



TESTING LABORATORY DIRECTORATE

EUROTEST CONTROL EAD

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Accredited Testing and Calibration Laboratory
certified by the Bulgarian Accreditation Service, reg. No. 3-LIK, valid by Oct 31, 2011

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PROTOCOL OF TESTING

No. 4145/29.04.2010

1 Surface waters and groundwaters.....
(product name, type, make, etc.)

2 Company which requested the testing: Balkan Mineral and Mining EAD - the samples are provided by a
representative of.....

Eurotest Control EAD through protocol no. 369/13.04.2010 in accordance with BNS ISO
5667.....
(name and address of the company, no. and date of the protocol for collection of samples)

3 Method of testing: BNS 3424/81; BNS EN 27888/00; BNS 3775/87; BNS 3413/77; BNS ISO 7150-1/02;

BNS EN ISO 10304-1/09; ETC V3I1/7.2.3-9/02; BNS EN ISO 6878/05; BNS 15398/81; BNS ISO 6703-1/02;

BNS EN 1483/07; BNS EN ISO 11885/09; BNS 12578/75; BNS EN ISO 9377-2/04 – the parameters are specified
in item 7.1 of the protocol.....
(name and no. of the standards or validated methods)

4 Date of receipt of the samples for testing in the laboratory, request ref. no. 518/15.04.2010

5 Number of tested samples: 7 water samples collected from groundwaters, Ada Tepe area
(production no., number, and mass of the samples,

Krumovgrad Region.....
number of samples shipments, import invoice no., date of production)

6 Date/period of the testing: Apr 15, 2010 to Apr 29, 2010.....

DIRECTOR OF

TESTING LABORATORY DIRECTORATE:

Yu. Akrabova

7. TEST RESULTS

7.1. Testing/measurements within the scope of accreditation

#	Parameter	Unit of measurement	Standards/validated methods	Sample no. according to Sample Logbook	Test results (value, below detection)	Parameter value and tolerance	Test conditions
1	2	3	4	5	6	7	8
				Water sample ATDDTG-001, lab no. 910, from groundwaters - Ada Tepe area, Krumovgrad region		In accordance with Order 1/2007	
1	pH	pH units	BNS 3424/81		7.35 ± 0.10	6.5÷9.5	Standard
2	Electrical conductivity	$\mu\text{S}/\text{cm}$	BNS EN 27888/00		677 ± 20	<2000	Standard
3	Total hardness	mgeqv/dm^3	BNS 3775/87		7.49 ± 0.75	<12	Standard
4	Permanganate oxidisable C	mgO_2/dm^3	BNS 3413/77		1.91 ± 0.19	-	Standard
5	Ammonium (NH_4^+)	mg/dm^3	BNS ISO 7150-1/02		<0.013	<0.50	Standard
6	Nitrites (NO_2^-)	mg/dm^3	BNS EN ISO 10304-1/09		<0.05	<0.50	Standard
7	Nitrites (NO_3^-)	mg/dm^3	BNS EN ISO 10304-1/09		0.69 ± 0.07	<50.0	Standard
8	Fluorides (F)	mg/dm^3	ETC V311/7.2.3-9/02		0.19 ± 0.02	<5.0	Standard
9	Phosphates (PO_4^{3-})	mg/dm^3	BNS EN ISO 6878/05		<0.10	<0.50	Standard
10	Sulfates (SO_4^{2-})	mg/dm^3	BNS EN ISO 10304-1/09		49.5 ± 5.0	<250	Standard
11	Chlorides (as Cl ⁻)	mg/dm^3	BNS EN ISO 10304-1/09		7.4 ± 0.7	<250	Standard
12	Sodium (Na)	mg/dm^3	BNS 15398/81		7.0 ± 0.7	<200	Standard
13	Cyanide (total) (CN^-)	mg/dm^3	BNS ISO 6703-1/02		<0.002	<0.01	Standard
14	Mercury (Hg)	$\mu\text{g}/\text{dm}^3$	BNS EN 1483/07		<1.0	<1.0	Standard
15	Cadmium (Cd)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<1.0	<5.0	Standard
16	Copper (Cu)	mg/dm^3	BNS EN ISO 11885/09		0.0033 ± 0.0003	<2.0	Standard
17	Nickel (Ni)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<2.0	<20	Standard
18	Lead (Pb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
19	Selenium (Se)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
20	Chromium (Cr)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<1.0	<10	Standard
21	Aluminum (Al)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		10.6 ± 1.1	<50	Standard
22	Iron (Fe)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		50.1 ± 5.0	<200	Standard
23	Zinc (Zn)	mg/dm^3	BNS EN ISO 11885/09		0.0676 ± 0.0068	<5.0	Standard
24	Boron (B)	mg/dm^3	BNS EN ISO 11885/09		0.0046 ± 0.0005	<1.0	Standard
25	Antimony (Sb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<5.0	<5.0	Standard
26	Arsenic (As)	mg/dm^3	BNS EN ISO 11885/09		<0.010	<0.05	Standard
27	Magnesium (Mg)	mg/dm^3	BNS EN ISO 11885/09		5.18 ± 0.52	<80	Standard
28	Calcium (Ca)	mg/dm^3	BNS EN ISO 11885/09		141.5 ± 14.2	<150	Standard
29	Uranium (natural)	mg/dm^3	BNS 12578/75		<0.001	<0.06	Standard
30	Petroleum products	mg/dm^3	BNS EN ISO 9377-2/04		<0.02	-	Standard

#	Parameter	Unit of measurement	Standards/validated methods	Sample no. according to Sample Logbook	Test results (value, below detection)	Parameter value and tolerance	Test conditions
1	2	3	4	5	6	7	8
				Water sample ATDDTG-002 ^a , lab no. 911, from groundwaters - Ada Tepe area, Krumovgrad region		In accordance with Order 1/2007	
1	pH	pH units	BNS 3424/81		7.27 ± 0.10	6.5÷9.5	Standard
2	Electrical conductivity	µS/cm	BNS EN 27888/00		615 ± 18	<2000	Standard
3	Total hardness	mgeqv/dm ³	BNS 3775/87		5.65 ± 0.57	<12	Standard
4	Permanganate oxidisable C	mgO ₂ /dm ³	BNS 3413/77		1.20 ± 0.12	-	Standard
5	Ammonium (NH ₄ ⁺)	mg/dm ³	BNS ISO 7150-1/02		<0.013	<0.50	Standard
6	Nitrites (NO ₂ ⁻)	mg/dm ³	BNS EN ISO 10304-1/09		<0.05	<0.50	Standard
7	Nitrites (NO ₃ ⁻)	mg/dm ³	BNS EN ISO 10304-1/09		<0.10	<50.0	Standard
8	Fluorides (F)	mg/dm ³	ETC V311/7.2.3-9/02		0.17 ± 0.02	<5.0	Standard
9	Phosphates (PO ₄ ³⁻)	mg/dm ³	BNS EN ISO 6878/05		<0.10	<0.50	Standard
10	Sulfates (SO ₄ ²⁻)	mg/dm ³	BNS EN ISO 10304-1/09		35.0 ± 3.5	<250	Standard
11	Chlorides (as Cl ⁻)	mg/dm ³	BNS EN ISO 10304-1/09		12.1 ± 1.2	<250	Standard
12	Sodium (Na)	mg/dm ³	BNS 15398/81		18.5 ± 1.9	<200	Standard
13	Cyanide (total) (CN ⁻)	mg/dm ³	BNS ISO 6703-1/02		<0.002	<0.01	Standard
14	Mercury (Hg)	µg/dm ³	BNS EN 1483/07		<1.0	<1.0	Standard
15	Cadmium (Cd)	µg/dm ³	BNS EN ISO 11885/09		<1.0	<5.0	Standard
16	Copper (Cu)	mg/dm ³	BNS EN ISO 11885/09		0.0049 ± 0.0005	<2.0	Standard
17	Nickel (Ni)	µg/dm ³	BNS EN ISO 11885/09		2.0	<20	Standard
18	Lead (Pb)	µg/dm ³	BNS EN ISO 11885/09		<10	<10	Standard
19	Selenium (Se)	µg/dm ³	BNS EN ISO 11885/09		<10	<10	Standard
20	Chromium (Cr)	µg/dm ³	BNS EN ISO 11885/09		4.2 ± 0.4	<10	Standard
21	Aluminum (Al)	µg/dm ³	BNS EN ISO 11885/09		48.3 ± 4.8	<50	Standard
22	Iron (Fe)	µg/dm ³	BNS EN ISO 11885/09		67.6 ± 6.8	<200	Standard
23	Zinc (Zn)	mg/dm ³	BNS EN ISO 11885/09		0.0095 ± 0.0010	<5.0	Standard
24	Boron (B)	mg/dm ³	BNS EN ISO 11885/09		0.0103 ± 0.0010	<1.0	Standard
25	Antimony (Sb)	µg/dm ³	BNS EN ISO 11885/09		5.3 ± 0.5	<5.0	Standard
26	Arsenic (As)	mg/dm ³	BNS EN ISO 11885/09		<0.010	<0.05	Standard
27	Magnesium (Mg)	mg/dm ³	BNS EN ISO 11885/09		28.87 ± 2.89	<80	Standard
28	Calcium (Ca)	mg/dm ³	BNS EN ISO 11885/09		65.6 ± 6.7	<150	Standard
29	Uranium (natural)	mg/dm ³	BNS 12578/75		<0.001	<0.06	Standard
30	Petroleum products	mg/dm ³	BNS EN ISO 9377-2/04		0.10 ± 0.01	-	Standard

#	Parameter	Unit of measurement	Standards/validated methods	Sample no. according to Sample Logbook	Test results (value, below detection)	Parameter value and tolerance	Test conditions
1	2	3	4	5	6	7	8
				Water sample ATDDTG-004, lab no. 912, from groundwaters - Ada Tepe area, Krumovgrad region		In accordance with Order 1/2007	
1	pH	pH units	BNS 3424/81		7.30 ± 0.10	$6.5 \div 9.5$	Standard
2	Electrical conductivity	$\mu\text{S}/\text{cm}$	BNS EN 27888/00		779 ± 23	<2000	Standard
3	Total hardness	$\text{mg eqv}/\text{dm}^3$	BNS 3775/87		6.73 ± 0.67	<12	Standard
4	Permanganate oxidisable C	$\text{mg O}_2/\text{dm}^3$	BNS 3413/77		1.42 ± 0.14	-	Standard
5	Ammonium (NH_4^+)	mg/dm^3	BNS ISO 7150-1/02		<0.013	<0.50	Standard
6	Nitrites (NO_2^-)	mg/dm^3	BNS EN ISO 10304-1/09		<0.05	<0.50	Standard
7	Nitrites (NO_3^-)	mg/dm^3	BNS EN ISO 10304-1/09		1.46 ± 0.15	<50.0	Standard
8	Fluorides (F)	mg/dm^3	ETC V311/7.2.3-9/02		0.26 ± 0.03	<5.0	Standard
9	Phosphates (PO_4^{3-})	mg/dm^3	BNS EN ISO 6878/05		<0.10	<0.50	Standard
10	Sulfates (SO_4^{2-})	mg/dm^3	BNS EN ISO 10304-1/09		58.0 ± 5.8	<250	Standard
11	Chlorides (as Cl)	mg/dm^3	BNS EN ISO 10304-1/09		14.5 ± 1.5	<250	Standard
12	Sodium (Na)	mg/dm^3	BNS 15398/81		33.3 ± 3.3	<200	Standard
13	Cyanide (total) (CN^-)	mg/dm^3	BNS ISO 6703-1/02		<0.002	<0.01	Standard
14	Mercury (Hg)	$\mu\text{g}/\text{dm}^3$	BNS EN 1483/07		<1.0	<1.0	Standard
15	Cadmium (Cd)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<1.0	<5.0	Standard
16	Copper (Cu)	mg/dm^3	BNS EN ISO 11885/09		0.0057 ± 0.0006	<2.0	Standard
17	Nickel (Ni)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<2.0	<20	Standard
18	Lead (Pb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
19	Selenium (Se)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
20	Chromium (Cr)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		3.5 ± 0.4	<10	Standard
21	Aluminum (Al)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		22.7 ± 2.3	<50	Standard
22	Iron (Fe)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		179.3 ± 17.9	<200	Standard
23	Zinc (Zn)	mg/dm^3	BNS EN ISO 11885/09		0.0098 ± 0.0010	<5.0	Standard
24	Boron (B)	mg/dm^3	BNS EN ISO 11885/09		0.0421 ± 0.0042	<1.0	Standard
25	Antimony (Sb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<5.0	<5.0	Standard
26	Arsenic (As)	mg/dm^3	BNS EN ISO 11885/09		<0.010	<0.05	Standard
27	Magnesium (Mg)	mg/dm^3	BNS EN ISO 11885/09		35.32 ± 3.53	<80	Standard
28	Calcium (Ca)	mg/dm^3	BNS EN ISO 11885/09		76.7 ± 7.7	<150	Standard
29	Uranium (natural)	mg/dm^3	BNS 12578/75		0.0010 ± 0.0006	<0.06	Standard
30	Petroleum products	mg/dm^3	BNS EN ISO 9377-2/04		<0.02	-	Standard

#	Parameter	Unit of measurement	Standards/validated methods	Sample no. according to Sample Logbook	Test results (value, below detection)	Parameter value and tolerance	Test conditions
1	2	3	4	5	6	7	8
				Water sample ATDDTG-005, lab no. 913, from groundwaters - Ada Tepe area, Krumovgrad region		In accordance with Order 1/2007	
1	pH	pH units	BNS 3424/81		6.80 ± 0.10	$6.5 \div 9.5$	Standard
2	Electrical conductivity	$\mu\text{S}/\text{cm}$	BNS EN 27888/00		353 ± 11	<2000	Standard
3	Total hardness	$\text{mg eqv}/\text{dm}^3$	BNS 3775/87		2.67 ± 0.27	<12	Standard
4	Permanganate oxidisable C	$\text{mg O}_2/\text{dm}^3$	BNS 3413/77		1.56 ± 0.16	-	Standard
5	Ammonium (NH_4^+)	mg/dm^3	BNS ISO 7150-1/02		<0.013	<0.50	Standard
6	Nitrites (NO_2^-)	mg/dm^3	BNS EN ISO 10304-1/09		<0.05	<0.50	Standard
7	Nitrites (NO_3^-)	mg/dm^3	BNS EN ISO 10304-1/09		0.15 ± 0.02	<50.0	Standard
8	Fluorides (F)	mg/dm^3	ETC V311/7.2.3-9/02		0.17 ± 0.08	<5.0	Standard
9	Phosphates (PO_4^{3-})	mg/dm^3	BNS EN ISO 6878/05		<0.10	<0.50	Standard
10	Sulfates (SO_4^{2-})	mg/dm^3	BNS EN ISO 10304-1/09		45.2 ± 4.5	<250	Standard
11	Chlorides (as Cl)	mg/dm^3	BNS EN ISO 10304-1/09		13.9 ± 1.4	<250	Standard
12	Sodium (Na)	mg/dm^3	BNS 15398/81		17.1 ± 1.7	<200	Standard
13	Cyanide (total) (CN^-)	mg/dm^3	BNS ISO 6703-1/02		<0.002	<0.01	Standard
14	Mercury (Hg)	$\mu\text{g}/\text{dm}^3$	BNS EN 1483/07		<1.0	<1.0	Standard
15	Cadmium (Cd)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<1.0	<5.0	Standard
16	Copper (Cu)	mg/dm^3	BNS EN ISO 11885/09		0.0054 ± 0.0005	<2.0	Standard
17	Nickel (Ni)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<2.0	<20	Standard
18	Lead (Pb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
19	Selenium (Se)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
20	Chromium (Cr)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		2.0 ± 0.2	<10	Standard
21	Aluminum (Al)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		50.4 ± 5.0	<50	Standard
22	Iron (Fe)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		74.4 ± 7.4	<200	Standard
23	Zinc (Zn)	mg/dm^3	BNS EN ISO 11885/09		0.0050 ± 0.0005	<5.0	Standard
24	Boron (B)	mg/dm^3	BNS EN ISO 11885/09		0.0103 ± 0.0010	<1.0	Standard
25	Antimony (Sb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<5.0	<5.0	Standard
26	Arsenic (As)	mg/dm^3	BNS EN ISO 11885/09		<0.010	<0.05	Standard
27	Magnesium (Mg)	mg/dm^3	BNS EN ISO 11885/09		16.11 ± 1.61	<80	Standard
28	Calcium (Ca)	mg/dm^3	BNS EN ISO 11885/09		26.92 ± 2.69	<150	Standard
29	Uranium (natural)	mg/dm^3	BNS 12578/75		<0.001	<0.06	Standard
30	Petroleum products	mg/dm^3	BNS EN ISO 9377-2/04		<0.02	-	Standard

#	Parameter	Unit of measurement	Standards/validated methods	Sample no. according to Sample Logbook	Test results (value, below detection)	Parameter value and tolerance	Test conditions
1	2	3	4	5	6	7	8
				Water sample KRW 002(AT), lab no. 914, from groundwaters - Ada Tepe area, Krumovgrad region		In accordance with Order 1/2007	
1	pH	pH units	BNS 3424/81		7.25 ± 0.10	$6.5 \div 9.5$	Standard
2	Electrical conductivity	$\mu\text{S}/\text{cm}$	BNS EN 27888/00		570 ± 17	<2000	Standard
3	Total hardness	mgeq/dm^3	BNS 3775/87		5.58 ± 0.56	<12	Standard
4	Permanganate oxidisable C	mgO_2/dm^3	BNS 3413/77		0.99 ± 0.10	-	Standard
5	Ammonium (NH_4^+)	mg/dm^3	BNS ISO 7150-1/02		<0.013	<0.50	Standard
6	Nitrites (NO_2^-)	mg/dm^3	BNS EN ISO 10304-1/09		<0.05	<0.50	Standard
7	Nitrites (NO_3^-)	mg/dm^3	BNS EN ISO 10304-1/09		2.9 ± 0.3	<50.0	Standard
8	Fluorides (F)	mg/dm^3	ETC V311/7.2.3-9/02		0.21 ± 0.02	<5.0	Standard
9	Phosphates (PO_4^{3-})	mg/dm^3	BNS EN ISO 6878/05		<0.10	<0.50	Standard
10	Sulfates (SO_4^{2-})	mg/dm^3	BNS EN ISO 10304-1/09		52.1 ± 5.2	<250	Standard
11	Chlorides (as Cl)	mg/dm^3	BNS EN ISO 10304-1/09		6.0 ± 0.6	<250	Standard
12	Sodium (Na)	mg/dm^3	BNS 15398/81		11.7 ± 1.2	<200	Standard
13	Cyanide (total) (CN^-)	mg/dm^3	BNS ISO 6703-1/02		<0.002	<0.01	Standard
14	Mercury (Hg)	$\mu\text{g}/\text{dm}^3$	BNS EN 1483/07		<1.0	<1.0	Standard
15	Cadmium (Cd)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<1.0	<5.0	Standard
16	Copper (Cu)	mg/dm^3	BNS EN ISO 11885/09		0.0035 ± 0.0004	<2.0	Standard
17	Nickel (Ni)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<2.0	<20	Standard
18	Lead (Pb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
19	Selenium (Se)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
20	Chromium (Cr)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		3.0 ± 0.3	<10	Standard
21	Aluminum (Al)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		11.2 ± 1.1	<50	Standard
22	Iron (Fe)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		19.4 ± 1.9	<200	Standard
23	Zinc (Zn)	mg/dm^3	BNS EN ISO 11885/09		0.0010 ± 0.0001	<5.0	Standard
24	Boron (B)	mg/dm^3	BNS EN ISO 11885/09		0.0131 ± 0.0013	<1.0	Standard
25	Antimony (Sb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<5.0	<5.0	Standard
26	Arsenic (As)	mg/dm^3	BNS EN ISO 11885/09		<0.010	<0.05	Standard
27	Magnesium (Mg)	mg/dm^3	BNS EN ISO 11885/09		18.16 ± 1.82	<80	Standard
28	Calcium (Ca)	mg/dm^3	BNS EN ISO 11885/09		81.8 ± 8.2	<150	Standard
29	Uranium (natural)	mg/dm^3	BNS 12578/75		<0.001	<0.06	Standard
30	Petroleum products	mg/dm^3	BNS EN ISO 9377-2/04		<0.02	-	Standard

#	Parameter	Unit of measurement	Standards/validated methods	Sample no. according to Sample Logbook	Test results (value, below detection)	Parameter value and tolerance	Test conditions
1	2	3	4	5	6	7	8
				Water sample AT spring, lab no. 915, from groundwaters - Ada Tepe area, Krumovgrad region		In accordance with Order 1/2007	
1	pH	pH units	BNS 3424/81		7.21 ± 0.10	$6.5 \div 9.5$	Standard
2	Electrical conductivity	$\mu\text{S}/\text{cm}$	BNS EN 27888/00		530 ± 16	<2000	Standard
3	Total hardness	mgeq/dm^3	BNS 3775/87		4.83 ± 0.48	<12	Standard
4	Permanganate oxidisable C	mgO_2/dm^3	BNS 3413/77		1.06 ± 0.11	-	Standard
5	Ammonium (NH_4^+)	mg/dm^3	BNS ISO 7150-1/02		074 ± 0.007	<0.50	Standard
6	Nitrites (NO_2^-)	mg/dm^3	BNS EN ISO 10304-1/09		<0.05	<0.50	Standard
7	Nitrites (NO_3^-)	mg/dm^3	BNS EN ISO 10304-1/09		4.3 ± 0.4	<50.0	Standard
8/	Fluorides (F)	mg/dm^3	ETC V3I1/7.2.3-9/02		0.21 ± 0.02	<5.0	Standard
9/	Phosphates (PO_4^{3-})	mg/dm^3	BNS EN ISO 6878/05		<0.10	<0.50	Standard
10/	Sulfates (SO_4^{2-})	mg/dm^3	BNS EN ISO 10304-1/09		30.6 ± 3.1	<250	Standard
11/	Chlorides (as Cl)	mg/dm^3	BNS EN ISO 10304-1/09		16.0 ± 1.6	<250	Standard
12/	Sodium (Na)	mg/dm^3	BNS 15398/81		14.4 ± 1.4	<200	Standard
13/	Cyanide (total) (CN^-)	mg/dm^3	BNS ISO 6703-1/02		<0.002	<0.01	Standard
14/	Mercury (Hg)	$\mu\text{g}/\text{dm}^3$	BNS EN 1483/07		<1.0	<1.0	Standard
15/	Cadmium (Cd)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<1.0	<5.0	Standard
16/	Copper (Cu)	mg/dm^3	BNS EN ISO 11885/09		0.0035 ± 0.0004	<2.0	Standard
17/	Nickel (Ni)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<2.0	<20	Standard
18/	Lead (Pb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
19/	Selenium (Se)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<10	<10	Standard
20/	Chromium (Cr)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<1.0	<10	Standard
21/	Aluminum (Al)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		21.4 ± 2.1	<50	Standard
22/	Iron (Fe)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		41.3 ± 4.1	<200	Standard
23/	Zinc (Zn)	mg/dm^3	BNS EN ISO 11885/09		0.0085 ± 0.0009	<5.0	Standard
24/	Boron (B)	mg/dm^3	BNS EN ISO 11885/09		0.0126 ± 0.0013	<1.0	Standard
25/	Antimony (Sb)	$\mu\text{g}/\text{dm}^3$	BNS EN ISO 11885/09		<5.0	<5.0	Standard
26/	Arsenic (As)	mg/dm^3	BNS EN ISO 11885/09		<0.010	<0.05	Standard
27/	Magnesium (Mg)	mg/dm^3	BNS EN ISO 11885/09		16.63 ± 1.66	<80	Standard
28/	Calcium (Ca)	mg/dm^3	BNS EN ISO 11885/09		69.2 ± 6.9	<150	Standard
29/	Uranium (natural)	mg/dm^3	BNS 12578/75		<0.001	<0.06	Standard
30/	Petroleum products	mg/dm^3	BNS EN ISO 9377-2/04		<0.02	-	Standard

#	Parameter	Unit of measurement	Standards/validated methods	Sample no. according to Sample Logbook	Test results (value, below detection)	Parameter value and tolerance	Test conditions
1	2	3	4	5	6	7	8
						In accordance with Order 1/2007	
1	pH	pH units	BNS 3424/81		7.57 ± 0.10	6.5÷9.5	Standard
2	Electrical conductivity	µS/cm	BNS EN 27888/00		1028 ± 31	<2000	Standard
3	Total hardness	mgeqv/dm ³	BNS 3775/87		4.83 ± 0.48	<12	Standard
4	Permanganate oxidisable C	mgO ₂ /dm ³	BNS 3413/77		1.06 ± 0.11	-	Standard
5	Ammonium (NH ₄ ⁺)	mg/dm ³	BNS ISO 7150-1/02		0.83 ± 0.08	<0.50	Standard
6	Nitrites (NO ₂ ⁻)	mg/dm ³	BNS EN ISO 10304-1/09	Water sample	<0.05	<0.50	Standard
7	Nitrites (NO ₃ ⁻)	mg/dm ³	BNS EN ISO 10304-1/09	ATDDEX 025	<0.10	<50.0	Standard
8	Fluorides (F)	mg/dm ³	ETC V311/7.2.3-9/02	lab no. 916, from	0.53 ± 0.05	<5.0	Standard
9	Phosphates (PO ₄ ³⁻)	mg/dm ³	BNS EN ISO 6878/05	groundwaters -	<0.10	<0.50	Standard
10	Sulfates (SO ₄ ²⁻)	mg/dm ³	BNS EN ISO 10304-1/09	Ada Tepe area,	66.0 ± 6.6	<250	Standard
11	Chlorides (as Cl ⁻)	mg/dm ³	BNS EN ISO 10304-1/09	Krumovgrad region	108.7 ± 10.9	<250	Standard
12	Sodium (Na)	mg/dm ³	BNS 15398/81		140.0 ± 14.0	<200	Standard
13	Cyanide (total) (CN ⁻)	mg/dm ³	BNS ISO 6703-1/02		<0.002	<0.01	Standard
14	Mercury (Hg)	µg/dm ³	BNS EN 1483/07		<1.0	<1.0	Standard
15	Cadmium (Cd)	µg/dm ³	BNS EN ISO 11885/09		<1.0	<5.0	Standard
16	Copper (Cu)	mg/dm ³	BNS EN ISO 11885/09		<0.0030	<2.0	Standard
17	Nickel (Ni)	µg/dm ³	BNS EN ISO 11885/09		<2.0	<20	Standard
18	Lead (Pb)	µg/dm ³	BNS EN ISO 11885/09		<10	<10	Standard
19	Selenium (Se)	µg/dm ³	BNS EN ISO 11885/09		<10	<10	Standard
20	Chromium (Cr)	µg/dm ³	BNS EN ISO 11885/09		<1.0	<10	Standard
21	Aluminum (Al)	µg/dm ³	BNS EN ISO 11885/09		11.2 ± 1.1	<50	Standard
22	Iron (Fe)	µg/dm ³	BNS EN ISO 11885/09		1846 ± 185	<200	Standard
23	Zinc (Zn)	mg/dm ³	BNS EN ISO 11885/09		<0.0010	<5.0	Standard
24	Boron (B)	mg/dm ³	BNS EN ISO 11885/09		0.1178 ± 0.0118	<1.0	Standard
25	Antimony (Sb)	µg/dm ³	BNS EN ISO 11885/09		<5.0	<5.0	Standard
26	Arsenic (As)	mg/dm ³	BNS EN ISO 11885/09		<0.010	<0.05	Standard
27	Magnesium (Mg)	mg/dm ³	BNS EN ISO 11885/09		31.37 ± 3.14	<80	Standard
28	Calcium (Ca)	mg/dm ³	BNS EN ISO 11885/09		44.97 ± 4.50	<150	Standard
29	Uranium (natural)	mg/dm ³	BNS 12578/75		<0.001	<0.06	Standard
30	Petroleum products	mg/dm ³	BNS EN ISO 9377-2/04		<0.02	-	Standard

NOTE I: If required, the protocol of testing may include opinions and interpretations of the tests (conclusions are not allowed) only if compliant with the regulations in item 5.10.5 of BNS EN ISO/IEC 17025.

NOTE II: The test results refer only to the tested samples. Excerpts of the protocol of testing should not be copied without the written consent of the testing laboratory.

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