

AFPC

Sample

2018-10

Grade

11-52-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	3	11.38	0.03
Ammoniacal Nitrogen, Other		001.99	13	11.36	0.04
Method Group 001.XX PCT			16	11.36	0.05
AMMON & NITRATE N					
Ammon & Nitrate N, Other		009.99	1	11.30	0.00
Method Group 009.XX PCT			1	11.30	0.00
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	1	11.27	0.00
Total Nitrogen, Combustion	993.13	010.60	18	11.39	0.14
Total Nitrogen, Other		010.99	3	11.32	0.38
Method Group 010.XX PCT			22	11.38	0.17
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	52.41	0.00
Total Phosphate, Spectrometric	978.02	020.20	20	52.17	0.20
Total Phosphate, ICP	970.03	020.40	2	52.35	0.02
Total Phosphate, Other	993.13	020.99	1	51.78	0.00
Method Group 020.XX PCT			24	52.19	0.28
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	11	0.17	0.02
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.07	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	0.17	0.02
Method Group 030.XX PCT			14	0.17	0.03
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	13	51.94	0.11
Indirect Available Phosphate, Other		040.99	2	53.21	0.77
Method Group 040.XX PCT			15	51.95	0.16
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	3	52.04	0.18
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	51.53	0.27
Direct Available Phosphate, ICP		041.50	1	51.95	0.00
Direct Available Phosphate, EDTA Extract	993.01	041.60	3	52.54	0.74
Direct Available Phosphate, Other		041.99	1	51.62	0.00
Method Group 041.XX PCT			10	51.94	0.35
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	17	45.16	0.34
Water Soluble Phosphate, Other		048.99	2	44.89	0.34
Method Group 048.XX PCT			19	45.16	0.43
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	4	0.14	0.00
Soluble Potash, Other		050.99	5	0.14	0.00
Method Group 050.XX PCT			9	0.14	0.00
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	15	1.06	0.32
Free Water, Other		060.99	6	1.08	0.45
Method Group 060.XX PCT			21	1.06	0.40
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	15	0.38	0.02
Method Group 101.XX PCT			15	0.38	0.03
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	2	1.74	0.02
Acid Soluble Magnesium, ICP		121.30	13	1.75	0.03
Acid Soluble Magnesium, Other		121.99	2	1.65	0.04
Method Group 121.XX PCT			17	1.72	0.05
WATER SOLUBLE MAGNESIUM					

Water Soluble Magnesium, Other	131.99	1	0.06	0.00	
Method Group 131.XX PCT		1	0.06	0.00	
SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	1	0.88	0.00
Sulfur, Spectrometric		144.70	2	1.42	0.00
Sulfur, Other		144.99	12	1.30	0.11
Method Group 144.XX PCT			15	1.32	0.14
TOTAL SULFUR (S)					
Sulfur, Other		145.99	1	1.27	0.0
Method Group 145.XX PCT			1	1.27	0.0
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	4	20.1	5.0
Total Arsenic, Other		151.99	1	15.5	0.0
Method Group 151.XX PPM			5	18.6	5.5
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	4	125	104.0
Method Group 165.XX PPM			4	125	126.7
WATER SOLUBLE BORON					
Water Soluble Boron, Other		171.99	1	18	0.0
Method Group 171.XX PPM			1	18	0.0
TOTAL CADMIUM					
Total Cadmium, Atomic Absorbtion		181.00	1	3	0.0
Total Cadmium, ICP		181.30	4	2.9	0.8
Total Cadmium, Other		181.99	2	2.7	0.6
Method Group 181.XX PPM			7	3.1	1.1
ALUMINUM AS Al₂O₃					
ICP, %			15	1.33	0.06
Water Soluble Chlorine, Other, %		190.99	2	1.26	0.04
Method Group 190.XX PCT			17	1.33	0.04
TOTAL CHROMIUM					
Total Chromium, Atomic Absorbtion		191.00	1	98	0.0
Total Chromium, ICP		191.30	2	115	1.5
Total Chromium, Other		191.99	2	122	2.3
Method Group 191.XX PPM			5	117	5.3
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	3	4	0.6
Acid Soluble Cobalt, Other		202.99	1	4	0.0
Method Group 202.XX PPM			4	4	0.5
ACID SOLUBLE COPPER					
Acid Soluble Copper, Other		221.99	1	0.9	0.0
Method Group 221.XX PPM			2	2.9	1.0
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP		241.30	15	2.25	0.04
Acid Soluble Iron, Other		241.99	2	2.05	0.10
Method Group 241.XX PCT			17	2.25	0.07
TOTAL LEAD					
Total Lead, Atomic Absorbtion		251.00	1	4	0.0
Total Lead, ICP		251.30	3	0.8	0.3
Total Lead, Other		251.99	1	0.9	0.0
Method Group 251.XX PPM			5	0.9	0.4
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	3	258	10.6
Acid Soluble Manganese, Other		261.99	3	282	2.6
Method Group 261.XX PPM			6	270	21.1
WATER SOLUBLE MANGANESE					
Water Soluble Manganese, Other		271.99	1	83	0
Method Group 271.XX PCT			1	83	0.0
TOTAL MERCURY					
Total Mercury, ICP		281.30	1	0.00	0.00
Total Mercury, Other		281.99	1	0	0.00

Method Group 281.XX PPM			2	0.01	0.01
TOTAL MOLYBDENUM					
Total Molybdenum, ICP	289.30		3	11	1.2
Total Molybdenum, Other	289.99		2	13	2.5
Method Group 289.XX PPM			5	11	2.9
TOTAL NICKEL					
Total Nickel, ICP	291.30		2	20.8	0.2
Total Nickel, icp	291.99		2	18.3	2.3
Method Group 291.XX PPM			4	20.8	1.7
TOTAL SELENIUM					
Total Selenium, ICP	301.30		2	0.4	0.3
Method Group 301.XX PPM			2	0.4	0.3
SODIUM AS Na₂O					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.20	0.00
Sodium, Other		311.99	9	0.22	0.01
Method Group 311.XX PCT			10	0.21	0.01
ACID SOLUBLE ZINC					
Acid Soluble Zinc, ICP	321.30		5	47.0	14.6
Acid Soluble Zinc, Other	321.99		2	65.6	2.2
Method Group 321.XX %			7	61.3	19.3
FLUORIDE					
Volumetric	325.10		13	1.99	0.18
Distilled/Electrode	325.99		4	1.92	0.07
Method Group 325.XX PCT			17	1.98	0.20

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
61	11.46	-2.233
Std Dev	11.41	-1.000
61	11.38	0.000
Median	11.38	0.000
31	11.37	0.447

001.99 Ammoniacal Nitrogen		
Lab	Other	
330	12.03	-14.963
79	11.47	-2.568
23	11.40	-1.005
23	11.40	-1.005
Std Dev	11.40	-1.000
24	11.36	-0.112
23	11.36	0.000
23	11.36	0.000
34	11.36	0.000
Median	11.36	0.000
24	11.35	0.112
275	11.34	0.335
32	11.32	0.782
Std Dev	11.31	1.000
38	11.18	4.020
275	11.16	4.355

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
330	12.03	-17.037
79	11.47	-2.871
61	11.46	-2.489
23	11.40	-1.085
23	11.40	-1.085
Std Dev	11.40	-1.000
61	11.38	-0.574
31	11.37	-0.191
24	11.36	-0.064
Median	11.36	0.000
23	11.36	0.064
23	11.36	0.064
34	11.36	0.064
24	11.35	0.191
275	11.34	0.447

32	11.32	0.957
Std Dev	11.32	1.000
38	11.18	4.658
275	11.16	5.041

009.99 Ammon & Nitrate N		
Lab	Other	
32	11.30	0.000
Median	11.30	0.000

009.XX Ammon & Nitrate N		
Lab	Total Method	
32	11.30	0.000
Median	11.30	0.000

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
219	11.27	0.000
Median	11.27	0.000

010.60 Total Nitrogen		
Lab	Combustion	
237	11.63	-1.750
24	11.56	-1.276
47	11.53	-1.057
24	11.53	-1.021
Std Dev	11.52	-1.000
49	11.50	-0.839
111	11.48	-0.656
66	11.47	-0.583
110	11.40	-0.109
219	11.39	-0.036
Median	11.39	0.000
31	11.38	0.036
14	11.38	0.073
63	11.36	0.182
79	11.31	0.547
14	11.31	0.547
140	11.29	0.729
107	11.26	0.948
Std Dev	11.25	1.000
38	11.15	1.714
29	10.99	2.881

010.99 Total Nitrogen		
Lab	Other	
330	12.32	-2.627
Std Dev	11.70	-1.000
32	11.32	0.000
Median	11.32	0.000
32	11.30	0.053

010.XX Total Nitrogen		
Lab	Total Method	
330	12.32	-6.569
237	11.63	-1.734
24	11.56	-1.279
47	11.53	-1.068
24	11.53	-1.033
Std Dev	11.52	-1.000
49	11.50	-0.858
111	11.48	-0.683
66	11.47	-0.613
110	11.40	-0.158
219	11.39	-0.088
31	11.38	-0.018
Median	11.38	0.000
14	11.38	0.018
63	11.36	0.123
32	11.32	0.403
79	11.31	0.473
14	11.31	0.473
32	11.30	0.543
140	11.29	0.648
219	11.27	0.788
107	11.26	0.858
Std Dev	11.23	1.000
38	11.15	1.594
29	10.99	2.715

14	11.38	0.018
63	11.36	0.123
32	11.32	0.403
79	11.31	0.473
14	11.31	0.473
32	11.30	0.543
140	11.29	0.648
219	11.27	0.788
107	11.26	0.858
Std Dev	11.23	1.000
38	11.15	1.594
29	10.99	2.715

020.10 Total Phosphate		
Lab	Gravimetric Quimociac	
219	52.41	0.000
Median	52.41	0.000

020.20 Total Phosphate		
Lab	Spectrometric	
110	55.00	-14.005

38	52.58	-2.025
14	52.41	-1.186
111	52.38	-1.062
31	52.38	-1.037
Std Dev	52.37	-1.000
34	52.32	-0.766
14	52.25	-0.420
24	52.23	-0.296
61	52.21	-0.198
23	52.17	0.000
23	52.17	0.000
Median	52.17	0.000
61	52.14	0.148
23	52.12	0.222
23	52.12	0.222
24	52.07	0.469
32	52.04	0.618
Std Dev	51.96	1.000
79	51.77	1.951
32	51.76	2.001
140	51.67	2.445
237	51.65	2.544

020.40 Total Phosphate		
Lab	Automated	
111	52.38	-1.340
Std Dev	52.37	-1.000
Median	52.35	0.000
Std Dev	52.33	1.000
219	52.32	1.340

020.99 Total Phosphate		
Lab	Other	
330	51.78	0.000
Median	51.78	0.000

020.XX Total Phosphate		
Lab	Total Method	
110	55.00	-12.071
38	52.58	-1.672
Std Dev	52.42	-1.000
14	52.41	-0.943
219	52.41	-0.943
111	52.38	-0.836

31	52.38	-0.815
111	52.38	-0.815
34	52.32	-0.579
219	52.32	-0.579
14	52.25	-0.279
24	52.23	-0.172
61	52.21	-0.086
Median	52.19	0.000
23	52.17	0.086
23	52.17	0.086
61	52.14	0.214
23	52.12	0.279
23	52.12	0.279
24	52.07	0.493
32	52.04	0.622
Std Dev	51.95	1.000
330	51.78	1.758
79	51.77	1.780
32	51.76	1.822
140	51.67	2.208
237	51.65	2.294

030.20 Insoluble Phosphate		
Lab		Spectrometric
61	0.27	-5.956
61	0.27	-5.956
Std Dev	0.19	-1.000
32	0.18	-0.596
23	0.17	0.000
23	0.17	0.000
23	0.17	0.000
Median	0.17	0.000
24	0.16	0.893
Std Dev	0.15	1.000
24	0.15	1.191
79	0.15	1.489
140	0.11	3.573

030.30 Insoluble Phosphate		
Lab		Alka. Quimociac
31	0.07	0.000
Median	0.07	0.000

030.40 Insoluble Phosphate		
Lab		Automated
32	0.20	-1.340
Std Dev	0.19	-1.000
Median	0.17	0.000
Std Dev	0.15	1.000
34	0.15	1.340

030.XX Insoluble Phosphate		
Lab		Total Method
61	0.27	-4.288
61	0.27	-4.288
32	0.20	-1.072
Std Dev	0.19	-1.000
32	0.18	-0.429
23	0.17	0.000
23	0.17	0.000
23	0.17	0.000
Median	0.17	0.000
24	0.16	0.643
24	0.15	0.858
Std Dev	0.15	1.000
34	0.15	1.072
79	0.15	1.072
140	0.11	2.573
31	0.07	4.288

040.20 Indirect Available Phosphate		
Lab		Spectrometric
31	52.31	-3.305
24	52.08	-1.251
Std Dev	52.05	-1.000
23	52.00	-0.536
23	52.00	-0.536
23	51.95	-0.134
23	51.95	-0.134
61	51.94	0.000
Median	51.94	0.000
24	51.92	0.179
61	51.87	0.625
32	51.85	0.804
Std Dev	51.82	1.000
79	51.63	2.769

32	51.58	3.171
140	51.56	3.350

040.99 Indirect Available Phosphate		
Lab		Other
63	54.25	-1.340
Std Dev	53.99	-1.000
Median	53.21	0.000
Std Dev	52.44	1.000
34	52.18	1.340

040.XX Indirect Available Phosphate		
Lab		Total Method
63	54.25	-17.122
31	52.31	-2.643
34	52.18	-1.675
Std Dev	52.08	-1.000
24	52.08	-0.931
23	52.00	-0.335
23	52.00	-0.335
23	51.95	0.000
23	51.95	0.000
Median	51.95	0.000
61	51.94	0.112
24	51.92	0.261
61	51.87	0.633
32	51.85	0.782
Std Dev	51.82	1.000
79	51.63	2.419
32	51.58	2.754
140	51.56	2.903

041.10 Direct Available Phosphate		
Lab		Gravimetric Quimociac
107	52.35	-1.768
Std Dev	52.22	-1.000
219	52.04	0.000
Median	52.04	0.000
47	51.88	0.912

041.20 Direct Available Phosphate		
Lab		Spectrometric
47	51.90	-1.340
Std Dev	51.80	-1.000

Median	51.53	0.000
Std Dev	51.25	1.000
38	51.16	1.340

041.50 Direct Available Phosphate		
Lab		ICP
66	51.95	0.000
Median	51.95	0.000

041.60 Direct Available Phosphate		
Lab		EDTA Extract
49	53.93	-1.867
Std Dev	53.28	-1.000
29	52.54	0.000
Median	52.54	0.000
219	51.94	0.813

041.99 Direct Available Phosphate		
Lab		Other
79	51.62	0.000
Median	51.62	0.000

041.XX Direct Available Phosphate		
Lab		Total Method
49	53.93	-6.834
29	52.54	-2.066
107	52.35	-1.405
Std Dev	52.23	-1.000
219	52.04	-0.336
66	51.95	-0.009
Median	51.94	0.000
219	51.94	0.009
47	51.90	0.164
47	51.88	0.215
Std Dev	51.65	1.000
79	51.62	1.129
38	51.16	2.697

048.20 Water Soluble Phosphate		
Lab		Spectrometric
31	45.61	-1.340
61	45.53	-1.090
23	45.53	-1.090
23	45.53	-1.090

Std Dev	45.49	-1.000
23	45.46	-0.884
23	45.46	-0.884
330	45.37	-0.633
24	45.24	-0.236
140	45.16	0.000
Median	45.16	0.000
61	45.09	0.206
79	45.06	0.280
14	45.05	0.309
14	45.00	0.456
32	44.96	0.574
32	44.95	0.618
Std Dev	44.82	1.000
24	44.76	1.163
111	44.38	2.297

048.99 Water Soluble Phosphate		
Lab		Other
34	45.35	-1.340
Std Dev	45.23	-1.000
Median	44.89	0.000
Std Dev	44.55	1.000
111	44.44	1.340

048.XX Water Soluble Phosphate		
Lab		Total Method
31	45.61	-1.284
61	45.53	-1.044
23	45.53	-1.044
23	45.53	-1.044
Std Dev	45.51	-1.000
23	45.46	-0.846
23	45.46	-0.846
330	45.37	-0.607
34	45.35	-0.536
24	45.24	-0.226
140	45.16	0.000
Median	45.16	0.000
61	45.09	0.197
79	45.06	0.268
14	45.05	0.296
14	45.00	0.437
32	44.96	0.550

32	44.95	0.592
Std Dev	44.80	1.000
24	44.76	1.114
111	44.44	2.017
111	44.38	2.200

050.50 %K ₂ O Soluble Potash		
Lab		ICP(Oxalate)
23	0.15	-0.670
23	0.15	-0.670
Median	0.14	0.000
23	0.14	0.670
23	0.14	0.670

050.99 %K ₂ O Soluble Potash		
Lab		Other
111	0.18	0.019
24	0.14	0.000
24	0.14	0.000
61	0.14	0.000
Median	0.14	0.000
31	0.13	0.019

050.XX %K ₂ O Soluble Potash		
Lab		Total Method
111	0.18	-10.720
23	0.15	-1.340
23	0.15	-1.340
Std Dev	0.14	-1.000
23	0.14	0.000
23	0.14	0.000
24	0.14	0.000
24	0.14	0.000
61	0.14	0.000
Median	0.14	0.000
Std Dev	0.14	1.000
31	0.13	2.680

060.00 Free Water		
Lab		Vacuum Oven
32	1.52	-1.441
32	1.43	-1.146
31	1.42	-1.131
Std Dev	1.38	-1.000

79	1.35	-0.898
24	1.34	-0.883
24	1.33	-0.852
140	1.25	-0.589
23	1.06	0.000
23	1.06	0.000
Median	1.06	0.000
111	0.98	0.248
23	0.91	0.449
23	0.91	0.449
34	0.87	0.573
Std Dev	0.73	1.000
61	0.69	1.146
61	0.55	1.565

060.99 Free Water		
Lab		Other
47	2.00	-2.031
Std Dev	1.53	-1.000
330	1.51	-0.952
14	1.10	-0.039
Median	1.08	0.000
14	1.06	0.039
275	0.71	0.809
275	0.68	0.875

060.XX Free Water		
Lab		Total Method
47	2.00	-2.896
32	1.52	-1.417
330	1.51	-1.386
32	1.43	-1.124
31	1.42	-1.109
Std Dev	1.38	-1.000
79	1.35	-0.878
24	1.34	-0.863
24	1.33	-0.832
140	1.25	-0.570
14	1.10	-0.108
14	1.06	0.000
Median	1.06	0.000
23	1.06	0.015
23	1.06	0.015
111	0.98	0.262

23	0.91	0.462
23	0.91	0.462
34	0.87	0.585
Std Dev	0.74	1.000
275	0.71	1.078
61	0.69	1.155
275	0.68	1.171
61	0.55	1.571

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
61	0.45	-3.092
330	0.42	-1.649
24	0.40	-1.031
Std Dev	0.40	-1.000
32	0.40	-0.825
32	0.40	-0.825
24	0.38	-0.206
23	0.38	0.000
23	0.38	0.000
Median	0.38	0.000
34	0.37	0.206
31	0.37	0.392
14	0.37	0.412
14	0.36	0.618
23	0.36	0.825
23	0.36	0.825
Std Dev	0.35	1.000
111	0.33	2.062

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
61	0.45	-3.092
330	0.42	-1.649
24	0.40	-1.031
Std Dev	0.40	-1.000
32	0.40	-0.825
32	0.40	-0.825
24	0.38	-0.206
23	0.38	0.000
23	0.38	0.000
Median	0.38	0.000
34	0.37	0.206
31	0.37	0.392

14	0.37	0.412
14	0.36	0.618
23	0.36	0.825
23	0.36	0.825
Std Dev	0.35	1.000
111	0.33	2.062

121.00 Acid Soluble Magnesium		
Lab	%MgO	Atomic Absorption
275	1.76	-1.340
Std Dev	1.75	-1.000
Median	1.74	0.000
Std Dev	1.72	1.000
275	1.71	1.340

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
32	1.78	-0.893
34	1.78	-0.893
61	1.76	-0.298
23	1.75	-0.149
23	1.75	-0.149
24	1.75	0.000
32	1.75	0.000
Median	1.75	0.000
24	1.72	0.744
Std Dev	1.71	1.000
23	1.71	1.191
23	1.71	1.191
31	1.67	2.382
14	1.65	2.829
14	1.65	2.829

121.99 Acid Soluble Magnesium		
Lab	%MgO	Other
111	1.70	-1.340
Std Dev	1.68	-1.000
Median	1.65	0.000
Std Dev	1.61	1.000
330	1.60	1.340

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
32	1.78	-1.340

34	1.78	-1.340
Std Dev	1.76	-1.000
275	1.76	-0.975
61	1.76	-0.853
23	1.75	-0.731
23	1.75	-0.731
24	1.75	-0.609
32	1.75	-0.609
24	1.72	0.000
Median	1.72	0.000
275	1.71	0.244
23	1.71	0.365
23	1.71	0.365
111	1.70	0.609
Std Dev	1.68	1.000
31	1.67	1.340
14	1.65	1.705
14	1.65	1.705
330	1.60	2.924

144..01 Sulfate Sulfur (S)		
Lab	Gravimetric	
79	0.88	0.000
Median	0.88	0.000

144.70 Sulfur		
Lab	Spectrometric	
14	1.43	-1.340
Std Dev	1.42	-1.000
Median	1.42	0.000
Std Dev	1.42	1.000
14	1.42	1.340

144.99 Sulfate Sulfur (S)		
Lab	Other	
330	1.45	-1.409
Std Dev	1.41	-1.000
23	1.38	-0.762
23	1.38	-0.762
23	1.37	-0.624
23	1.37	-0.624
61	1.32	-0.162
Median	1.30	0.000
32	1.28	0.162

34	1.27	0.254
32	1.23	0.670
24	1.22	0.716
24	1.21	0.809
Std Dev	1.19	1.000
31	1.14	1.456

144.XX Sulfate Sulfur (S)		
Lab	Total Method	
330	1.45	-1.149
Std Dev	1.43	-1.000
14	1.43	-0.936
14	1.42	-0.893
23	1.38	-0.553
23	1.38	-0.553
23	1.37	-0.425
23	1.37	-0.425
61	1.32	0.000
Median	1.32	0.000
32	1.28	0.298
34	1.27	0.383
32	1.23	0.766
24	1.22	0.808
24	1.21	0.893
Std Dev	1.20	1.000
31	1.14	1.489
79	0.88	3.743

145.99 Total Sulfur (S)		
Lab	Other	
111	1.27	0.000
Median	1.27	0.000

145.XX Total Sulfur (S)		
Lab	Total Method	
111	1.27	0.000
Median	1.27	0.000

151.30 Total Arsenic		
Lab	ICP	
330	22.93	-0.573
140	21.54	-0.295
Median	20.07	0.000
24	18.60	0.295

Std Dev	15.08	1.000
111	5.00	3.020

151.99 Total Arsenic		
Lab	Other	
31	15.45	0.000
Median	15.45	0.000

151.XX Total Arsenic		
Lab	Total Method	
330	22.93	-0.953
140	21.54	-0.647
24	18.60	0.000
Median	18.60	0.000
31	15.45	0.693
Std Dev	14.06	1.000
111	5.00	2.992

165.99 Acid Soluble Boron		
Lab	PPM	Other
275	194.00	-0.665
275	192.50	-0.651
Median	124.85	0.000
24	57.20	0.651
330	42.57	0.791

165.XX, ppm Acid Soluble Boron		
Lab	PPM	Total Method
275	194.00	-0.665
275	192.50	-0.651
Median	124.85	0.000
24	57.20	0.651
330	42.57	0.791

171.99 Water Soluble Boron		
Lab	PPM	Other
330	18.27	0.000
Median	18.27	0.000

171.XX Water Soluble Boron		
Lab	PPM	Total Method
330	18.27	0.000
Median	18.27	0.000

181.00 Total Cadmium		
Lab	Atomic Absorbion	
330	3.10	0.000
Median	3.10	0.000

181.30 Total Cadmium		
Lab	PPM	ICP
275	3.50	-0.737
275	3.37	-0.567
Median	2.94	0.000
61	2.50	0.567
Std Dev	2.17	1.000
111	2.00	1.219

181.99 Total Cadmium		
Lab	Other	
24	3.55	-1.340
Std Dev	3.34	-1.000
Median	2.73	0.000
Std Dev	2.11	1.000
31	1.90	1.340

181.XX Total Cadmium		
Lab	PPM	Total Method
24	3.55	-0.509
275	3.50	-0.452
275	3.37	-0.305
330	3.10	0.000
Median	3.10	0.000
61	2.50	0.678
Std Dev	2.22	1.000
111	2.00	1.244
31	1.90	1.357

190.00 Aluminum		
Lab	%Al ₂ O ₃	ICP
275	1.56	-3.584
275	1.53	-3.116
14	1.45	-1.870
14	1.44	-1.714
Std Dev	1.39	-1.000
24	1.35	-0.343
24	1.34	-0.156
34	1.34	-0.078

23	1.33	0.000
23	1.33	0.000
Median	1.33	0.000
61	1.32	0.156
23	1.31	0.312
23	1.31	0.312
32	1.28	0.779
32	1.28	0.857
Std Dev	1.27	1.000
111	1.26	1.169

190.99 Aluminum		
Lab	%Al ₂ O ₃	Atomic Absorbion
31	1.31	-1.340
Std Dev	1.30	-1.000
Median	1.26	0.000
Std Dev	1.21	1.000
330	1.20	1.340

190.XX Aluminum		
Lab	%Al ₂ O ₃	Total Method
275	1.56	-7.338
275	1.53	-6.381
14	1.45	-3.829
14	1.44	-3.510
Std Dev	1.36	-1.000
24	1.35	-0.702
24	1.34	-0.319
34	1.34	-0.160
23	1.33	0.000
23	1.33	0.000
Median	1.33	0.000
61	1.32	0.319
23	1.31	0.638
23	1.31	0.638
31	1.31	0.638
Std Dev	1.30	1.000
32	1.28	1.595
32	1.28	1.755
111	1.26	2.393
330	1.20	4.148

191.00 Total Chromium		
Lab	Atomic Absorbion	

330	97.90	0.000
Median	97.90	0.000

191.30 Total Chromium		
Lab	ICP	
61	117.00	-1.340
Std Dev	116.49	-1.000
Median	115.00	0.000
Std Dev	113.51	1.000
111	113.00	1.340

191.99 Total Chromium		
Lab	PPM	Other
24	125.00	-1.340
Std Dev	124.21	-1.000
Median	121.90	0.000
Std Dev	119.59	1.000
31	118.80	1.340

191.XX Total Chromium		
Lab	PPM	Total Method
24	125.00	-1.848
Std Dev	121.33	-1.000
31	118.80	-0.416
61	117.00	0.000
Median	117.00	0.000
111	113.00	0.924
Std Dev	112.67	1.000
330	97.90	4.414

202.30 Acid Soluble Cobalt		
Lab	PPM	ICP
61		

202.99 Acid Soluble Cobalt		
Lab	Other	
24	4.20	0.000
Median	4.20	0.000

202.XX Acid Soluble Cobalt		
Lab	PPM	Total Method
61	4.70	-1.385
Std Dev	4.53	-1.000
24	4.20	-0.250
Median	4.09	0.000

330	3.98	0.250
Std Dev	3.65	1.000
111	3.00	2.476

221.30 Acid Soluble Copper		
Lab	PPM	ICP
61	<0.4	0.000
111	4.00	0.000
Median	4.00	0.000

221.99 Acid Soluble Copper		
Lab	Other	
24	1.74	0.000
Median	1.74	0.000

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
61	<0.4	0.000
111	4.00	-1.340
Std Dev	3.71	-1.000
Median	2.87	0.000
Std Dev	2.03	1.000
24	1.74	1.340

241.30 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	ICP
111	2.32	-1.515
34	2.30	-1.165
Std Dev	2.29	-1.000
24	2.28	-0.699
23	2.28	-0.699
23	2.28	-0.699
24	2.28	-0.583
32	2.26	-0.233
23	2.25	0.000
23	2.25	0.000
61	2.25	0.000
Median	2.25	0.000

14	2.23	0.583
32	2.22	0.699
Std Dev	2.21	1.000
14	2.20	1.165
275	2.15	2.330
275	2.15	2.330

241.99		Acid Soluble Iron	
Lab	%Fe ₂ O ₃	Other	
31	2.19	-1.340	
Std Dev	2.15	-1.000	
Median	2.05	0.000	
Std Dev	1.94	1.000	
330	1.91	1.340	

241.XX		Acid Soluble Iron	
Lab	%Fe ₂ O ₃	Total Method	
111	2.32	-1.089	
Std Dev	2.31	-1.000	
34	2.30	-0.838	
24	2.28	-0.503	
23	2.28	-0.502	
23	2.28	-0.502	
24	2.28	-0.419	
32	2.26	-0.167	
23	2.25	0.000	
23	2.25	0.000	
61	2.25	0.000	
Median	2.25	0.000	
14	2.23	0.419	
32	2.22	0.503	
14	2.20	0.838	
Std Dev	2.19	1.000	
31	2.19	1.089	
275	2.15	1.675	
275	2.15	1.675	
330	1.91	5.695	

251.00		Total Lead	
Lab	Atomic Absorbion		
330	4.16	0.000	
Median	4.16	0.000	

251.30		Total Lead	
Lab	PPM	ICP	
61	1.20	-1.601	
Std Dev	1.04	-1.000	
275	0.77	0.000	
Median	0.77	0.000	
Std Dev	0.50	1.000	

275 0.48 1.079

251.99		Total Lead	
Lab	Other		
24	0.91	0.000	
Median	0.91	0.000	

251.XX		Total Lead	
Lab	PPM	Total Method	
330	4.16	-10.131	
Std Dev	1.23	-1.000	
61	1.20	-0.907	
24	0.91	0.000	
Median	0.91	0.000	
275	0.77	0.433	
Std Dev	0.59	1.000	
275	0.48	1.337	

261.30		Acid Soluble Manganese	
Lab	ICP		
111	260.00	-0.202	
237	257.85	0.000	
Median	257.85	0.000	
Std Dev	247.22	1.000	
330	231.50	2.478	

261.99		Acid Soluble Manganese	
Lab	PPM	Other	
61	287.00	-1.857	
Std Dev	284.76	-1.000	
31	282.15	0.000	
Median	282.15	0.000	
24	280.00	0.823	

261.XX		Acid Soluble Manganese	
Lab	PPM	Total Method	
61	287.00	-0.981	
31	282.15	-0.701	
24	280.00	-0.577	
Median	270.00	0.000	
111	260.00	0.577	
237	257.85	0.701	
Std Dev	252.67	1.000	
330	231.50	2.221	

271.99		Water Soluble Manganese	
Lab	Other		
330	82.75	0.000	
Median	82.75	0.000	

271.XX		Water Soluble Manganese	
Lab	PPM	Total Method	
330	82.75	0.000	
Median	82.75	0.000	

281.30		Total Mercury	
Lab	PPM	ICP	
24	0.02	0.000	
Median	0.02	0.000	

281.99		Total Mercury	
Lab	PPM	Other	
330	0.00	0.000	
Median	0.00	0.000	

281.XX		Total Mercury	
Lab	PPM	Total Method	
24	0.02	-1.340	
Std Dev	0.02	-1.000	
Median	0.01	0.000	
Std Dev	0.01	1.000	
330	0.00	1.340	

289.30		Total Molybdenum	
Lab	PPM	ICP	
111			

289.99		Total Molybdenum	
Lab	PPM	Other	
24	16.50	-1.340	
Std Dev	15.66	-1.000	
Median	13.18	0.000	
Std Dev	10.69	1.000	
31	9.85	1.340	

289.XX		Total Molybdenum	
Lab	PPM	Total Method	
24	16.50	-2.382	
111	13.50	-1.106	

Std Dev	13.25	-1.000
330	10.90	0.000
Median	10.90	0.000
61	10.35	0.234
31	9.85	0.447

291.30		Total Nickel	
Lab	ICP		
61			

291.99		Total Nickel	
Lab	PPM	Other	
24	21.30	-1.340	
Std Dev	20.53	-1.000	
Median	18.25	0.000	
Std Dev	15.97	1.000	
31	15.20	1.340	

291.XX		Total Nickel	
Lab	PPM	Total Method	
24	21.30	-0.388	
61	21.00	-0.176	
Median	20.75	0.000	
330	20.50	0.176	
Std Dev	19.33	1.000	
31	15.20	3.914	

301.30		Total Selenium	
Lab	PPM	ICP	
24	<0.002	0.000	
330	0.73	-1.340	
Std Dev	0.63	-1.000	
Median	0.37	0.000	
Std Dev	0.10	1.000	
140	0.01	1.340	

301.XX		Total Selenium	
Lab	PPM	Total Mthod	
24	<0.002	0.000	
330	0.73	-1.340	
Std Dev	0.63	-1.000	
Median	0.37	0.000	
Std Dev	0.10	1.000	
140	0.01	1.340	

311.00		
Lab	%Na ₂ O	Sodium Atomic Absorbion
330	0.20	0.000
Median	0.20	0.000

311.99		
Lab	%Na ₂ O	Sodium Other
111	0.27	-4.913
Std Dev	0.23	-1.000
24	0.22	-0.447
23	0.22	0.000
23	0.22	0.000
24	0.22	0.000
Median	0.22	0.000
61	0.21	0.893
Std Dev	0.20	1.000
23	0.20	1.340
23	0.20	1.340
31	0.20	1.787

311.XX		
Lab	%Na ₂ O	Sodium Total Method
111	0.27	-5.360
Std Dev	0.22	-1.000
24	0.22	-0.893
23	0.22	-0.447
23	0.22	-0.447
24	0.22	-0.447
Median	0.21	0.000
61	0.21	0.447
23	0.20	0.893
23	0.20	0.893
330	0.20	0.893
Std Dev	0.20	1.000
31	0.20	1.340

321.30		
Lab	PPM	Acid Soluble Zinc ICP
111	198.50	-10.358
Std Dev	61.63	-1.000
24	61.30	-0.978
61	47.00	0.000
Median	47.00	0.000
275	41.70	0.362

321.99		
Lab		Acid Soluble Zinc Other
330	68.50	-1.340
Std Dev	67.76	-1.000
Median	65.59	0.000
Std Dev	63.41	1.000
31	62.68	1.340

321.XX		
Lab	PPM	Acid Soluble Zinc Total Method
111	198.50	-8.657
Std Dev	77.15	-1.000
330	68.50	-0.454
31	62.68	-0.087
24	61.30	0.000
Median	61.30	0.000
61	47.00	0.902
Std Dev	45.45	1.000
275	41.70	1.237
275	36.10	1.590

325.10		
Lab	%	Fluoride Electrode
23	2.14	-0.884
23	2.14	-0.884
23	2.13	-0.798
23	2.13	-0.798
79	2.11	-0.713
24	2.02	-0.171
32	1.99	0.000
Median	1.99	0.000
24	1.98	0.057
32	1.93	0.342
34	1.89	0.542
14	1.79	1.140
14	1.74	1.397
111	1.22	4.362

325.99		
Lab	%	Fluoride Other
31	2.00	-1.128
61	1.96	-0.494

Median	1.92	0.000
61	1.89	0.494
330	1.83	1.269

325.XX		
Lab	%	Fluoride Total Method
23	2.14	-0.983
23	2.14	-0.983
23	2.13	-0.893
23	2.13	-0.893
79	2.11	-0.804
24	2.02	-0.238
31	2.00	-0.149
32	1.99	-0.060
24	1.98	0.000
Median	1.98	0.000
61	1.96	0.119
32	1.93	0.298
34	1.89	0.506
61	1.89	0.536
330	1.83	0.864
14	1.79	1.132
14	1.74	1.400
111	1.22	4.496