

AFPC

Sample

2016-10

Grade

11-52-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, Other		001.99	15	11.40	0.05
Method Group 001.XX PCT			15	11.40	0.06
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	11.43	0.07
Total Nitrogen, Salicylic	955.04d	010.12	1	12.08	0.00
Total Nitrogen, Combustion	993.13	010.60	21	11.45	0.10
Total Nitrogen, Other		010.99	4	11.32	0.12
Method Group 010.XX PCT			29	11.43	0.12
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	52.64	0.00
Total Phosphate, Spectrometric	978.02	020.20	24	52.24	0.23
Total Phosphate, ICP	970.03	020.40	4	52.26	0.16
Method Group 020.XX PCT			29	52.26	0.25
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	8	0.04	0.06
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.01	0.00
Insoluble Phosphate, Automated	978.01	030.40	3	0.02	0.01
Insoluble Phosphate, Other		030.99	1	0.05	0.00
Method Group 030.XX PCT			13	0.03	0.03
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	11	52.08	0.13
Indirect Available Phosphate, Automated	960.02	040.40	2	52.21	0.08
Indirect Available Phosphate, Other		040.99	1	52.32	0.00
Method Group 040.XX PCT			14	52.11	0.20
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	3	52.53	0.31
Direct Available Phosphate, Spectrometric	960.03D	041.20	3	52.48	0.01
Direct Available Phosphate, Automated	978.01	041.40	1	52.51	0.00
Direct Available Phosphate, ICP		041.50	3	52.07	1.18
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	52.37	0.23
Direct Available Phosphate, Other		041.99	1	51.37	0.00
Method Group 041.XX PCT			15	52.38	0.51
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	17	46.50	0.59
Water Soluble Phosphate, Other		048.99	4	47.34	1.50
Method Group 048.XX PCT			21	46.57	0.76
SOLUBLE POTASH AS K₂O					
Soluble Potash, Atomic Absorption(Citrate)		050.31	1	0.15	0.00
Soluble Potash, ICP(Oxalate)		050.50	3	0.36	0.00
Soluble Potash, ICP(Citrate)		050.51	1	0.17	0.00
Soluble Potash, Other		050.99	8	0.34	0.02
Method Group 050.XX PCT			13	0.35	0.04
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	17	1.96	0.21
Free Water, Other		060.99	4	1.89	0.03
Method Group 060.XX PCT			21	1.91	0.24
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	0.24	0.00
Acid Soluble Calcium, ICP		101.30	16	0.34	0.02
Acid Soluble Calcium, Other		101.99	1	0.28	0.00
Method Group 101.XX PCT			18	0.34	0.04
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	3	2.08	0.02
Acid Soluble Magnesium, ICP		121.30	16	2.10	0.08
Acid Soluble Magnesium, Other		121.99	1	2.03	0.00
Method Group 121.XX PCT			20	2.10	0.08

SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	1	1.67	0.00
Sulfur, Spectrometric		144.70	2	1.64	0.00
Sulfur, Other		144.99	12	1.63	0.05
Method Group 144.XX PCT			15	1.64	0.05
TOTAL SULFUR (S)					
Sulfur, Other		145.99	2	1.57	0.0
Method Group 145.XX PCT			2	1.57	0.0
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	6	3.4	3.9
Total Arsenic, Other		151.99	3	3.3	2.9
Method Group 151.XX PPM			9	3.3	5.7
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	1	120	0.0
Method Group 165.XX PPM			1	120	0.0
TOTAL CADMIUM					
Total Cadmium, ICP		181.30	8	49.7	2.4
Total Cadmium, Other		181.99	1	46.4	0.0
Method Group 181.XX PPM			9	49.4	3.4
ALUMINUM AS Al₂O₃					
ICP, %			15	1.17	0.04
Water Soluble Chlorine, Other, %		190.99	1	1.18	0.00
Method Group 190.XX PCT			16	1.17	0.05
TOTAL CHROMIUM					
Total Chromium, ICP		191.30	8	400	27.0
Total Chromium, Other		191.99	1	361	0.0
Method Group 191.XX PPM			9	397	31.8
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	8	3	0.6
Acid Soluble Cobalt, Other		202.99	1	2	0.0
Method Group 202.XX PPM			9	3	0.7
ACID SOLUBLE COPPER					
Acid Soluble Copper, Other		221.99	1	0.9	0.0
Method Group 221.XX PPM			5	0.7	0.4
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP		241.30	16	2.09	0.03
Acid Soluble Iron, Other		241.99	1	2.18	0.00
Method Group 241.XX PCT			18	2.09	0.04
TOTAL LEAD					
Total Lead, ICP		251.30	8	6	1.5
Total Lead, Other		251.99	1	5.1	0.0
Method Group 251.XX PPM			9	5	1.1
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	1	103	0.0
Acid Soluble Manganese, Other		261.99	9	108	3.8
Method Group 261.XX PPM			10	107	4.9
TOTAL MERCURY					
Total Mercury, ICP		281.30	2	0.00	0.01
Method Group 281.XX PPM			2	0.05	0.01
TOTAL MOLYBDENUM					
Total Molybdenum, ICP		289.30	7	15	1.8
Total Molybdenum, Other		289.99	1	18	0.0
Method Group 289.XX PPM			8	16	2.8
TOTAL NICKEL					
Total Nickel, ICP		291.30	8	49.0	1.7
Total Nickel, icp		291.99	1	50.0	0.0
Method Group 291.XX PPM			9	49.2	1.4
TOTAL SELENIUM					
Total Selenium, ICP		301.30	5	0.2	5.1
Total Selenium, Other		301.99	1	5	0.0
Method Group 301.XX PPM			6	2.4	5.7
SODIUM AS Na₂O					

Sodium, Other	311.99	9	0.32	0.02
Method Group 311.XX PCT		9	0.32	0.03
ACID SOLUBLE ZINC				
Acid Soluble Zinc, Atomic Absorption	975.02 321.00	1	849.2	0.0
Acid Soluble Zinc, ICP	321.30	6	810.9	14.6
Acid Soluble Zinc, Other	321.99	3	722.5	38.2
Method Group 321.XX %		10	810.9	39.5
FLUORIDE				
Volumetric	325.10	13	0.73	0.10
Distilled/Electrode	325.99	4	0.77	0.00
Method Group 325.XX PCT		17	0.77	0.07

001.99 Ammoniacal Nitrogen		
Lab		Other
61	11.47	-1.340
34	11.46	-1.244
Std Dev	11.45	-1.000
61	11.44	-0.861
140	11.42	-0.383
24	11.41	-0.191
24	11.41	-0.191
32	11.40	-0.096
23	11.40	0.000
32	11.40	0.000
Median	11.40	0.000
275	11.37	0.479
Std Dev	11.34	1.000
23	11.34	1.053
275	11.34	1.053
79	11.27	2.393
310	11.10	5.647
38	11.10	5.743

001.XX Ammoniacal Nitrogen		
Lab		Total Method
61	11.47	-1.340
34	11.46	-1.244
Std Dev	11.45	-1.000
61	11.44	-0.861
140	11.42	-0.383
24	11.41	-0.191
24	11.41	-0.191
32	11.40	-0.096
23	11.40	0.000
32	11.40	0.000
Median	11.40	0.000
275	11.37	0.479
Std Dev	11.34	1.000
23	11.34	1.053
275	11.34	1.053
79	11.27	2.393
310	11.10	5.647
38	11.10	5.743

010.11 Total Nitrogen		
Lab		Modified Comprehensive
32	11.40	-0.639
32	11.40	-0.598
Median	11.32	0.000
38	11.25	0.598

43	11.43	0.000
43	11.43	0.000
Median	11.43	0.000
Std Dev	11.36	1.000
219	11.25	2.680

010.12 Total Nitrogen		
Lab		Salicylic
107	12.08	0.000
Median	12.08	0.000

010.60 Total Nitrogen		
Lab		Combustion
49	11.60	-1.436
80	11.60	-1.436
Std Dev	11.55	-1.000
47	11.55	-0.957
66	11.52	-0.622
31	11.51	-0.526
110	11.50	-0.479
24	11.47	-0.191
9	11.47	-0.191
79	11.47	-0.144
14	11.46	-0.096
29	11.45	0.000
Median	11.45	0.000
24	11.45	0.048
219	11.42	0.287
39	11.41	0.431
14	11.40	0.479
9	11.36	0.861
Std Dev	11.35	1.000
77	11.34	1.101
137	11.32	1.244
63	11.23	2.106
103	11.00	4.355
99	10.91	5.169

010.99 Total Nitrogen		
Lab		Other
32	11.40	-0.639
32	11.40	-0.598
Median	11.32	0.000
38	11.25	0.598

Std Dev	11.20	1.000
335	11.19	1.134

010.XX Total Nitrogen		
Lab		Total Method
107	12.08	-6.402
49	11.60	-1.687
80	11.60	-1.687
47	11.55	-1.191
Std Dev	11.53	-1.000
66	11.52	-0.844
31	11.51	-0.744
110	11.50	-0.695
24	11.47	-0.397
9	11.47	-0.397
79	11.47	-0.347
14	11.46	-0.298
29	11.45	-0.199
24	11.45	-0.149
43	11.43	0.000
43	11.43	0.000
Median	11.43	0.000
219	11.42	0.099
39	11.41	0.248
32	11.40	0.298
14	11.40	0.298
32	11.40	0.347
9	11.36	0.695
77	11.34	0.943
Std Dev	11.33	1.000
137	11.32	1.092
38	11.25	1.787
219	11.25	1.787
63	11.23	1.985
335	11.19	2.432
103	11.00	4.318
99	10.91	5.161

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
219	52.64	0.000
Median	52.64	0.000

020.20 Total Phosphate		
Lab		Spectrometric
335	52.61	-1.580
275	52.59	-1.519
275	52.52	-1.194
38	52.50	-1.122
Std Dev	52.47	-1.000
99	52.44	-0.861
140	52.41	-0.730
14	52.38	-0.599
31	52.38	-0.599
34	52.33	-0.381
24	52.30	-0.251
32	52.27	-0.120
14	52.26	-0.054
Median	52.24	0.000
32	52.23	0.054
9	52.21	0.142
24	52.19	0.229
43	52.16	0.381
61	52.15	0.403
9	52.08	0.708
43	52.08	0.708
Std Dev	52.01	1.000
61	51.91	1.471
23	51.90	1.493
23	51.80	1.928
110	51.65	2.582
310	51.40	3.671

020.40 Total Phosphate		
Lab		Automated
137	52.57	-1.917
Std Dev	52.42	-1.000
9	52.33	-0.452
Median	52.26	0.000
219	52.19	0.452
9	52.14	0.732

020.XX Total Phosphate		
Lab		Total Method
219	52.64	-1.886
335	52.61	-1.737
275	52.59	-1.668

137	52.57	-1.539
275	52.52	-1.298
38	52.50	-1.216
Std Dev	52.46	-1.000
99	52.44	-0.918
140	52.41	-0.769
14	52.38	-0.620
31	52.38	-0.620
9	52.33	-0.372
34	52.33	-0.372
24	52.30	-0.223
32	52.27	-0.074
14	52.26	0.000
Median	52.26	0.000
32	52.23	0.124
9	52.21	0.223
24	52.19	0.323
219	52.19	0.347
43	52.16	0.496
61	52.15	0.521
9	52.14	0.571
9	52.08	0.869
43	52.08	0.869
Std Dev	52.05	1.000
61	51.91	1.737
23	51.90	1.762
23	51.80	2.258
110	51.65	3.003
310	51.40	4.243

030.20	Insoluble Phosphate	
Lab	Spectrometric	
24	0.11	-1.276
24	0.11	-1.276
140	0.11	-1.276
Std Dev	0.09	-1.000
23	0.04	-0.044
Median	0.04	0.000
61	0.04	0.044
43	0.03	0.062
23	0.03	0.070
43	0.01	0.414

030.30	Insoluble Phosphate	
Lab	Alka. Quimociac	
31	0.01	0.000
Median	0.01	0.000

030.40	Insoluble Phosphate	
Lab	Automated	
9	0.03	-1.340
Std Dev	0.03	-1.000
9	0.02	0.000
Median	0.02	0.000
Std Dev	0.01	1.000
34	0.01	1.340

030.99	Insoluble Phosphate	
Lab	Other	
32	0.05	0.000
Median	0.05	0.000

030.XX	Insoluble Phosphate	
Lab	Total Method	
24	0.11	-3.395
24	0.11	-3.395
140	0.11	-3.395
Std Dev	0.06	-1.000
32	0.05	-0.715
23	0.04	-0.268
61	0.04	-0.045
43	0.03	0.000
Median	0.03	0.000
23	0.03	0.022
9	0.03	0.179
9	0.02	0.625
43	0.01	0.893
Std Dev	0.01	1.000
31	0.01	1.072
34	0.01	1.072

040.20	Indirect Available Phosphate	
Lab	Spectrometric	
31	52.37	-2.269
140	52.30	-1.721
Std Dev	52.21	-1.000
9	52.20	-0.939

24	52.19	-0.861
43	52.12	-0.313
24	52.08	0.000
Median	52.08	0.000
43	52.07	0.078
9	52.06	0.196
61	51.99	0.685
Std Dev	51.95	1.000
23	51.86	1.721
23	51.77	2.426

040.40	Indirect Available Phosphate	
Lab	Automated	
9	52.31	-1.340
Std Dev	52.28	-1.000
Median	52.21	0.000
Std Dev	52.13	1.000
9	52.11	1.340

040.99	Indirect Available Phosphate	
Lab	Other	
34	52.32	0.000
Median	52.32	0.000

040.XX	Indirect Available Phosphate	
Lab	Total Method	
31	52.37	-1.596
34	52.32	-1.286
9	52.31	-1.224
140	52.30	-1.162
Std Dev	52.27	-1.000
9	52.20	-0.542
24	52.19	-0.480
43	52.12	-0.046
Median	52.11	0.000
9	52.11	0.046
24	52.08	0.201
43	52.07	0.263
9	52.06	0.356
61	51.99	0.744
Std Dev	51.95	1.000
23	51.86	1.565
23	51.77	2.122

041.10	Direct Available Phosphate	
Lab	Gravimetric Quimociac	
219	52.64	-0.341
47	52.53	0.000
Median	52.53	0.000
Std Dev	52.22	1.000
107	51.81	2.339

041.20	Direct Available Phosphate	
Lab	Spectrometric	
275	52.50	-1.626
Std Dev	52.49	-1.000
47	52.48	0.000
Median	52.48	0.000
Std Dev	52.47	1.000
275	52.47	1.054

041.40	Direct Available Phosphate	
Lab	Automated	
49	52.51	0.000
Median	52.51	0.000

041.50	Direct Available Phosphate	
Lab	ICP	
66	52.20	-0.111
63	52.07	0.000
Median	52.07	0.000
Std Dev	50.89	1.000
80	49.05	2.569

041.60	Direct Available Phosphate	
Lab	EDTA Extract	
29	52.79	-1.802
Std Dev	52.60	-1.000
77	52.38	-0.011
Median	52.37	0.000
219	52.37	0.011
Std Dev	52.14	1.000
137	51.57	3.493

041.99	Direct Available Phosphate	
Lab	Other	
335	51.37	0.000
Median	51.37	0.000

041.XX Direct Available Phosphate		
Lab	Total Method	
29	52.79	-0.983
219	52.64	-0.617
47	52.53	-0.368
49	52.51	-0.321
275	52.50	-0.293
47	52.48	-0.249
275	52.47	-0.221
77	52.38	0.000
Median	52.38	0.000
219	52.37	0.012
66	52.20	0.416
63	52.07	0.724
Std Dev	51.95	1.000
107	51.81	1.342
137	51.57	1.924
335	51.37	2.387
80	49.05	7.896

048.20 Water Soluble Phosphate Spectrometric		
Lab	Total Method	
31	47.29	-1.357
Std Dev	47.08	-1.000
9	46.98	-0.828
140	46.94	-0.751
9	46.83	-0.563
61	46.81	-0.538
61	46.66	-0.273
79	46.59	-0.165
24	46.55	-0.094
24	46.50	0.000
Median	46.50	0.000
23	46.47	0.051
23	46.29	0.358
43	46.10	0.683
14	46.03	0.802
14	45.97	0.905
Std Dev	45.91	1.000
43	45.87	1.067
275	45.70	1.360
275	45.58	1.558

048.99 Water Soluble Phosphate		
Lab	Other	
39	53.65	-4.200
Std Dev	48.84	-1.000
32	47.50	-0.108
Median	47.34	0.000
9	47.18	0.108
34	46.57	0.511

048.XX Water Soluble Phosphate		
Lab	Total Method	
39	53.65	-11.294
32	47.50	-1.484
31	47.29	-1.149
Std Dev	47.20	-1.000
9	47.18	-0.965
9	46.98	-0.654
140	46.94	-0.582
9	46.83	-0.407
61	46.81	-0.383
61	46.66	-0.136
79	46.59	-0.034
34	46.57	0.000
Median	46.57	0.000
24	46.55	0.032
24	46.50	0.120
23	46.47	0.167
23	46.29	0.455
43	46.10	0.758
14	46.03	0.869
14	45.97	0.965
Std Dev	45.94	1.000
43	45.87	1.117
275	45.70	1.391
275	45.58	1.575

050.31 Soluble Potash		
Lab	Atomic Absorption(Citrate)	
107	0.15	0.000
Median	0.15	0.000

050.50 %K ₂ O Soluble Potash		
Lab	ICP(Oxalate)	
99	0.37	-2.680

Std Dev	0.36	-1.000
23	0.36	0.000
23	0.36	0.000
Median	0.36	0.000

050.51 %K ₂ O Soluble Potash		
Lab	ICP(Citrate)	
137	0.17	0.000
Median	0.17	0.000

050.99 Soluble Potash		
Lab	%K ₂ O	Other
61	0.36	-0.951
24	0.35	-0.529
61	0.35	-0.529
24	0.35	-0.317
Median	0.34	0.000
31	0.33	0.317
43	0.32	0.797
43	0.32	0.854
Std Dev	0.31	1.000
80	0.25	3.700

050.XX Soluble Potash		
Lab	%K ₂ O	Total Method
99	0.37	-0.628
23	0.36	-0.471
23	0.36	-0.471
61	0.36	-0.471
24	0.35	-0.157
61	0.35	-0.157
24	0.35	0.000
Median	0.35	0.000
31	0.33	0.471
43	0.32	0.827
43	0.32	0.869
Std Dev	0.31	1.000
80	0.25	2.981
137	0.17	5.648
107	0.15	6.119

060.00 Free Water		
Lab	Vacuum Oven	
32	2.24	-1.364

32	2.21	-1.218
31	2.21	-1.194
24	2.19	-1.096
Std Dev	2.17	-1.000
24	2.12	-0.755
219	2.11	-0.731
9	2.06	-0.463
9	2.06	-0.463
140	1.96	0.000
Median	1.96	0.000
79	1.91	0.244
43	1.86	0.512
34	1.85	0.536
61	1.84	0.585
43	1.81	0.731
23	1.80	0.804
23	1.78	0.877
Std Dev	1.75	1.000
61	1.68	1.364

060.99 Free Water		
Lab	Other	
275	1.94	-1.378
Std Dev	1.92	-1.000
275	1.91	-0.459
Median	1.89	0.000
14	1.88	0.459
Std Dev	1.86	1.000
14	1.85	1.225

060.XX Free Water		
Lab	Total Method	
32	2.24	-1.701
32	2.21	-1.546
31	2.21	-1.520
24	2.19	-1.417
24	2.12	-1.057
219	2.11	-1.031
Std Dev	2.10	-1.000
9	2.06	-0.747
9	2.06	-0.747
140	1.96	-0.258
275	1.94	-0.129
79	1.91	0.000

Median	1.91	0.000
275	1.91	0.026
14	1.88	0.180
43	1.86	0.283
14	1.85	0.309
34	1.85	0.309
61	1.84	0.361
43	1.81	0.515
23	1.80	0.593
23	1.78	0.670
Std Dev	1.72	1.000
61	1.68	1.185

101.00 Acid Soluble Calcium		
Lab	%CaO	Atomic Absorption
219	0.24	0.000
Median	0.24	0.000

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
61	0.42	-3.195
61	0.41	-2.783
32	0.38	-1.546
24	0.37	-1.134
Std Dev	0.37	-1.000
14	0.36	-0.722
24	0.36	-0.515
9	0.35	-0.103
14	0.35	-0.103
Median	0.34	0.000
34	0.34	0.103
23	0.34	0.309
9	0.33	0.515
23	0.33	0.515
32	0.33	0.515
Std Dev	0.32	1.000
31	0.30	1.608
43	0.30	1.752
43	0.30	1.782

101.99 Acid Soluble Calcium		
Lab	%CaO	Other
219	0.28	0.000
Median	0.28	0.000

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
61	0.42	-2.274
61	0.41	-1.998
32	0.38	-1.171
Std Dev	0.37	-1.000
24	0.37	-0.896
14	0.36	-0.620
24	0.36	-0.482
9	0.35	-0.207
14	0.35	-0.207
34	0.34	-0.069
Median	0.34	0.000
23	0.34	0.069
9	0.33	0.207
23	0.33	0.207
32	0.33	0.207
31	0.30	0.937
Std Dev	0.30	1.000
43	0.30	1.033
43	0.30	1.053
219	0.28	1.612
219	0.24	2.714

121.00 Acid Soluble Magnesium		
Lab	%MgO	Atomic Absorption
219	2.13	-1.821
Std Dev	2.11	-1.000
275	2.08	0.000
Median	2.08	0.000
275	2.06	0.859

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
24	2.23	-1.595
24	2.20	-1.276
32	2.19	-1.085
Std Dev	2.18	-1.000
23	2.15	-0.574
32	2.15	-0.574
9	2.11	-0.064
23	2.11	-0.064
34	2.10	0.000

61	2.10	0.000
Median	2.10	0.000
9	2.10	0.064
61	2.08	0.319
14	2.04	0.766
14	2.04	0.766
Std Dev	2.02	1.000
31	1.92	2.361
43	1.83	3.510
43	1.83	3.510

121.99 Acid Soluble Magnesium		
Lab	%MgO	Other
219	2.03	0.000
Median	2.03	0.000

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
24	2.23	-1.890
24	2.20	-1.520
32	2.19	-1.297
Std Dev	2.16	-1.000
23	2.15	-0.704
32	2.15	-0.704
219	2.13	-0.415
9	2.11	-0.111
23	2.11	-0.111
34	2.10	-0.037
61	2.10	-0.037
Median	2.10	0.000
9	2.10	0.037
275	2.08	0.245
61	2.08	0.334
275	2.06	0.556
14	2.04	0.853
14	2.04	0.853
Std Dev	2.03	1.000
219	2.03	1.068
31	1.92	2.706
43	1.83	4.040
43	1.83	4.040

144..01 Sulfate Sulfur (S)		
Lab		Gravimetric

79	1.67	0.000
Median	1.67	0.000

144.70 Sulfur Spectrometric		
Lab		
14	1.64	-1.340
Std Dev	1.64	-1.000
Median	1.64	0.000
Std Dev	1.64	1.000
14	1.64	1.340

144.99 Sulfate Sulfur (S)		
Lab		Other
32	1.68	-1.039
Std Dev	1.67	-1.000
9	1.65	-0.383
23	1.64	-0.273
34	1.64	-0.273
24	1.64	-0.164
9	1.64	-0.164
Median	1.63	0.000
23	1.62	0.164
24	1.60	0.711
Std Dev	1.58	1.000
61	1.58	1.039
32	1.58	1.149
61	1.54	1.914
31	1.51	2.571

144.XX Sulfate Sulfur (S)		
Lab		Total Method
32	1.68	-1.021
Std Dev	1.67	-1.000
79	1.67	-0.893
9	1.65	-0.255
14	1.64	-0.128
23	1.64	-0.128
34	1.64	-0.128
14	1.64	0.000
24	1.64	0.000
Median	1.64	0.000
9	1.64	0.000
23	1.62	0.383
Std Dev	1.60	1.000

24	1.60	1.021
61	1.58	1.404
32	1.58	1.531
61	1.54	2.425
31	1.51	3.190

145.99	Total Sulfur (S)	
Lab	Other	
43	1.58	-1.340
Std Dev	1.57	-1.000
Median	1.57	0.000
Std Dev	1.57	1.000
43	1.57	1.340

145.XX	Total Sulfur (S)	
Lab	Total Method	
43	1.58	-1.340
Std Dev	1.57	-1.000
Median	1.57	0.000
Std Dev	1.57	1.000
43	1.57	1.340

151.30	Total Arsenic	
Lab	ICP	
43	9.15	-1.448
43	9.00	-1.410
Std Dev	7.38	-1.000
335	4.18	-0.187
Median	3.44	0.000
24	2.71	0.187
61	2.45	0.252
31	1.75	0.429

151.99	Total Arsenic	
Lab	Other	
140	11.08	-2.646
Std Dev	6.24	-1.000
18	3.30	0.000
Median	3.30	0.000
18	3.20	0.034

151.XX	Total Arsenic	
Lab	Total Method	
140	11.08	-1.656

43	9.15	-1.245
43	9.00	-1.213
Std Dev	8.00	-1.000
335	4.18	-0.187
18	3.30	0.000
Median	3.30	0.000
18	3.20	0.021
24	2.71	0.127
61	2.45	0.181
31	1.75	0.330

165.99	Acid Soluble Boron	
Lab	PPM	Other
24	120.00	0.000
Median	120.00	0.000

165.XX, ppm	Acid Soluble Boron	
Lab	PPM	Total Method
24	120.00	0.000
Median	120.00	0.000

181.30	Total Cadmium	
Lab	PPM	ICP
335	55.01	-2.179
61	53.50	-1.561
Std Dev	52.13	-1.000
18	50.05	-0.144
61	50.00	-0.123
Median	49.70	0.000
18	49.40	0.123
31	48.50	0.493
Std Dev	47.27	1.000
43	45.10	1.889
43	44.98	1.941

181.99	Total Cadmium	
Lab	Other	
24	46.35	0.000
Median	46.35	0.000

181.XX	Total Cadmium	
Lab	PPM	Total Method
335	55.01	-2.030
61	53.50	-1.485

Std Dev	52.16	-1.000
18	50.05	-0.235
61	50.00	-0.217
18	49.40	0.000
Median	49.40	0.000
31	48.50	0.326
Std Dev	46.64	1.000
24	46.35	1.105
43	45.10	1.557
43	44.98	1.603

190.00	Aluminum	
Lab	%Al ₂ O ₃	ICP
14	1.22	-1.218
9	1.22	-1.096
14	1.22	-1.096
Std Dev	1.21	-1.000
9	1.21	-0.975
34	1.19	-0.487
32	1.18	-0.244
24	1.18	-0.122
24	1.17	0.000
32	1.17	0.000
Median	1.17	0.000
23	1.16	0.365
23	1.15	0.609
43	1.15	0.609
61	1.13	0.975
Std Dev	1.13	1.000
43	1.12	1.218
61	1.12	1.218

190.99	Aluminum	
Lab	%Al ₂ O ₃	Atomic Absorption
31	1.18	0.000
Median	1.18	0.000

190.XX	Aluminum	
Lab	%Al ₂ O ₃	Total Method
14	1.22	-1.273
9	1.22	-1.139
14	1.22	-1.139
9	1.21	-1.005
Std Dev	1.21	-1.000

34	1.19	-0.469
31	1.18	-0.201
32	1.18	-0.201
24	1.18	-0.067
Median	1.17	0.000
24	1.17	0.067
32	1.17	0.067
23	1.16	0.469
23	1.15	0.737
43	1.15	0.737
Std Dev	1.14	1.000
61	1.13	1.139
43	1.12	1.407
61	1.12	1.407

191.30	Total Chromium	
Lab	ICP	
335	491.25	-3.365
61	433.50	-1.230
Std Dev	427.29	-1.000
61	414.00	-0.508
18	403.40	-0.116
Median	400.25	0.000
18	397.10	0.116
31	383.85	0.606
43	379.00	0.786
43	376.00	0.897

191.99	Total Chromium	
Lab	PPM	Other
24	360.50	0.000
Median	360.50	0.000

191.XX	Total Chromium	
Lab	PPM	Total Method
335	491.25	-3.605
61	433.50	-1.394
Std Dev	423.22	-1.000
61	414.00	-0.647
18	403.40	-0.241
18	397.10	0.000
Median	397.10	0.000
31	383.85	0.507
43	379.00	0.693

43	376.00	0.808
Std Dev	370.98	1.000
24	360.50	1.401

202.30 Acid Soluble Cobalt		
Lab	PPM	ICP
61		

202.99 Acid Soluble Cobalt		
Lab	PPM	Other
24	1.85	0.000
Median	1.85	0.000

202.XX Acid Soluble Cobalt		
Lab	PPM	Total Method
61	4.15	-1.601
61	4.05	-1.433
335	3.80	-1.003
Std Dev	3.79	-1.000
18	3.40	-0.337
18	3.20	0.000
Median	3.20	0.000
43	3.00	0.337
43	3.00	0.337
Std Dev	2.61	1.000
24	1.85	2.275
31	1.59	2.714

221.00 Acid Soluble Copper		
Lab	PPM	Atomic Absorption
219	2.11	0.000
Median	2.11	0.000

221.30 Acid Soluble Copper		
Lab	PPM	ICP
61	<0.4	0.000
61	<0.4	0.000
43	1.00	-0.650
43	1.00	-0.650
Median	0.80	0.000
18	0.60	0.650
18	0.55	0.812

221.99 Acid Soluble Copper		
Lab	PPM	Other

24	0.70	0.000
Median	0.70	0.000

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
61	<0.4	0.000
61	<0.4	0.000
43	1.00	-1.005
43	1.00	-1.005
Std Dev	1.00	-1.000
24	0.70	0.000
Median	0.70	0.000
18	0.60	0.335
18	0.55	0.503

241.30 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	ICP
24	2.18	-3.099
34	2.18	-3.099
24	2.16	-2.261
Std Dev	2.12	-1.000
9	2.11	-0.754
9	2.11	-0.586
61	2.10	-0.419
23	2.10	-0.251
23	2.09	-0.084
Median	2.09	0.000
32	2.09	0.084
14	2.08	0.419
61	2.08	0.419
32	2.07	0.586
Std Dev	2.06	1.000
14	2.06	1.089
31	2.02	2.429
43	1.99	3.434
43	1.96	4.271

241.99 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Other
219	2.18	0.000
Median	2.18	0.000

241.XX Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Total Method

219	2.18	-2.889
24	2.18	-2.808
34	2.18	-2.808
24	2.16	-2.006
Std Dev	2.12	-1.000
219	2.11	-0.690
9	2.11	-0.562
9	2.11	-0.401
61	2.10	-0.241
23	2.10	-0.080
Median	2.09	0.000
23	2.09	0.080
32	2.09	0.241
14	2.08	0.562
61	2.08	0.562
32	2.07	0.722
Std Dev	2.06	1.000
14	2.06	1.204
31	2.02	2.487
43	1.99	3.450
43	1.96	4.253

251.30 Total Lead		
Lab	PPM	ICP
18	9.65	-2.624
18	9.25	-2.351
Std Dev	7.27	-1.000
335	6.26	-0.310
61	6.25	-0.307
Median	5.80	0.000
61	5.35	0.307
43	5.05	0.511
43	5.00	0.545
Std Dev	4.33	1.000
31	3.55	1.533

251.99 Total Lead		
Lab	PPM	Other
24	5.06	0.000
Median	5.06	0.000

251.XX Total Lead		
Lab	PPM	Total Method
18	9.65	-4.782

18	9.25	-4.337
335	6.26	-1.006
61	6.25	-1.001
Std Dev	6.25	-1.000
61	5.35	0.000
Median	5.35	0.000
24	5.06	0.322
43	5.05	0.334
43	5.00	0.389
Std Dev	4.45	1.000
31	3.55	2.002

261.30 Acid Soluble Manganese		
Lab	PPM	ICP
31	102.80	0.000
Median	102.80	0.000

261.99 Acid Soluble Manganese		
Lab	PPM	Other
219	123.30	-4.020
219	118.30	-2.706
Std Dev	111.81	-1.000
43	110.50	-0.657
43	110.00	-0.525
61	108.00	0.000
Median	108.00	0.000
24	106.00	0.525
18	105.40	0.683
18	104.80	0.841
Std Dev	104.19	1.000
61	102.50	1.445

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
219	123.30	-4.026
219	118.30	-2.791
Std Dev	111.05	-1.000
43	110.50	-0.865
43	110.00	-0.741
61	108.00	-0.247
Median	107.00	0.000
24	106.00	0.247
18	105.40	0.395
18	104.80	0.543

Std Dev	102.95	1.000
31	102.80	1.037
61	102.50	1.112

281.30	Total Mercury	
Lab	PPM	ICP
24	0.06	-1.340
Std Dev	0.05	-1.000
Median	0.05	0.000
Std Dev	0.04	1.000
335	0.04	1.340

281.XX	Total Mercury	
Lab	PPM	Total Method
24	0.06	-1.340
Std Dev	0.05	-1.000
Median	0.05	0.000
Std Dev	0.04	1.000
335	0.04	1.340

289.30	Total Molybdenum	
Lab	PPM	ICP
18		

289.99	Total Molybdenum	
Lab	PPM	Other
24	18.00	0.000
Median	18.00	0.000

289.XX	Total Molybdenum	
Lab	PPM	Total Method
24	18.00	-0.986
18	17.85	-0.922
18	17.65	-0.836
31	16.40	-0.300
Median	15.70	0.000
43	15.00	0.300
43	14.60	0.472
61	14.50	0.515
61	14.00	0.729

291.30	Total Nickel	
Lab	PPM	ICP
335		

291.99	Total Nickel	
Lab	PPM	Other
24	50.00	0.000
Median	50.00	0.000

291.XX	Total Nickel	
Lab	PPM	Total Method
335	58.78	-8.598
61	52.50	-2.993
Std Dev	50.27	-1.000
24	50.00	-0.759
61	50.00	-0.759
18	49.15	0.000
Median	49.15	0.000
18	48.75	0.357
43	48.50	0.581
Std Dev	48.03	1.000
43	48.00	1.027
31	46.30	2.546

301.30	Total Selenium	
Lab	PPM	ICP
18	8.45	-1.609
18	6.90	-1.307
Std Dev	5.32	-1.000
24	0.19	0.000
Median	0.19	0.000
335	0.02	0.033
61	0.00	0.036

301.99	Total Selenium	
Lab	PPM	Other
140	4.55	0.000
Median	4.55	0.000

301.XX	Total Selenium	
Lab	PPM	Total Method
18	8.45	-1.304
Std Dev	7.03	-1.000
18	6.90	-0.972
140	4.55	-0.467
Median	2.37	0.000
24	0.19	0.467
335	0.02	0.504

61	0.00	0.507
----	------	-------

311.99	Sodium	
Lab	%Na ₂ O	Other
24	0.36	-1.563
24	0.35	-1.340
Std Dev	0.34	-1.000
23	0.33	-0.447
23	0.32	0.000
61	0.32	0.000
Median	0.32	0.000
61	0.31	0.447
31	0.30	0.893
Std Dev	0.30	1.000
43	0.29	1.372
43	0.29	1.385

311.XX	Sodium	
Lab	%Na ₂ O	Total Method
24	0.36	-1.563
24	0.35	-1.340
Std Dev	0.34	-1.000
23	0.33	-0.447
23	0.32	0.000
61	0.32	0.000
Median	0.32	0.000
61	0.31	0.447
31	0.30	0.893
Std Dev	0.30	1.000
43	0.29	1.372
43	0.29	1.385

321.00	Acid Soluble Zinc	
Lab	Atomic Absorption	
219	849.20	0.000
Median	849.20	0.000

321.30	Acid Soluble Zinc	
Lab	PPM	ICP
61	870.00	-4.036
61	836.50	-1.747
Std Dev	825.56	-1.000
24	811.00	-0.005
Median	810.93	0.000

18	810.85	0.005
31	810.40	0.036
Std Dev	796.29	1.000
18	782.80	1.922

321.99	Acid Soluble Zinc	
Lab	Other	
219	823.30	-2.641
Std Dev	760.67	-1.000
43	722.50	0.000
Median	722.50	0.000
43	721.00	0.039

321.XX	Acid Soluble Zinc	
Lab	PPM	Total Method
61	870.00	-1.820
219	849.20	-1.179
Std Dev	843.39	-1.000
61	836.50	-0.788
219	823.30	-0.381
24	811.00	-0.002
Median	810.93	0.000
18	810.85	0.002
31	810.40	0.016
18	782.80	0.866
Std Dev	778.46	1.000
43	722.50	2.724
43	721.00	2.770

325.10	Fluoride	
Lab	%	Electrode
32	0.87	-1.438
32	0.86	-1.283
23	0.81	-0.819
23	0.80	-0.716
24	0.80	-0.665
24	0.79	-0.613
275	0.73	0.000
Median	0.73	0.000
31	0.73	0.057
275	0.72	0.088
34	0.67	0.624
14	0.64	0.892
14	0.64	0.974

79 0.19 5.571

325.99		Fluoride
Lab	%	Other
9	0.78	-2.680
61	0.77	0.000
61	0.77	0.000
Median	0.77	0.000
9	0.76	2.680

325.XX		Fluoride
Lab	%	Total Method
32	0.87	-1.836
32	0.86	-1.560
23	0.81	-0.734
23	0.80	-0.551
24	0.80	-0.459
24	0.79	-0.367
9	0.78	-0.184
61	0.77	0.000
61	0.77	0.000
Median	0.77	0.000
9	0.76	0.184
275	0.73	0.725
31	0.73	0.826
275	0.72	0.881
34	0.67	1.836
14	0.64	2.313
14	0.64	2.460
79	0.19	10.647