

AFPC

2017-09

Grade

18-46-0

Sample

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, Other		001.99	13	18.06	0.07
Method Group 001.XX PCT			13	18.06	0.09
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	4	18.11	0.03
Total Nitrogen, Salicylic	955.04d	010.12	1	17.41	0.00
Total Nitrogen, Combustion	993.13	010.60	16	18.07	0.13
Total Nitrogen, Other		010.99	8	18.15	0.13
Method Group 010.XX PCT			29	18.10	0.15
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	46.87	0.00
Total Phosphate, Spectrometric	978.02	020.20	19	46.71	0.21
Total Phosphate, ICP	970.03	020.40	3	46.85	0.07
Total Phosphate, Other	993.13	020.99	2	47.64	0.00
Method Group 020.XX PCT			25	46.78	0.20
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	9	0.03	0.03
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.09	0.00
Insoluble Phosphate, Automated	978.01	030.40	3	0.05	0.02
Insoluble Phosphate, Other		030.99	2	0.04	0.01
Method Group 030.XX PCT			15	0.04	0.04
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	10	46.61	0.20
Indirect Available Phosphate, Automated	960.02	040.40	2	46.73	0.07
Indirect Available Phosphate, Other		040.99	3	46.73	0.15
Method Group 040.XX PCT			15	46.63	0.19
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	3	46.55	0.34
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	46.10	0.75
Direct Available Phosphate, Automated	978.01	041.40	1	46.14	0.00
Direct Available Phosphate, ICP		041.50	2	46.10	0.05
Direct Available Phosphate, EDTA Extract	993.01	041.60	3	47.25	0.23
Direct Available Phosphate, Other		041.99	1	48.58	0.00
Method Group 041.XX PCT			12	46.67	0.93
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	16	44.19	0.38
Water Soluble Phosphate, Other		048.99	3	44.35	0.17
Method Group 048.XX PCT			19	44.26	0.43
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.15	0.00
Soluble Potash, Other		050.99	6	0.15	0.00
Method Group 050.XX PCT			8	0.15	0.00
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	17	1.08	0.15
Free Water, Other		060.99	5	1.21	0.14
Method Group 060.XX PCT			22	1.16	0.17
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	18	0.34	0.03
Method Group 101.XX PCT			18	0.34	0.03
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, ICP		121.30	16	1.55	0.08
Acid Soluble Magnesium, Other		121.99	2	1.43	0.00
Method Group 121.XX PCT			18	1.52	0.13
WATER SOLUBLE MAGNESIUM					
Water Soluble Magnesium, Other		131.99	2		0.00
Method Group 131.XX PCT			2	0.00	0.00
SULFATE SULFUR (S)					

Sulfur, Gravimetric	980.02(a)	144.01	2	5.96	2.86
Sulfur, Other		144.99	16	2.09	0.06
Method Group 144.XX PCT			18	2.09	0.08
TOTAL SULFUR (S)					
Sulfur, Other		145.99	2	2.05	0.0
Method Group 145.XX PCT			2	2.05	0.0
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	4	2.3	2.0
Total Arsenic, Other		151.99	2	2.4	0.8
Method Group 151.XX PPM			6	2.3	1.4
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	3	319	95.8
Method Group 165.XX PPM			3	319	116.7
WATER SOLUBLE BORON					
Water Soluble Boron, Other		171.99	2	64	0.2
Method Group 171.XX PPM			2	64	0.2
TOTAL CADMIUM					
Total Cadmium, Atomic Absorbtion		181.00	3	33	5.9
Total Cadmium, ICP		181.30	5	35.3	1.2
Total Cadmium, Other		181.99	1	38.0	0.0
Method Group 181.XX PPM			9	35.3	3.8
ALUMINUM AS Al₂O₃					
ICP, %			15	0.47	0.01
Water Soluble Chlorine, Other, %		190.99	3	0.48	0.33
Method Group 190.XX PCT			18	0.47	0.01
TOTAL CHROMIUM					
Total Chromium, Atomic Absorbtion		191.00	3	220	12.5
Total Chromium, ICP		191.30	5	217	4.9
Total Chromium, Other		191.99	1	222	0.0
Method Group 191.XX PPM			9	217	8.2
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	7	2	0.2
Acid Soluble Cobalt, Other		202.99	1	1	0.0
Method Group 202.XX PPM			8	2	0.5
ACID SOLUBLE COPPER					
Acid Soluble Copper, Other		221.99	1	0.9	0.0
Method Group 221.XX PPM			3	1.0	0.2
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP		241.30	16	0.70	0.02
Acid Soluble Iron, Other		241.99	2	0.69	0.01
Method Group 241.XX PCT			18	0.70	0.02
TOTAL LEAD					
Total Lead, ICP		251.30	4	1	1.1
Total Lead, Other		251.99	1	1.1	0.0
Method Group 251.XX PPM			5	1	1.2
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	3	54	91.7
Acid Soluble Manganese, Other		261.99	5	61	1.5
Method Group 261.XX PPM			8	60	4.5
WATER SOLUBLE MANGANESE					
Water Soluble Manganese, Other		271.99	2	4	0
Method Group 271.XX PCT			2	4	0.0
TOTAL MOLYBDENUM					
Total Molybdenum, ICP		289.30	7	4	3.3
Total Molybdenum, Other		289.99	1	4	0.0
Method Group 289.XX PPM			8	4	3.4
TOTAL NICKEL					
Total Nickel, ICP		291.30	7	17.8	7.0
Total Nickel, icp		291.99	1	20.5	0.0
Method Group 291.XX PPM			8	17.9	6.4
TOTAL SELENIUM					
Total Selenium, ICP		301.30	1	1.0	0.0

Total Selenium, Other	301.99	1	0	0.0
Method Group 301.XX PPM		2	0.5	0.4
SODIUM AS Na₂O				
Sodium, Other	311.99	9	0.19	0.00
Method Group 311.XX PCT		9	0.19	0.00
ACID SOLUBLE ZINC				
Acid Soluble Zinc, ICP	321.30	5	445.5	274.4
Acid Soluble Zinc, Other	321.99	4	233.3	298.9
Method Group 321.XX %		9	433.5	375.0
FLUORIDE				
Volumetric	325.10	13	1.38	0.03
Distilled/Electrode	325.99	4	1.44	0.03
Method Group 325.XX PCT		17	1.39	0.08

001.99 Ammoniacal Nitrogen		
Lab		Other
330	18.16	-1.340
330	18.15	-1.269
Std Dev	18.13	-1.000
24	18.11	-0.705
61	18.11	-0.635
24	18.09	-0.353
61	18.08	-0.212
310	18.06	0.000
Median	18.06	0.000
34	18.06	0.071
32	18.02	0.635
32	18.01	0.705
79	17.99	0.987
Std Dev	17.99	1.000
140	17.81	3.526
38	17.08	13.894

001.XX Ammoniacal Nitrogen		
Lab		Total Method
330	18.16	-1.340
330	18.15	-1.269
Std Dev	18.13	-1.000
24	18.11	-0.705
61	18.11	-0.635
24	18.09	-0.353
61	18.08	-0.212
310	18.06	0.000
Median	18.06	0.000
34	18.06	0.071
32	18.02	0.635
32	18.01	0.705
79	17.99	0.987
Std Dev	17.99	1.000
140	17.81	3.526
38	17.08	13.894

010.11 Total Nitrogen		
Lab		Modified Comprehensive
43	18.13	-0.695
43	18.12	-0.298
Median	18.11	0.000
219	18.10	0.298

Std Dev	18.08	1.000
113	18.04	2.879

010.12 Total Nitrogen		
Lab		Salicylic
107	17.41	0.000
Median	17.41	0.000

010.60 Total Nitrogen		
Lab		Combustion
24	18.43	-2.738
66	18.32	-1.884
24	18.29	-1.690
Std Dev	18.20	-1.000
14	18.20	-0.952
49	18.17	-0.719
14	18.14	-0.524
219	18.12	-0.330
39	18.09	-0.097
Median	18.07	0.000
79	18.06	0.097
9	18.03	0.330
63	18.02	0.408
47	18.01	0.524
9	17.99	0.680
Std Dev	17.94	1.000
77	17.91	1.262
38	17.84	1.806
31	17.76	2.428

010.99 Total Nitrogen		
Lab		Other
330	18.38	-1.743
330	18.37	-1.668
Std Dev	18.28	-1.000
23	18.21	-0.431
23	18.17	-0.131
Median	18.15	0.000
32	18.13	0.131
32	18.09	0.431
Std Dev	18.01	1.000
140	18.00	1.106
29	17.54	4.592

010.XX Total Nitrogen		
Lab		Total Method
24	18.43	-2.722
330	18.38	-2.345
330	18.37	-2.261
66	18.32	-1.801
24	18.29	-1.591
Std Dev	18.22	-1.000
23	18.21	-0.879
14	18.20	-0.796
23	18.17	-0.544
49	18.17	-0.544
14	18.14	-0.335
32	18.13	-0.251
43	18.13	-0.209
43	18.12	-0.126
219	18.12	-0.126
219	18.10	0.000
Median	18.10	0.000
32	18.09	0.084
39	18.09	0.126
79	18.06	0.335
113	18.04	0.544
9	18.03	0.586
63	18.02	0.670
47	18.01	0.796
140	18.00	0.838
9	17.99	0.963
Std Dev	17.98	1.000
77	17.91	1.591
38	17.84	2.178
31	17.76	2.848
29	17.54	4.732
107	17.41	5.821

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
219	46.87	0.000
Median	46.87	0.000

020.20 Total Phosphate		
Lab		Spectrometric
43	46.98	-1.269
34	46.98	-1.246

Std Dev	46.92	-1.000
24	46.89	-0.823
24	46.83	-0.541
43	46.78	-0.306
14	46.78	-0.306
32	46.78	-0.306
14	46.77	-0.259
23	46.76	-0.235
23	46.71	0.000
Median	46.71	0.000
61	46.69	0.118
61	46.68	0.141
140	46.66	0.259
32	46.56	0.729
Std Dev	46.50	1.000
79	46.43	1.340
310	46.39	1.505
113	46.34	1.740
31	46.07	3.033
38	45.29	6.700

020.40 Total Phosphate		
Lab		Automated
9	47.01	-2.527
Std Dev	46.91	-1.000
9	46.85	0.000
Median	46.85	0.000
219	46.84	0.153

020.99 Total Phosphate		
Lab		Other
330	47.64	-1.340
Std Dev	47.64	-1.000
Median	47.64	0.000
Std Dev	47.63	1.000
330	47.63	1.340

020.XX Total Phosphate		
Lab		Total Method
330	47.64	-5.391
330	47.63	-5.329
9	47.01	-1.465
43	46.98	-1.278
34	46.98	-1.247

Std Dev	46.94	-1.000
24	46.89	-0.686
219	46.87	-0.592
9	46.85	-0.436
219	46.84	-0.374
24	46.83	-0.312
43	46.78	0.000
14	46.78	0.000
32	46.78	0.000
Median	46.78	0.000
14	46.77	0.062
23	46.76	0.093
23	46.71	0.405
61	46.69	0.561
61	46.68	0.592
140	46.66	0.748
Std Dev	46.61	1.000
32	46.56	1.371
79	46.43	2.181
310	46.39	2.400
113	46.34	2.711
31	46.07	4.425
38	45.29	9.287

030.20	Insoluble Phosphate	
Lab	Spectrometric	
61	0.09	-2.178
61	0.09	-2.178
113	0.06	-1.173
Std Dev	0.05	-1.000
140	0.04	-0.503
23	0.03	0.000
23	0.03	0.000
Median	0.03	0.000
79	0.02	0.168
24	0.02	0.335
24	0.01	0.503

030.30	Insoluble Phosphate	
Lab	Alka. Quimociac	
31	0.09	0.000
Median	0.09	0.000

030.40	Insoluble Phosphate	
Lab	Automated	
9	0.08	-1.489
Std Dev	0.07	-1.000
9	0.05	0.000
Median	0.05	0.000
Std Dev	0.03	1.000
34	0.03	1.191

030.99	Insoluble Phosphate	
Lab	Other	
32	0.05	-1.340
Std Dev	0.05	-1.000
Median	0.04	0.000
Std Dev	0.02	1.000
32	0.02	1.340

030.XX	Insoluble Phosphate	
Lab	Total Method	
31	0.09	-1.489
61	0.09	-1.489
61	0.09	-1.489
9	0.08	-1.042
Std Dev	0.07	-1.000
113	0.06	-0.596
9	0.05	-0.298
32	0.05	-0.298
140	0.04	0.000
Median	0.04	0.000
34	0.03	0.298
23	0.03	0.447
23	0.03	0.447
32	0.02	0.596
79	0.02	0.596
24	0.02	0.744
24	0.01	0.893

040.20	Indirect Available Phosphate	
Lab	Spectrometric	
24	46.87	-1.309
24	46.82	-1.037
Std Dev	46.81	-1.000
23	46.74	-0.642
23	46.69	-0.395

140	46.62	-0.049
Median	46.61	0.000
61	46.60	0.049
61	46.59	0.074
79	46.41	0.988
Std Dev	46.40	1.000
113	46.28	1.606
31	45.97	3.137

040.40	Indirect Available Phosphate	
Lab	Automated	
9	46.83	-1.340
Std Dev	46.80	-1.000
Median	46.73	0.000
Std Dev	46.65	1.000
9	46.63	1.340

040.99	Indirect Available Phosphate	
Lab	Other	
34	46.95	-1.438
Std Dev	46.88	-1.000
32	46.73	0.000
Median	46.73	0.000
Std Dev	46.57	1.000
32	46.54	1.242

040.XX	Indirect Available Phosphate	
Lab	Total Method	
34	46.95	-1.986
24	46.87	-1.513
9	46.83	-1.230
24	46.82	-1.167
Std Dev	46.79	-1.000
23	46.74	-0.662
32	46.73	-0.599
23	46.69	-0.347
9	46.63	0.000
Median	46.63	0.000
140	46.62	0.095
61	46.60	0.221
61	46.59	0.252
32	46.54	0.599
Std Dev	46.47	1.000
79	46.41	1.419

113	46.28	2.207
31	45.97	4.162

041.10	Direct Available Phosphate	
Lab	Gravimetric Quimociac	
47	46.98	-1.267
Std Dev	46.89	-1.000
219	46.55	0.000
Median	46.55	0.000
Std Dev	46.20	1.000
107	46.06	1.413

041.20	Direct Available Phosphate	
Lab	Spectrometric	
47	47.11	-1.340
Std Dev	46.85	-1.000
Median	46.10	0.000
Std Dev	45.35	1.000
38	45.09	1.340

041.40	Direct Available Phosphate	
Lab	Automated	
39	46.14	0.000
Median	46.14	0.000

041.50	Direct Available Phosphate	
Lab	ICP	
63	46.16	-1.340
Std Dev	46.14	-1.000
Median	46.10	0.000
Std Dev	46.05	1.000
66	46.04	1.340

041.60	Direct Available Phosphate	
Lab	EDTA Extract	
49	47.41	-0.692
77	47.25	0.000
Median	47.25	0.000
Std Dev	47.01	1.000
219	46.79	1.988

041.99	Direct Available Phosphate	
Lab	Other	
29	48.58	0.000

Median	48.58	0.000
--------	-------	-------

041.XX	Direct Available Phosphate	
Lab	Total Method	

29	48.58	-2.491
Std Dev	47.43	-1.000
49	47.41	-0.965
77	47.25	-0.756
47	47.11	-0.580
47	46.98	-0.411
219	46.79	-0.156
Median	46.67	0.000
219	46.55	0.156
63	46.16	0.659
39	46.14	0.691
107	46.06	0.789
66	46.04	0.822
Std Dev	45.90	1.000
38	45.09	2.054

048.20	Water Soluble Phosphate	
Lab	Spectrometric	

9	44.75	-1.444
330	44.68	-1.275
330	44.66	-1.223
Std Dev	44.57	-1.000
9	44.47	-0.716
140	44.40	-0.546
23	44.37	-0.455
23	44.29	-0.260
24	44.26	-0.182
Median	44.19	0.000
14	44.12	0.182
14	44.12	0.195
79	44.08	0.286
61	43.91	0.742
24	43.89	0.781
61	43.86	0.859
Std Dev	43.81	1.000
113	43.59	1.561
31	41.26	7.637

048.99	Water Soluble Phosphate	
Lab	Other	

32	44.45	-0.553
32	44.35	0.000
Median	44.35	0.000
Std Dev	44.18	1.000
34	43.99	2.127

048.XX	Water Soluble Phosphate	
Lab	Total Method	

9	44.75	-1.361
330	44.68	-1.179
330	44.66	-1.123
Std Dev	44.62	-1.000
9	44.47	-0.575
32	44.45	-0.519
140	44.40	-0.393
23	44.37	-0.295
32	44.35	-0.253
23	44.29	-0.084
24	44.26	0.000
Median	44.26	0.000
14	44.12	0.393
14	44.12	0.407
79	44.08	0.505
34	43.99	0.772
61	43.91	0.996
Std Dev	43.90	1.000
24	43.89	1.038
61	43.86	1.123
113	43.59	1.880
31	41.26	8.433

050.50	%K ₂ O	Soluble Potash
Lab		ICP(Oxalate)

23	0.15	0.000
23	0.15	0.000
Median	0.15	0.000

050.99	%K ₂ O	Soluble Potash
Lab		Other

61	0.17	-7.017
61	0.16	-1.721
Std Dev	0.15	-1.000
43	0.15	-0.032
Median	0.15	0.000

43	0.15	0.032
24	0.15	0.044
24	0.15	0.044

050.XX	%K ₂ O	Soluble Potash
Lab		Total Method

61	0.17	-18.970
61	0.16	-4.730
Std Dev	0.15	-1.000
43	0.15	-0.188
43	0.15	-0.016
Median	0.15	0.000
23	0.15	0.016
23	0.15	0.016
24	0.15	0.016
24	0.15	0.016

060.00	Free Water	
Lab	Vacuum Oven	

31	2.40	-9.071
61	1.33	-1.752
24	1.30	-1.546
9	1.25	-1.168
24	1.23	-1.065
Std Dev	1.22	-1.000
9	1.16	-0.584
34	1.16	-0.584
113	1.11	-0.206
32	1.08	0.000
Median	1.08	0.000
43	1.07	0.034
23	1.07	0.069
43	1.06	0.137
140	1.04	0.275
32	1.03	0.309
23	1.01	0.481
79	0.99	0.584
61	0.97	0.722

060.99	Free Water	
Lab	Other	

330	1.39	-1.268
330	1.37	-1.123
Std Dev	1.35	-1.000

14	1.21	0.000
Median	1.21	0.000
47	1.18	0.217
14	1.18	0.254

060.XX	Free Water	
Lab	Total Method	

31	2.40	-9.006
330	1.39	-1.641
330	1.37	-1.495
61	1.33	-1.240
24	1.30	-1.021
Std Dev	1.30	-1.000
9	1.25	-0.620
24	1.23	-0.510
14	1.21	-0.365
47	1.18	-0.146
14	1.18	-0.109
9	1.16	0.000
Median	1.16	0.000
34	1.16	0.000
113	1.11	0.401
32	1.08	0.620
43	1.07	0.656
23	1.07	0.693
43	1.06	0.766
140	1.04	0.912
32	1.03	0.948
Std Dev	1.02	1.000
23	1.01	1.130
79	0.99	1.240
61	0.97	1.386

101.30	%CaO	Acid Soluble Calcium
Lab		ICP

32	0.38	-1.381
61	0.38	-1.381
61	0.37	-1.013
Std Dev	0.36	-1.000
14	0.36	-0.829
24	0.36	-0.829
34	0.36	-0.645
24	0.35	-0.460
9	0.35	-0.276

Lab	%CaO	Total Method
32	0.34	-0.092
Median	0.34	0.000
23	0.34	0.092
9	0.33	0.276
23	0.33	0.276
330	0.33	0.460
31	0.32	0.589
330	0.32	0.829
Std Dev	0.31	1.000
14	0.30	1.381
43	0.30	1.405
43	0.30	1.534

Lab	%CaO	Total Method
32	0.38	-1.381
61	0.38	-1.381
61	0.37	-1.013
Std Dev	0.36	-1.000
14	0.36	-0.829
24	0.36	-0.829
34	0.36	-0.645
24	0.35	-0.460
9	0.35	-0.276
32	0.34	-0.092
Median	0.34	0.000
23	0.34	0.092
9	0.33	0.276
23	0.33	0.276
330	0.33	0.460
31	0.32	0.589
330	0.32	0.829
Std Dev	0.31	1.000
14	0.30	1.381
43	0.30	1.405
43	0.30	1.534

Lab	%MgO	ICP
24	1.59	-0.542
34	1.58	-0.415
24	1.58	-0.351
23	1.57	-0.223
23	1.57	-0.223

Lab	%MgO	Other
32	1.57	-0.223
9	1.55	-0.032
32	1.55	-0.032
Median	1.55	0.000
9	1.55	0.032
14	1.50	0.670
31	1.49	0.734
14	1.48	0.861
Std Dev	1.47	1.000
61	1.40	1.882
61	1.40	1.946
43	1.33	2.776
43	1.31	3.031

Lab	%MgO	Other
330	1.44	-1.340
Std Dev	1.43	-1.000
Median	1.43	0.000
Std Dev	1.43	1.000
330	1.43	1.340

Lab	%MgO	Total Method
24	1.59	-0.682
34	1.58	-0.585
24	1.58	-0.536
23	1.57	-0.439
23	1.57	-0.439
32	1.57	-0.439
9	1.55	-0.292
32	1.55	-0.292
9	1.55	-0.244
Median	1.52	0.000
14	1.50	0.244
31	1.49	0.292
14	1.48	0.390
330	1.44	0.828
330	1.43	0.926
Std Dev	1.42	1.000
61	1.40	1.169
61	1.40	1.218
43	1.33	1.852
43	1.31	2.047

Lab	Sulfate Sulfur (S)	Gravimetric
47	9.80	-1.340
Std Dev	8.83	-1.000
Median	5.96	0.000
Std Dev	3.10	1.000
79	2.13	1.340

Lab	Sulfate Sulfur (S)	Other
330	6.12	-64.560
330	6.06	-63.600
24	2.17	-1.360
Std Dev	2.15	-1.000
9	2.12	-0.480
14	2.11	-0.320
23	2.10	-0.240
9	2.09	-0.080
23	2.09	-0.080
Median	2.09	0.000
24	2.08	0.080
14	2.08	0.160
34	2.08	0.160
32	2.03	0.960
Std Dev	2.02	1.000
32	2.02	1.040
61	1.65	6.960
61	1.61	7.600
31	1.20	14.240

Lab	Sulfate Sulfur (S)	Total Method
47	9.80	-121.546
330	6.12	-63.532
330	6.06	-62.586
24	2.17	-1.261
Std Dev	2.15	-1.000
79	2.13	-0.552
9	2.12	-0.394
14	2.11	-0.236
23	2.10	-0.158
9	2.09	0.000
23	2.09	0.000

Lab	Total Sulfur (S)	Other
Median	2.09	0.000
24	2.08	0.158
14	2.08	0.236
34	2.08	0.236
Std Dev	2.03	1.000
32	2.03	1.025
32	2.02	1.104
61	1.65	6.936
61	1.61	7.567
31	1.20	14.109

Lab	Total Sulfur (S)	Other
43	2.07	-1.340
Std Dev	2.06	-1.000
Median	2.05	0.000
Std Dev	2.04	1.000
43	2.04	1.340

Lab	Total Sulfur (S)	Total Method
43	2.07	-1.340
Std Dev	2.06	-1.000
Median	2.05	0.000
Std Dev	2.04	1.000
43	2.04	1.340

Lab	Total Arsenic	ICP
31	11.75	-4.749
Std Dev	4.29	-1.000
43	2.35	-0.025
Median	2.30	0.000
43	2.25	0.025
24	1.39	0.460

Lab	Total Arsenic	Other
140	3.47	-1.340
Std Dev	3.18	-1.000
Median	2.36	0.000
Std Dev	1.53	1.000
113	1.25	1.340

151.XX		
Lab	Total Arsenic	Total Method
31	11.75	-7.989
Std Dev	3.48	-1.000
140	3.47	-0.985
43	2.35	-0.042
Median	2.30	0.000
43	2.25	0.042
24	1.39	0.774
113	1.25	0.888

165.99		
Lab	PPM	Acid Soluble Boron Other
330	319.50	-0.010
330	318.50	0.000
Median	318.50	0.000
Std Dev	222.68	1.000
24	62.70	2.670

65.XX, ppm		
Lab	PPM	Acid Soluble Boron Total Method
330	319.50	-0.010
330	318.50	0.000
Median	318.50	0.000
Std Dev	222.68	1.000
24	62.70	2.670

171.99		
Lab	PPM	Water Soluble Boron Other
330	64.00	-1.340
Std Dev	63.94	-1.000
Median	63.75	0.000
Std Dev	63.56	1.000
330	63.50	1.340

171.XX		
Lab	PPM	Water Soluble Boron Total Method
330	64.00	-1.340
Std Dev	63.94	-1.000
Median	63.75	0.000
Std Dev	63.56	1.000
330	63.50	1.340

181.00		
Lab	Total Cadmium	Atomic Absorbtion
113	48.33	-2.629
Std Dev	38.71	-1.000
330	32.80	0.000
Median	32.80	0.000
330	32.50	0.051

181.30		
Lab	PPM	Total Cadmium ICP
61	37.00	-1.431
61	36.50	-1.017
Std Dev	36.48	-1.000
43	35.27	0.000
Median	35.27	0.000
43	34.88	0.323
Std Dev	34.06	1.000
31	2.85	26.817

181.99		
Lab	Total Cadmium	Other
24	38.00	0.000
Median	38.00	0.000

181.XX		
Lab	PPM	Total Cadmium Total Method
113	48.33	-4.167
Std Dev	38.40	-1.000
24	38.00	-0.871
61	37.00	-0.552
61	36.50	-0.392
43	35.27	0.000
Median	35.27	0.000
43	34.88	0.124
330	32.80	0.788
330	32.50	0.884
Std Dev	32.14	1.000
31	2.85	10.344

190.00		
Lab	%Al ₂ O ₃	Aluminum ICP
14	0.51	-7.147
14	0.50	-4.467
23	0.48	-1.787

Std Dev	0.48	-1.000
9	0.48	-0.893
23	0.48	-0.893
43	0.48	-0.893
24	0.47	0.000
32	0.47	0.000
34	0.47	0.000
43	0.47	0.000
61	0.47	0.000
Median	0.47	0.000
9	0.47	0.893
24	0.47	0.893
Std Dev	0.46	1.000
61	0.46	2.680
32	0.44	5.360

190.99		
Lab	%Al ₂ O ₃	Aluminum Atomic Absorption
31	1.36	-2.650
Std Dev	0.81	-1.000
330	0.48	0.000
Median	0.48	0.000
330	0.47	0.030

190.XX		
Lab	%Al ₂ O ₃	Aluminum Total Method
31	1.36	-135.531
14	0.51	-6.126
14	0.50	-3.829
23	0.48	-1.531
Std Dev	0.48	-1.000
9	0.48	-0.766
23	0.48	-0.766
43	0.48	-0.766
330	0.48	-0.766
24	0.47	0.000
32	0.47	0.000
34	0.47	0.000
43	0.47	0.000
61	0.47	0.000
Median	0.47	0.000
9	0.47	0.766
24	0.47	0.766
330	0.47	0.766

Std Dev	0.46	1.000
61	0.46	2.297
32	0.44	4.594

191.00		
Lab	Total Chromium	Atomic Absorbtion
330	220.50	-0.080
330	219.50	0.000
Median	219.50	0.000
Std Dev	206.98	1.000
113	186.94	2.600

191.30		
Lab	Total Chromium	ICP
43	217.50	-0.206
43	217.00	-0.103
61	216.50	0.000
Median	216.50	0.000
Std Dev	211.65	1.000
61	210.50	1.237
31	109.30	22.100

191.99		
Lab	PPM	Total Chromium Other
24	222.00	0.000
Median	222.00	0.000

191.XX		
Lab	PPM	Total Chromium Total Method
24	222.00	-0.744
330	220.50	-0.521
330	219.50	-0.372
43	217.50	-0.074
43	217.00	0.000
Median	217.00	0.000
61	216.50	0.074
61	210.50	0.968
Std Dev	210.28	1.000
113	186.94	4.476
31	109.30	16.035

202.30		
Lab	PPM	Acid Soluble Cobalt ICP
31		

202.99		
Lab	Acid Soluble Cobalt	
	Other	
24	0.83	0.000
Median	0.83	0.000

202.XX		
Lab	PPM	Acid Soluble Cobalt Total Method
31	3.03	-2.884
Std Dev	2.29	-1.000
43	2.00	-0.255
43	2.00	-0.255
61	1.95	-0.128
Median	1.90	0.000
61	1.85	0.128
Std Dev	1.51	1.000
330	1.50	1.021
330	1.40	1.276
24	0.83	2.731

221.30		
Lab	PPM	Acid Soluble Copper ICP
61	<0.4	0.000
61	<0.4	0.000
43	1.00	0.000
43	1.00	0.000
Median	1.00	0.000

221.99		
Lab	Acid Soluble Copper	
	Other	
24	0.51	0.000
Median	0.51	0.000

221.XX		
Lab	PPM	Acid Soluble Copper Total Method
61	<0.4	0.000
61	<0.4	0.000
43	1.00	0.000
43	1.00	0.000
Median	1.00	0.000
24	0.51	2.680

241.30		
Lab	%Fe ₂ O ₃	Acid Soluble Iron ICP
31	1.65	-48.112

14	1.55	-43.263
34	0.73	-1.404
Std Dev	0.72	-1.000
23	0.72	-0.893
9	0.72	-0.638
24	0.72	-0.638
24	0.71	-0.128
32	0.71	-0.128
Median	0.70	0.000
9	0.70	0.128
14	0.70	0.128
23	0.70	0.128
43	0.69	0.638
43	0.69	0.638
61	0.69	0.638
Std Dev	0.68	1.000
32	0.67	1.914
61	0.67	1.914

241.99		
Lab	%Fe ₂ O ₃	Acid Soluble Iron Other
330	0.70	-1.340
Std Dev	0.70	-1.000
Median	0.69	0.000
Std Dev	0.68	1.000
330	0.68	1.340

241.XX		
Lab	%Fe ₂ O ₃	Acid Soluble Iron Total Method
31	1.65	-50.652
14	1.55	-45.560
34	0.73	-1.608
23	0.72	-1.072
Std Dev	0.72	-1.000
9	0.72	-0.804
24	0.72	-0.804
24	0.71	-0.268
32	0.71	-0.268
9	0.70	0.000
14	0.70	0.000
23	0.70	0.000
330	0.70	0.000
Median	0.70	0.000
43	0.69	0.536

43	0.69	0.536
61	0.69	0.536
Std Dev	0.68	1.000
330	0.68	1.340
32	0.67	1.876
61	0.67	1.876

251.30		
Lab	PPM	Total Lead ICP
61	2.50	-1.120
Std Dev	2.36	-1.000
61	1.90	-0.593
Median	1.23	0.000
43	0.55	0.593
43	0.45	0.681

251.99		
Lab	Total Lead	
	Other	
24	1.05	0.000
Median	1.05	0.000

251.XX		
Lab	PPM	Total Lead Total Method
61	2.50	-1.439
Std Dev	2.06	-1.000
61	1.90	-0.844
24	1.05	0.000
Median	1.05	0.000
43	0.55	0.496
43	0.45	0.596

261.30		
Lab	Acid Soluble Manganese ICP	
31	298.20	-2.669
Std Dev	145.18	-1.000
330	53.50	0.000
Median	53.50	0.000
330	52.50	0.011

261.99		
Lab	PPM	Acid Soluble Manganese Other
24	64.50	-2.680
Std Dev	61.99	-1.000
43	61.50	-0.670

43	60.50	0.000
Median	60.50	0.000
61	59.50	0.670
Std Dev	59.01	1.000
61	58.50	1.340

261.XX		
Lab	PPM	Acid Soluble Manganese Total Method
31	298.20	-63.838
24	64.50	-1.206
Std Dev	63.73	-1.000
43	61.50	-0.402
43	60.50	-0.134
Median	60.00	0.000
61	59.50	0.134
61	58.50	0.402
Std Dev	56.27	1.000
330	53.50	1.742
330	52.50	2.010

271.99		
Lab	Water Soluble Manganese Other	
330	3.80	-1.340
Std Dev	3.79	-1.000
Median	3.75	0.000
Std Dev	3.71	1.000
330	3.70	1.340

271.XX		
Lab	PPM	Water Soluble Manganese Total Method
330	3.80	-1.340
Std Dev	3.79	-1.000
Median	3.75	0.000
Std Dev	3.71	1.000
330	3.70	1.340

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

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

Median	0.00	0.000
--------	------	-------

289.30 Total Molybdenum		
Lab	PPM	ICP

330		
-----	--	--

289.99 Total Molybdenum		
Lab	PPM	Other

24	3.91	0.000
----	------	-------

Median	3.91	0.000
--------	------	-------

289.XX Total Molybdenum		
Lab	PPM	Total Method

330	9.40	-2.006
-----	------	--------

330	9.40	-2.006
-----	------	--------

31	6.65	-1.020
----	------	--------

Std Dev	6.59	-1.000
---------	------	--------

24	3.91	-0.038
----	------	--------

Median	3.81	0.000
--------	------	-------

43	3.70	0.038
----	------	-------

43	3.65	0.056
----	------	-------

61	3.45	0.127
----	------	-------

61	3.15	0.235
----	------	-------

291.30 Total Nickel	
Lab	ICP

330	
-----	--

291.99 Total Nickel		
Lab	PPM	Other

24	20.45	0.000
----	-------	-------

Median	20.45	0.000
--------	-------	-------

291.XX Total Nickel		
Lab	PPM	Total Method

330	34.80	-3.235
-----	-------	--------

330	34.65	-3.206
-----	-------	--------

Std Dev	23.12	-1.000
---------	-------	--------

24	20.45	-0.488
----	-------	--------

61	18.00	-0.019
----	-------	--------

Median	17.90	0.000
--------	-------	-------

61	17.80	0.019
----	-------	-------

43	17.00	0.172
----	-------	-------

43	17.00	0.172
----	-------	-------

Std Dev	12.68	1.000
---------	-------	-------

31	10.45	1.426
----	-------	-------

301.30 Total Selenium		
Lab	PPM	ICP

24	1.00	0.000
----	------	-------

Median	1.00	0.000
--------	------	-------

301.99 Total Selenium		
Lab	PPM	Other

140	0.01	0.000
-----	------	-------

Median	0.01	0.000
--------	------	-------

301.XX Total Selenium		
Lab	PPM	Total Mthod

24	1.00	-1.340
----	------	--------

Std Dev	0.87	-1.000
---------	------	--------

Median	0.50	0.000
--------	------	-------

Std Dev	0.13	1.000
---------	------	-------

140	0.01	1.340
-----	------	-------

311.99 Sodium		
Lab	%Na ₂ O	Other

31	0.26	-17.420
----	------	---------

24	0.21	-4.020
----	------	--------

23	0.20	-1.340
----	------	--------

23	0.20	-1.340
----	------	--------

Std Dev	0.19	-1.000
---------	------	--------

24	0.19	0.000
----	------	-------

61	0.19	0.000
----	------	-------

61	0.19	0.000
----	------	-------

Median	0.19	0.000
--------	------	-------

Std Dev	0.19	1.000
---------	------	-------

43	0.16	8.218
----	------	-------

43	0.16	8.363
----	------	-------

311.XX Sodium		
Lab	%Na ₂ O	Total Method

31	0.26	-17.420
----	------	---------

24	0.21	-4.020
----	------	--------

23	0.20	-1.340
----	------	--------

23	0.20	-1.340
----	------	--------

Std Dev	0.19	-1.000
---------	------	--------

24	0.19	0.000
----	------	-------

61	0.19	0.000
----	------	-------

61	0.19	0.000
----	------	-------

Median	0.19	0.000
--------	------	-------

Std Dev	0.19	1.000
---------	------	-------

43	0.16	8.218
----	------	-------

43	0.16	8.363
----	------	-------

321.30 Acid Soluble Zinc		
Lab	PPM	ICP

61	459.00	-0.049
----	--------	--------

61	459.00	-0.049
----	--------	--------

24	445.50	0.000
----	--------	-------

Median	445.50	0.000
--------	--------	-------

Std Dev	171.10	1.000
---------	--------	-------

31	91.30	1.291
----	-------	-------

47	1.00	1.620
----	------	-------

321.99 Acid Soluble Zinc		
Lab	Other	

43	433.50	-0.670
----	--------	--------

43	433.50	-0.670
----	--------	--------

Median	233.25	0.000
--------	--------	-------

330	33.00	0.670
-----	-------	-------

330	32.70	0.671
-----	-------	-------

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method

61	459.00	-0.083
----	--------	--------

61	459.00	-0.083
----	--------	--------

24	445.50	-0.039
----	--------	--------

43	433.50	0.000
----	--------	-------

43	433.50	0.000
----	--------	-------

Median	433.50	0.000
--------	--------	-------

Std Dev	125.66	1.000
---------	--------	-------

31	91.30	1.112
----	-------	-------

330	33.00	1.301
-----	-------	-------

330	32.70	1.302
-----	-------	-------

47	1.00	1.405
----	------	-------

325.10 Fluoride		
Lab	%	Electrode

31	1.94	-22.200
----	------	---------

32	1.50	-4.600
----	------	--------

32	1.49	-4.400
----	------	--------

24	1.40	-0.600
----	------	--------

79	1.39	-0.400
----	------	--------

24	1.39	-0.200
----	------	--------

9	1.38	0.000
---	------	-------

23	1.38	0.000
----	------	-------

Median	1.38	0.000
--------	------	-------

9	1.37	0.600
---	------	-------

34	1.36	0.740
----	------	-------

23	1.36	0.800
----	------	-------

14	1.32	2.400
----	------	-------

14	1.31	3.000
----	------	-------

325.99 Fluoride		
Lab	%	Other

330	1.48	-1.340
-----	------	--------

330	1.46	-0.552
-----	------	--------

Median	1.44	0.000
--------	------	-------

61	1.42	0.552
----	------	-------

61	1.42	0.709
----	------	-------

325.XX Fluoride		
Lab	%	Total Method

31	1.94	-8.114
----	------	--------

32	1.50	-1.563
----	------	--------

32	1.49	-1.489
----	------	--------

330	1.48	-1.340
-----	------	--------

330	1.46	-0.968
-----	------	--------

61	1.42	-0.447
----	------	--------

61	1.42	-0.372
----	------	--------

24	1.40	-0.074
----	------	--------

79	1.39	0.000
----	------	-------

Median	1.39	0.000
--------	------	-------

24	1.39	0.074
----	------	-------

9	1.38	0.149
---	------	-------

23	1.38	0.149
----	------	-------

9	1.37	0.372
---	------	-------

34	1.36	0.424
----	------	-------

23	1.36	0.447
----	------	-------

14	1.32	1.042
----	------	-------

14	1.31	1.266
----	------	-------