Table S1. Description of sampling sites

Sample name	Sample number	Latitude	Longitude	Location	Collection date
T1-2020	1	57,08900	65,62300	Industrial zone	17.02.2020
T3-2020	2	57,10100	65,60900	transport zone	17.02.2020
T4-2020	3	57,10900	65,61400	modern business zone	17.02.2020
T6-2020	4	57,11400	65,57600	transport zone	17.02.2020
T7-2020	5	57,12861	65,57333	high-rise residential area	17.02.2020
T9-2020	6	57,14111	65,56139	modern business zone	17.02.2020
T10-2020	7	57,14500	65,58111	high-rise residential area	17.02.2020
T11-2020	8	57,15556	65,56028	transport zone	17.02.2020
T13-2020	9	57,13000	65,53778	high-rise residential area	18.02.2020
T14-2020	10	57,12968	65,52968	modern business zone	18.02.2020
T15-2020	11	57,12861	65,52333	high-rise residential area	18.02.2020
T16-2020	12	57,13472	65,50028	high-rise residential area	18.02.2020
T17-2020	13	57,13806	65,51417	modern business zone	18.02.2020
T19-2020	14	57,15306	65,61028	Industrial zone	18.02.2020
T21-2020	15	57,11167	65,64611	Industrial zone	18.02.2020
T22-2020	16	57,11667	65,62194	transport zone	18.02.2020
T23-2020	17	57,12139	65,59000	Industrial zone	19.02.2020
T25-2020	18	57,13333	65,60278	high-rise residential area	19.02.2020
T26-2020	19	57,17750	65,60417	transport zone	19.02.2020
T28-2020	20	57,18694	65,62333	high-rise residential area	19.02.2020
T29-2020	21	57,19861	65,52806	transport zone	19.02.2020
T31-2020	22	57,15028	65,53611	historical center	19.02.2020
T32-2020	23	57,15750	65,55139	historical center	19.02.2020
T34-2020	24	57,15694	65,52472	historical center	19.02.2020
T35-2020	25	57,15611	65,51306	historical center	19.02.2020
T37-2020	26	57,18528	65,51444	low-rise residential area	19.02.2020
T38-2020	27	57,18750	65,46861	low-rise residential area	19.02.2020
T40-2020	28	57,15889	65,48889	Industrial zone	19.02.2020
T41-2020	29	57,16611	65,46833	low-rise residential area	19.02.2020
T43-2020	30	57,12056	65,54889	transport zones	19.02.2020
T44-2020	31	57,12111	65,50861	transport zones	19.02.2020
T45-2020	32	57,14528	65,45389	modern business zones	19.02.2020
T47-2020	33	57,14639	65,50722	modern business zones	19.02.2020
T48-2020	34	57,17333	65,53833	transport zones	19.02.2020
T49-2020	35	57,18361	65,55694	transport zones	19.02.2020
TFo3-2020	36	56,86722	65,37861	Background area near Tyumen	20.02.2020
TFo5-2020	37	57,05583	64,92806	Background area near Tyumen	20.02.2020
TFo7-2020	38	57,10000	65,04361	Background area near Tyumen	20.02.2020
TFo8-2020	39	57,30861	64,98472	Background area near Tyumen	20.02.2020
TFo10-2020	40	57,35167	64,88722	Background area near Tyumen	20.02.2020
TFo11-2020	41	57,22389	65,06278	Background area near Tyumen	20.02.2020

Table S2. Methods of analysis, analytical results and recovery of certified reference material "Trace Metals in Drinking Water"

Element	Method	Certified value	Found 1	Recovery,%	Found 2	Recovery,%
Na	AES	6000	5920	99	5779	96
Mg	AES	9000	8894	99	8888	99
Al	AES	120	123	103	122	102
P	AES	-	<DL	-	<DL	-
S	AES	-	<DL	-	<DL	-
K	AES	2500	2454	98	2536	101
Ca	AES	35000	35366	101	35224	101
Sc	AES	-	<DL	-	<DL	-
Ti	AES	-	<DL	-	<DL	-
V	MS	30	30,1	100	30,1	100
Cr	MS	20	20,3	102	20,7	103
Mn	MS	40	40,2	100	40,0	100
Fe	MS	100	97,9	98	104	104
Co	MS	25	25,3	101	25,4	101
Ni	MS	60	61,4	102	59,8	100
Cu	MS	20	20,9	104	20,0	100
Zn	MS	70	69,2	99	70,6	101
Ga	MS	-	<DL	-	<DL	-
Ge	MS	-	<DL	-	<DL	-
As	MS	80	80,0	100	80,0	100
Se	MS	10	10,4	104	10,1	101
Br	MS	-	<DL	-	<DL	-
Sr	MS	250	251	100	251	100
Ba	MS	50	51,8	104	50,7	101
Hg	MS	-	<DL	-	<DL	-
Pb	MS	40	40,3	101	39,7	99
Li	MS	20	20	99	19,3	96
Be	MS	20	20	100	20,7	103
Rb	MS	10	10	101	9,9	99
Y	MS	-	<DL	-	<DL	-
Zr	MS	-	<DL	-	<DL	-
Nb	MS	-	<DL	-	<DL	-
Mo	MS	100	104	104	101,4	101
Ru	MS	-	<DL	-	<DL	-
Rh	MS	-	<DL	-	<DL	-
Pd	MS	-	<DL	-	<DL	-
Ag	MS	2	2	110	2	108
Cd	MS	10	10		10	101
In	MS	-	<DL	-	<DL	-
Sn	MS	-	233	-	0	-
Sb	MS	10	11	106	10	104
Te	MS	3	3	98	3	102
Cs	MS	-	0,018	-	0,016	-
La	MS	-	0,017	-	0,015	-
Ce	MS	-	0,031	-	0,031	-

Pr	MS	-	<DL	-	<DL	-
Nd	MS	-	<DL	-	<DL	-
Sm	MS	-	<DL	-	<DL	-
Eu	MS	-	<DL	-	<DL	-
Gd	MS	-	<DL	-	<DL	-
Tb	MS	-	<DL	-	<DL	-
Dy	MS	-	<DL	-	<DL	-
Ho	MS	-	<DL	-	<DL	-
Er	MS	-	<DL	-	<DL	-
Tm	MS	-	<DL	-	<DL	-
Yb	MS	-	<DL	-	<DL	-
Lu	MS	-	<DL	-	<DL	-
Hf	MS	-	24,8	-	0,013	-
Ta	MS	-	12,6	-	0,011	-
W	MS	-	27,7	-	0,025	-
Re	MS	-	161	-	0,159	-
Os	MS	-	<DL	-	<DL	-
Ir	MS	-	<DL	-	<DL	-
Pt	MS	-	<DL	-	<DL	-
Au	MS	-	<DL	-	<DL	-
Tl	MS	10	10,1	101	10,1	101
Bi	MS	10	10,1	101	9,9	99
Th	MS	-	<DL	-	<DL	-
U	MS	10	10,2	102	10,3	103

Table S3. Methods of analysis, analytical results and recovery of certified reference material "Gabbro Essexit STD-2A (GSO 8670-2005)

Element	Method	Certified value	Found	Recovery,%
Li	AES, MS	8,6	10,4	121
Be	MS	0,8	0,7	90
Na_2O	AES	7,51	7,5	100
MgO	AES	14,63	14,8	101
Al_2O_3	AES	14,63	14,8	101
P_2O_5	AES	0,17	0,17	98
S	AES	0,026	0,03	112
K_2O	AES	0,46	0,47	102
CaO	AES	10,42	10,53	101
Sc	MS	41	39,8	97
Ti	AES, MS	1,59	1,6	100
V	AES, MS	315	320	102
Cr	AES, MS	213	230	108
Mn	AES, MS	0,21	0,23	107
Fe_2O_3	AES	14,62	14,6	100
Co	MS	52	54,6	105
Ni	AES, MS	126	123	98
Cu	AES, MS	180	188	105
Zn	AES, MS	112	111	99
Ga	MS	17	20,1	118
As	MS	-	<DL	-
Se	MS	-	<DL	-
Rb	MS	11	11,1	100
Sr	AES, MS	197	200	102
Y	MS	29	30,0	103
Zr	MS	125	108	86
Nb	MS	6,0	5,2	86
Mo	MS	1,0	0,67	69
Rh	MS	-	<DL	-
Pd	MS	-	<DL	-
Ag	MS	0,06	0,065	108
Cd	MS	-	0,1	-
Sn	MS	1,6	1,04	64
Sb	MS	-	0,149	-
Te	MS	-	<DL	-
Cs	MS	0,5	0,35	78
Ba	AES, MS	227	153	67
La	MS	8	8,2	103
Ce	MS	22	19,8	90
Pr	MS	2,6	2,7	105
Nd	MS	13,2	13,1	99
Sm	MS	4,0	3,9	98
Eu	MS	1,4	1,3	94
Gd	MS	4,5	4,7	104
Tb	MS	0,8	0,8	101

Dy	MS	5,1	5,2	102
Ho	MS	1,0	1,1	110
Er	MS	2,9	3,2	110
Tm	MS	0,44	0,45	103
Yb	MS	3,3	3,1	95
Lu	MS	0,44	0,44	99
Hf	MS	2,7	2,9	106
Ta	MS	0,4	0,31	90
W	MS	0,3	0,21	71
Re	MS	-	<DL	-
Ir	MS	-	<DL	-
Pt	MS	-	<DL	-
Au	MS	0.0026	<DL	-
Hg	MS	-	0,016	-
Tl	MS	-	0,051	-
Pb	MS	3,0	2,4	80
Bi	MS	-	<DL	-
Th	MS	1,0	1,1	111
U	MS	0,5	0,47	105