

AFPC

Sample

2018-06

Grade

11-52-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	1	11.28	0.00
Ammoniacal Nitrogen, Other		001.99	8	11.25	0.04
Method Group 001.XX PCT			9	11.26	0.05
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	11.34	0.01
Total Nitrogen, Combustion	993.13	010.60	21	11.17	0.18
Total Nitrogen, Other		010.99	5	11.26	0.01
Method Group 010.XX PCT			29	11.24	0.21
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	53.29	0.00
Total Phosphate, Spectrometric	978.02	020.20	18	52.65	0.43
Total Phosphate, ICP	970.03	020.40	2	52.67	0.10
Total Phosphate, Other	993.13	020.99	1	52.75	0.00
Method Group 020.XX PCT			22	52.67	0.33
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	8	0.20	0.82
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.11	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.21	0.00
Insoluble Phosphate, Other		030.99	2	0.11	0.00
Method Group 030.XX PCT			12	0.17	0.09
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	9	52.54	0.39
Indirect Available Phosphate, Other		040.99	3	51.91	0.99
Method Group 040.XX PCT			12	52.29	0.64
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	3	52.53	0.22
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	52.40	0.07
Direct Available Phosphate, ICP		041.50	3	51.75	0.55
Direct Available Phosphate, EDTA Extract	993.01	041.60	6	52.44	0.71
Direct Available Phosphate, Other		041.99	1	52.61	0.00
Method Group 041.XX PCT			15	52.50	0.66
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	13	47.69	0.28
Water Soluble Phosphate, ICP		048.50	1	47.88	0.00
Water Soluble Phosphate, Other		048.99	3	47.63	0.06
Method Group 048.XX PCT			17	47.66	0.28
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.17	0.00
Soluble Potash, Other		050.99	8	0.17	0.01
Method Group 050.XX PCT			10	0.17	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	13	1.35	0.12
Free Water, Other		060.99	3	2.97	0.38
Method Group 060.XX PCT			16	1.38	0.61
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	0.13	0.00
Acid Soluble Calcium, ICP		101.30	14	0.21	0.02
Acid Soluble Calcium, Other		101.99	1	0.14	0.00
Method Group 101.XX PCT			16	0.21	0.03
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	1	0.75	0.00
Acid Soluble Magnesium, ICP		121.30	12	1.01	0.04
Acid Soluble Magnesium, Other		121.99	3	0.89	0.11
Method Group 121.XX PCT			16	1.00	0.12

AFPC Check Sample 06-2018 **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	1.67	0.00
Sulfur, Spectrometric		144.70	2	1.60	0.00
Sulfur, Other		144.99	9	1.63	2.34
Method Group 144.XX PCT			12	1.63	0.75
TOTAL SULFUR (S)					
Sulfur, Other		145.99	5	1.74	4.7
Method Group 145.XX PCT			5	1.74	5.7
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	5	10.4	3.4
Total Arsenic, Other		151.99	1	7.8	0.0
Method Group 151.XX PPM			6	10.4	4.5
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	2	55	4.9
Method Group 165.XX PPM			2	55	6.0
WATER SOLUBLE BORON					
Water Soluble Boron, Other		171.99	1	4	0.0
Method Group 171.XX PPM			1	4	0.0
TOTAL CADMIUM					
Total Cadmium, Atomic Absorbtion		181.00	1	4	0.0
Total Cadmium, ICP		181.30	5	5.1	0.4
Total Cadmium, Other		181.99	2	3.9	1.1
Method Group 181.XX PPM			8	5.0	2.0
ALUMINUM AS Al₂O₃					
ICP, %			12	1.61	0.09
Water Soluble Chlorine, Other, %		190.99	2	1.51	0.07
Method Group 190.XX PCT			14	1.61	0.11
TOTAL CHROMIUM					
Total Chromium, Atomic Absorbtion		191.00	1	63	0.0
Total Chromium, ICP		191.30	5	84	1.4
Total Chromium, Other		191.99	2	87	2.1
Method Group 191.XX PPM			8	84	2.8
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	6	5	1.3
Acid Soluble Cobalt, Other		202.99	1	5	0.0
Method Group 202.XX PPM			7	5	1.5
ACID SOLUBLE COPPER					
Method Group 221.XX PPM			2	1.0	0.0
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP		241.30	12	1.75	0.03
Acid Soluble Iron, Other		241.99	3	1.49	0.25
Method Group 241.XX PCT			16	1.73	0.06
TOTAL LEAD					
Total Lead, ICP		251.30	3	1.1	0.1
Total Lead, Other		251.99	1	0.5	0.0
Method Group 251.XX PPM			4	1.0	0.2
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	2	142	103.6
Acid Soluble Manganese, Other		261.99	7	330	15.5
Method Group 261.XX PPM			9	323	22.9
WATER SOLUBLE MANGANESE					
Water Soluble Manganese, Other		271.99	1	177	0
Method Group 271.XX PCT			1	177	0.0
TOTAL MOLYBDENUM					
Total Molybdenum, ICP		289.30	6	15	0.5
Total Molybdenum, Other		289.99	2	16	4.2
Method Group 289.XX PPM			8	15	2.8

TOTAL NICKEL					
Total Nickel, ICP	291.30		5	22.5	0.2
Total Nickel, icp	291.99		2	25.3	3.2
Method Group 291.XX PPM			7	22.5	0.8
TOTAL SELENIUM					
Total Selenium, ICP	301.30		3	0.2	0.3
Method Group 301.XX PPM			3	0.2	0.3
SODIUM AS Na₂O					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.48	0.00
Sodium, Other		311.99	8	0.18	0.02
Method Group 311.XX PCT			9	0.19	0.02
ACID SOLUBLE ZINC					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	1	89.9	0.0
Acid Soluble Zinc, ICP		321.30	4	87.8	31.5
Acid Soluble Zinc, Other		321.99	5	89.0	14.0
Method Group 321.XX %			10	89.4	14.6
FLUORIDE					
Volumetric	325.10		11	1.79	0.13
Distilled/Electrode	325.99		2	1.79	0.05
Method Group 325.XX PCT			13	1.79	0.12

001.10 Ammoniacal Nitrogen		
Lab		MgO distillation
31	11.28	0.000
Median	11.28	0.000

001.99 Ammoniacal Nitrogen		
Lab		Other
38	11.38	-3.399
Std Dev	11.29	-1.000
34	11.27	-0.392
79	11.27	-0.392
32	11.26	-0.131
Median	11.25	0.000
24	11.25	0.131
32	11.22	0.915
Std Dev	11.21	1.000
24	11.21	1.046
330	10.93	8.367

001.XX Ammoniacal Nitrogen		
Lab		Total Method
38	11.38	-3.350
Std Dev	11.29	-1.000
31	11.28	-0.670
34	11.27	-0.268
79	11.27	-0.268
32	11.26	0.000
Median	11.26	0.000
24	11.25	0.268
Std Dev	11.22	1.000
32	11.22	1.072
24	11.21	1.206
330	10.93	8.710

010.11 Total Nitrogen		
Lab		Modified Comprehensive
43	11.34	0.000
219	11.34	0.000
Median	11.34	0.000
Std Dev	11.33	1.000
43	11.31	2.680

010.60 Total Nitrogen		
Lab		Combustion
31	11.38	-0.798

49	11.52	-1.926
80	11.45	-1.563
66	11.43	-1.424
31	11.38	-1.145
110	11.35	-1.005
Std Dev	11.35	-1.000
219	11.34	-0.921
64	11.32	-0.810
79	11.24	-0.363
77	11.23	-0.307
47	11.22	-0.279
140	11.17	0.000
Median	11.17	0.000
24	11.16	0.084
14	11.11	0.363
29	11.10	0.391
38	11.10	0.391
14	11.10	0.419
103	11.10	0.419
24	11.06	0.614
63	11.03	0.782
111	11.00	0.949
Std Dev	10.99	1.000
99	10.97	1.145

010.99 Total Nitrogen		
Lab		Other
330	12.29	-69.345
Std Dev	11.27	-1.000
23	11.27	-0.670
32	11.26	0.000
Median	11.26	0.000
23	11.25	0.670
Std Dev	11.24	1.000
32	11.22	2.680

010.XX Total Nitrogen		
Lab		Total Method
330	12.29	-6.016
49	11.52	-1.597
80	11.45	-1.226
66	11.43	-1.083
Std Dev	11.41	-1.000
31	11.38	-0.798

110	11.35	-0.656
43	11.34	-0.570
219	11.34	-0.570
219	11.34	-0.570
64	11.32	-0.456
43	11.31	-0.428
23	11.27	-0.171
32	11.26	-0.114
23	11.25	-0.057
79	11.24	0.000
Median	11.24	0.000
77	11.23	0.057
47	11.22	0.086
32	11.22	0.114
140	11.17	0.371
24	11.16	0.456
14	11.11	0.741
29	11.10	0.770
38	11.10	0.770
14	11.10	0.798
103	11.10	0.798
24	11.06	0.998
Std Dev	11.06	1.000
63	11.03	1.169
111	11.00	1.340
99	10.97	1.540

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
219	53.29	0.000
Median	53.29	0.000

020.20 Total Phosphate		
Lab		Spectrometric
24	52.95	-0.682
24	52.84	-0.437
31	52.79	-0.320
14	52.78	-0.297
111	52.74	-0.204
23	52.71	-0.122
34	52.70	-0.111
23	52.68	-0.064
43	52.66	-0.017
Median	52.65	0.000

14	52.65	0.017
79	52.63	0.064
99	52.52	0.309
43	52.37	0.658
Std Dev	52.22	1.000
32	52.09	1.323
140	52.03	1.451
32	52.02	1.486
110	51.85	1.870
38	51.42	2.884

020.40 Total Phosphate		
Lab		Automated
111	52.81	-1.340
Std Dev	52.77	-1.000
Median	52.67	0.000
Std Dev	52.56	1.000
219	52.53	1.340

020.99 Total Phosphate		
Lab		Other
330	52.75	0.000
Median	52.75	0.000

020.XX Total Phosphate		
Lab		Total Method
219	53.29	-2.276
24	52.95	-1.010
Std Dev	52.94	-1.000
24	52.84	-0.624
111	52.81	-0.496
31	52.79	-0.441
14	52.78	-0.404
330	52.75	-0.294
111	52.74	-0.257
23	52.71	-0.128
34	52.70	-0.110
23	52.68	-0.037
Median	52.67	0.000
43	52.66	0.037
14	52.65	0.092
79	52.63	0.165
219	52.53	0.514
99	52.52	0.551

Std Dev	52.40	1.000
43	52.37	1.101
32	52.09	2.148
140	52.03	2.350
32	52.02	2.405
110	51.85	3.010
38	51.42	4.607

23	0.24	-0.850
34	0.21	-0.523
140	0.21	-0.458
24	0.20	-0.327
Median	0.17	0.000
24	0.15	0.327
23	0.14	0.392
32	0.12	0.719
32	0.11	0.784
31	0.11	0.850
Std Dev	0.09	1.000
79	0.09	1.111

43	52.13	0.306
32	51.97	0.603
32	51.91	0.727
140	51.83	0.881
Std Dev	51.76	1.000
43	50.66	3.111
34	49.31	5.705

041.99	Direct Available Phosphate	
Lab	Other	
79	52.61	0.000
Median	52.61	0.000

030.20	Insoluble Phosphate	
Lab	Spectrometric	
43	4.49	-5.232
43	4.26	-4.957
Std Dev	1.02	-1.000
23	0.24	-0.043
140	0.21	-0.006
Median	0.20	0.000
24	0.20	0.006
24	0.15	0.067
23	0.14	0.073
79	0.09	0.140

040.20	Indirect Available Phosphate	
Lab	Spectrometric	
24	52.80	-0.670
31	52.69	-0.374
24	52.65	-0.271
23	52.57	-0.064
79	52.54	0.000
Median	52.54	0.000
23	52.45	0.245
Std Dev	52.15	1.000
43	52.13	1.069
140	51.83	1.843
43	50.66	4.845

041.10	Direct Available Phosphate	
Lab	Gravimetric Quimociac	
107	52.56	-0.115
219	52.53	0.000
Median	52.53	0.000
Std Dev	52.31	1.000
47	51.97	2.565

041.XX	Direct Available Phosphate	
Lab	Total Method	
49	53.84	-2.462
Std Dev	53.04	-1.000
219	52.86	-0.655
77	52.80	-0.544
63	52.64	-0.258
79	52.61	-0.194
107	52.56	-0.101
219	52.53	-0.055
38	52.50	0.000
Median	52.50	0.000
47	52.30	0.369
64	52.09	0.765
47	51.97	0.978
Std Dev	51.96	1.000
29	51.82	1.251
80	51.75	1.383
66	51.17	2.462
103	50.67	3.375

030.30	Insoluble Phosphate	
Lab	Alka. Quimociac	
31	0.11	0.000
Median	0.11	0.000

041.20	Direct Available Phosphate	
Lab	Spectrometric	
38	52.50	-1.340
Std Dev	52.47	-1.000
Median	52.40	0.000
Std Dev	52.33	1.000
47	52.30	1.340

030.40	Insoluble Phosphate	
Lab	Automated	
34	0.21	0.000
Median	0.21	0.000

040.99	Indirect Available Phosphate	
Lab	Other	
32	51.97	-0.065
32	51.91	0.000
Median	51.91	0.000
Std Dev	50.91	1.000
34	49.31	2.615

041.50	Direct Available Phosphate	
Lab	ICP	
63	52.64	-1.617
Std Dev	52.30	-1.000
80	51.75	0.000
Median	51.75	0.000
Std Dev	51.20	1.000
66	51.17	1.063

048.20	Water Soluble Phosphate	
Lab	Spectrometric	
330	48.28	-2.126
31	48.03	-1.215
23	47.98	-1.054
Std Dev	47.96	-1.000
111	47.82	-0.482
23	47.75	-0.214
14	47.69	-0.018
79	47.69	0.000
Median	47.69	0.000
43	47.64	0.161
14	47.57	0.411
43	47.45	0.858
Std Dev	47.41	1.000
24	47.29	1.429
24	47.20	1.733

030.99	Insoluble Phosphate	
Lab	Other	
32	0.12	-1.340
Std Dev	0.11	-1.000
Median	0.11	0.000
Std Dev	0.11	1.000
32	0.11	1.340

040.XX	Indirect Available Phosphate	
Lab	Total Method	
24	52.80	-0.986
31	52.69	-0.766
24	52.65	-0.689
23	52.57	-0.536
79	52.54	-0.488
23	52.45	-0.306
Median	52.29	0.000

041.60	Direct Available Phosphate	
Lab	EDTA Extract	
49	53.84	-1.963
Std Dev	53.15	-1.000
219	52.86	-0.584
77	52.80	-0.500
Median	52.44	0.000
64	52.09	0.500
29	51.82	0.870
Std Dev	51.73	1.000
103	50.67	2.491

030.XX	Insoluble Phosphate	
Lab	Total Method	
43	4.49	-56.411
43	4.26	-53.469
Std Dev	0.25	-1.000

140	47.12	2.019
048.50 Water Soluble Phosphate		
Lab	ICP	
111	47.88	0.000
Median	47.88	0.000
048.99 Water Soluble Phosphate		
Lab	Other	
32	47.66	-0.625
34	47.63	0.000
Median	47.63	0.000
Std Dev	47.57	1.000
32	47.51	2.055
048.XX Water Soluble Phosphate		
Lab	Total Method	
330	48.28	-2.680
31	48.03	-1.578
23	47.98	-1.383
Std Dev	47.89	-1.000
111	47.88	-0.951
111	47.82	-0.692
23	47.75	-0.367
14	47.69	-0.130
79	47.69	-0.108
32	47.66	0.000
Median	47.66	0.000
43	47.64	0.086
34	47.63	0.151
14	47.57	0.389
32	47.51	0.648
43	47.45	0.929
Std Dev	47.43	1.000
24	47.29	1.621
24	47.20	1.988
140	47.12	2.334
050.50 %K ₂ O Soluble Potash		
Lab	ICP(Oxalate)	
23	0.17	0.000
23	0.17	0.000
Median	0.17	0.000

050.99 Soluble Potash		
Lab	%K ₂ O	Other
111	0.20	-2.162
Std Dev	0.19	-1.000
24	0.18	-0.522
24	0.18	-0.522
31	0.18	-0.112
Median	0.17	0.000
43	0.17	0.112
43	0.17	0.172
Std Dev	0.16	1.000
330	0.14	2.757
80	0.10	6.036
050.XX Soluble Potash		
Lab	%K ₂ O	Total Method
111	0.20	-4.304
24	0.18	-1.241
24	0.18	-1.241
Std Dev	0.18	-1.000
31	0.18	-0.475
43	0.17	-0.055
Median	0.17	0.000
43	0.17	0.055
23	0.17	0.291
23	0.17	0.291
Std Dev	0.17	1.000
330	0.14	4.885
80	0.10	11.011
060.00 Free Water		
Lab	Vacuum Oven	
31	2.13	-6.335
24	1.92	-4.588
24	1.85	-4.020
Std Dev	1.47	-1.000
32	1.40	-0.365
32	1.40	-0.365
34	1.36	-0.041
140	1.35	0.000
Median	1.35	0.000
23	1.27	0.650
111	1.27	0.650
79	1.23	0.975

Std Dev	1.23	1.000
43	1.20	1.218
43	1.20	1.218
23	1.12	1.868
060.99 Free Water		
Lab	Other	
14	2.99	-0.039
14	2.97	0.000
Median	2.97	0.000
Std Dev	2.59	1.000
330	1.97	2.641
060.XX Free Water		
Lab	Total Method	
14	2.99	-3.232
14	2.97	-3.202
31	2.13	-1.516
330	1.97	-1.184
24	1.92	-1.084
Std Dev	1.87	-1.000
24	1.85	-0.944
32	1.40	-0.040
32	1.40	-0.040
Median	1.38	0.000
34	1.36	0.040
140	1.35	0.050
23	1.27	0.211
111	1.27	0.211
79	1.23	0.291
43	1.20	0.351
43	1.20	0.351
23	1.12	0.512
101.00 Acid Soluble Calcium		
Lab	%CaO	Atomic Absorption
219	0.13	0.000
Median	0.13	0.000
101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
330	2.39	-89.522
32	0.25	-1.288
Std Dev	0.24	-1.000

32	0.24	-0.876
111	0.24	-0.876
24	0.23	-0.670
23	0.22	-0.258
24	0.22	-0.052
Median	0.21	0.000
31	0.21	0.052
23	0.21	0.155
34	0.21	0.361
14	0.20	0.567
43	0.20	0.673
43	0.20	0.708
14	0.20	0.773
101.99 Acid Soluble Calcium		
Lab	%CaO	Other
219	0.14	0.000
Median	0.14	0.000
101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
330	2.39	-85.589
32	0.25	-1.329
Std Dev	0.24	-1.000
32	0.24	-0.935
111	0.24	-0.935
24	0.23	-0.738
23	0.22	-0.345
24	0.22	-0.148
31	0.21	-0.049
Median	0.21	0.000
23	0.21	0.049
34	0.21	0.246
14	0.20	0.443
43	0.20	0.544
43	0.20	0.577
14	0.20	0.640
Std Dev	0.19	1.000
219	0.14	2.983
219	0.13	3.337
121.00 Acid Soluble Magnesium		
Lab	%MgO	Atomic Absorption
219	0.75	0.000

Median	0.75	0.000
--------	------	-------

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP

23	1.03	-0.638
24	1.03	-0.638
23	1.03	-0.510
32	1.03	-0.510
24	1.02	-0.383
34	1.01	-0.128
Median	1.01	0.000
32	1.00	0.128
31	1.00	0.255
14	0.98	0.766
Std Dev	0.97	1.000
14	0.97	1.021
43	0.89	2.935
43	0.87	3.573

121.99 Acid Soluble Magnesium		
Lab	%MgO	Other

111	1.01	-1.128
Std Dev	0.99	-1.000
219	0.89	0.000
Median	0.89	0.000
Std Dev	0.78	1.000
330	0.72	1.552

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method

23	1.03	-0.329
24	1.03	-0.329
23	1.03	-0.278
32	1.03	-0.278
24	1.02	-0.228
34	1.01	-0.126
111	1.01	-0.076
32	1.00	-0.025
Median	1.00	0.000
31	1.00	0.025
14	0.98	0.228
14	0.97	0.329
Std Dev	0.90	1.000
43	0.89	1.087

219	0.89	1.138
43	0.87	1.340
219	0.75	2.493
330	0.72	2.806

144..01 Sulfate Sulfur (S)		
Lab	Gravimetric	

79	1.67	0.000
Median	1.67	0.000

144.70 Sulfur		
Lab	Spectrometric	

14	1.61	-1.340
Std Dev	1.60	-1.000
Median	1.60	0.000
Std Dev	1.60	1.000
14	1.60	1.340

144.99 Sulfate Sulfur (S)		
Lab	Other	

330	14.64	-5.551
32	4.87	-1.382
32	4.77	-1.339
Std Dev	3.97	-1.000
24	1.66	-0.012
34	1.63	0.000
Median	1.63	0.000
23	1.63	0.001
24	1.63	0.001
23	1.63	0.003
31	1.52	0.050

144.XX Sulfate Sulfur (S)		
Lab	Total Method	

330	14.64	-21.227
32	4.87	-5.285
32	4.77	-5.122
Std Dev	2.24	-1.000
79	1.67	-0.056
24	1.66	-0.048
34	1.63	-0.001
Median	1.63	0.000
23	1.63	0.001
24	1.63	0.001

23	1.63	0.009
14	1.61	0.042
14	1.60	0.058
31	1.52	0.189

145.99 Total Sulfur (S)		
Lab	Other	

63	10.07	-1.769
31	7.95	-1.319
Std Dev	6.45	-1.000
111	1.74	0.000
Median	1.74	0.000
43	1.64	0.021
43	1.60	0.030

145.XX Total Sulfur (S)		
Lab	Total Method	

63	10.07	-1.769
31	7.95	-1.319
Std Dev	6.45	-1.000
111	1.74	0.000
Median	1.74	0.000
43	1.64	0.021
43	1.60	0.030

151.30 Total Arsenic		
Lab	ICP	

43	15.00	-1.347
43	14.90	-1.318
Std Dev	13.82	-1.000
140	10.43	0.000
Median	10.43	0.000
64	10.35	0.022
24	8.34	0.616

151.99 Total Arsenic		
Lab	Other	

18	7.80	0.000
Median	7.80	0.000

151.XX Total Arsenic		
Lab	Total Method	

43	15.00	-1.251
43	14.90	-1.223

Std Dev	14.08	-1.000
140	10.43	-0.010
Median	10.39	0.000
64	10.35	0.010
24	8.34	0.556
18	7.80	0.702

165.99 Acid Soluble Boron		
Lab	PPM	Other

24	61.55	-1.340
Std Dev	59.89	-1.000
Median	55.00	0.000
Std Dev	50.11	1.000
330	48.45	1.340

165.XX, ppm Acid Soluble Boron		
Lab	PPM	Total Method

24	61.55	-1.340
Std Dev	59.89	-1.000
Median	55.00	0.000
Std Dev	50.11	1.000
330	48.45	1.340

171.99 Water Soluble Boron		
Lab	PPM	Other

330	4.35	0.000
Median	4.35	0.000

171.XX Water Soluble Boron		
Lab	PPM	Total Method

330	4.35	0.000
Median	4.35	0.000

181.00 Total Cadmium		
Lab	Atomic Absorbtion	

330	3.50	0.000
Median	3.50	0.000

181.30 Total Cadmium		
Lab	PPM	ICP

43	5.52	-1.023
Std Dev	5.51	-1.000
43	5.48	-0.914
18	5.10	0.000

Median	5.10	0.000
64	4.93	0.426
Std Dev	4.69	1.000
111	2.00	7.553

181.99 Total Cadmium		
Lab		Other
24	5.39	-1.340
Std Dev	5.01	-1.000
Median	3.92	0.000
Std Dev	2.82	1.000
31	2.45	1.340

181.XX Total Cadmium		
Lab	PPM	Total Method
43	5.52	-0.313
43	5.48	-0.286
24	5.39	-0.230
18	5.10	-0.054
Median	5.01	0.000
64	4.93	0.054
330	3.50	0.934
Std Dev	3.39	1.000
31	2.45	1.582
111	2.00	1.860

190.00 Aluminum		
Lab	%Al ₂ O ₃	ICP
14	1.69	-0.903
24	1.69	-0.903
14	1.69	-0.846
24	1.69	-0.846
34	1.63	-0.169
23	1.61	0.000
32	1.61	0.000
Median	1.61	0.000
23	1.60	0.169
32	1.58	0.395
43	1.54	0.790
Std Dev	1.52	1.000
43	1.50	1.241
111	1.15	5.191

190.99 Aluminum		
Lab	%Al ₂ O ₃	Atomic Absorption
31	1.60	-1.340
Std Dev	1.58	-1.000
Median	1.51	0.000
Std Dev	1.43	1.000
330	1.41	1.340

190.XX Aluminum		
Lab	%Al ₂ O ₃	Total Method
14	1.69	-0.939
24	1.69	-0.939
14	1.69	-0.884
24	1.69	-0.884
34	1.63	-0.221
23	1.61	-0.055
32	1.61	-0.055
Median	1.61	0.000
31	1.60	0.055
23	1.60	0.111
32	1.58	0.332
43	1.54	0.718
Std Dev	1.51	1.000
43	1.50	1.160
330	1.41	2.155
111	1.15	5.028

191.00 Total Chromium		
Lab		Atomic Absorption
330	63.00	0.000
Median	63.00	0.000

191.30 Total Chromium		
Lab		ICP
18	94.15	-7.453
Std Dev	85.36	-1.000
64	84.83	-0.606
111	84.00	0.000
Median	84.00	0.000
43	83.00	0.734
43	83.00	0.734

191.99 Total Chromium		
Lab	PPM	Other
219	1.67	0.000
Median	1.67	0.000

24	89.70	-1.340
Std Dev	88.98	-1.000
Median	86.85	0.000
Std Dev	84.72	1.000
31	84.00	1.340

191.XX Total Chromium		
Lab	PPM	Total Method
18	94.15	-4.469
24	89.70	-2.509
Std Dev	86.27	-1.000
64	84.83	-0.363
31	84.00	0.000
111	84.00	0.000
Median	84.00	0.000
43	83.00	0.440
43	83.00	0.440
Std Dev	81.73	1.000
330	63.00	9.245

202.30 Acid Soluble Cobalt		
Lab	PPM	ICP
64		

202.99 Acid Soluble Cobalt		
Lab		Other
24	5.24	0.000
Median	5.24	0.000

202.XX Acid Soluble Cobalt		
Lab	PPM	Total Method
24	5.24	-0.196
64	5.21	-0.175
43	5.00	0.000
43	5.00	0.000
Median	5.00	0.000
18	4.10	0.751
Std Dev	3.80	1.000
330	2.90	1.753
111	1.50	2.922

221.00 Acid Soluble Copper		
Lab		Atomic Absorption
219	1.67	0.000
Median	1.67	0.000

221.30 Acid Soluble Copper		
Lab	PPM	ICP
43	1.00	0.000
43	1.00	0.000
Median	1.00	0.000

221.99 Acid Soluble Copper		
Lab		Other
24	<0.0001	0.000
Median	0.00	0.000

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
24	<0.0001	0.000
43	1.00	0.000
43	1.00	0.000
Median	1.00	0.000

241.30 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	ICP
111	1.86	-3.311
Std Dev	1.78	-1.000
24	1.78	-0.946
23	1.77	-0.631
23	1.77	-0.473
24	1.77	-0.473
32	1.76	-0.315
Median	1.75	0.000
43	1.74	0.315
34	1.73	0.788
43	1.73	0.788
32	1.72	0.946
Std Dev	1.72	1.000
14	1.71	1.261
14	1.70	1.576

241.99 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Other
31	1.70	-0.820
219	1.49	0.000
Median	1.49	0.000
Std Dev	1.24	1.000
330	1.03	1.860

241.XX Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Total Method
111	1.86	-2.629
24	1.78	-1.112
Std Dev	1.77	-1.000
23	1.77	-0.910
23	1.77	-0.809
24	1.77	-0.809
32	1.76	-0.708
43	1.74	-0.303
34	1.73	0.000
43	1.73	0.000
Median	1.73	0.000
32	1.72	0.101
14	1.71	0.303
14	1.70	0.506
31	1.70	0.607
Std Dev	1.68	1.000
219	1.67	1.062
219	1.49	4.723
330	1.03	14.057

251.30 Total Lead		
Lab	PPM	ICP
18	1.20	-2.010
Std Dev	1.12	-1.000
43	1.05	0.000
Median	1.05	0.000
43	1.00	0.670

251.99 Total Lead		
Lab	PPM	Other
24	0.48	0.000
Median	0.48	0.000

251.XX Total Lead		
Lab	PPM	Total Method
18	1.20	-1.079
Std Dev	1.19	-1.000
43	1.05	-0.154
Median	1.03	0.000
43	1.00	0.154
Std Dev	0.86	1.000

24 0.48 3.357		
261.30 Acid Soluble Manganese		
Lab	PPM	ICP
330	281.00	-1.340
Std Dev	245.76	-1.000
Median	142.11	0.000
Std Dev	38.47	1.000
111	3.23	1.340

261.99 Acid Soluble Manganese		
Lab	PPM	Other
24	355.00	-1.593
Std Dev	345.80	-1.000
43	339.00	-0.561
43	338.50	-0.529
31	330.30	0.000
Median	330.30	0.000
18	322.50	0.503
Std Dev	314.80	1.000
219	313.45	1.087
219	313.35	1.093

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
24	355.00	-1.732
Std Dev	341.27	-1.000
43	339.00	-0.879
43	338.50	-0.852
31	330.30	-0.416
18	322.50	0.000
Median	322.50	0.000
219	313.45	0.482
219	313.35	0.488
Std Dev	303.73	1.000
330	281.00	2.211
111	3.23	17.011

271.99 Water Soluble Manganese		
Lab	PPM	Other
330	177.00	0.000
Median	177.00	0.000

271.XX Water Soluble Manganese		
Lab	PPM	Total Method
330	177.00	0.000
Median	177.00	0.000

281.30 Total Mercury		
Lab	PPM	ICP
24	<0.0001	0.000
Median	0.00	0.000

281.XX Total Mercury		
Lab	PPM	Total Method
24	<0.0001	0.000
Median	0.00	0.000

289.30 Total Molybdenum		
Lab	PPM	ICP
330		

289.99 Total Molybdenum		
Lab	PPM	Other
24	21.45	-1.340
Std Dev	20.04	-1.000
Median	15.88	0.000
Std Dev	11.71	1.000
31	10.30	1.340

289.XX Total Molybdenum		
Lab	PPM	Total Method
330	53.00	-16.865
24	21.45	-3.004
Std Dev	16.89	-1.000
18	15.00	-0.170
64	14.88	-0.115
Median	14.61	0.000
43	14.35	0.115
43	14.25	0.159
Std Dev	12.34	1.000
111	11.50	1.367
31	10.30	1.895

291.30 Total Nickel		
Lab	PPM	ICP
18		

291.99 Total Nickel		
Lab	PPM	Other
24	29.50	-1.340
Std Dev	28.42	-1.000
Median	25.25	0.000
Std Dev	22.08	1.000
31	21.00	1.340

291.XX Total Nickel		
Lab	PPM	Total Method
24	29.50	-10.086
Std Dev	23.19	-1.000
18	22.55	-0.072
43	22.50	0.000
43	22.50	0.000
Median	22.50	0.000
64	22.19	0.447
Std Dev	21.81	1.000
31	21.00	2.161
330	15.00	10.806

301.30 Total Selenium		
Lab	PPM	ICP
24	<0.0001	0.000
18	0.75	-1.992
Std Dev	0.48	-1.000
330	0.20	0.000
Median	0.20	0.000
140	0.01	0.688

301.XX Total Selenium		
Lab	PPM	Total Method
24	<0.0001	0.000
18	0.75	-1.992
Std Dev	0.48	-1.000
330	0.20	0.000
Median	0.20	0.000
140	0.01	0.688

311.00 Sodium		
Lab	%Na ₂ O	Atomic Absorbtion
330	0.48	0.000
Median	0.48	0.000

311.99			
Lab	%Na ₂ O	Sodium Other	
111	0.22	-1.893	
31	0.20	-1.020	
Std Dev	0.20	-1.000	
23	0.19	-0.437	
24	0.19	-0.146	
Median	0.18	0.000	
23	0.18	0.146	
24	0.18	0.437	
Std Dev	0.17	1.000	
43	0.15	1.719	
43	0.15	1.793	

311.XX			
Lab	%Na ₂ O	Sodium Total Method	
330	0.48	-15.812	
111	0.22	-1.608	
Std Dev	0.20	-1.000	
31	0.20	-0.804	
23	0.19	-0.268	
24	0.19	0.000	
Median	0.19	0.000	
23	0.18	0.268	
24	0.18	0.536	
Std Dev	0.17	1.000	
43	0.15	1.715	
43	0.15	1.784	

321.00			
Lab	Acid Soluble Zinc Atomic Absorption		
219	89.85	0.000	
Median	89.85	0.000	

321.30			
Lab	PPM	Acid Soluble Zinc ICP	
111	165.00	-2.449	
Std Dev	119.34	-1.000	
18	90.45	-0.083	
Median	87.83	0.000	
64	85.20	0.083	
Std Dev	56.31	1.000	
24	11.85	2.411	

321.99			
Lab	Acid Soluble Zinc Other		
330	8205.00	-578.481	
31	105.30	-1.162	
Std Dev	103.03	-1.000	
43	89.00	0.000	
Median	89.00	0.000	
43	86.50	0.178	
219	83.90	0.364	

321.XX			
Lab	PPM	Acid Soluble Zinc Total Method	
330	8205.00	-677.035	
111	165.00	-6.305	
31	105.30	-1.324	
Std Dev	101.41	-1.000	
18	90.45	-0.086	
219	89.85	-0.035	
Median	89.43	0.000	
43	89.00	0.035	
43	86.50	0.244	
64	85.20	0.352	
219	83.90	0.461	
Std Dev	77.44	1.000	
24	11.85	6.472	

325.10			
Lab	%	Fluoride Electrode	
32	2.04	-1.931	
32	2.02	-1.813	
23	1.89	-0.788	
24	1.84	-0.355	
24	1.83	-0.276	
79	1.79	0.000	
Median	1.79	0.000	
34	1.78	0.079	
23	1.76	0.276	
14	1.63	1.261	
14	1.62	1.340	
111	0.25	12.139	

325.99			
Lab	%	Fluoride Other	
330	1.85	-1.340	

Median	1.79	0.000	
31	1.72	1.340	

325.XX			
Lab	%	Fluoride Total Method	
32	2.04	-2.525	
32	2.02	-2.371	
23	1.89	-1.031	
330	1.85	-0.618	
24	1.84	-0.464	
24	1.83	-0.361	
79	1.79	0.000	
Median	1.79	0.000	
34	1.78	0.103	
23	1.76	0.361	
31	1.72	0.722	
14	1.63	1.649	
14	1.62	1.752	
111	0.25	15.874	