



Institute of Public Health in Ostrava
Centre of Hygienic Laboratories
CAI Accredited Testing Laboratory No. 1393 by ČSN EN ISO/IEC 17025
Partyzánské náměstí 7, 702 00 Ostrava

TEST REPORT No. 13996/2015

Customer : Elektrenu oaze
Mykolo Marcinkeviciaus g. 30
084 12 Vilnius
LT

Set No. : 7766
Sample Received : 26.2.2015 14:00
Sample Analyzed : 26.2.2015 - 16.3.2015
Ref. No. : ZU/06895/2015
File No. : S-ZU/06895/2015
File code : 4.0.3

Sample No. :	17612	Sampling time:	Not mentioned
Sampling date :	Not mentioned		
Sample name:	Fertenat		
Sample Type :	technology water		
Sampled by :	Customer		
Mode of sampling :	Not mentioned		
Purpose :	on the request customers		

Results - chemical analysis

Parameter	Value	Unit	Kind	Method used	Uncertainty
Hg	<0,001	mg/l	A	SOP OV 200.03 ²	-
As	<0,050	mg/l	A	SOP OV 201.01 ²	-
B	0,352	mg/l	A	SOP OV 201.01 ²	±20%
Ca	177	mg/l	A	SOP OV 201.01 ²	±20%
Cd	<0,0500	mg/l	A	SOP OV 201.01 ²	-
Co	<0,0500	mg/l	A	SOP OV 201.01 ²	-
Cr	0,106	mg/l	A	SOP OV 201.01 ²	±20%
Cu	0,397	mg/l	A	SOP OV 201.01 ²	±20%
Fe	29,4	mg/l	A	SOP OV 201.01 ²	±20%
I (iodine)	<0,100	mg/l	N	SOP OV 201 ²	-
K	291	mg/l	A	SOP OV 201.01 ²	±20%
Mg	58,7	mg/l	A	SOP OV 201.01 ²	±20%
Mn	1,34	mg/l	A	SOP OV 201.01 ²	±20%
Mo	<0,0500	mg/l	A	SOP OV 201.01 ²	-
Na	28,8	mg/l	A	SOP OV 201.01 ²	±20%
Ni	0,156	mg/l	A	SOP OV 201.01 ²	±20%
P	32,6	mg/l	A	SOP OV 201.01 ²	±20%
Pb	0,139	mg/l	A	SOP OV 201.01 ²	±20%
S (sulphur)	36,4	mg/l	N	SOP OV 201.01 ²	±20%
Se	<0,100	mg/l	A	SOP OV 201.01 ²	-
Zn	0,602	mg/l	A	SOP OV 201.01 ²	±20%
Ammonium ions	7,9	mg/l	A	SOP OV 002 ²	±10%
Nitrate	<200	mg/l	A	SOP OV 003 ²	-
Nitrite	<15	mg/l	A	SOP OV 003 ²	-
Fluoride	<100	mg/l	A	SOP OV 003 ²	-
Phosphate	96	mg/l	A	SOP OV 003 ²	±20%
Total nitrogen	140	mg/l	A	SOP OV 006.02 ²	±15%
Inorganic nitrogen	6,1	mg/l	A	SOP OV 006.01 ²	±10%
hydrogencarbonates (HCO ₃ ⁻)	740	mg/l	A	SOP OV 013 ²	±10%
Carbonate	<3,0	mg/l	A	SOP OV 013 ²	-
Total mineralization	1430	mg/l	A	SOP OV 026.01 ²	-
Chloride	<200	mg/l	A	SOP OV 003 ²	-
alkalinity pH= 4,5	12	mmol/l	A	SOP OV 024.01 ²	±10%
alkalinity pH=8,3	<0,050	mmol/l	A	SOP OV 024.01 ²	-

Results - chemical analysis					
Parameter	Value	Unit	Kind	Method used	Uncertainty
loss on ignition (LOI)	63,0	%	N	SOP OV 040.02 ²	±5%
Sulphates	<200	mg/l	A	SOP OV 003 ²	-
Dry weight	0,48	%	N	SOP OV 040.01 ²	±5%
acidity pH=4,5	<0,050	mmol/l	A	SOP OV 045 ²	-
acidity pH=48,3	1,1	mmol/l	A	SOP OV 045 ²	±10%
density (at 20°C)	1000	g/l	N	SOP OV 2011 ²	-

Notice to sampling : The sampling itself is not a subject of accreditation.

Notice to analysis :

Total mineralization is given as sum of Ca²⁺, Mg²⁺, Mn²⁺, Na⁺, K⁺, NH₄⁺, Fe, HCO₃⁻, Cl⁻, F⁻, SO₄²⁻, CO₃²⁻, OH⁻, NO₃⁻, NO₂⁻ a PO₄³⁻.

Method specification :

SOP OV 002 (ČSN ISO 7150-1)
 SOP OV 003 (ČSN EN ISO 15061, ČSN EN ISO 10304-1, ČSN EN ISO 10304-4)
 SOP OV 006.01 (ČSN EN 25663)
 SOP OV 006.02 (návod firmy MERCK)
 SOP OV 013 (ČSN 75 7373)
 SOP OV 024.01 (ČSN EN ISO 9963-1)
 SOP OV 026.01 (ČSN 75 7358)
 SOP OV 040.01 (ČSN EN 14346, část A)
 SOP OV 040.02 (ČSN EN 12879, ČSN 46 5735)
 SOP OV 045 (ČSN 75 7372)
 SOP OV 200.03 (ČSN 75 7440)
 SOP OV 201.01 (ČSN EN ISO 11885)
 SOP OV 201 (ČSN EN ISO 17294-1, ČSN EN ISO 17294-2)

Laboratory workplace :

⁽²⁾ - Analyses performed at Ostrava (Partyzánské nám. 7, 702 00 Ostrava)

Methods in KIND column: "N" non-accredited test, "A" accredited test
 < - the result is below the detection limit, > - the result is higher than the value presented

Results deal with tested samples only.

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These expanded uncertainties of measurement are obtained by multiplying of standard uncertainty of measurement by extending coefficient k=2 (for confidence level 95%). Uncertainty of sampling not included.

Head of Hygienic Laboratories Center : Doškářová Šárka, RNDr.

Checked by : Němcová Vladimíra, Ing.

Completed by : Němcová Vladimíra, Ing.

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Dardová

Ing. Zdeňka Dardová

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