

## State of waters in the mining operations zones in considered areas

The summary results for the content of elements in surface water samples collected during the **sixth quarterly period** of the implementation of Project RoRS 337 are given in Table 1.

Table 1 – Results for surface water samples

Class of surface water	Element/Parameter	Range (min-max)	Median	MAC*	Content > MAC (%)
<b>IV</b> From Bor city to the confluence Bor and Timok River	Fe (mg/l)	0.38-599	97.6	2	<b>90</b>
	Mn (mg/l)	1.9-68.3	5.1	1	<b>100</b>
	Cu (mg/l)	6.6-206.2	48.3	1	<b>100</b>
	Zn (mg/l)	1.1-25.1	5.8	5	<b>85</b>
	As (µg/l)	3.4-19257.5	156.6	100	<b>60</b>
	Ni (µg/l)	130.9-13845.7	2865.4	34	<b>100</b>
	Pb (µg/l)	<2.1-1867.5	664.8	14	<b>80</b>
	Cd (µg/l)	22.5-2550.1	416.1	0.9	<b>100</b>
	Cr (mg/l)	<0.005-0.071	0	0.25	0
	Hg (µg/l)	<0.0005	-	0.07	0
	SO <sub>4</sub> <sup>2-</sup> (mg/l)	946.8-7333.3	2024.4	300	<b>100</b>
<b>III</b> From the confluence Bor and Timok River till to the confluence of Timok and Danube River	Fe (mg/l)	0.18-0.21	0.2	1	0
	Mn (mg/l)	0.074-0.14	0.14	0.3	0
	Cu (mg/l)	0.055-0.063	0.06	0.5	0
	Zn (mg/l)	0.018-0.03	0.02	2	0
	As (µg/l)	3.2-4.7	3.3	50	0
	Ni (µg/l)	12.2-25.1	13.36	34	0
	Pb (µg/l)	<2.1	-	14	0
	Cd (µg/l)	1.5-1.8	1.72	0.6	<b>100</b>
	Cr (mg/l)	<0.005	-	0.1	0
	Hg (µg/l)	<0.005	-	0.07	0
	SO <sub>4</sub> <sup>2-</sup> (mg/l)	188.7-212.5	208.66	200	<b>67</b>
<b>II</b> From border with Hungary up to border with Bulgaria	Fe (mg/l)	0.18-0.35	0.26	0.5	0
	Mn (mg/l)	<0.006-1.8	0.91	0.1	<b>25</b>
	Cu (mg/l)	0.009-0.28	0.02	0.005	<b>100</b>
	Zn (mg/l)	0.011-0.15	0.02	0.3	0
	As (µg/l)	<2.1-3.3	2.7	10	0
	Ni (µg/l)	<3.6-24.6	14.39	34	0
	Pb (µg/l)	<2.1	-	14	0
	Cd (µg/l)	0.21-2.1	0.25	0.45	<b>25</b>
	Cr (mg/l)	<0.005	-	0.05	0
	Hg (µg/l)	<0.0005	-	0.07	0
	SO <sub>4</sub> <sup>2-</sup> (mg/l)	108.5-984.4	208.61	100	<b>100</b>

\*Maximum Allowed Concentration

The summary results for the content of elements in wells collected during **sixth quarterly period** of the implementation of Project RoRS 337 are given in Table 2.

Table 2 – Results for wells

Element/ Parameter	Range (min-max)	Median	MAC for drinking water	Content > MAC (%)
Mn (mg/l)	<0.006-23.31	0.09	0.05	<b>40</b>
Cu (mg/l)	<0.006-13.64	0.14	2	<b>20</b>
Zn (mg/l)	0,019-2.05	0.03	3	0
As (µg/l)	<2.10-20.40	6.85	10	<b>10</b>
Ni (µg/l)	3.99-599.25	31.10	20	<b>20</b>
Pb (µg/l)	<2.1-2.66	2.67	10	0
Cr (mg/l)	<0.005-0.022	0.01	0.05	0
Mo (mg/L)	<0.007	-	0.07	0
Hg (mg/l)	<0.0005	-	0.001	0

The summary results for the content of elements in soil samples collected during **sixth quarterly period** of the implementation of Project RoRS 337 are given in Table 3.

Table 3 – Results for soil samples

Element/ Parameter	Range (min-max)	Median	MAC	Content > MAC (%)	Remediation values	Content >Remediation values (%)
As (mg/kg)	37.7-497.3	191.8	42	<b>20</b>	55	<b>20</b>
Cd (mg/kg)	<0.71-3.8	2.7	6.4	0	12	0
Cr (mg/kg)	93.5-308.0	203.9	240	<b>30</b>	380	0
Cu (mg/kg)	143.2-7166.4	872.4	110	<b>100</b>	190	<b>100</b>
Hg (mg/kg)	0.1-0.4	0.2	1.6	0	10	0
Pb (mg/kg)	40.0-401.0	207.3	310	<b>40</b>	530	0
Ni (mg/kg)	3.0-49.6	12.5	44	<b>10</b>	210	0
Zn (mg/kg)	66.7-5194.9	872.8	430	<b>70</b>	720	<b>60</b>

The summary results for the content of elements in sediment samples collected during **sixth quarterly period** of the implementation of Project RoRS 337 are given in Table 4.

Table 4 – Results for sediment samples

Element/ Parameter	Range (min-max)	Median	MAC	Content > MAC (%)	Remediation values	Content >Remediation values (%)
As (mg/kg)	945.4	945.4	42	<b>100</b>	55	<b>100</b>
Cd (mg/kg)	4.0	4.0	6.4	0	12	0
Cr (mg/kg)	119.4	119.4	240	0	380	0
Cu (mg/kg)	6960.6	6960.6	110	<b>100</b>	190	<b>100</b>
Hg (mg/kg)	<0.1	<0.1	1.6	0	10	0
Pb (mg/kg)	1052.7	1052.7	310	<b>100</b>	530	<b>100</b>
Ni (mg/kg)	49.8	49.8	44	<b>100</b>	210	0
Zn (mg/kg)	4775.2	4775.2	430	<b>100</b>	720	<b>100</b>