

5.4. Tests results

5.4.1. Results of measuring pH and specific conductivity depending on flow velocity of magnetically treated pipe water through the magnetic field [of Magnetizer]

Table 1.

Water not treated magnetically			
Trial	temperature [°C]	specific conductivity [mS/m]	pH
1.	12	0,9	7,78
2.	12	0,7	7,81
3.	12	1,1	7,98
4.	12	1,2	7,98
5.	12	0,8	8,05
6.	12	1,3	8,03
7.	12	0,9	8,02
8.	12	0,7	8,05
9.	12	1,1	8,14
10.	12	1,3	8,07
average		1,0	7,99

Table 2

Water treated magnetically with Magnetizer				
Trial	temperature [°C]	flow velocity [m/s]	specific conductivity [mS/m]	pH
1.	12	1,4	0,9	7,73
2.	12	1,4	0,7	7,63
3.	12	1,4	0,6	7,67
4.	12	1,4	0,7	7,80
5.	12	1,4	0,8	7,72
6.	12	1,4	0,9	7,78
7.	12	1,4	0,8	7,73
8.	12	1,4	0,9	7,68
9.	12	1,4	0,6	7,78
10.	12	1,4	0,8	7,79
average			0,77	7,73

Table 3

Water treated magnetically with Magnetizer				
Trial	temperature [°C]	flow velocity [m/s]	specific conductivity [mS/m]	pH
1.	12	0,28	0,7	7,18
2.	12	0,28	0,8	7,35
3.	12	0,28	0,6	7,45
4.	12	0,28	0,7	7,46
5.	12	0,28	0,6	7,4
6.	12	0,28	0,8	7,5
7.	12	0,28	0,6	7,45
8.	12	0,28	0,5	7,48
9.	12	0,28	0,4	7,66
10.	12	0,28	0,5	7,35
average			0,62	7,43

5.4.2. Results of measuring dynamic viscosity and general hardness depending on the flow of magnetically treated water through the magnetic field of Magnetizer

Table 1.

Water not treated magnetically					
Trial	temp. [°C]	conductivity [ms/m]	pH	dynamic viscosity [P]	general hardness [°n]
1.	12	1	7,99	147	15,1
2.	12	1	7,99	177,5	15,1
3.	12	1	7,99	149,9	15,3
4.	12	1	7,99	151	15,9
5.	12	1	7,99	151	15,1
6.	12	1	7,99	147	14,3
7.	12	1	7,99	147	14,2
8.	12	1	7,99	147	14,1
9.	12	1	7,99	153	13,5
10.	12	1	7,99	151,2	12,6
average				149,2	14,52

Table 2

Water treated magnetically with Magnetizer						
Trial	temp. [°C]	flow velocity [m/s]	conductivity [mS/m]	pH	dynamic viscosity [P]	general hardness
1.	12	1,4	0,77	7,73	139	12,1
2.	12	1,4	0,77	7,73	138,9	12,5
3.	12	1,4	0,77	7,73	141	12,9
4.	12	1,4	0,77	7,73	141	12,3
5.	12	1,4	0,77	7,73	135	12,2
6.	12	1,4	0,77	7,73	138,9	12,0
7.	12	1,4	0,77	7,73	138,9	11,9
8.	12	1,4	0,77	7,73	139	11,9
9.	12	1,4	0,77	7,73	140	12,6
10.	12	1,4	0,77	7,73	138,9	11,9
average					139,4	12,23

Table 3

Water treated magnetically with Magnetizer						
Trial	temp. [°C]	flow velocity [m/s]	conductivity [mS/m]	pH	dynamic viscosity [P]	general hardness [°n]
1.	12	0,28	0,62	7,43	147	12,3
2.	12	0,28	0,62	7,43	140	11,9
3.	12	0,28	0,62	7,43	146	11,9
4.	12	0,28	0,62	7,43	147,5	11,8
5.	12	0,28	0,62	7,43	147	11,5
6.	12	0,28	0,62	7,43	147	12,1
7.	12	0,28	0,62	7,43	141	11,9
8.	12	0,28	0,62	7,43	151	12,5
9.	12	0,28	0,62	7,43	139,9	12,65
10.	12	0,28	0,62	7,43	141	12,1
average					144,7	12,06

5.4.3. Results of (free) Carbon Dioxide content in pipe raw water and in water magnetically treated by Magnetizer

Table 1.

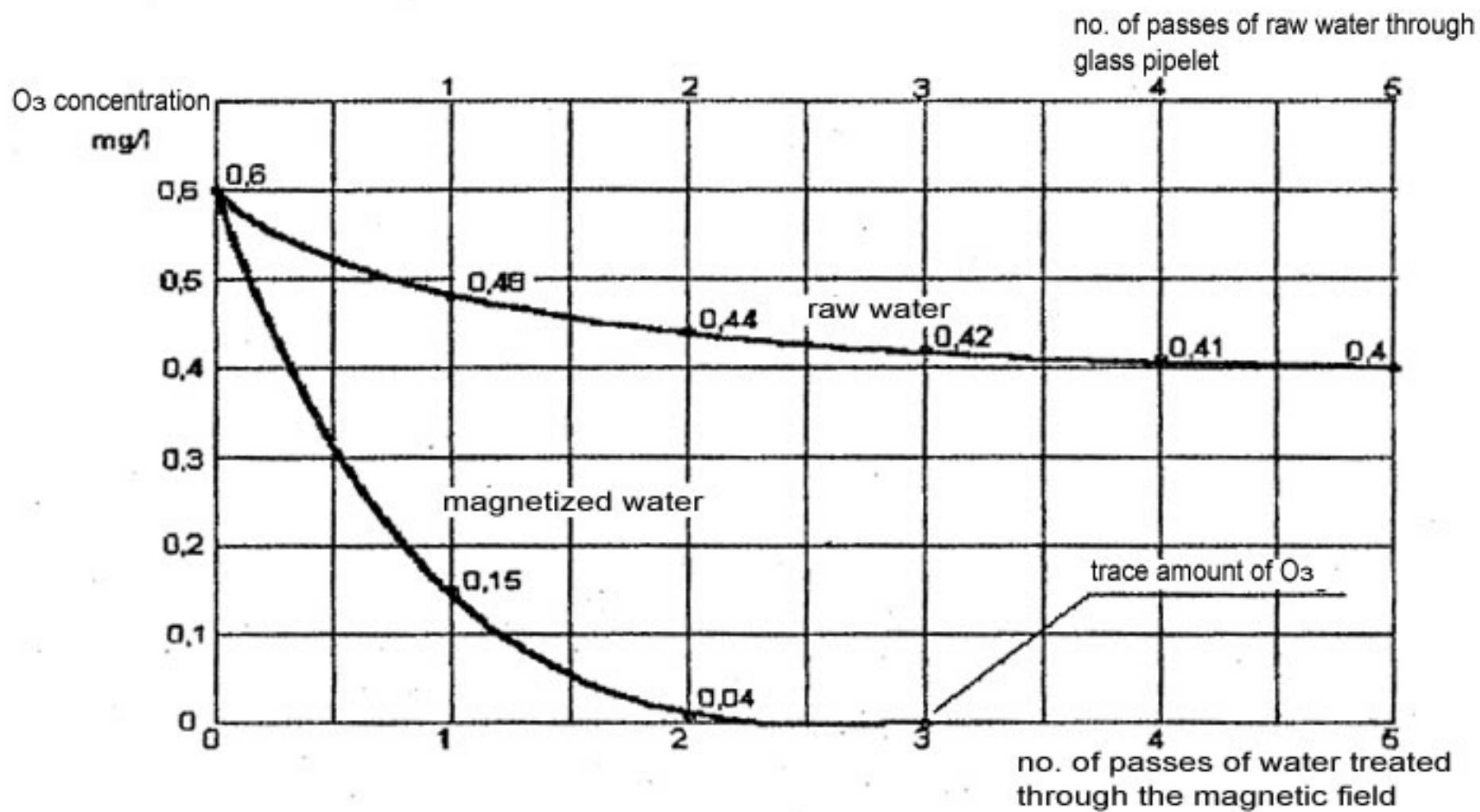
Trial	time from sampling to completing analysis	raw water	magnetically treated water
	[min]	content of free CO ₂	[mg/l]
1.	10	55	33
2.	15	68	28,6
3.	20	74,8	44
4.	25	72,6	46
5.	30	76,9	52,5

5.4.4. Results of Oxygen (O₂) content in pipe raw water and in water magnetically treated after 5 passes through the magnetic field of Magnetizer

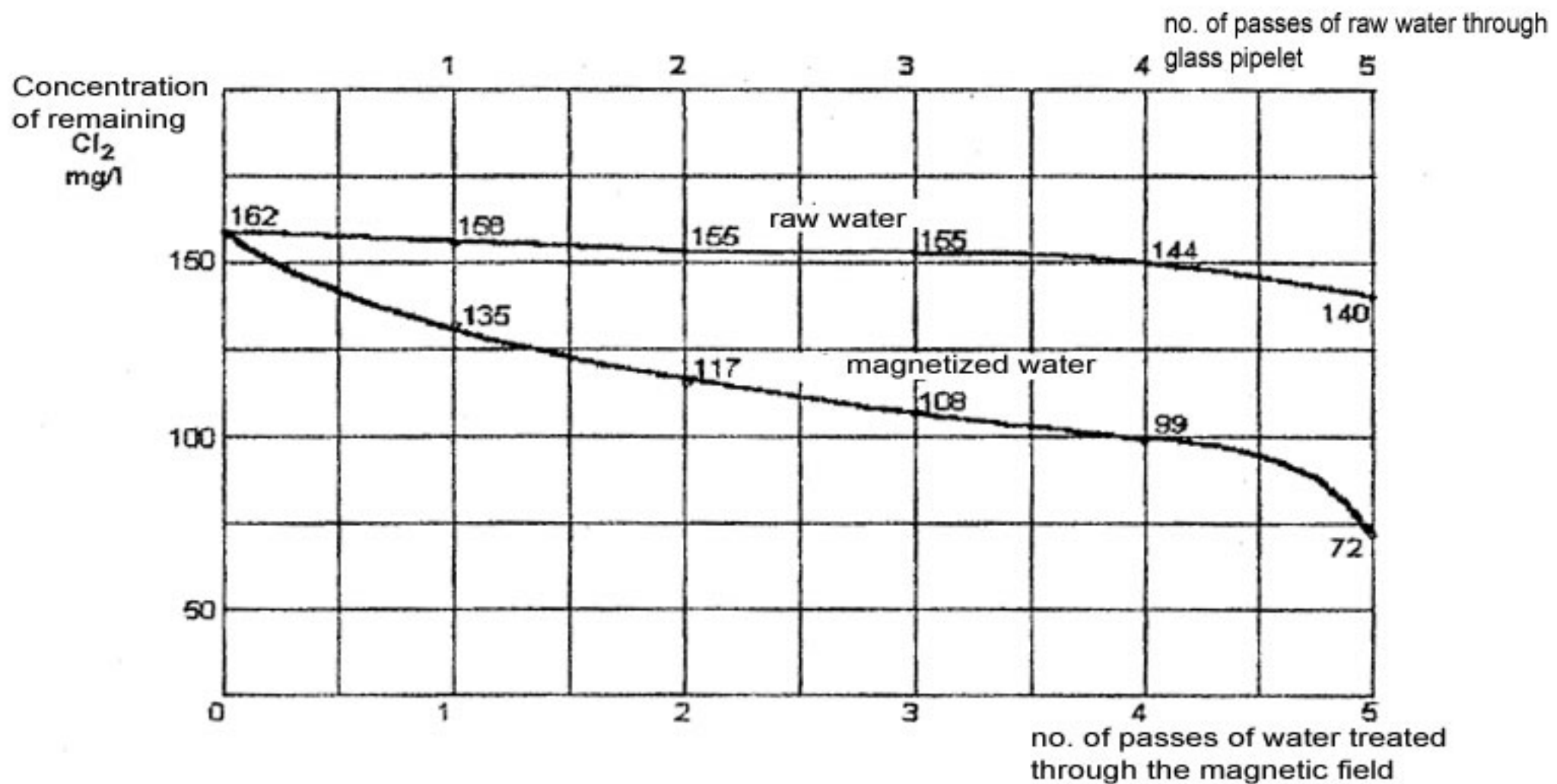
Table 1

Trial	raw water	water treated magnetically
	percent of oxygen dsaturation	
1.	96	99,2
2.	98	100
3.	97	100
4.	98	100
5.	97	100
ave.	97,2	99,84

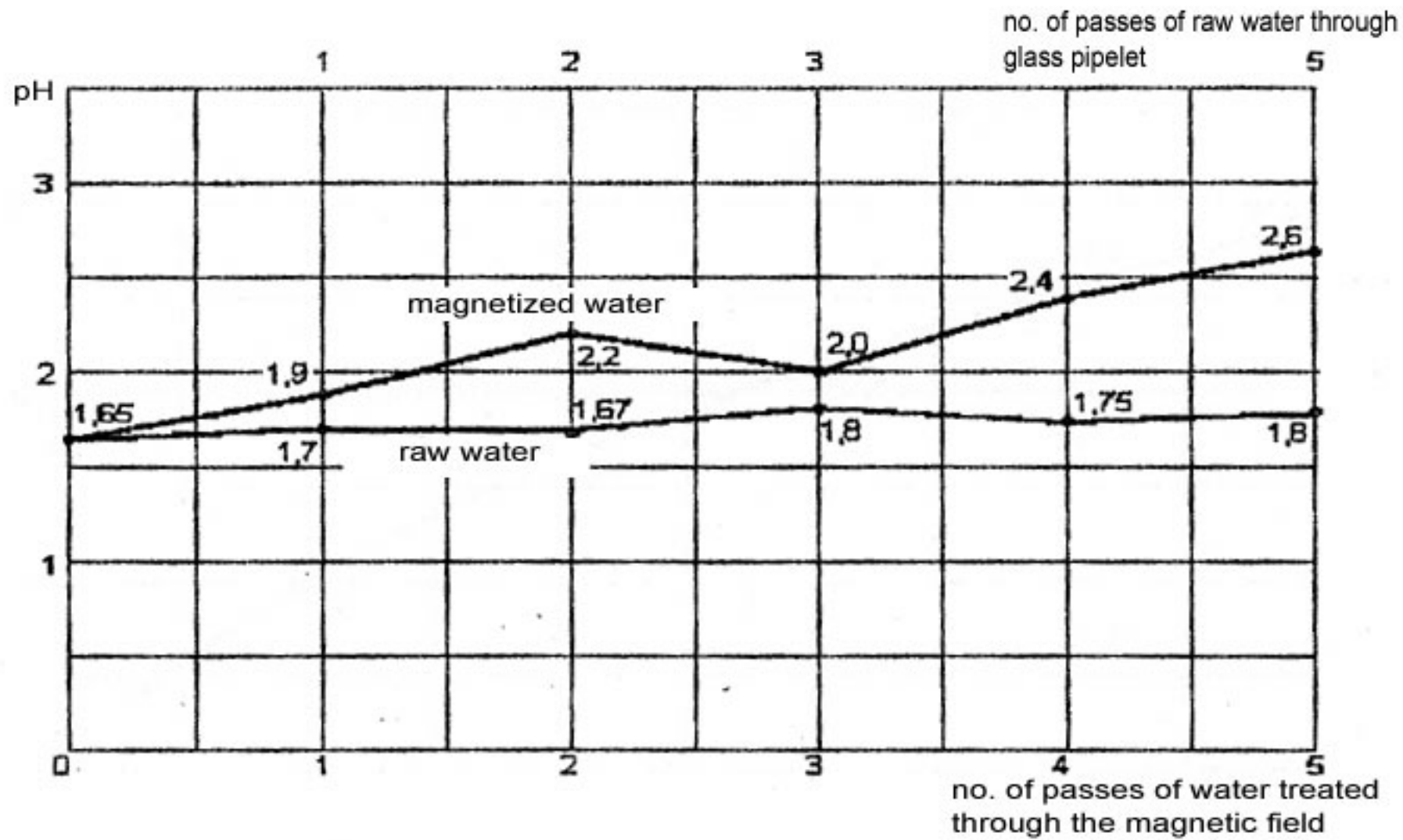
5.4.5. Results of Ozone (O_3) content in pipe raw water and in water magnetically treated by Magnetizer



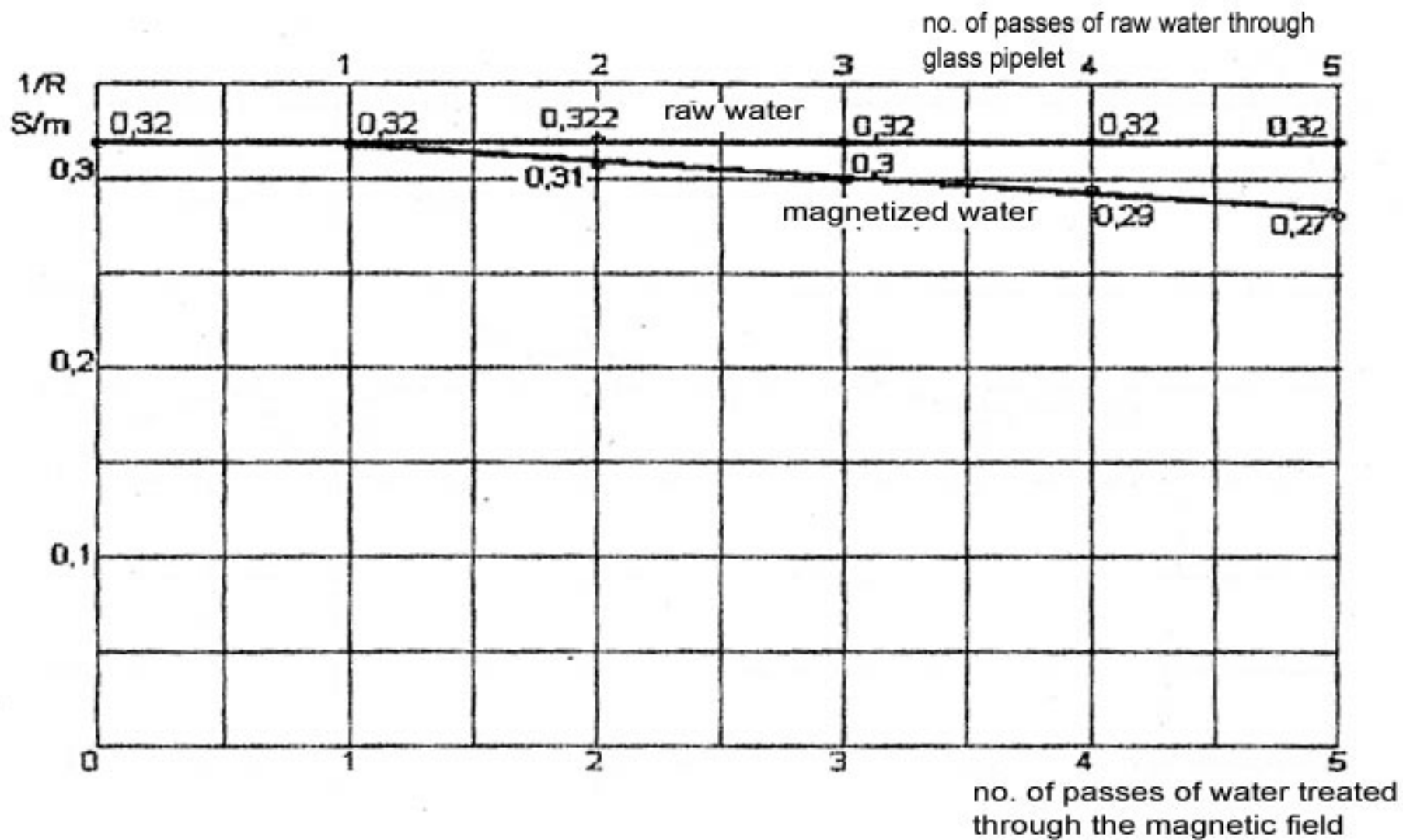
5.4.6. Results of Chlorine (Cl_2) remaining in chlorinated water submitted to magnetic treatment



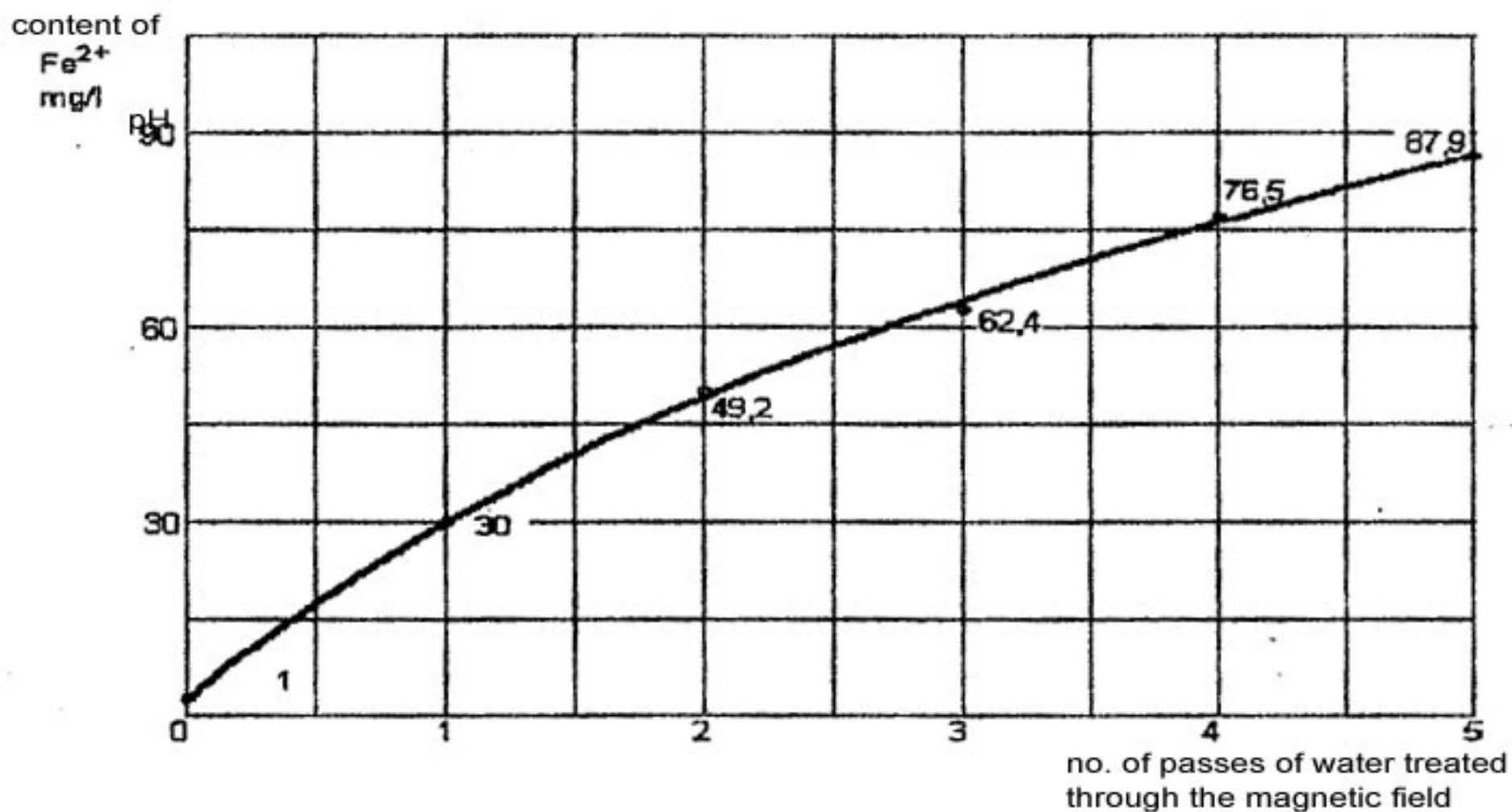
5.4.6.a. Results of pH content for chlorinated water submitted to magnetic treatment by Magnetizer



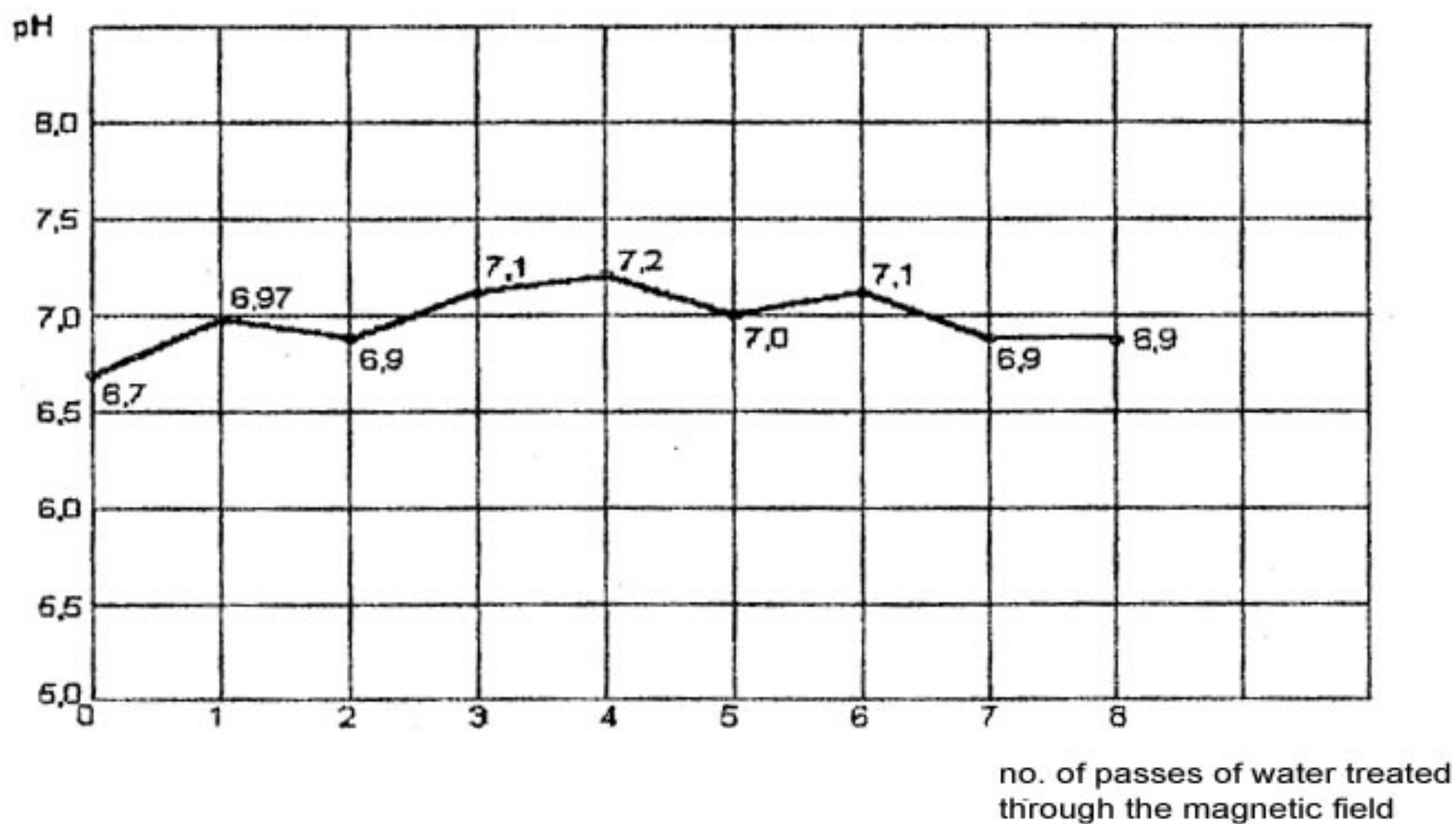
5.4.6.b. Results of measurement of specific conductivity for chlorinated water submitted to magnetic treatment



5.4.7. Results of Fe²⁺ content in water submitted to magnetic treatment by Magnetizer



5.4.8. Results of measurement of pH changes in distilled water submitted to multipass magnetic treatment



5.4.10. Results of oxygenation of sewage submitted to 5 passes through the magnetic field of Magnetizer at the entrance to aeration chamber

pass	raw sewage	sewage treated magnetically
	content of O ₂ [mg/l]	
1.	5,8	8,9
2.	5,6	7,1
3.	5,3	7,0
ave.	5,56	7,66

5.4.11. Results of measurement of sedimentation time for sewage submitted to multipass (5 times) magnetic treatment

time in min.	raw sewage	sewage treated magnetically
	volume of sedimented residue [cm ³]	
5	5,0	7,6
15	8,5	10,0
30	8,7	11,2
60	9,2	12,1
120	11,5	12,1