0.60			27.9
9.0	18	20	4	R	2	5	**16**	31	-	0.73	270	42	25.3	9.00	11.5	153.0	88.29	64.7	485	69.4	0.27	0.80	55.3	11.0	18.5	20.8	25.4	34.6	40.4	46.2	-	0.41			39	0.63			46.2
9.1	18	29		R	2	4	**25**	50	-	1.01	412	44	40.9	10.00	17.8	154.8	89.27	65.5	525	75.5	0.26	0.82	62.1	17.3	28.6	32.1	39.3	53.5	62.5	71.4	-	0.58			41	0.71			71.4
9.2	18	29		R	2	4	**25**	50	-	1.01	412	44	40.9	10.00	17.8	156.6	90.25	66.3	525	75.9	0.26	0.82	62.4	17.3	28.6	32.1	39.3	53.5	62.5	71.4	-	0.58			41	0.71			71.4
9.3	18	30		R	2	4	**26**	52	-	1.03	428	44	42.5	10.00	18.6	158.4	91.23	67.2	529	76.7	0.26	0.83	63.3	18.0	29.7	33.4	40.8	55.7	65.0	74.3	-	0.59			41	0.71			74.3
9.4	18	31		R	2	4	**27**	54	-	1.06	444	44	44.1	10.00	19.3	160.2	92.21	68.0	532	77.6	0.25	0.83	64.2	18.7	30.8	34.7	42.4	57.8	67.5	77.1	-	0.61			41	0.72			77.1
9.5	18	28	0	R	2	4	**24**	48	-	0.97	396	44	39.2	10.00	17.1	162.0	93.19	68.8	521	76.3	0.26	0.82	62.6	16.6	27.4	30.8	37.7	51.4	60.0	68.5	-	0.56			41	0.70			68.5
9.6	18	30		R	2	0	**30**	60	-	1.12	492	44	49.1	10.00	21.4	163.8	94.18	69.6	529	77.7	0.25	0.83	64.8	20.8	34.3	38.6	47.1	64.3	75.0	85.7	-	0.67			42	0.74			85.7
9.7	18	25		R	2	0	**25**	50	-	1.01	412	44	40.9	10.00	17.8	165.6	95.16	70.4	509	75.1	0.26	0.82	61.8	17.3	28.6	32.1	39.3	53.5	62.5	71.4	-	0.58			41	0.71			71.4



Projekce iGeo s.r.o.

VYHODNOCENÍ TEŽKÉ DYNAMICKÉ PENETRAČNÍ ZKOUŠKY

Zakázka: IG průzkum pro projekci „Rekreační přístav Napajedla – Pahrbek“ **Datum:** 25.04.2019

Je doporučeno využívat tmavě podbarvené a tm. zelené sloupce

DPH 10

hloubka sondy	**H**	7.9	m	s	0.031	m
hladina vody	**HPV**	0	m	**pa**	101	kPa
obj. hm. vody	**γH2O**	9.81	kN/m3	**V**	100	kPa
hmotnost beranu	**Mh**	50	kg			
pád beranu	**Hh**	0.5	m			
hmotnost válce	**Ma**	17	kg			
hmotnost tyče	**Mt**	4.75				
gravit. zrychlení	**g**	9.81	m/s2			
úhel hrotu	**α**	90	deg			
průměr hrotu	**D**	0.04	m			
plocha kužele	**A**	0.002	m2			

Vyhodnotil: I. Poul **Prováděl:** J. Víšek
Podle: ČSN EN1997-2, ČSN EN ISO 22476-2

	IC	ID	cu
přepočet	0.01	5	1

H	γ	Np	Npc	typ	S	Npcc	Nc	N60	IC	ID	cu	φef	rd	tyč	qd	σ	u	σvo'	w1	Eoed	ν	β	Edef	Edef								IC	ID	φef	cef	φef	ID	Eoed	Edef	Edef
(m)	kN/			zem.							(kPa)	(°)			MPa	(kPa)	kPa	kPa		(MPa)			(MPa)	MPa										(°)	(kPa)	(°)		(MPa)	(MPa)	(MPa)
0.0				voda, penetrováno z hladiny													0.098																							
0.1																	0.981																							
0.2																	1.962																							
0.3																	2.943																							
0.4																	3.924																							
0.5			0														4.905																							
0.6																	5.886																							
0.7																	6.867																							
0.8																	7.848																							
0.9																	8.829																							
1.0																	9.81																							
1.1																	10.79																							
1.2																	11.77																							
1.3																	12.75																							
1.4																	13.73																							
1.5			0														14.72																							
1.6																	15.7																							
1.7																	16.68																							
1.8																	17.66																							
1.9																	18.64																							
2.0																	19.62																							
2.1																	20.6																							
2.2																	21.58																							
2.3																	22.56																							
2.4																	23.54																							
2.5			0														24.53																							
2.6																	25.51																							
2.7																	26.49																							
2.8																	27.47																							
2.9																	28.45																							
3.0																	29.43																							
3.1																	30.41																							
3.2																	31.39																							
3.3	18	0		J	2	0	**0**	0	0.21	-	21	18	0.4	4.00	0.2	34.2	32.37	1.8	52	4.7	0.41	0.43	2.0	0.1	0.4	0.4	0.5	0.7	0.8	1.0	0.29	0.11			-	-			0.1
3.4	18	0		J	2	0	**0**	0	0.21	-	21	18	0.4	4.00	0.2	36.0	33.35	2.6	52	4.7	0.41	0.43	2.0	0.1	0.4	0.4	0.5	0.7	0.8	1.0	0.29	0.11			-	-			0.1
3.5	18	0	0	J	2	0	**0**	0	0.21	-	21	18	0.4	4.00	0.2	37.8	34.34	3.4	52	4.8	0.41	0.43	2.1	0.1	0.4	0.4	0.5	0.7	0.8	1.0	0.29	0.11			-	-			0.1
3.6	18	0		J	2	0	**0**	0	0.21	-	21	18	0.4	4.00	0.2	39.6	35.32	4.3	52	4.8	0.41	0.43	2.1	0.1	0.4	0.4	0.5	0.7	0.8	1.0	0.29	0.11			-	-			0.1
3.7	18	0		J	2	0	**0**	1	0.22	-	22	18	0.5	4.00	0.3	41.4	36.3	5.1	52	4.9	0.41	0.43	2.1	0.1	0.5	0.6	0.7	0.9	1.1	1.3	0.34	0.12			-	-			0.1
3.8	18	0		J	2	0	**0**	1	0.22	-	22	18	0.5	4.00	0.3	43.2	37.28	5.9	52	5.0	0.41	0.43	2.2	0.1	0.5	0.6	0.7	0.9	1.1	1.3	0.34	0.12			-	-			0.1
3.9	18	0		J	2	0	**0**	1	0.22	-	22	18	0.5	4.00	0.3	45.0	38.26	6.7	52	5.1	0.41	0.43	2.2	0.1	0.5	0.6	0.7	0.9	1.1	1.3	0.34	0.12			-	-			0.1
4.0	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	46.8	39.24	7.5	236	23.3	0.34	0.66	15.3	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.1	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	48.6	40.22	8.4	236	23.5	0.34	0.66	15.5	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.2	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	50.4	41.2	9.2	236	23.8	0.34	0.66	15.6	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.3	18	3		Pjm	2	0	**3**	6	0.71	0.28	71	38	4.9	5.00	2.7	52.2	42.18	10.0	280	28.4	0.32	0.69	19.6	2.1	4.3	4.9	5.9	8.1	9.5	10.8	-	0.18			31	0.39			5.9
4.4	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	54.0	43.16	10.8	311	31.9	0.31	0.71	22.7	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.5	18	2	0	Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	55.8	44.15	11.6	236	24.4	0.34	0.66	16.0	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.6	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	57.6	45.13	12.4	236	24.6	0.34	0.66	16.2	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
4.7	18	3		Pjm	2	0	**3**	6	0.71	0.28	71	38	4.9	5.00	2.7	59.4	46.11	13.3	280	29.4	0.32	0.69	20.3	2.1	4.3	4.9	5.9	8.1	9.5	10.8	-	0.18			31	0.39			5.9
4.8	18	4		Pjm	2	0	**4**	8	0.91	0.34	91	39	6.5	5.00	3.6	61.2	47.09	14.1	311	32.9	0.31	0.71	23.5	3.0	5.8	6.5	7.9	10.8	12.6	14.4	-	0.20			33	0.44			7.9
4.9	18	2		Pjm	2	0	**2**	4	0.51	-	51	38	3.3	5.00	1.8	63.0	48.07	14.9	236	25.2	0.34	0.66	16.6	1.2	2.9	3.2	4.0	5.4	6.3	7.2	-	0.15			29	0.33			4.0
5.0	18	2		Pjm	2	0	**2**	4	0.49	-	49	38	3.3	6.00	1.7	64.8	49.05	15.7	236	25.4	0.34	0.65	16.6	1.1	2.7	3.1	3.8	5.1	6.0	6.8	-	0.15			29	0.32			3.8
5.1	18	3		Pjm	2	0	**3**	6	0.68	0.28	68	38	4.9	6.00	2.6	66.6	50.03	16.5	280	30.4	0.32	0.69	20.9	2.0	4.1	4.6	5.6	7.7	9.0	10.3	-	0.17			31	0.39			5.6
5.2	18	2		Pjm	2	0	**2**	4	0.49	-	49	38	3.3	6.00	1.7	68.4	51.01	17.4	236	25.8	0.34	0.65	16.9	1.1	2.7	3.1	3.8	5.1	6.0	6.8	-	0.15			29	0.32			3.8
5.3	18	2		Pjm	2	0	**2**	4	0.49	-	49	38	3.3	6.00	1.7	70.2	51.99	18.2	236	26.0	0.34	0.65	17.0	1.1	2.7	3.1	3.8	5.1	6.0	6.8	-	0.15			29	0.32			3.8
5.4	18	3		Pjm	2	0	**3**	6	0.68	0.28	68	38	4.9	6.00	2.6	72.0	52.97	19.0	280	31.1	0.32	0.69	21.3	2.0	4.1	4.6	5.6	7.7	9.0	10.3	-	0.17			31	0.39			5.6
5.5	18	2	0	Pjm	2	0	**2**	4	0.49	-	49	38	3.3	6.00	1.7	73.8	53.96	19.8	236	26.4	0.34	0.65	17.2	1.1	2.7	3.1	3.8	5.1	6.0	6.8	-	0.15			29	0.32			3.8
5.6	18	2		Pjm	2	0	**2**	4	0.49	-	49	38	3.3	6.00	1.7	75.6	54.94	20.6	236	26.6	0.34	0.65	17.4	1.1	2.7	3.1	3.8	5.1	6.0	6.8	-	0.15			29	0.32			3.8
5.7	18	1		Pjm	2	0	**1**	2	0.25	-	25	38	1.6	6.00	0.9	77.4	55.92	21.5	161	18.3	0.36	0.59	10.8	0.3	1.4	1.5	1.9	2.6	3.0	3.4	-	0.13			26	0.20			1.9
5.8	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	79.2	56.9	22.3	335	38.3	0.31	0.73	27.8	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
5.9	18	5		Pjm	2	0	**5**	10	1.06	0.40	106	39	8.2	6.00	4.3	81.0	57.88	23.1	335	38.5	0.31	0.73	28.0	3.7	6.8	7.7	9.4	12.8	15.0	17.1	-	0.22			34	0.47			9.4
6.0	18	5		Pjm	2	0	**5**	10	1.02	0.40	102	39	8.2	7.00	4.1	82.8	58.86	23.9	335	38.8	0.31	0.72	28.1	3.5	6.5	7.3	9.0	12.2	14.3	16.3	-	0.21			34	0.46			9.0
6.1	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	84.6	59.84	24.7	311	36.2	0.32	0.71	25.6	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.2	18	3		Pjm	2	0	**3**	6	0.65	0.28	65	38	4.9	7.00	2.4	86.4	60.82	25.6	280	32.8	0.33	0.68	22.4	1.9	3.9	4.4	5.4	7.3	8.6	9.8	-	0.17			31	0.38			5.4
6.3	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	88.2	61.8	26.4	311	36.7	0.32	0.71	25.9	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.4	18	3		Pjm	2	0	**3**	6	0.65	0.28	65	38	4.9	7.00	2.4	90.0	62.78	27.2	280	33.3	0.33	0.68	22.7	1.9	3.9	4.4	5.4	7.3	8.6	9.8	-	0.17			31	0.38			5.4
6.5	18	4	0	Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	91.8	63.77	28.0	311	37.2	0.32	0.71	26.3	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.6	18	4		Pjm	2	0	**4**	8	0.83	0.34	83	39	6.5	7.00	3.3	93.6	64.75	28.8	311	37.4	0.32	0.71	26.4	2.7	5.2	5.9	7.2	9.8	11.4	13.0	-	0.19			32	0.43			7.2
6.7	18	3		Pjm	2	0	**3**	6	0.65	0.28	65	38	4.9	7.00	2.4	95.4	65.73	29.6	280	33.9	0.33	0.68	23.2	1.9	3.9	4.4	5.4	7.3	8.6	9.8	-	0.17			31	0.38			5.4
6.8	18	2		Pjm	2	0	**2**	4	0.47	-	47	38	3.3	7.00	1.6	97.2	66.71	30.5	236	28.8	0.34	0.65	18.7	1.1	2.6	2.9	3.6	4.9	5.7	6.5	-	0.15			29	0.31			3.6
6.9	18	2		Pjm	2	0	**2**	4	0.47	-	47	38	3.3	7.00	1.6	99.0	67.69	31.3	236	28.9	0.34	0.65	18.8	1.1	2.6	2.9	3.6	4.9	5.7	6.5	-	0.15			29	0.31			3.6
7.0	18	2		Pjm	2	0	**2**	4	0.45	-	45	38	3.3	8.00	1.6	100.8	68.67	32.1	236	29.1	0.34	0.65	18.8	1.0	2.5	2.8	3.4	4.7	5.5	6.2	-	0.15			29	0.30			3.4
7.1	18	4		Pjm	2	0	**4**	8	0.80	0.34	80	39	6.5	8.00	3.1	102.6	69.65	32.9	311	38.6	0.32	0.70	27.1	2.5	5.0	5.6	6.9	9.3	10.9	12.5	-	0.19			32	0.42			6.9
7.2	18	4		Pjm	2	0	**4**	8	0.80	0.34	80	39	6.5	8.00	3.1	104.4	70.63	33.7	311	38.8	0.32	0.70	27.3	2.5	5.0	5.6	6.9	9.3	10.9	12.5	-	0.19			32	0.42			6.9
7.3	18	5		Pjm	2	0	**5**	10	0.98	0.40	98	39	8.2	8.00	3.9	106.2	71.61	34.6	335	42.1	0.31	0.72	30.3	3.3	6.2	7.0	8.6	11.7	13.6	15.6	-	0.21			33	0.45			8.6
7.4	18	7		P	2	0	**7**	14	-	0.49	133	40	11.4	8.00	5.5	108.0	72.59	35.4	371	46.9	0.30	0.74	34.9	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			16.4
7.5	18	7	0	P	2	0	**7**	14	-	0.49	133	40	11.4	8.00	5.5	109.8	73.57	36.2	371	47.2	0.30	0.74	35.1	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			16.4
7.6	18	7		P	2	0	**7**	14	-	0.49	133	40	11.4	8.00	5.5	111.6	74.56	37.0	371	47.4	0.30	0.74	35.3	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			16.4
7.7	18	8		P	2	0	**8**	16	-	0.53	150	40	13.1	8.00	6.2	113.4	75.54	37.8	386	49.6	0.29	0.75	37.4	5.7	10.0	11.2	13.7	18.7	21.8	24.9	-	0.27			36	0.53			18.7
7.8	18	7		P	2	0	**7**	14	-	0.49	133	40	11.4	8.00	5.5	115.2	76.52	38.7	371	48.0	0.30	0.74	35.7	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			16.4
7.9	18	7		P	2	0	**7**	14	-	0.49	133	40	11.4	8.00	5.5	117.0	77.5	39.5	371	48.2	0.30	0.74	35.9	4.9	8.7	9.8	12.0	16.4	19.1	21.8	-	0.25			35	0.51			16.4