

AFPC

Sample

2017-10

Grade

11-52-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	1	11.51	0.00
Ammoniacal Nitrogen, Other		001.99	14	11.35	0.06
Method Group 001.XX PCT			15	11.37	0.08
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	1	11.40	0.00
Total Nitrogen, Combustion	993.13	010.60	21	11.41	0.18
Total Nitrogen, Other		010.99	4	11.56	0.43
Method Group 010.XX PCT			26	11.40	0.24
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	51.90	0.00
Total Phosphate, Spectrometric	978.02	020.20	21	51.92	0.14
Total Phosphate, ICP	970.03	020.40	1	52.00	0.00
Total Phosphate, ICP, Lithium	970.02	020.50	1	51.94	0.00
Total Phosphate, Other	993.13	020.99	2	52.62	0.05
Method Group 020.XX PCT			26	51.95	0.20
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	7	0.05	0.00
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.08	0.00
Insoluble Phosphate, Automated	978.01	030.40	3	0.06	0.01
Insoluble Phosphate, Other		030.99	1	0.08	0.00
Method Group 030.XX PCT			12	0.05	0.03
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	9	51.79	0.15
Indirect Available Phosphate, Automated	960.02	040.40	1	51.89	0.00
Indirect Available Phosphate, Other		040.99	1	51.93	0.00
Method Group 040.XX PCT			11	51.84	0.17
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	51.72	0.03
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	51.78	0.28
Direct Available Phosphate, ICP		041.50	4	51.62	0.18
Direct Available Phosphate, EDTA Extract	993.01	041.60	3	52.00	0.38
Direct Available Phosphate, Other		041.99	1	52.31	0.00
Method Group 041.XX PCT			12	51.72	0.57
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	16	46.02	0.36
Water Soluble Phosphate, Other		048.99	4	46.04	0.45
Method Group 048.XX PCT			20	46.02	0.45
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.27	0.00
Soluble Potash, Other		050.99	10	0.27	0.05
Method Group 050.XX PCT			12	0.27	0.05
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	14	2.05	0.13
Free Water, Other		060.99	8	1.92	0.14
Method Group 060.XX PCT			22	2.00	0.22
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	17	0.36	0.01
Method Group 101.XX PCT			17	0.36	0.02
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, ICP		121.30	16	1.97	0.04
Acid Soluble Magnesium, Other		121.99	3	1.90	0.03
Method Group 121.XX PCT			19	1.96	0.07
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	1	1.49	0.00
Sulfur, Other		144.99	16	1.48	0.03
Method Group 144.XX PCT			17	1.49	0.04
TOTAL SULFUR (S)					
Sulfur, Other		145.99	2	3.33	1.4
Method Group 145.XX PCT			2	3.33	1.7
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	4	9.4	0.9
Total Arsenic, Other		151.99	1	4.9	0.0
Method Group 151.XX PPM			5	8.8	1.3
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	4	219	121.8
Method Group 165.XX PPM			4	219	148.4
WATER SOLUBLE BORON					
Water Soluble Boron, Other		171.99	3	44	3.8
Method Group 171.XX PPM			3	44	4.6
TOTAL CADMIUM					
Total Cadmium, Atomic Absorbtion		181.00	2	31	0.1
Total Cadmium, ICP		181.30	6	34.2	1.3
Total Cadmium, Other		181.99	2	17.2	12.3
Method Group 181.XX PPM			10	33.0	3.2
ALUMINUM AS Al₂O₃					
ICP, %			16	1.24	0.06
Water Soluble Chlorine, Other, %		190.99	3	1.23	114.27
Method Group 190.XX PCT			19	1.23	0.07
TOTAL CHROMIUM					
Total Chromium, Atomic Absorbtion		191.00	2	303	0.2
Total Chromium, ICP		191.30	4	309	12.6
Total Chromium, Other		191.99	1	294	0.0
Method Group 191.XX PPM			7	304	9.5
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	6	4	1.1
Acid Soluble Cobalt, Other		202.99	1	3	0.0
Method Group 202.XX PPM			7	4	1.4
ACID SOLUBLE COPPER					
Acid Soluble Copper, Other		221.99	2	0.9	0.0
Method Group 221.XX PPM			3	1.5	2.3
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP		241.30	16	2.18	0.02
Acid Soluble Iron, Other		241.99	2	2.02	0.02
Method Group 241.XX PCT			18	2.18	0.04
TOTAL LEAD					
Total Lead, Atomic Absorbtion		251.00	2	2	0.0
Total Lead, ICP		251.30	4	2	0.6
Total Lead, Other		251.99	1	0.6	0.0
Method Group 251.XX PPM			7	2	0.7
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	4	166	9.7
Acid Soluble Manganese, Other		261.99	3	134	15.3
Method Group 261.XX PPM			7	160	24.0
WATER SOLUBLE MANGANESE					
Water Soluble Manganese, Other		271.99	2	25	0
Method Group 271.XX PCT			2	25	0.0
TOTAL MERCURY					
Total Mercury, Other		281.99	2	0	0.00
Method Group 281.XX PPM			2	0.00	0.00
TOTAL MOLYBDENUM					
Total Molybdenum, ICP		289.30	7	16	2.8
Total Molybdenum, Other		289.99	1	16	0.0
Method Group 289.XX PPM			8	16	2.8
TOTAL NICKEL					
Total Nickel, ICP		291.30	6	42.0	8.5

Total Nickel, icp	291.99	2	36.0	4.4
Method Group 291.XX PPM		8	42.0	5.4
TOTAL SELENIUM				
Total Selenium, ICP	301.30	1	0.9	0.0
Total Selenium, Other	301.99	3	4	1.5
Method Group 301.XX PPM		4	2.5	3.0
SODIUM AS Na₂O				
Sodium, Other	311.99	8	0.29	0.02
Method Group 311.XX PCT		8	0.29	0.03
ACID SOLUBLE ZINC				
Acid Soluble Zinc, ICP	321.30	6	549.2	14.8
Acid Soluble Zinc, Other	321.99	2	477.0	0.7
Method Group 321.XX %		8	541.7	34.3
FLUORIDE				
Volumetric	325.10	14	1.18	0.06
Distilled/Electrode	325.99	4	1.29	0.01
Method Group 325.XX PCT		18	1.21	0.11

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
31	11.51	0.000
Median	11.51	0.000

001.99 Ammoniacal Nitrogen		
Lab	Other	
275	-	0.000
275	11.65	-5.062
24	11.48	-2.170
Std Dev	11.41	-1.000
79	11.41	-0.978
330	11.40	-0.808
24	11.40	-0.723
32	11.38	-0.383
330	11.37	-0.298
Median	11.35	0.000
23	11.34	0.298
61	11.34	0.298
34	11.32	0.553
61	11.32	0.553
23	11.31	0.723
Std Dev	11.29	1.000
310	11.21	2.425
32	11.20	2.595

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
275	-	0.000
275	11.65	-4.414
31	11.51	-2.207
24	11.48	-1.734
Std Dev	11.43	-1.000
79	11.41	-0.631
330	11.40	-0.473
24	11.40	-0.394
32	11.38	-0.079
330	11.37	0.000
Median	11.37	0.000
23	11.34	0.552
61	11.34	0.552
34	11.32	0.788
61	11.32	0.788
23	11.31	0.946

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
219	11.40	0.000
Median	11.40	0.000

010.60 Total Nitrogen		
Lab	Combustion	
49	11.57	-0.865
80	11.55	-0.782
24	11.54	-0.726
66	11.53	-0.642
31	11.51	-0.530
64	11.47	-0.307
79	11.47	-0.307
63	11.45	-0.223
110	11.44	-0.167
14	11.43	-0.112
14	11.41	0.000
Median	11.41	0.000
9	11.34	0.391
24	11.34	0.391
77	11.32	0.530
219	11.25	0.893
Std Dev	11.23	1.000
9	11.23	1.033
103	11.17	1.368
47	11.11	1.675
99	10.93	2.680
38	10.91	2.792
111	10.86	3.099

010.99 Total Nitrogen		
Lab	Other	
330	11.85	-0.667
330	11.82	-0.587
Median	11.56	0.000
140	11.31	0.587
Std Dev	11.13	1.000
29	11.05	1.173

010.XX Total Nitrogen		
Lab	Total Method	
330	11.85	-2.274
330	11.82	-2.096
Std Dev	11.60	-1.000
49	11.57	-0.826
80	11.55	-0.749
24	11.54	-0.699
66	11.53	-0.622
31	11.51	-0.521
64	11.47	-0.318
79	11.47	-0.318
63	11.45	-0.241
110	11.44	-0.191
14	11.43	-0.140
14	11.41	-0.038
Median	11.40	0.000
219	11.40	0.038
9	11.34	0.318
24	11.34	0.318
77	11.32	0.445
140	11.31	0.495
219	11.25	0.775
9	11.23	0.902
Std Dev	11.21	1.000
103	11.17	1.207
47	11.11	1.486
29	11.05	1.791
99	10.93	2.401
38	10.91	2.502
111	10.86	2.782

020.10 Total Phosphate		
Lab	Gravimetric Quimociac	
219	51.90	0.000
Median	51.90	0.000

020.20 Total Phosphate		
Lab	Spectrometric	
24	52.24	-2.257
24	52.21	-2.010
275	52.20	-1.975
310	52.17	-1.763
275	52.07	-1.058

020.40 Total Phosphate		
Lab	Automated	
219	52.00	0.000
Median	52.00	0.000

020.50 Total Phosphate		
Lab	ICP	
111	51.94	0.000
Median	51.94	0.000

020.99 Total Phosphate		
Lab	Other	
330	52.69	-1.340
Std Dev	52.67	-1.000
Median	52.62	0.000
Std Dev	52.57	1.000
330	52.56	1.340

020.XX Total Phosphate		
Lab	Total Method	
330	52.69	-4.528
330	52.56	-3.727
24	52.24	-1.787
24	52.21	-1.571

275	52.20	-1.540
310	52.17	-1.355
Std Dev	52.11	-1.000
275	52.07	-0.739
111	52.01	-0.370
14	52.01	-0.339
219	52.00	-0.277
34	51.98	-0.209
31	51.98	-0.185
32	51.97	-0.092
Median	51.95	0.000
111	51.94	0.092
9	51.92	0.185
61	51.92	0.216
219	51.90	0.339
61	51.87	0.493
14	51.85	0.647
140	51.84	0.709
32	51.82	0.801
9	51.81	0.863
Std Dev	51.79	1.000
23	51.76	1.171
79	51.74	1.325
23	51.70	1.540
99	51.58	2.280

030.20 Insoluble Phosphate Spectrometric		
Lab		
61	0.15	-53.600
24	0.06	-2.680
Std Dev	0.05	-1.000
23	0.05	0.000
24	0.05	0.000
79	0.05	0.000
140	0.05	0.000
Median	0.05	0.000
Std Dev	0.05	1.000
23	0.05	2.680

030.30 Insoluble Phosphate Alka. Quimociac		
Lab		
31	0.08	0.000
Median	0.08	0.000

030.40 Insoluble Phosphate Automated		
Lab		
9	0.08	-2.233
Std Dev	0.07	-1.000
9	0.06	0.000
Median	0.06	0.000
34	0.05	0.447

030.99 Insoluble Phosphate Other		
Lab		
32	0.08	0.000
Median	0.08	0.000

030.XX Insoluble Phosphate Total Method		
Lab		
61	0.15	-4.355
9	0.08	-1.228
31	0.08	-1.228
32	0.08	-1.228
Std Dev	0.07	-1.000
9	0.06	-0.112
24	0.06	-0.112
Median	0.05	0.000
23	0.05	0.112
24	0.05	0.112
34	0.05	0.112
79	0.05	0.112
140	0.05	0.112
23	0.05	0.335

040.20 Indirect Available Phosphate Spectrometric		
Lab		
24	52.19	-2.749
24	52.16	-2.543
Std Dev	51.93	-1.000
31	51.91	-0.825
9	51.84	-0.344
140	51.79	0.000
Median	51.79	0.000
61	51.75	0.275
23	51.71	0.515
79	51.69	0.687
23	51.66	0.893

040.40 Indirect Available Phosphate Automated		
Lab		
9	51.89	0.000
Median	51.89	0.000

040.99 Indirect Available Phosphate Other		
Lab		
34	51.93	0.000
Median	51.93	0.000

040.XX Indirect Available Phosphate Total Method		
Lab		
24	52.19	-2.443
24	52.16	-2.233
Std Dev	51.98	-1.000
34	51.93	-0.691
31	51.91	-0.489
9	51.89	-0.349
9	51.84	0.000
Median	51.84	0.000
140	51.79	0.349
61	51.75	0.628
23	51.71	0.872
Std Dev	51.69	1.000
79	51.69	1.047
23	51.66	1.256

041.10 Direct Available Phosphate Gravimetric Quimociac		
Lab		
47	51.75	-1.340
Std Dev	51.74	-1.000
Median	51.72	0.000
Std Dev	51.69	1.000
219	51.68	1.340

041.20 Direct Available Phosphate Spectrometric		
Lab		
47	52.15	-1.340
Std Dev	52.05	-1.000
Median	51.78	0.000
Std Dev	51.50	1.000
38	51.40	1.340

041.50 Direct Available Phosphate ICP		
Lab		
63	52.23	-3.303
Std Dev	51.80	-1.000
80	51.65	-0.162
Median	51.62	0.000
66	51.59	0.162
Std Dev	51.44	1.000
64	51.42	1.083

041.60 Direct Available Phosphate EDTA Extract		
Lab		
77	52.37	-0.987
219	52.00	0.000
Median	52.00	0.000
Std Dev	51.62	1.000
49	51.36	1.693

041.99 Direct Available Phosphate Other		
Lab		
29	52.31	0.000
Median	52.31	0.000

041.XX Direct Available Phosphate Total Method		
Lab		
77	52.37	-1.399
29	52.31	-1.287
63	52.23	-1.109
Std Dev	52.18	-1.000
47	52.15	-0.936
219	52.00	-0.603
47	51.75	-0.075
Median	51.72	0.000
219	51.68	0.075
80	51.65	0.140
66	51.59	0.269
64	51.42	0.635
38	51.40	0.678
49	51.36	0.764

048.20 Water Soluble Phosphate Spectrometric		
Lab		
330	46.47	-1.236
330	46.46	-1.208

9	46.41	-1.083
Std Dev	46.38	-1.000
140	46.25	-0.625
9	46.20	-0.500
31	46.20	-0.486
23	46.14	-0.333
23	46.03	-0.028
Median	46.02	0.000
61	46.01	0.028
24	45.94	0.236
24	45.92	0.292
79	45.75	0.764
61	45.68	0.944
Std Dev	45.66	1.000
111	45.48	1.514
14	20.08	72.055
14	20.05	72.124

048.99 Water Soluble Phosphate		
Lab		Other
32	46.54	-1.117
Std Dev	46.49	-1.000
32	46.22	-0.402
Median	46.04	0.000
34	45.86	0.402
Std Dev	45.59	1.000
111	45.22	1.831

048.XX Water Soluble Phosphate		
Lab		Total Method
32	46.54	-1.401
330	46.47	-1.199
330	46.46	-1.172
9	46.41	-1.050
Std Dev	46.39	-1.000
140	46.25	-0.606
32	46.22	-0.539
9	46.20	-0.485
31	46.20	-0.471
23	46.14	-0.323
23	46.03	-0.027
Median	46.02	0.000
61	46.01	0.027
24	45.94	0.229

24	45.92	0.283
34	45.86	0.431
79	45.75	0.741
61	45.68	0.916
Std Dev	45.65	1.000
111	45.48	1.468
111	45.22	2.155
14	20.08	69.882
14	20.05	69.949

050.50 %K ₂ O Soluble Potash		
Lab		ICP(Oxalate)
23	0.27	0.000
23	0.27	0.000
Median	0.27	0.000

050.99 Soluble Potash		
Lab	%K ₂ O	Other
34	2.04	-35.801
Std Dev	0.32	-1.000
111	0.30	-0.506
24	0.29	-0.405
61	0.29	-0.303
61	0.28	-0.202
Median	0.27	0.000
24	0.26	0.202
330	0.23	0.809
Std Dev	0.22	1.000
31	0.22	1.011
330	0.22	1.011
80	0.10	3.438

050.XX Soluble Potash		
Lab	%K ₂ O	Total Method
34	2.04	-40.371
Std Dev	0.31	-1.000
111	0.30	-0.570
24	0.29	-0.456
61	0.29	-0.342
61	0.28	-0.228
23	0.27	0.000
23	0.27	0.000
Median	0.27	0.000
24	0.26	0.228

330	0.23	0.912
Std Dev	0.23	1.000
31	0.22	1.140
330	0.22	1.140
80	0.10	3.877

060.00 Free Water		
Lab		Vacuum Oven
31	2.32	-2.054
24	2.21	-1.193
24	2.20	-1.154
Std Dev	2.18	-1.000
140	2.13	-0.567
111	2.10	-0.372
9	2.08	-0.176
79	2.06	-0.020
Median	2.05	0.000
9	2.05	0.020
32	2.02	0.293
23	1.99	0.528
23	1.94	0.919
Std Dev	1.92	1.000
61	1.91	1.115
61	1.87	1.428
32	1.86	1.506

060.99 Free Water		
Lab		Other
47	9.15	-50.973
47	2.17	-1.710
Std Dev	2.06	-1.000
330	1.99	-0.441
330	1.98	-0.370
Median	1.92	0.000
275	1.87	0.370
275	1.86	0.441
Std Dev	1.78	1.000
14	1.78	1.005
14	1.74	1.287

060.XX Free Water		
Lab		Total Method
47	9.15	-40.130
31	2.32	-1.768

24	2.21	-1.151
24	2.20	-1.123
Std Dev	2.18	-1.000
47	2.17	-0.926
140	2.13	-0.702
111	2.10	-0.561
9	2.08	-0.421
79	2.06	-0.309
9	2.05	-0.281
32	2.02	-0.084
Median	2.00	0.000
23	1.99	0.084
330	1.99	0.084
330	1.98	0.140
23	1.94	0.365
61	1.91	0.505
61	1.87	0.730
275	1.87	0.730
275	1.86	0.786
32	1.86	0.786
Std Dev	1.82	1.000
14	1.78	1.235
14	1.74	1.459

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
32	0.41	-3.685
61	0.40	-3.015
61	0.40	-3.015
24	0.38	-1.340
24	0.37	-1.005
Std Dev	0.37	-1.000
111	0.37	-0.670
330	0.36	-0.335
9	0.36	0.000
23	0.36	0.000
23	0.36	0.000
Median	0.36	0.000
9	0.35	0.335
14	0.35	0.335
32	0.35	0.335
330	0.35	0.335
14	0.35	0.670
34	0.35	0.670

Std Dev	0.34	1.000
31	0.24	7.738

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
32	0.41	-3.685
61	0.40	-3.015
61	0.40	-3.015
24	0.38	-1.340
24	0.37	-1.005
Std Dev	0.37	-1.000
111	0.37	-0.670
330	0.36	-0.335
9	0.36	0.000
23	0.36	0.000
23	0.36	0.000
Median	0.36	0.000
9	0.35	0.335
14	0.35	0.335
32	0.35	0.335
330	0.35	0.335
14	0.35	0.670
34	0.35	0.670
Std Dev	0.34	1.000
31	0.24	7.738

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
275	2.50	-12.410
275	2.46	-11.477
24	2.04	-1.573
24	2.02	-1.223
Std Dev	2.01	-1.000
32	1.99	-0.408
34	1.98	-0.291
9	1.97	-0.058
9	1.97	-0.058
Median	1.97	0.000
23	1.97	0.058
23	1.96	0.175
61	1.96	0.175
61	1.95	0.524
Std Dev	1.92	1.000
14	1.91	1.340

14	1.91	1.457
32	1.90	1.573
31	1.12	19.750

121.99 Acid Soluble Magnesium		
Lab	%MgO	Other
111	1.96	-1.936
Std Dev	1.93	-1.000
330	1.90	0.000
Median	1.90	0.000
330	1.87	0.744

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
275	2.50	-9.648
275	2.46	-8.933
24	2.04	-1.340
24	2.02	-1.072
Std Dev	2.02	-1.000
32	1.99	-0.447
34	1.98	-0.357
9	1.97	-0.179
9	1.97	-0.179
23	1.97	-0.089
23	1.96	0.000
61	1.96	0.000
111	1.96	0.000
Median	1.96	0.000
61	1.95	0.268
14	1.91	0.893
14	1.91	0.983
Std Dev	1.90	1.000
32	1.90	1.072
330	1.90	1.161
330	1.87	1.608
31	1.12	15.008

144..01 Sulfate Sulfur (S)		
Lab	Gravimetric	
79	1.49	0.000
Median	1.49	0.000

144.99 Sulfate Sulfur (S)		
Lab	Other	

330	4.58	-89.805
330	4.55	-88.936
23	1.56	-2.307
23	1.54	-1.583
61	1.52	-1.003
Std Dev	1.51	-1.000
9	1.51	-0.714
9	1.50	-0.569
61	1.49	-0.134
Median	1.48	0.000
34	1.48	0.134
14	1.48	0.156
24	1.48	0.156
32	1.48	0.156
14	1.47	0.300
32	1.47	0.445
24	1.46	0.735
Std Dev	1.45	1.000
31	1.36	3.487

144.XX Sulfate Sulfur (S)		
Lab	Total Method	
330	4.58	-103.683
330	4.55	-102.678
23	1.56	-2.513
23	1.54	-1.675
61	1.52	-1.005
Std Dev	1.51	-1.000
9	1.51	-0.670
9	1.50	-0.503
61	1.49	0.000
79	1.49	0.000
Median	1.49	0.000
34	1.48	0.310
14	1.48	0.335
24	1.48	0.335
32	1.48	0.335
14	1.47	0.502
32	1.47	0.670
Std Dev	1.46	1.000
24	1.46	1.005
31	1.36	4.187

145.99 Total Sulfur (S)		
Lab	Other	
31	5.20	-1.340
Std Dev	4.72	-1.000
Median	3.33	0.000
Std Dev	1.93	1.000
111	1.45	1.340

145.XX Total Sulfur (S)		
Lab	Total Method	
31	5.20	-1.340
Std Dev	4.72	-1.000
Median	3.33	0.000
Std Dev	1.93	1.000
111	1.45	1.340

151.30 Total Arsenic		
Lab	ICP	
330	10.00	-0.646
330	10.00	-0.646
Median	9.39	0.000
64	8.78	0.646
24	8.59	0.841

151.99 Total Arsenic		
Lab	Other	
140	4.88	0.000
Median	4.88	0.000

151.XX Total Arsenic		
Lab	Total Method	
330	10.00	-1.164
330	10.00	-1.164
Std Dev	9.83	-1.000
64	8.78	0.000
Median	8.78	0.000
24	8.59	0.176
Std Dev	7.72	1.000
140	4.88	3.702

165.99 Acid Soluble Boron		
Lab	PPM	Other
330	295.50	-0.626
330	294.50	-0.618

Median	219.25	0.000
111	144.00	0.618
Std Dev	97.40	1.000
24	93.90	1.029

65.XX, ppm		Acid Soluble Boron
Lab	PPM	Total Method
330	295.50	-0.626
330	294.50	-0.618
Median	219.25	0.000
111	144.00	0.618
Std Dev	97.40	1.000
24	93.90	1.029

171.99		Water Soluble Boron
Lab	PPM	Other
330	44.71	-0.186
330	44.00	0.000
Median	44.00	0.000
Std Dev	40.21	1.000
31	34.55	2.494

171.XX		Water Soluble Boron
Lab	PPM	Total Method
330	44.71	-0.186
330	44.00	0.000
Median	44.00	0.000
Std Dev	40.21	1.000
31	34.55	2.494

181.00		Total Cadmium
Lab	PPM	Atomic Absorbtion
330	30.90	-1.340
Std Dev	30.86	-1.000
Median	30.73	0.000
Std Dev	30.59	1.000
330	30.55	1.340

181.30		Total Cadmium
Lab	PPM	ICP
61	35.50	-1.066
Std Dev	35.42	-1.000
61	34.50	-0.276
275	34.25	-0.079

Median	34.15	0.000
275	34.05	0.079
Std Dev	32.88	1.000
64	32.31	1.458
111	29.00	4.068

181.99		Total Cadmium
Lab	PPM	Other
24	33.70	-1.340
Std Dev	29.51	-1.000
Median	17.17	0.000
Std Dev	4.83	1.000
31	0.64	1.340

181.XX		Total Cadmium
Lab	PPM	Total Method
61	35.50	-0.939
61	34.50	-0.563
275	34.25	-0.469
275	34.05	-0.394
24	33.70	-0.262
Median	33.00	0.000
64	32.31	0.262
330	30.90	0.791
330	30.55	0.922
Std Dev	30.34	1.000
111	29.00	1.506
31	0.64	12.173

190.00		Aluminum
Lab	%Al ₂ O ₃	ICP
275	1.35	-1.999
Std Dev	1.30	-1.000
9	1.30	-0.999
9	1.29	-0.818
14	1.29	-0.818
14	1.29	-0.818
23	1.26	-0.363
23	1.25	-0.182
32	1.25	-0.182
Median	1.24	0.000
32	1.23	0.182
24	1.23	0.273
34	1.23	0.273

61	1.22	0.454
24	1.20	0.727
61	1.20	0.727
Std Dev	1.18	1.000
275	1.13	1.999
111	0.86	6.904

190.99		Aluminum
Lab	%Al ₂ O ₃	Atomic Absorption
31	307.45	-2.680
Std Dev	115.50	-1.000
330	1.23	0.000
Median	1.23	0.000
330	1.21	0.000

190.XX		Aluminum
Lab	%Al ₂ O ₃	Total Method
31	307.45	-5659.790
275	1.35	-2.218
9	1.30	-1.201
9	1.29	-1.017
14	1.29	-1.017
14	1.29	-1.017
Std Dev	1.28	-1.000
23	1.26	-0.554
23	1.25	-0.370
32	1.25	-0.370
32	1.23	0.000
330	1.23	0.000
Median	1.23	0.000
24	1.23	0.092
34	1.23	0.092
61	1.22	0.277
330	1.21	0.370
24	1.20	0.554
61	1.20	0.554
Std Dev	1.18	1.000
275	1.13	1.848
111	0.86	6.839

191.00		Total Chromium
Lab	PPM	Atomic Absorbtion
330	303.50	-1.340
Std Dev	303.44	-1.000

Median	303.25	0.000
Std Dev	303.06	1.000
330	303.00	1.340

191.30		Total Chromium
Lab	PPM	ICP
61	324.50	-1.230
Std Dev	321.60	-1.000
61	314.50	-0.436
Median	309.00	0.000
111	303.50	0.436
Std Dev	296.40	1.000
64	289.96	1.511

191.99		Total Chromium
Lab	PPM	Other
24	294.00	0.000
Median	294.00	0.000

191.XX		Total Chromium
Lab	PPM	Total Method
61	324.50	-2.680
61	314.50	-1.404
Std Dev	311.34	-1.000
111	303.50	0.000
330	303.50	0.000
Median	303.50	0.000
330	303.00	0.064
Std Dev	295.66	1.000
24	294.00	1.212
64	289.96	1.728

202.30		Acid Soluble Cobalt
Lab	PPM	ICP
61		

202.99		Acid Soluble Cobalt
Lab	PPM	Other
24	3.13	0.000
Median	3.13	0.000

202.XX		Acid Soluble Cobalt
Lab	PPM	Total Method
61	4.80	-1.042
Std Dev	4.75	-1.000

61	4.70	-0.952
111	4.50	-0.772
64	3.65	0.000
Median	3.65	0.000
24	3.13	0.465
330	3.10	0.492
330	2.95	0.627

221.30 Acid Soluble Copper		
Lab	PPM	ICP
61	<0.4	0.000
61	<0.4	0.000
111	6.50	0.000
Median	6.50	0.000

221.99 Acid Soluble Copper		
Lab		Other
31	1.46	-1.340
Std Dev	1.45	-1.000
Median	1.41	0.000
Std Dev	1.37	1.000
24	1.36	1.340

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
61	<0.4	0.000
61	<0.4	0.000
111	6.50	-2.628
Std Dev	3.38	-1.000
31	1.46	0.000
Median	1.46	0.000
24	1.36	0.052

241.30 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	ICP
275	2.77	-30.118
275	2.74	-28.587
34	2.20	-1.021
61	2.20	-1.021
Std Dev	2.20	-1.000
24	2.20	-0.766
111	2.20	-0.766
9	2.19	-0.255
14	2.18	0.000

23	2.18	0.000
Median	2.18	0.000
32	2.18	0.204
9	2.18	0.255
23	2.17	0.510
61	2.17	0.510
Std Dev	2.16	1.000
14	2.15	1.531
24	2.12	3.063
32	2.10	4.084

241.99 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Other
330	2.05	-1.340
Std Dev	2.04	-1.000
Median	2.02	0.000
Std Dev	2.00	1.000
330	1.99	1.340

241.XX Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Total Method
275	2.77	-19.832
275	2.74	-18.827
Std Dev	2.21	-1.000
34	2.20	-0.737
61	2.20	-0.737
24	2.20	-0.570
111	2.20	-0.570
9	2.19	-0.235
14	2.18	-0.067
23	2.18	-0.067
Median	2.18	0.000
32	2.18	0.067
9	2.18	0.101
23	2.17	0.268
61	2.17	0.268
14	2.15	0.938
Std Dev	2.15	1.000
24	2.12	1.943
32	2.10	2.613
330	2.05	4.288
330	1.99	6.298

251.00 Total Lead		
Lab		Atomic Absorbtion
330	2.00	0.000
330	2.00	0.000
Median	2.00	0.000

251.30 Total Lead		
Lab	PPM	ICP
61	2.20	-0.953
61	2.00	-0.597
Median	1.67	0.000
275	1.33	0.597
275	1.20	0.828

251.99 Total Lead		
Lab		Other
24	0.56	0.000
Median	0.56	0.000

251.XX Total Lead		
Lab	PPM	Total Method
61	2.20	-0.365
61	2.00	0.000
330	2.00	0.000
330	2.00	0.000
Median	2.00	0.000
Std Dev	1.45	1.000
275	1.33	1.221
275	1.20	1.459
24	0.56	2.625

261.30 Acid Soluble Manganese		
Lab		ICP
31	172.80	-0.678
111	172.50	-0.647
Median	166.25	0.000
330	160.00	0.647
330	158.50	0.802

261.99 Acid Soluble Manganese		
Lab	PPM	Other
24	174.00	-2.615
Std Dev	149.30	-1.000
61	134.00	0.000

Median	134.00	0.000
61	133.00	0.065

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
24	174.00	-0.711
31	172.80	-0.650
111	172.50	-0.634
330	160.00	0.000
Median	160.00	0.000
330	158.50	0.076
Std Dev	140.30	1.000
61	134.00	1.320
61	133.00	1.370

271.99 Water Soluble Manganese		
Lab		Other
330	24.90	-1.340
Std Dev	24.89	-1.000
Median	24.85	0.000
Std Dev	24.81	1.000
330	24.80	1.340

271.XX Water Soluble Manganese		
Lab	PPM	Total Method
330	24.90	-1.340
Std Dev	24.89	-1.000
Median	24.85	0.000
Std Dev	24.81	1.000
330	24.80	1.340

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

281.99 Total Mercury		
Lab	PPM	Other
275	0.00	-1.340
Std Dev	0.00	-1.000
Median	0.00	0.000
Std Dev	0.00	1.000
275	0.00	1.340

281.XX		
Lab	PPM	Total Mercury Total Method
24	<0.001	0.000
275	0.00	-1.340
Std Dev	0.00	-1.000
Median	0.00	0.000
Std Dev	0.00	1.000
275	0.00	1.340

289.30		
Lab	PPM	Total Molybdenum ICP
330		

289.99		
Lab	PPM	Total Molybdenum Other
24	16.00	0.000
Median	16.00	0.000

289.XX		
Lab	PPM	Total Molybdenum Total Method
330	20.50	-1.959
330	20.45	-1.937
Std Dev	18.27	-1.000
111	18.00	-0.883
24	16.00	-0.022
Median	15.95	0.000
31	15.90	0.022
61	15.50	0.194
61	15.50	0.194
64	15.26	0.299

291.30		
Lab		Total Nickel ICP
330		

291.99		
Lab	PPM	Total Nickel Other
24	41.90	-1.340
Std Dev	40.39	-1.000
Median	35.95	0.000
Std Dev	31.51	1.000
111	30.00	1.340

291.XX		
Lab	PPM	Total Nickel Total Method
330	54.90	-2.902

330	54.85	-2.891
Std Dev	46.41	-1.000
61	42.00	-0.011
61	42.00	-0.011
Median	41.95	0.000
24	41.90	0.011
31	39.65	0.515
64	37.98	0.890
Std Dev	37.49	1.000
111	30.00	2.678

301.30		
Lab	PPM	Total Selenium ICP
24	0.94	0.000
Median	0.94	0.000

301.99		
Lab	PPM	Total Selenium Other
330	4.00	0.000
330	4.00	0.000
Median	4.00	0.000
Std Dev	2.54	1.000
140	0.10	2.680

301.XX		
Lab	PPM	Total Selenium Total Mthod
330	4.00	-0.627
330	4.00	-0.627
Median	2.47	0.000
24	0.94	0.627
140	0.10	0.971

311.99		
Lab	%Na ₂ O	Sodium Other
24	0.33	-1.981
24	0.32	-1.515
Std Dev	0.31	-1.000
111	0.31	-0.816
61	0.29	-0.117
Median	0.29	0.000
23	0.29	0.117
23	0.28	0.350
61	0.28	0.350
Std Dev	0.27	1.000

31	0.21	3.845
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311.XX		
Lab	%Na ₂ O	Sodium Total Method
24	0.33	-1.981
24	0.32	-1.515
Std Dev	0.31	-1.000
111	0.31	-0.816
61	0.29	-0.117
Median	0.29	0.000
23	0.29	0.117
23	0.28	0.350
61	0.28	0.350
Std Dev	0.27	1.000
31	0.21	3.845

321.30		
Lab	PPM	Acid Soluble Zinc ICP
111	643.00	-6.323
Std Dev	564.03	-1.000
61	563.00	-0.930
61	556.00	-0.458
Median	549.20	0.000
31	542.40	0.458
64	541.03	0.551
Std Dev	534.37	1.000
24	534.00	1.025

321.99		
Lab		Acid Soluble Zinc Other
330	478.00	-1.340
Std Dev	477.75	-1.000
Median	477.00	0.000
Std Dev	476.25	1.000
330	476.00	1.340

321.XX		
Lab	PPM	Acid Soluble Zinc Total Method
111	643.00	-3.595
Std Dev	569.89	-1.000
61	563.00	-0.756
61	556.00	-0.507
31	542.40	-0.024
Median	541.72	0.000

64	541.03	0.024
24	534.00	0.274
Std Dev	513.54	1.000
330	478.00	2.262
330	476.00	2.333

325.10		
Lab	%	Fluoride Electrode
32	1.32	-2.297
23	1.29	-1.787
9	1.23	-0.851
32	1.23	-0.851
9	1.21	-0.425
31	1.21	-0.425
79	1.19	-0.085
Median	1.18	0.000
34	1.18	0.085
24	1.16	0.340
24	1.16	0.340
23	1.14	0.681
14	1.09	1.531
14	1.07	1.957
111	0.25	15.825

325.99		
Lab	%	Fluoride Other
61	1.29	0.000
61	1.29	0.000
330	1.29	0.000
Median	1.29	0.000
330	1.26	5.360

325.XX		
Lab	%	Fluoride Total Method
32	1.32	-1.254
23	1.29	-0.912
61	1.29	-0.912
61	1.29	-0.912
330	1.29	-0.912
330	1.26	-0.570
9	1.23	-0.285
32	1.23	-0.285
9	1.21	0.000
31	1.21	0.000

Median	1.21	0.000
79	1.19	0.228
34	1.18	0.342
24	1.16	0.513
24	1.16	0.513
23	1.14	0.741
14	1.09	1.311
14	1.07	1.597
111	0.25	10.891