

AFPC

2018-03

Grade

18-46-0

Sample

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	1	17.44	0.00
Ammoniacal Nitrogen, Other		001.99	11	17.22	0.16
Method Group 001.XX PCT			12	17.25	0.22
TOTAL NITROGEN					
Total Nitrogen, Reduced Iron		010.10	1	17.90	0.00
Total Nitrogen, Modified Comprehensive	978.02	010.11	2	17.63	0.02
Total Nitrogen, Combustion	993.13	010.60	18	17.68	0.14
Total Nitrogen, Other		010.99	5	17.80	0.09
Method Group 010.XX PCT			26	17.70	0.19
TOTAL PHOSPHATE					
Total Phosphate, Spectrometric	978.02	020.20	20	46.47	0.17
Total Phosphate, Other	993.13	020.99	1	46.39	0.00
Method Group 020.XX PCT			21	46.47	0.18
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	9	0.20	0.04
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.08	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.25	0.00
Insoluble Phosphate, Other		030.99	2	0.18	0.02
Method Group 030.XX PCT			13	0.20	0.06
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	10	46.31	0.17
Indirect Available Phosphate, Other		040.99	3	46.20	0.07
Method Group 040.XX PCT			13	46.27	0.18
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	1	46.31	0.00
Direct Available Phosphate, Spectrometric	960.03D	041.20	3	46.50	0.31
Direct Available Phosphate, Automated	978.01	041.40	1	46.07	0.00
Direct Available Phosphate, ICP		041.50	2	45.89	0.18
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	47.15	0.85
Method Group 041.XX PCT			11	46.47	0.93
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	13	41.79	0.35
Water Soluble Phosphate, Other		048.99	3	42.04	0.17
Method Group 048.XX PCT			16	41.83	0.42
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.26	0.01
Soluble Potash, Other		050.99	11	0.25	0.01
Method Group 050.XX PCT			13	0.25	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	15	2.28	0.22
Free Water, Other		060.99	3	1.43	0.43
Method Group 060.XX PCT			18	2.28	0.38
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	13	0.15	0.02
Method Group 101.XX PCT			13	0.15	0.02
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	2	1.37	0.00
Acid Soluble Magnesium, ICP		121.30	12	1.36	0.04
Acid Soluble Magnesium, Other		121.99	1	1.29	0.00
Method Group 121.XX PCT			15	1.37	0.05
WATER SOLUBLE MAGNESIUM					
Water Soluble Magnesium, Other		131.99	1		0.00
Method Group 131.XX PCT			1	0.00	0.00
SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	1	2.22	0.00
Sulfur, Other		144.99	11	2.13	0.09

Method Group 144.XX PCT		12	2.14	0.11
TOTAL SULFUR (S)				
Sulfur, Other	145.99	3	2.09	1.7
Method Group 145.XX PCT		3	2.09	2.0
TOTAL ARSENIC				
Total Arsenic, ICP	980.02(b) 151.02	7	9.0	1.7
Method Group 151.XX PPM		7	9.0	2.1
ACID SOLUBLE BORON				
Acid Soluble Boron, Other	165.99	2	87	2.8
Method Group 165.XX PPM		2	87	3.5
WATER SOLUBLE BORON				
Water Soluble Boron, Other	171.99	1	55	0.0
Method Group 171.XX PPM		1	55	0.0
TOTAL CADMIUM				
Total Cadmium, Atomic Absorbtion	181.00	1	23	0.0
Total Cadmium, ICP	181.30	5	26.7	1.0
Total Cadmium, Other	181.99	2	27.3	0.1
Method Group 181.XX PPM		8	26.9	1.1
ALUMINUM AS Al₂O₃				
ICP, %		11	1.15	0.02
Water Soluble Chlorine, Other, %	190.99	2	1.14	0.01
Method Group 190.XX PCT		13	1.15	0.02
TOTAL CHROMIUM				
Total Chromium, Atomic Absorbtion	191.00	1	183	0.0
Total Chromium, ICP	191.30	5	205	4.5
Total Chromium, Other	191.99	2	214	0.9
Method Group 191.XX PPM		8	208	10.9
ACID SOLUBLE COBALT				
Acid Soluble Cobalt, ICP	202.30	7	2	0.1
Acid Soluble Cobalt, Other	202.99	1	2	0.0
Method Group 202.XX PPM		8	2	0.2
ACID SOLUBLE COPPER				
Acid Soluble Copper, Other	221.99	1	0.9	0.0
Method Group 221.XX PPM		4	2.0	0.3
ACID SOLUBLE IRON AS Fe₂O₃				
Acid Soluble Iron, ICP	241.30	11	0.98	0.03
Acid Soluble Iron, Other	241.99	2	0.94	0.03
Method Group 241.XX PCT		13	0.98	0.05
TOTAL LEAD				
Total Lead, ICP	251.30	3	0.5	0.0
Total Lead, Other	251.99	1	0.2	0.0
Method Group 251.XX PPM		4	0.4	0.1
ACID SOLUBLE MANGANESE				
Acid Soluble Manganese, ICP	972.02a 261.30	3	155	20.9
Acid Soluble Manganese, Other	261.99	6	134	2.8
Method Group 261.XX PPM		9	136	4.1
WATER SOLUBLE MANGANESE				
Water Soluble Manganese, Other	271.99	1	38	0
Method Group 271.XX PCT		1	38	0.0
TOTAL MOLYBDENUM				
Total Molybdenum, ICP	289.30	7	12	0.3
Total Molybdenum, Other	289.99	2	11	2.1
Method Group 289.XX PPM		9	12	0.5
TOTAL NICKEL				
Total Nickel, ICP	291.30	5	13.0	0.3
Total Nickel, icp	291.99	2	11.4	2.0
Method Group 291.XX PPM		7	13.0	0.6
TOTAL SELENIUM				
Total Selenium, ICP	301.30	4	0.1	0.2
Total Selenium, Other	301.99	1	0	0.0
Method Group 301.XX PPM		5	0.1	0.0
SODIUM AS Na₂O				

Sodium, Atomic Absorbtion	983.04	311.00	1	0.30	0.00
Sodium, Other		311.99	11	0.65	0.02
Method Group 311.XX PCT			12	0.64	0.03
ACID SOLUBLE ZINC					
Acid Soluble Zinc, ICP		321.30	3	206.0	9.7
Acid Soluble Zinc, Other		321.99	4	213.0	8.5
Method Group 321.XX %			7	206.5	7.3
FLUORIDE					
Volumetric		325.10	8	0.57	0.04
Distilled/Electrode		325.99	4	0.59	0.22
Method Group 325.XX PCT			12	0.58	0.04

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
31	17.44	0.000
Median	17.44	0.000

001.99 Ammoniacal Nitrogen		
Lab	Other	
113	17.50	-1.745
79	17.48	-1.652
275	17.39	-1.091
Std Dev	17.38	-1.000
275	17.33	-0.717
24	17.28	-0.374
24	17.22	0.000
Median	17.22	0.000
330	17.19	0.187
32	17.17	0.312
32	17.13	0.561
34	17.11	0.686
Std Dev	17.05	1.000
38	16.73	3.054

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
113	17.50	-1.354
79	17.48	-1.272
31	17.44	-1.056
Std Dev	17.43	-1.000
275	17.39	-0.785
275	17.33	-0.460
24	17.28	-0.162
Median	17.25	0.000
24	17.22	0.162
330	17.19	0.325
32	17.17	0.433
32	17.13	0.650
34	17.11	0.758
Std Dev	17.06	1.000
38	16.73	2.815

010.10 Total Nitrogen		
Lab	Reduced Iron	
113	17.90	0.000
Median	17.90	0.000

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
43	17.65	-1.340
Std Dev	17.64	-1.000
Median	17.63	0.000
Std Dev	17.61	1.000
43	17.61	1.340

010.60 Total Nitrogen		
Lab	Combustion	
49	17.95	-1.902
237	17.88	-1.418
47	17.85	-1.176
24	17.84	-1.141
Std Dev	17.82	-1.000
24	17.81	-0.934
63	17.76	-0.588
103	17.71	-0.242
99	17.70	-0.173
39	17.70	-0.138
Median	17.68	0.000
140	17.66	0.138
38	17.63	0.311
61	17.63	0.311
31	17.62	0.415
79	17.60	0.519
110	17.58	0.692
Std Dev	17.53	1.000
61	17.53	1.003
80	17.50	1.210
29	17.39	1.971

010.99 Total Nitrogen		
Lab	Other	
330	18.35	-6.197
Std Dev	17.88	-1.000
32	17.87	-0.782
32	17.80	0.000
Median	17.80	0.000
23	17.75	0.558
Std Dev	17.71	1.000
23	17.71	1.005

010.XX Total Nitrogen		
Lab	Total Method	
330	18.35	-4.059
49	17.95	-1.552
113	17.90	-1.207
237	17.88	-1.113
32	17.87	-1.019
Std Dev	17.86	-1.000
47	17.85	-0.893
24	17.84	-0.862
24	17.81	-0.674
32	17.80	-0.580
63	17.76	-0.360
23	17.75	-0.266
103	17.71	-0.047
23	17.71	-0.016
Median	17.70	0.000
99	17.70	0.016
39	17.70	0.047
140	17.66	0.298
43	17.65	0.329
38	17.63	0.455
61	17.63	0.455
31	17.62	0.549
43	17.61	0.611
79	17.60	0.643
110	17.58	0.799
Std Dev	17.54	1.000
61	17.53	1.081
80	17.50	1.269
29	17.39	1.959

020.20 Total Phosphate		
Lab	Spectrometric	
99	47.17	-4.171
24	46.78	-1.822
79	46.75	-1.671
275	46.75	-1.671
275	46.74	-1.581
Std Dev	46.64	-1.000
61	46.63	-0.949
24	46.56	-0.497
31	46.53	-0.316
32	46.53	-0.316

23	46.48	-0.015
Median	46.47	0.000
61	46.47	0.015
237	46.46	0.105
34	46.45	0.166
110	46.44	0.196
23	46.44	0.226
43	46.43	0.256
32	46.39	0.497
43	46.38	0.587
Std Dev	46.31	1.000
140	46.19	1.731
113	46.09	2.304

020.99 Total Phosphate		
Lab	Other	
330	46.39	0.000
Median	46.39	0.000

020.XX Total Phosphate		
Lab	Total Method	
99	47.17	-4.657
24	46.78	-2.044
79	46.75	-1.876
275	46.75	-1.876
275	46.74	-1.776
61	46.63	-1.072
Std Dev	46.62	-1.000
24	46.56	-0.570
31	46.53	-0.369
32	46.53	-0.369
23	46.48	-0.034
61	46.47	0.000
Median	46.47	0.000
237	46.46	0.101
34	46.45	0.167
110	46.44	0.201
23	46.44	0.234
43	46.43	0.268
32	46.39	0.536
330	46.39	0.570
43	46.38	0.637
Std Dev	46.32	1.000
140	46.19	1.910

113	46.09	2.546
030.20 Insoluble Phosphate Spectrometric		
Lab		
61	0.29	-1.898
61	0.29	-1.898
113	0.25	-1.005
Std Dev	0.24	-1.000
23	0.23	-0.558
24	0.20	0.000
Median	0.20	0.000
24	0.19	0.223
79	0.19	0.335
140	0.18	0.558
23	0.17	0.670
030.30 Insoluble Phosphate Alka. Quimociac		
Lab		
31	0.08	0.000
Median	0.08	0.000
030.40 Insoluble Phosphate Automated		
Lab		
34	0.25	0.000
Median	0.25	0.000
030.99 Insoluble Phosphate Other		
Lab		
32	0.21	-1.340
Std Dev	0.20	-1.000
Median	0.18	0.000
Std Dev	0.16	1.000
32	0.16	1.340
030.XX Insoluble Phosphate Total Method		
Lab		
61	0.29	-1.627
61	0.29	-1.627
Std Dev	0.25	-1.000
34	0.25	-0.861
113	0.25	-0.861
23	0.23	-0.479
32	0.21	-0.096
24	0.20	0.000

Median	0.20	0.000
24	0.19	0.191
79	0.19	0.287
140	0.18	0.479
23	0.17	0.574
32	0.16	0.861
Std Dev	0.15	1.000
31	0.08	2.393
040.20 Indirect Available Phosphate Spectrometric		
Lab		
24	46.58	-1.565
79	46.57	-1.536
Std Dev	46.48	-1.000
31	46.45	-0.840
24	46.38	-0.435
61	46.35	-0.232
Median	46.31	0.000
23	46.27	0.232
23	46.25	0.319
61	46.19	0.695
Std Dev	46.13	1.000
140	46.01	1.709
113	45.85	2.666
040.99 Indirect Available Phosphate Other		
Lab		
32	46.37	-2.463
Std Dev	46.27	-1.000
34	46.20	0.000
Median	46.20	0.000
32	46.19	0.217
040.XX Indirect Available Phosphate Total Method		
Lab		
24	46.58	-2.130
79	46.57	-2.096
31	46.45	-1.271
Std Dev	46.41	-1.000
24	46.38	-0.790
32	46.37	-0.722
61	46.35	-0.550
23	46.27	0.000
Median	46.27	0.000

23	46.25	0.103
34	46.20	0.447
32	46.19	0.550
61	46.19	0.550
Std Dev	46.12	1.000
140	46.01	1.752
113	45.85	2.886
041.10 Direct Available Phosphate Gravimetric Quimociac		
Lab		
47	46.31	0.000
Median	46.31	0.000
041.20 Direct Available Phosphate Spectrometric		
Lab		
47	47.29	-2.582
Std Dev	46.81	-1.000
275	46.50	0.000
Median	46.50	0.000
275	46.47	0.098
041.40 Direct Available Phosphate Automated		
Lab		
39	46.07	0.000
Median	46.07	0.000
041.50 Direct Available Phosphate ICP		
Lab		
63	46.13	-1.340
Std Dev	46.07	-1.000
Median	45.89	0.000
Std Dev	45.71	1.000
80	45.65	1.340
041.60 Direct Available Phosphate EDTA Extract		
Lab		
29	47.43	-0.331
49	47.35	-0.231
Median	47.15	0.000
77	46.96	0.231
Std Dev	46.30	1.000
103	44.07	3.644

041.XX Direct Available Phosphate Total Method		
Lab		
29	47.43	-1.258
49	47.35	-1.147
47	47.29	-1.075
Std Dev	47.23	-1.000
77	46.96	-0.636
275	46.50	-0.039
275	46.47	0.000
Median	46.47	0.000
47	46.31	0.216
63	46.13	0.446
39	46.07	0.524
Std Dev	45.71	1.000
80	45.65	1.075
103	44.07	3.145
048.20 Water Soluble Phosphate Spectrometric		
Lab		
23	42.22	-1.225
330	42.18	-1.109
Std Dev	42.14	-1.000
31	42.09	-0.850
79	41.96	-0.490
140	41.93	-0.403
23	41.87	-0.231
275	41.79	0.000
Median	41.79	0.000
24	41.78	0.029
61	41.74	0.144
24	41.50	0.850
Std Dev	41.44	1.000
275	41.43	1.037
61	41.42	1.066
113	41.26	1.527
048.99 Water Soluble Phosphate Other		
Lab		
32	42.07	-0.177
32	42.04	0.000
Median	42.04	0.000
Std Dev	41.87	1.000
34	41.61	2.503

048.XX Water Soluble Phosphate		
Lab	Total Method	
23	42.22	-1.118
330	42.18	-1.002
Std Dev	42.17	-1.000
31	42.09	-0.741
32	42.07	-0.683
32	42.04	-0.596
79	41.96	-0.378
140	41.93	-0.291
23	41.87	-0.116
Median	41.83	0.000
275	41.79	0.116
24	41.78	0.145
61	41.74	0.261
34	41.61	0.639
24	41.50	0.973
Std Dev	41.49	1.000
275	41.43	1.162
61	41.42	1.191
113	41.26	1.656

050.50 %K ₂ O Soluble Potash		
Lab	ICP(Oxalate)	
23	0.28	-1.340
Std Dev	0.28	-1.000
Median	0.26	0.000
Std Dev	0.25	1.000
23	0.25	1.340

050.99 Soluble Potash		
Lab	%K ₂ O Other	
275	0.27	-1.814
275	0.27	-1.319
Std Dev	0.26	-1.000
24	0.26	-0.412
61	0.26	-0.412
24	0.25	0.000
61	0.25	0.000
Median	0.25	0.000
43	0.24	0.450
43	0.24	0.619
Std Dev	0.24	1.000
31	0.24	1.236

330	0.20	4.122
80	0.10	12.365

050.XX Soluble Potash		
Lab	%K ₂ O Total Method	
23	0.28	-3.213
275	0.27	-2.356
275	0.27	-1.714
Std Dev	0.26	-1.000
24	0.26	-0.536
61	0.26	-0.536
24	0.25	0.000
61	0.25	0.000
Median	0.25	0.000
23	0.25	0.536
43	0.24	0.585
43	0.24	0.804
Std Dev	0.24	1.000
31	0.24	1.607
330	0.20	5.355
80	0.10	16.066

060.00 Free Water		
Lab	Vacuum Oven	
34	2.44	-0.721
43	2.40	-0.518
43	2.38	-0.450
140	2.37	-0.405
31	2.34	-0.248
24	2.31	-0.135
32	2.29	-0.023
32	2.28	0.000
Median	2.28	0.000
24	2.28	0.023
23	2.21	0.338
23	2.09	0.856
Std Dev	2.06	1.000
79	2.02	1.171
113	1.92	1.644
61	1.90	1.734
61	1.82	2.072

060.99 Free Water		
Lab	Other	
330	0.15	0.188

330	2.57	-2.657
Std Dev	1.86	-1.000
275	1.43	0.000
Median	1.43	0.000
275	1.42	0.023

060.XX Free Water		
Lab	Total Method	
330	2.57	-0.933
34	2.44	-0.518
43	2.40	-0.375
43	2.38	-0.327
140	2.37	-0.295
31	2.34	-0.183
24	2.31	-0.104
32	2.29	-0.024
32	2.28	-0.008
Median	2.28	0.000
24	2.28	0.008
23	2.21	0.231
23	2.09	0.598
79	2.02	0.822
Std Dev	1.96	1.000
113	1.92	1.157
61	1.90	1.220
61	1.82	1.460
275	1.43	2.704
275	1.42	2.736

101.30 Acid Soluble Calcium		
Lab	%CaO ICP	
61	0.19	-1.956
61	0.19	-1.956
24	0.18	-1.420
24	0.18	-1.152
Std Dev	0.17	-1.000
32	0.17	-0.616
32	0.16	-0.348
31	0.15	0.000
Median	0.15	0.000
23	0.15	0.188
23	0.15	0.188
34	0.15	0.188
330	0.15	0.188

43	0.14	0.683
43	0.14	0.840

101.XX Acid Soluble Calcium		
Lab	%CaO Total Method	
61	0.19	-1.956
61	0.19	-1.956
24	0.18	-1.420
24	0.18	-1.152
Std Dev	0.17	-1.000
32	0.17	-0.616
32	0.16	-0.348
31	0.15	0.000
Median	0.15	0.000
23	0.15	0.188
23	0.15	0.188
34	0.15	0.188
330	0.15	0.188
43	0.14	0.683
43	0.14	0.840

121.00 Acid Soluble Magnesium		
Lab	%MgO Atomic Absorption	
275	1.37	0.000
275	1.37	0.000
Median	1.37	0.000

121.30 Acid Soluble Magnesium		
Lab	%MgO ICP	
32	1.40	-0.997
23	1.38	-0.374
61	1.38	-0.374
24	1.37	-0.249
24	1.37	-0.249
34	1.37	-0.125
Median	1.36	0.000
32	1.36	0.125
61	1.35	0.249
23	1.33	0.873
Std Dev	1.32	1.000
31	1.30	1.620
43	1.22	3.615
43	1.21	3.740

121.99		
Lab	%MgO	Acid Soluble Magnesium Other
330	1.29	0.000
Median	1.29	0.000

121.XX		
Lab	%MgO	Acid Soluble Magnesium Total Method
32	1.40	-0.782
23	1.38	-0.223
61	1.38	-0.223
24	1.37	-0.112
24	1.37	-0.112
275	1.37	-0.112
275	1.37	-0.112
34	1.37	0.000
Median	1.37	0.000
32	1.36	0.223
61	1.35	0.335
23	1.33	0.893
Std Dev	1.32	1.000
31	1.30	1.563
330	1.29	1.675
43	1.22	3.350
43	1.21	3.462

144.01		
Lab		Sulfate Sulfur (S) Gravimetric
79	2.22	0.000
Median	2.22	0.000

144.99		
Lab		Sulfate Sulfur (S) Other
330	5.57	-38.445
23	2.24	-1.228
Std Dev	2.22	-1.000
23	2.22	-0.949
24	2.19	-0.670
34	2.16	-0.279
61	2.13	0.000
Median	2.13	0.000
61	2.12	0.112
24	2.12	0.167
32	2.05	0.893
Std Dev	2.04	1.000

31	2.04	1.061
32	2.01	1.340

144.XX		
Lab		Sulfate Sulfur (S) Total Method
330	5.57	-39.120
23	2.24	-1.112
Std Dev	2.23	-1.000
79	2.22	-0.884
23	2.22	-0.827
24	2.19	-0.542
34	2.16	-0.143
Median	2.14	0.000
61	2.13	0.143
61	2.12	0.257
24	2.12	0.314
Std Dev	2.05	1.000
32	2.05	1.055
31	2.04	1.226
32	2.01	1.511

145.99		
Lab		Total Sulfur (S) Other
31	6.50	-2.662
Std Dev	3.75	-1.000
43	2.09	0.000
Median	2.09	0.000
43	2.06	0.018

145.XX		
Lab		Total Sulfur (S) Total Method
31	6.50	-2.662
Std Dev	3.75	-1.000
43	2.09	0.000
Median	2.09	0.000
43	2.06	0.018

151.30		
Lab		Total Arsenic ICP
43	12.70	-2.144
43	12.50	-2.028
Std Dev	10.73	-1.000
61	9.00	0.000
61	9.00	0.000

Median	9.00	0.000
140	8.49	0.296
24	8.39	0.356
Std Dev	7.27	1.000
113	5.93	1.781

151.XX		
Lab		Total Arsenic Total Method
43	12.70	-2.144
43	12.50	-2.028
Std Dev	10.73	-1.000
61	9.00	0.000
61	9.00	0.000
Median	9.00	0.000
140	8.49	0.296
24	8.39	0.356
Std Dev	7.27	1.000
113	5.93	1.781

165.99		
Lab	PPM	Acid Soluble Boron Other
24	90.85	-1.340
Std Dev	89.88	-1.000
Median	87.04	0.000
Std Dev	84.20	1.000
330	83.23	1.340

165.XX, ppm		
Lab	PPM	Acid Soluble Boron Total Method
24	90.85	-1.340
Std Dev	89.88	-1.000
Median	87.04	0.000
Std Dev	84.20	1.000
330	83.23	1.340

171.99		
Lab	PPM	Water Soluble Boron Other
330	54.65	0.000
Median	54.65	0.000

171.XX		
Lab	PPM	Water Soluble Boron Total Method
330	54.65	0.000
Median	54.65	0.000

181.00		
Lab		Total Cadmium Atomic Absorbion
330	23.00	0.000
Median	23.00	0.000

181.30		
Lab	PPM	Total Cadmium ICP
61	28.00	-1.259
61	28.00	-1.259
Std Dev	27.73	-1.000
43	26.69	0.000
Median	26.69	0.000
43	26.60	0.081
113	26.07	0.589

181.99		
Lab		Total Cadmium Other
31	27.50	-1.340
Std Dev	27.46	-1.000
Median	27.33	0.000
Std Dev	27.19	1.000
24	27.15	1.340

181.XX		
Lab	PPM	Total Cadmium Total Method
61	28.00	-1.253
61	28.00	-1.253
Std Dev	27.78	-1.000
31	27.50	-0.674
24	27.15	-0.269
Median	26.92	0.000
43	26.69	0.269
43	26.60	0.368
113	26.07	0.981
Std Dev	26.05	1.000
330	23.00	4.535

190.00		
Lab	%Al ₂ O ₃	Aluminum ICP
23	1.18	-1.489
32	1.17	-1.191
Std Dev	1.17	-1.000
32	1.17	-0.893

34	1.16	-0.596
43	1.16	-0.298
23	1.15	0.000
43	1.15	0.000
Median	1.15	0.000
24	1.15	0.298
61	1.14	0.893
Std Dev	1.13	1.000
24	1.13	1.191
61	1.12	1.787

190.99	Aluminum	
Lab	%Al ₂ O ₃	Atomic Absorption
31	1.15	-1.340
Std Dev	1.15	-1.000
Median	1.14	0.000
Std Dev	1.12	1.000
330	1.12	1.340

190.XX	Aluminum	
Lab	%Al ₂ O ₃	Total Method
23	1.18	-1.340
32	1.17	-1.072
Std Dev	1.17	-1.000
32	1.17	-0.804
34	1.16	-0.536
43	1.16	-0.268
23	1.15	0.000
31	1.15	0.000
43	1.15	0.000
Median	1.15	0.000
24	1.15	0.268
61	1.14	0.804
Std Dev	1.13	1.000
24	1.13	1.072
61	1.12	1.608
330	1.12	1.608

191.00	Total Chromium	
Lab	Atomic Absorption	
330	183.00	0.000
Median	183.00	0.000

191.30	Total Chromium	
Lab	ICP	
61	214.50	-2.122
61	210.00	-1.117
Std Dev	209.48	-1.000
43	205.00	0.000
Median	205.00	0.000
43	204.00	0.223
Std Dev	200.52	1.000
113	193.65	2.535

191.99	Total Chromium	
Lab	PPM	Other
31	215.30	-1.340
Std Dev	215.01	-1.000
Median	214.15	0.000
Std Dev	213.29	1.000
24	213.00	1.340

191.XX	Total Chromium	
Lab	PPM	Total Method
31	215.30	-0.874
61	214.50	-0.784
24	213.00	-0.616
61	210.00	-0.280
Median	207.50	0.000
43	205.00	0.280
43	204.00	0.392
Std Dev	198.57	1.000
113	193.65	1.551
330	183.00	2.744

202.30	Acid Soluble Cobalt	
Lab	PPM	ICP
330		

202.99	Acid Soluble Cobalt	
Lab	Other	
24	1.54	0.000
Median	1.54	0.000

202.XX	Acid Soluble Cobalt	
Lab	PPM	Total Method
330	2.50	-3.309
Std Dev	2.15	-1.000

61	2.15	-0.993
275	2.03	-0.199
43	2.00	0.000
43	2.00	0.000
Median	2.00	0.000
275	1.86	0.926
61	1.85	0.993
Std Dev	1.85	1.000
24	1.54	3.044

221.30	Acid Soluble Copper	
Lab	PPM	ICP
61	<1	0.000
43	2.00	0.000
43	2.00	0.000
Median	2.00	0.000
Std Dev	1.66	1.000
61	1.10	2.680

221.99	Acid Soluble Copper	
Lab	Other	
24	2.33	0.000
Median	2.33	0.000

221.XX	Acid Soluble Copper	
Lab	PPM	Total Method
61	<1	0.000
24	2.33	-1.438
Std Dev	2.23	-1.000
43	2.00	0.000
43	2.00	0.000
Median	2.00	0.000
Std Dev	1.77	1.000
61	1.10	3.922

241.30	Acid Soluble Iron	
Lab	%Fe ₂ O ₃	ICP
24	1.02	-1.042
Std Dev	1.01	-1.000
32	1.01	-0.744
34	1.00	-0.447
24	0.99	-0.298
23	0.99	-0.149
23	0.98	0.000

Median	0.98	0.000
32	0.96	0.596
61	0.96	0.744
Std Dev	0.95	1.000
43	0.94	1.191
43	0.94	1.191
61	0.92	1.787

241.99	Acid Soluble Iron	
Lab	%Fe ₂ O ₃	Other
31	0.98	-1.340
Std Dev	0.97	-1.000
Median	0.94	0.000
Std Dev	0.91	1.000
330	0.90	1.340

241.XX	Acid Soluble Iron	
Lab	%Fe ₂ O ₃	Total Method
24	1.02	-1.072
Std Dev	1.01	-1.000
32	1.01	-0.804
34	1.00	-0.536
24	0.99	-0.402
23	0.99	-0.268
23	0.98	-0.134
31	0.98	0.000
Median	0.98	0.000
32	0.96	0.402
61	0.96	0.536
43	0.94	0.938
43	0.94	0.938
Std Dev	0.94	1.000
61	0.92	1.474
330	0.90	2.010

251.30	Total Lead	
Lab	PPM	ICP
61	<1	0.000
61	<1	0.000
43	0.50	-1.811
Std Dev	0.48	-1.000
43	0.45	0.000
Median	0.45	0.000
113	0.43	0.869

251.99 Total Lead		
Lab	PPM	Total Method
24	0.17	0.000
Median	0.17	0.000

251.XX Total Lead		
Lab	PPM	Total Method
61	<1	0.000
61	<1	0.000
43	0.50	-0.835
43	0.45	-0.162
Median	0.44	0.000
113	0.43	0.162
24	0.17	3.555

261.30 Acid Soluble Manganese		
Lab	PPM	Total Method
275	170.00	-0.718
275	155.00	0.000
Median	155.00	0.000
Std Dev	134.10	1.000
330	114.00	1.962

261.99 Acid Soluble Manganese		
Lab	PPM	Total Method
43	136.50	-0.999
31	135.75	-0.727
43	135.50	-0.636
Median	133.75	0.000
24	132.00	0.636
61	132.00	0.636
61	132.00	0.636

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
275	170.00	-10.273
275	155.00	-5.807
Std Dev	138.86	-1.000
43	136.50	-0.298
31	135.75	-0.074
43	135.50	0.000
Median	135.50	0.000
Std Dev	132.14	1.000

24	132.00	1.042
61	132.00	1.042
61	132.00	1.042
330	114.00	6.402

271.99 Water Soluble Manganese		
Lab	PPM	Total Method
330	38.00	0.000
Median	38.00	0.000

271.XX Water Soluble Manganese		
Lab	PPM	Total Method
330	38.00	0.000
Median	38.00	0.000

281.30 Total Mercury		
Lab	PPM	Total Method
24	<0.001	0.000
Median	0.00	0.000

281.XX Total Mercury		
Lab	PPM	Total Method
24	<0.001	0.000
Median	0.00	0.000

289.30 Total Molybdenum		
Lab	PPM	Total Method
330		

289.99 Total Molybdenum		
Lab	PPM	Total Method
24	14.00	-1.340
Std Dev	13.27	-1.000
Median	11.13	0.000
Std Dev	8.98	1.000
31	8.25	1.340

289.XX Total Molybdenum		
Lab	PPM	Total Method
24	14.00	-3.820
330	14.00	-3.820
Std Dev	12.87	-1.000
43	12.75	-0.689
43	12.70	-0.564
275	12.48	0.000

Median	12.48	0.000
61	12.35	0.313
275	12.22	0.651
Std Dev	12.08	1.000
61	12.00	1.190
31	8.25	10.582

291.30 Total Nickel		
Lab	PPM	Total Method
330		

291.99 Total Nickel		
Lab	PPM	Total Method
24	14.05	-1.340
Std Dev	13.38	-1.000
Median	11.40	0.000
Std Dev	9.42	1.000
31	8.75	1.340

291.XX Total Nickel		
Lab	PPM	Total Method
330	15.00	-3.829
24	14.05	-2.010
Std Dev	13.52	-1.000
61	13.35	-0.670
43	13.00	0.000
43	13.00	0.000
61	13.00	0.000
Median	13.00	0.000
Std Dev	12.48	1.000
31	8.75	8.136

301.30 Total Selenium		
Lab	PPM	Total Method
140	0.90	-5.069
Std Dev	0.26	-1.000
61	0.10	0.000
61	0.10	0.000
Median	0.10	0.000
24	0.05	0.291

301.99 Total Selenium		
Lab	PPM	Total Method
330	0.10	0.000
Median	0.10	0.000

301.XX Total Selenium		
Lab	PPM	Total Method
140	0.90	0.363
61	0.10	0.000
61	0.10	0.000
330	0.10	0.000
Median	0.10	0.000
24	0.05	0.363

311.00 Sodium		
Lab	%Na ₂ O	Atomic Absorbtion
330	0.30	0.000
Median	0.30	0.000

311.99 Sodium		
Lab	%Na ₂ O	Total Method
275	0.69	-1.965
Std Dev	0.67	-1.000
23	0.67	-0.893
24	0.66	-0.670
61	0.66	-0.447
275	0.65	-0.179
23	0.65	0.000
Median	0.65	0.000
31	0.64	0.447
61	0.63	0.670
24	0.63	0.893
Std Dev	0.62	1.000
43	0.62	1.233
43	0.61	1.477

311.XX Sodium		
Lab	%Na ₂ O	Total Method
275	0.69	-1.981
23	0.67	-1.010
Std Dev	0.66	-1.000
24	0.66	-0.808
61	0.66	-0.606
275	0.65	-0.364
23	0.65	-0.202
Median	0.64	0.000
31	0.64	0.202
61	0.63	0.404

24	0.63	0.606
43	0.62	0.914
Std Dev	0.62	1.000
43	0.61	1.135
330	0.30	13.742

321.30 Acid Soluble Zinc		
Lab	PPM	ICP
61	206.50	-0.052
61	206.00	0.000
Median	206.00	0.000
Std Dev	196.30	1.000
24	180.50	2.628

321.99 Acid Soluble Zinc		
Lab		Other
31	225.70	-1.490
Std Dev	221.53	-1.000
330	217.00	-0.469
Median	213.00	0.000
43	209.00	0.469
Std Dev	204.47	1.000
43	204.00	1.056

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method
31	225.70	-3.216
330	217.00	-1.759
Std Dev	212.47	-1.000
43	209.00	-0.419
61	206.50	0.000
Median	206.50	0.000
61	206.00	0.084
43	204.00	0.419
Std Dev	200.53	1.000
24	180.50	4.355

325.10 Fluoride		
Lab	%	Electrode
32	0.64	-1.787
32	0.61	-1.099
23	0.59	-0.550
23	0.58	-0.137
Median	0.57	0.000

79	0.57	0.137
24	0.56	0.412
34	0.52	1.374
24	0.51	1.649

325.99 Fluoride		
Lab	%	Other
330	1.71	-5.003
61	0.60	-0.045
Median	0.59	0.000
61	0.58	0.045
31	0.57	0.089

325.XX Fluoride		
Lab	%	Total Method
330	1.71	-37.939
32	0.64	-1.926
32	0.61	-1.089
61	0.60	-0.754
23	0.59	-0.419
61	0.58	-0.084
Median	0.58	0.000
23	0.58	0.084
31	0.57	0.251
79	0.57	0.419
24	0.56	0.754
34	0.52	1.926
24	0.51	2.261