

### Základné fyzikálne a chemické ukazovatele

Objekt/ Ukazovateľ	Teplota (°C)	pH (-)	Vodivosť (mSm <sup>-1</sup> )
116	1993 10-12.5 1994-98 10-11.5 (12.5) 1999 ~10.5 2000 10-13.4	1993-94, 99-00 7.4-7.7 1995-98 7-7.8 rozk.	1993-98 (30)38-50 1999-00 36-46
87	1993-98 ~10 1999-00 10-11.5	1993-95 (7.2) 7.5-7.8 1996-00 ~ 7.5	kol. 41-48
3	sez. kol. 5-15	(7.2) 7.3-7.7	sez. kol. m↓, 35-49
105	1993-96,1999-00 10-13 1997-98 8-17	1993-94 7.3-7.8 1995-98 rozk. 7.1-8 1999-00 7.5-7.7	1993-98 (34) 38-48 1999-00 m↓ 36-40
329	10-10.5	7.4 -7.7	↓ trend z 42-32
103	1993-95, 2000 11-12 1996-1998 ~ 11 1999 ~ 10.5	1993-95, 1999-00 7.5-8 1996-1998 rozk. 7.2-8	(28) 34-40 (54)
234	~ 10-10.5	7.6-7.8	1994-97 ~ 31 1998-00 28-30
262	~ 10	7.6-7.8	~ 31
265	~ 16	~ 8	27-29
102	(8) 10-14 rozk.	7-7.5	1993-94 m↓ zo 100-50, 1995-98 stab. 48-60 1999-00 ~ 48
888	1993-97 m↑ 9.5-10.5 1998-00 ~ 10.5	1993-97 7.5-7.8 1998-00 ~ 7.6	30-33
2559	rozk., m↓ 1993-96 9-16.5 1997-00 9-13	1993-94 m↓ 8.1-7.5 1995-00 ~ 7.5	1993 m↓ 48-34, 1994-98 m↑ 39-47, 1999-00 m↓ 41-44
872	1993-95 rozk. 9-12 1996-00 ~ 10.5	7.3-7.6	1993-95 m↑ 1996-99 26-36, 1996-97 ~33-35, 1998-00 m↓ 33-29
899	1993-95 rozk. 10-13 1996-97 10-10.5 1998-00 10.5-11	1993-96 m↑ 7-7.5 1997-00 ~ 7.4	↓ trend 80-30 (pod. ako na 102)
906	kol. 9.5-12 (14)	7.2-7.8	rozk. 38-48, prelom 97/98 lok. max. 52-60
467	rozk. (8) 9-13 (14.5)	1993-98 kol. (7.3) 7.5-7.8 1999-00 ~7.7	40-50 (ojed. 34-38)
485	rozk. 9-14	kol. 7.5-7.8 (7.9) (ojed. 7.1-7.4)	40-50 (ojed. 32-38)
170	1993-95 m↓ 11.5-10 1996-00 ~ 10	7.6-7.9	1993-95 m↑ 1996-99 34-36, 1996-97 ~34-36, 1998-00 m↓ 34-30

### Katióny

Objekt/ Ukazovateľ	Na (mg l <sup>-1</sup> )	K (mg l <sup>-1</sup> )	Ca (mg l <sup>-1</sup> )
116	1993-96 zväčša 9-11 1997-00 m↑ 10-12 (13)	2-3, 6.1994-1.1996 ~ 1	1993-94 m↓ zo 72-60, 1995-00 m↑ 62-72
87	(8) 9-12	2-3.4, 6.1994-1.1996 ~ 1	1993-96 m↑ 61-73 1997-00 ~ 71-73
3	~ 9 (ojed. 11-14.5)	(1.9) 2.8-3.2	52-68(74)
105	(7.5) 9-11 (12.5)	~ 2 (ojed. do 3), 6.1994-1.1996 ~ 1	1993-95 m↓ zo 70-62 1996-97 m↑ 60-64 1998-00 ~ 64
329	rozk. 10-13(14)	2-3	1994-98 rozk. 70-90

		6.1994-6.1995 ~ 1	1998-00 m↓ 74-60
<b>103</b>	1993-95 rozk. 2.5-6 1996-98 ~ 4 1999-00 m↑ 4-5.5	~ 1, 6.1994-1.1996 ~0.5	1993-98 ~ 55 1999-00 m↑ 58-64
<b>234</b>	rozk. 6-8	1-2 6.1994-6.1995 ~ 1	m↓ rozk. 76-58/64 (84)
<b>262</b>	1994-98 9.5-10 1999-00 m↑ 10-11 (11.4)	2-3 6.1994-6.1995 ~ 0.5	kol. zväčša 55-71, (ojed. 45-55)
<b>265</b>	rozk. zväčša (10.5)12-14	m↑ 0.5-2 (ojed. 2.5-3)	m↓, kol. zväčša 42-55
<b>102</b>	1994-96 m↓ 22.5-15 1997-00 10-12	1-2.4	1993-95 ↓ zo 160-70, 1995-00 stab. 70-80
<b>888</b>	7-10 (11)	1.5-3, 6.1994-1.1996 ~ 1	1993-97 60-75 (80) 1998-00 m↓ 60-65,
<b>2559</b>	~ 10	(1.2) 1.5-2 (2.6)	1993-95 m↓ zo 66- 54, 1996-00↑ trend, 55-70 (80)
<b>872</b>	1993-97 kol. 9-13 1998-00 10-11	2-3, 6.1994-1.1996 ~ 1	1993-95 m↑ 60-80 1996-00 m↓ (80) 75-60
<b>899</b>	1993-96 m ↓ 25-10 1997-00 stab. ~ 9-11	1.5-3, 6.1994-1.1996 ~ 1	1993-95 ↓ 150-70 1996-00 stab. ~ 60-80
<b>906</b>	rozk. 7-11 (13)	kol (1.4) 2-2.5(2.7)	1993-94 ↓ zo 100-60, 1995-96,1998-00 60-70 1997 lok. max. 92,
<b>467</b>	kol. 10-12	2-2.4 (3.2)	1993-97 m↑ 60-70 1998-00 ~ 70
<b>485</b>	1995-97 ~ 9 1998-00 rozk. 7.5-17	1.6-2.2 (2.7)	1993-96 m↓ 76-64 1997-00 ~66
<b>170</b>	8-11	2-3, 6.1994-1.1996 ~ 1	1993-97 m↑ 65-85 (90) 1998-00 m↓ na 60-70

Objekt/ Ukazovateľ	Mg (mg <sup>l</sup> <sup>-1</sup> )	SiO <sub>2</sub> (mg <sup>l</sup> <sup>-1</sup> )
<b>116</b>	14-17 1999 (10.3) 12-14	1993-97 4-6 (min. do 2) 1998-00 m↑ 4.5-6.5
<b>87</b>	1993-97 m↑ 13-20 1998-00 m↓ 16-18	1993-96 kol. (3) 4-5.5 1997-00 m↑ 4-6
<b>3</b>	rozk. 10-16(18)	1998-00 ~ 2, (ojed. do 5 )
<b>105</b>	1993-97 14-16 1998-00 m↓ 14.5-12	4-6 (ojed. do 2)
<b>329</b>	1994-96 m↓ z 21-10/15 1997-00 m↑ 7-20	1994-98 m↓ z 10-2 1999-00 m↑, 4-6
<b>103</b>	14-18 (r. 1993 do 23)	roz., 7-9, (1993 do 10, 1993-98 ojed. aj 2-7)
<b>234</b>	roz., zväčša 10-17 1999-00 18-23	roz., zväčša 2-5 1999 lok. max. 5-7
<b>262</b>	1993-98 kol.(6)14-20 (27) 1999-00 8-13	m↓ 8-2/4 1999 6-10
<b>265</b>	kol. (8)10-17(23)	kol. (2) 5-10(15)
<b>102</b>	1993-95 ↓ z 50-20, 1995-00 stab. 18-24 (28)	(1.4) 2-3
<b>888</b>	1993-97rozk. m↑ 7-20 1998-00 (5) 14-19	1993-96 m↓ zo 7-3, 1997,99 2 lok. max. 6,7
<b>2559</b>	kol. 12-17 (2000, 21-23)	1996-98 kol. 1.4-2.4 1999-00 m↑ 2.5-3
<b>872</b>	kol. (6) 10-20 (30)	1993-98, 2000 ↓ trend z 10-2/4, 1999 m↑ 6-7
<b>899</b>	1993-94 ↓ z 70-20,	1993-96 m↓ z 16-4,

	1995-00 stab. 10-20	1997-98 stab. ~4 (10) 1999-00 m↑ 5-7 (10)
906	rozk. 12-19 (24)	1996-98 kol. 1.6-2.6 1999-00 m↑ kol. 2-3
467	(11) 15-18 (27)	1993-95 ↑ z 2-17, 1996-00 3-6,
485	1993-96 m↓ z 20-14, 1997-00 stab. 13-14.5	1993- jar 95 ↑ z 2-18, 6.95-00 5-6
170	kol. (6) 10-20 (ojed. 22-44)	1993-98, 2000 ↓ trend z 8-2/4, 1999 m↑ 5-6

## Anióny

Objekt/ Ukazovateľ	SO <sub>4</sub> <sup>2-</sup> (mg l <sup>-1</sup> )	Cl <sup>-</sup> (mg l <sup>-1</sup> )	HCO <sub>3</sub> <sup>-</sup> (mg l <sup>-1</sup> )
116	↓ trend 43-24	1993-96 16-20 1997-99 m↑ 18-20 2000 m↓ ~ 17	↑ trend 210-280
87	↓ trend 50-24	16-22 (27)	↑ trend 200-280 1998-00 280-290
3	rozk. 24-44	rozk. 14-26 (31)	sez. kol. 180-225
105	↓ trend 44-26 1998 lok. max. 38	kol. 15-20 (24)	m↑ 220-245
329	m↓, kol. 35-55	1994-95 m↓ 24-17 1996-jar 98 m↑ 17-22 6.96-00 m↓ 15-18	↓ trend 295-220/240
103	↑ trend (21) 30-46	1993-97 ~ 10 1998-99 m↑ 10-20 2000 m↓	m↑ 200-226
234	30-40	15-22 (25)	kol. 200-220, 2000 (2 hod. 281, 353)
262	(28) 30-40 (44)	rozk., 16-22(25)	200-220 (245)
265	10-20(22)	rozk. 4-9(11)	zvážša 200-220 1999-00 ojed. 225-323
102	1993-94 ↓ z 260-50, 1995-98 stab. 40-80 1999-00 ~ 40	1993-95 ↓ 40-19, 1996-97 19-27 1998-00 ~ 18	1993-95 ↓ zo 400-270, 1996-97 m↑ 290-340 1998-00 m↓ 270-290
888	kol. 30-50	1993-96 m↓ rozk. 22-15 1997-00 kol. 15-20	1993-94 ↓ 280-20/220 1995-00 200-220
2559	m↓, kol. 28-48	1993-97 kol. 15-20 1998-00 ~16	1993-97 ↑ 200-270, 1998 ↓ ~ 250 1999-00 ↑ 240-270
872	1993-97 m↑ 30-48, 1998-00 m↓ 44-30	1993-95 m↓ rozk. 22-17 1996-00 kol. 17-19 (22)	1993-94 ↑ 170-250, 1995-97 stab. 220-250 1999-00 m↓ 230-195
899	1993-95 ↓ z 200-30, 1996-00 stab. 20-40	1993-95 ↓ z 50-15, 1996-00 stab. 15-20	1993-94 ↓ z 420-260, 1995-97 stab. 240-280 1999-00 ~ 250
906	m↓, kol. 20-60 1997 lok. max. 100	rozk. 11-24	kol. 210-270 1997 lok. max. 360
467	m↑ 35-60	kol. 16-23	1993-98 ↑ trend 200- 250, 1999-00 240-250
485	m↓ 40-26	1993-97 kol. 15-20 1998-00 rozk. 15-26	230-250
170	1993-97 kol. 30-46 1998-00 34-40	1993-95 m↓ rozk. 25-17 1996-00 kol. 16-20 (23)	1993-97 ↑ 200-280 (300), 1999-00 m↓ 250-220

### Nutrienty + Fe a Mn

Objekt/ Ukazovatel'	NO <sub>3</sub> <sup>-</sup> (mg l <sup>-1</sup> )	NO <sub>2</sub> <sup>-</sup> (mg l <sup>-1</sup> )	NH <sub>4</sub> <sup>+</sup> (mg l <sup>-1</sup> )
116	↓ trend, 12-0.5	det. limit	det. limit, ojed. nad 0.05 (0.1- 0.13)
87	↓ trend, 14-0.03	det. limit, 1993 0.01-0.03	det. limit (ojed. překroč. 0.13)
3	sez. kol., 1-18	0.01-0.04 (0.07)	1993-94 0.04-0.3 1997-00 det. limit
105	↓ trend, 10-1	det. limit	det. limit, ojed. nad 0.05 (max. 0.1)
329	1994-97 m↑, 5-10, 1998-00 m↓ na 3-4	det. limit	1994-97 0.01-0.11 1998-00 det. limit
103	↑ trend, 1-3.5	det. limit	det. limit, ojed. nad 0.05 (max. 0.15)
234	kol. (3) 6-8	rozk. 0.01-0.05, (1999 1 hod. 0.11)	1993-97 0.01-0.08 1998-00 det. limit
262	1-2, 1998-99 ojed. ~ 0.5	0.01-0.03	0.04-0.08 (0.37)
265	~ 0.5	det. limit	m↑ 0.01-0.1 (0.3)
102	m ↓ po prehradení, 1993-96 3-7, 1997-98 2-5 1999-00 ~2	1993-98 0-0.02 (0.03) 1999-00 det. limit 0.03	kol. 0-0.05 (1 hod. nad 0.2)
888	m ↓ , 9-13(14) 1999-00 ~9	det. limit (ojed. nad max. 0.04)	1993-97 0.01-0.2 1998-00 det. limit
2559	↓ trend, 17-6	1993-98 0-0.02 1999-00 det. limit 0.03	kol. 0-0.05 (0.19)
872	1993-94 m↓ 18-5, 1995-97 stab. 5-8 1998-00 m↑ 7-13	0.01-0.05 (ojed. nad max. 0.15)	1993-96 do 0.2 (ojed. nad max. 0.55), 1997-99 do 0.05
899	1993 0.5-4 (7) 1994-00 ~ 0.5	det. limit (ojed nad max. 0.06)	1993-96 kol. 0.02-0.4 (0.7), 1997-00 m↑ trend 0.2-0.5
906	1993-98 rozk. 4-12 (17) 1999-00 m↓ 2-5 (11)	1993-98 0-0.01 (0.25) 1999-00 det. limit 0.03	kol. 0-0.05 (0.1)
467	↓ trend, 8-1	det. limit	det. limit
485	1993-95 m↓ 2-0.5 1996-00 ~ 0.5 (ojed. 2.5)	det. limit	1993-95 0 det. limit 1996-00 rozkol. 0.05-0.3 (0.44)
170	1993-94 m↓ 13-7, 1995-97 7-10 1998-00 m↓ 8-5 (3)	rozk. 1993-94 0.01-0.1 1995-98 0.01-0.15 (0.2) 1999-00 0.08-0.1	m↓, 1993-96 do 0.2 (ojed. nad max. 0.42), 1997-00 do 0.05

Objekt/ Ukazovatel'	PO <sub>4</sub> <sup>3-</sup> (mg l <sup>-1</sup> )	Fe (mg l <sup>-1</sup> )	Mn (mg l <sup>-1</sup> )
116	1993-1995 0 1996-00 0.01-0.04	1993-95 0 1996-00 0.02-0.1 (2 krát nad, max. 0.17)	1992-95, 1997-98 kolíšu do 0.1 (ojed. nad) 1996 0.1-0.17 1999-00 0.05-0.2
87	0.01-0.04	1993-96 0 1996-99 0.02-0.05 2000 0.06-0.14	det. limit (2000, ojed. nad, 0.05-0.1)
3	det. limit	1998 0.01-0.12 1999-00 0.01-0.03	1993-95 0.15-1.05 1998-00 ~ 0
105	1993-1995 0-0.05 1996-00 0.01-0.03	1993-96 det. limit 1996 0.02-0.06 (0.1)	det. limit
329	0.01-0.05 (0.06)	kol. do 0.2 (ojed. 0.5-0.9)	det. limit (ojed. 0.03-0.29)

103	1993-1995 0-0.05 1996-00 0.01-0.03 (0.06)	det. limit ojed. 0.03-0.04	det. limit
234	1994-97 0.03-0.07 1999-00 detekční limit	rozsk., zvětšena 0.1-0.3 (ojed. 0.3-0.6)	0.01-0.03 (ojed. 0.06-0.27)
262	det. limit (0.03-0.05)	kol. (0.2) 0.3-0.55	m↑ 0.04-0.14 (0.17) 1999-00 0.11-0.14
265	rozsk. 0.02-0.12 (0.23) zvětšena 0.07-0.12	0.04- 0.12 (0.2, 1hod. 0.86)	1993-98 m↑ 0.01-0.1 1999-00 0.06-0.1(0.34)
102	1993-98 kolíšu do 0.05, 1999-00 det. limit 0.05/0.1	kolíše do 0.05 (1993 do 0.12)	↓ trend, 0-0.06
888	0.01-0.05 (0.1)	kol. do 0.1 (ojed. 0.2- 0.3)	0-0.06 (ojed. 0.12-0.26)
2559	1993-98 kolíšu do 0.04, 1999-00 det. limit	0-0.01(0.04)	1993-97 rozsk. 0.01-0.035 1998-00 m↓ kol. do 0.02
872	0.01-0.05 (0.07)	1993-96 rozsk. 0-2.4 (3 hod. 4.82, 6.86, 10.77) 1997-00 do 0.5 (1.4, 1.6)	0.01-0.08 (ojed. 0.1-0.3)
899	0.01-0.05 (0.08)	kol. do 0.1 (ojed. nad 0.14-0.41)	1992-95↓ 0.7-0.1/0.2, 1996-00 ↑ trend 0.1-0.7
906	1993-98 kolíšu do 0.06, 1999-00 det. limit	1993-96 0-0.02 (0.06) 1997-00 0-0.01 (0.03)	1993-96 0.02-0.035 1998 lok. max. 0.05 1999-00 m↓0.05-0.025
467	1993-1995 0 1996-00 0.01-0.04 (0.19)	1993-1995 0 1996-00 kol. 0.02-0.07	det. limit
485	1993-1995 0 1996-00 0.01-0.04 (0.2)	1993-1995 0 1996-00 kol. 0.02-0.1/0.2	rozsk. 0.2-0.6 (0.8)
170	0.01-0.05 (0.06)	1993-jar 96 m↑ 0.01- 1.45, 3.96-97 m↓ 0.8-0.2 1998-00 0.2-0.4	0.01-0.06 (ojed. 0.1-0.3)

### Ukazovatele kyslíkového režimu

Objekt/ Ukazovatel'	Kyslík (mg l <sup>-1</sup> )	CHSK <sub>Mn</sub> (mg l <sup>-1</sup> )	TOC (mg l <sup>-1</sup> )
116	1993-95 0.1-1 1996-98 0.1-0.4 2000 0.6-1.5	m↑ trend 0.6-1.4	1993-jar 99 ↑ trend 0.6-3 3.1999-00 2-2.5
87	0-0.2	1993-99 m↑ 0.4-1.4 2000 m↓ 1.4-0.7	1993-98 m↑ trend 1-2.8 1999-00 2-2.6
3	1993-95 ~ 0.1 1997-00 sez.kol. 0-7	m↑, rozsk. 0.3-2.4	1-2 (3.5)
105	1993-94 0.1-1 1995-98 ~ 0.2 2000 0.2-1 (1.8)	0.5-1 (1.4)	1993-96 ↑ trend 0.6-2.6 1997-00 kol. 1.6-2.4
329	0-0.1 1996-97 0-0.5	1994-98 ↓ trend 2-0.5 1999-00 m↑ ~1	kol. 0.1-1.6 (6.25) 1998-00 ~0.5
103	0.1-1 (ojed. 1.2 -2)	(0.2) 0.4-0.8 (1.2)	1993-96 ↑ trend 0.5-2.5 1997-00 ↓ trend 2.2-1.4
234	0-0.2	rozsk. 0.5-1.5 ((2.5)	0.2-1.2 (2.2)
262	0-0.1	1994-97 m↓ 2.5-1.5, 1998-00 m↑ 1.4-2.6	kol. 1-2
265	0-0.1(0.2)	1994-98 m↓ 1.7-0.3, 1999-00 m↑ 0.7-1.3	0.2-1 (1.4)
102	1993-96, 1998-00 1-6 1997 1-2	1993-96 ↓ trend 2-0.7 1997-00 0.5-0.7 (1)	1993-95 1.8-2.5 1996-00 0.5-1.5 (1.7)
888	0-0.4 1999-00 0-2.6	1993-98 rozsk. m↓ 2.8- 0.4, 1999-00 ~1	1993-97 m↑ 0.5-2.5(4) 1998-00 m↓ 2-1
2559	0.6-2.4 (4.4-10.2)	1993-96 ↓ trend 2-0.7 1997-00 0.5-0.7 (1)	0.6-1.2 (2.1)

<b>872</b>	1993 m↓ 4.2-0.4 1994-97 0-0.1 1999-00 0.2-0.8	1993-95 rozk. 0.8-2(3), 1996-98 m↓ 1.6-0.4 1999-00 m↑ 0.81.6	1993-97 m↑ 0.2-2(3.2) 1998-00 m↓ 1-0.2
<b>899</b>	1993 0-1.1 1994-00 0-0.4	1993-97 rozk. 1-2.8 (3.2) 1998-00 m↓ 0.6-1.8 (2)	1993-97 m↑ 0.5-1.5(3.5) 1998-00 m↓ 1-0.5
<b>906</b>	1993-95, 1998-00 2.8.-6 1996-98 1-2.4	1993-96 ↓ trend 2.5-0.6 1997-00 0.5-0.8 (1)	1-1.8(2.4)
<b>467</b>	0.2-0.8(ojed..1.2-1.6)	0.5-1	~ 1.8-2.2
<b>485</b>	0.1-0.9 (ojed.1.2-3)	0.5-1.2 (1.5)	~ 1.8-2.2
<b>170</b>	0-0.3	1993-97 m↓ rozk. 2.4-0.5 1998-00 0.4-1.4	1993-96 m↑ 0.2-2(3.1) 1997-00 m↓ 1.6-0.2/0.6