

AFPC

Sample

2014-12

Grade

10-49-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, Other		001.99	13	10.16	0.10
Method Group 001.XX PCT			13	10.16	0.13
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	1	10.16	0.00
Total Nitrogen, Combustion	993.13	010.60	17	10.15	0.13
Total Nitrogen, Other		010.99	3	10.06	0.02
Method Group 010.XX PCT			21	10.13	0.11
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	3	49.85	0.03
Total Phosphate, Spectrometric	978.02	020.20	16	49.65	0.27
Total Phosphate, ICP	970.03	020.40	2	49.67	0.21
Total Phosphate, Other	993.13	020.99	1	49.50	0.00
Method Group 020.XX PCT			22	49.68	0.35
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	7	0.10	0.05
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.08	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	0.09	0.01
Insoluble Phosphate, Other		030.99	2	0.38	0.01
Method Group 030.XX PCT			12	0.11	0.07
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	9	49.58	0.23
Indirect Available Phosphate, Automated	960.02	040.40	1	49.84	0.00
Indirect Available Phosphate, Other		040.99	3	49.25	0.22
Method Group 040.XX PCT			13	49.58	0.34
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	49.44	0.20
Direct Available Phosphate, Spectrometric	960.03D	041.20	1	49.41	0.00
Direct Available Phosphate, Automated	978.01	041.40	2	48.67	0.47
Direct Available Phosphate, ICP		041.50	4	49.34	0.66
Direct Available Phosphate, EDTA Extract	993.01	041.60	3	49.56	0.12
Method Group 041.XX PCT			12	49.47	0.53
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	12	44.52	0.28
Water Soluble Phosphate, Other		048.99	3	44.30	0.13
Method Group 048.XX PCT			15	44.52	0.33
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	3	0.21	0.01
Soluble Potash, Other		050.99	6	0.21	0.00
Method Group 050.XX PCT			9	0.21	0.00
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	10	0.77	0.15
Free Water, Vacuum Desiccate	965.08A	060.10	2	0.91	0.03
Free Water, Other		060.99	3	0.67	0.05
Method Group 060.XX PCT			15	0.77	0.19
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	1.76	0.00
Acid Soluble Calcium, ICP		101.30	13	2.04	0.04
Method Group 101.XX PCT			14	2.04	0.05
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	1	1.44	0.00
Acid Soluble Magnesium, ICP		121.30	13	1.47	0.06
Method Group 121.XX PCT			14	1.46	0.07
SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	2	1.97	0.02
Sulfur, Spectrometric		144.70	2	1.98	0.00

Sulfur, Other	144.99	11	1.98	0.03	
Method Group 144.XX PCT		15	1.98	0.03	
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	8	13	0.9
Method Group 151.XX PPM			8	13	1.1
ACID SOLUBLE BORON					
Acid Soluble Boron, Other	165.99	1	48	0.0	
Method Group 165.XX PPM			1	48	0.0
TOTAL CADMIUM					
Total Cadmium, ICP	181.30	7	5	0.5	
Total Cadmium, Other	181.99	1	4	0.0	
Method Group 181.XX PPM			8	5	0.6
ALUMINUM AS Al₂O₃					
ICP, %			12	2.49	0.02
Water Soluble Chlorine, Other, %	190.99	1	2.70	0.00	
Method Group 190.XX PCT			13	2.50	0.04
TOTAL CHROMIUM					
Total Chromium, ICP	191.30	7	93	1.3	
Total Chromium, Other	191.99	1	82	0.0	
Method Group 191.XX PPM			8	93	3.4
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP	202.30	6	3	1.0	
Acid Soluble Cobalt, Other	202.99	1	3	0.0	
Method Group 202.XX PPM			7	3	1.2
ACID SOLUBLE COPPER					
Acid Soluble Copper, ICP	221.30	2	0.4	0.1	
Acid Soluble Copper, Other	221.99	1	0.0	0.0	
Method Group 221.XX PPM			3	0.5	0.3
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP	241.30	13	1.83	0.03	
Method Group 241.XX PCT			14	1.83	0.03
TOTAL LEAD					
Total Lead, ICP	251.30	7	7	0.9	
Total Lead, Other	251.99	1	7.7	0.0	
Method Group 251.XX PPM			8	7	1.3
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, Atomic Absorption	972.02b	261.11	1	391	0.0
Acid Soluble Manganese, ICP	972.02a	261.30	4	376	6.9
Acid Soluble Manganese, Other	261.99	3	372	34.5	
Method Group 261.XX PPM			8	376	19.7
TOTAL MERCURY					
Total Mercury, ICP	281.30	1	0.00	0.00	
Method Group 281.XX PPM			1	0.05	0.00
TOTAL MOLYBDENUM					
Total Molybdenum, ICP	289.30	6	14	0.9	
Total Molybdenum, Other	289.99	1	19	0.0	
Method Group 289.XX PPM			7	14	1.5
TOTAL NICKEL					
Total Nickel, icp	291.99	8	14	0.4	
Method Group 291.XX PPM			8	14	0.5
TOTAL SELENIUM					
Total Selenium, ICP	301.30	3	0.3	0.3	
Method Group 301.XX PPM			3	0.3	0.3
SODIUM AS Na₂O					
Sodium, Other	311.99	7	0.45	0.01	
Method Group 311.XX PCT			7	0.45	0.02
ACID SOLUBLE ZINC					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	1	63.2	0.0
Acid Soluble Zinc, ICP	321.30	8	71.2	5.8	
Method Group 321.XX PPM			9	71.0	8.6

Volumetric	325.10	14	3.27	0.16
Distilled/Electrode	325.99	2	3.56	0.02
Method Group 325.XX PCT		16	3.28	0.20

001.99 Ammoniacal Nitrogen		
Lab		Other
79	10.23	-0.670
34	10.22	-0.622
24	10.21	-0.526
275	10.21	-0.526
24	10.17	-0.144
23	10.16	0.000
23	10.16	0.000
61	10.16	0.000
Median	10.16	0.000
9	10.09	0.622
61	10.07	0.814
32	10.06	0.909
Std Dev	10.05	1.000
32	10.05	1.053
310	10.01	1.388

001.XX Ammoniacal Nitrogen		
Lab		Total Method
79	10.23	-0.670
34	10.22	-0.622
24	10.21	-0.526
275	10.21	-0.526
24	10.17	-0.144
23	10.16	0.000
23	10.16	0.000
61	10.16	0.000
Median	10.16	0.000
9	10.09	0.622
61	10.07	0.814
32	10.06	0.909
Std Dev	10.05	1.000
32	10.05	1.053
310	10.01	1.388

010.11 Total Nitrogen		
Lab		Modified Comprehensive
219	10.16	0.000
Median	10.16	0.000

010.60 Total Nitrogen		
Lab		Combustion
49	10.46	-2.308

14	10.40	-1.824
47	10.37	-1.638
14	10.34	-1.377
Std Dev	10.28	-1.000
31	10.24	-0.670
66	10.18	-0.223
219	10.18	-0.223
24	10.17	-0.149
79	10.15	0.000
Median	10.15	0.000
63	10.13	0.149
77	10.11	0.335
99	10.08	0.558
9	10.06	0.670
80	10.05	0.744
Std Dev	10.02	1.000
29	10.01	1.042
103	9.98	1.303
24	9.91	1.787

010.99 Total Nitrogen		
Lab		Other
40	10.10	-1.876
Std Dev	10.08	-1.000
32	10.06	0.000
Median	10.06	0.000
32	10.05	0.804

010.XX Total Nitrogen		
Lab		Total Method
49	10.46	-3.685
14	10.40	-2.959
47	10.37	-2.680
14	10.34	-2.289
31	10.24	-1.228
Std Dev	10.22	-1.000
66	10.18	-0.558
219	10.18	-0.558
24	10.17	-0.447
219	10.16	-0.279
79	10.15	-0.223
63	10.13	0.000
Median	10.13	0.000
77	10.11	0.279

40	10.10	0.391
99	10.08	0.614
9	10.06	0.782
32	10.06	0.782
80	10.05	0.893
32	10.05	0.949
Std Dev	10.04	1.000
29	10.01	1.340
103	9.98	1.731
24	9.91	2.457

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
40	49.88	-1.251
Std Dev	49.87	-1.000
219	49.85	0.000
Median	49.85	0.000
Std Dev	49.82	1.000
241	49.81	1.429

020.20 Total Phosphate		
Lab		Spectrometric
14	50.13	-1.787
14	50.03	-1.429
9	50.01	-1.354
Std Dev	49.92	-1.000
31	49.84	-0.696
99	49.79	-0.527
24	49.76	-0.414
23	49.69	-0.150
34	49.67	-0.075
Median	49.65	0.000
23	49.63	0.075
32	49.62	0.132
275	49.59	0.226
24	49.45	0.771
32	49.45	0.771
61	49.41	0.903
Std Dev	49.38	1.000
79	49.38	1.016
61	49.37	1.053

020.40 Total Phosphate		
Lab		Automated
61	0.18	-1.588
Std Dev	0.15	-1.000
61	0.14	-0.794

9	49.95	-1.340
Std Dev	49.88	-1.000
Median	49.67	0.000
Std Dev	49.45	1.000
219	49.38	1.340

020.99 Total Phosphate		
Lab		Other
310	49.50	0.000
Median	49.50	0.000

020.XX Total Phosphate		
Lab		Total Method
14	50.13	-1.554
14	50.03	-1.222
9	50.01	-1.152
Std Dev	49.97	-1.000
9	49.95	-0.943
40	49.88	-0.698
219	49.85	-0.576
31	49.84	-0.541
241	49.81	-0.436
99	49.79	-0.384
24	49.76	-0.279
23	49.69	-0.035
Median	49.68	0.000
34	49.67	0.035
23	49.63	0.175
32	49.62	0.227
275	49.59	0.314
310	49.50	0.629
24	49.45	0.821
32	49.45	0.821
61	49.41	0.943
Std Dev	49.39	1.000
79	49.38	1.048
219	49.38	1.048
61	49.37	1.082

030.20 Insoluble Phosphate		
Lab		Spectrometric
61	0.18	-1.588
Std Dev	0.15	-1.000
61	0.14	-0.794

24	0.12	-0.298
24	0.10	0.000
Median	0.10	0.000
23	0.07	0.695
23	0.06	0.893
Std Dev	0.05	1.000
79	0.04	1.191

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

030.40 Insoluble Phosphate		
Lab Automated		
9	0.11	-1.340
Std Dev	0.10	-1.000
Median	0.09	0.000
Std Dev	0.08	1.000
34	0.07	1.340

030.99 Insoluble Phosphate		
Lab Other		
32	0.40	-1.340
Std Dev	0.39	-1.000
Median	0.38	0.000
Std Dev	0.37	1.000
32	0.37	1.340

030.XX Insoluble Phosphate		
Lab Total Method		
32	0.40	-4.783
32	0.37	-4.370
61	0.18	-1.237
Std Dev	0.17	-1.000
61	0.14	-0.577
24	0.12	-0.165
9	0.11	-0.082
Median	0.11	0.000
24	0.10	0.082
31	0.08	0.495
34	0.07	0.577
23	0.07	0.660
23	0.06	0.825

Std Dev	0.04	1.000
79	0.04	1.072

040.20 Indirect Available Phosphate		
Lab Spectrometric		
9	49.90	-1.428
Std Dev	49.80	-1.000
31	49.76	-0.813
24	49.65	-0.308
23	49.63	-0.220
23	49.58	0.000
Median	49.58	0.000
24	49.37	0.901
Std Dev	49.35	1.000
79	49.34	1.032
61	49.27	1.340
61	49.19	1.691

040.40 Indirect Available Phosphate		
Lab Automated		
9	49.84	0.000
Median	49.84	0.000

040.99 Indirect Available Phosphate		
Lab Other		
34	49.64	-1.794
Std Dev	49.47	-1.000
32	49.25	0.000
Median	49.25	0.000
32	49.05	0.886

040.XX Indirect Available Phosphate		
Lab Total Method		
9	49.90	-1.161
Std Dev	49.85	-1.000
9	49.84	-0.947
31	49.76	-0.661
24	49.65	-0.250
34	49.64	-0.232
23	49.63	-0.179
23	49.58	0.000
Median	49.58	0.000
24	49.37	0.733
79	49.34	0.840

Std Dev	49.30	1.000
61	49.27	1.090
32	49.25	1.179
61	49.19	1.376
32	49.05	1.876

041.10 Direct Available Phosphate		
Lab Gravimetric Quimociac		
219	49.71	-1.340
Std Dev	49.64	-1.000
Median	49.44	0.000
Std Dev	49.24	1.000
47	49.18	1.340

041.20 Direct Available Phosphate		
Lab Spectrometric		
275	49.41	0.000
Median	49.41	0.000

041.40 Direct Available Phosphate		
Lab Automated		
49	49.30	-1.340
Std Dev	49.14	-1.000
Median	48.67	0.000
Std Dev	48.20	1.000
103	48.04	1.340

041.50 Direct Available Phosphate		
Lab ICP		
63	49.77	-0.645
47	49.72	-0.562
Median	49.34	0.000
66	48.97	0.562
Std Dev	48.68	1.000
80	48.45	1.346

041.60 Direct Available Phosphate		
Lab EDTA Extract		
64	49.84	-2.387
Std Dev	49.67	-1.000
219	49.56	0.000
Median	49.56	0.000
77	49.52	0.293

041.XX Direct Available Phosphate		
Lab Total Method		
64	49.84	-0.861
63	49.77	-0.700
47	49.72	-0.574
219	49.71	-0.551
219	49.56	-0.207
77	49.52	-0.126
Median	49.47	0.000
275	49.41	0.126
49	49.30	0.390
47	49.18	0.666
Std Dev	49.03	1.000
66	48.97	1.136
80	48.45	2.330
103	48.04	3.271

048.20 Water Soluble Phosphate		
Lab Spectrometric		
9	44.80	-0.992
79	44.70	-0.616
61	44.68	-0.563
14	44.61	-0.313
14	44.57	-0.170
23	44.53	-0.009
Median	44.52	0.000
23	44.52	0.009
61	44.29	0.831
24	44.26	0.956
31	44.25	0.992
Std Dev	44.24	1.000
24	43.93	2.135
275	43.70	2.939

048.99 Water Soluble Phosphate		
Lab Other		
32	44.61	-2.345
Std Dev	44.43	-1.000
32	44.30	0.000
Median	44.30	0.000
34	44.25	0.335

048.XX Water Soluble Phosphate		
Lab Total Method		

9	44.80	-1.050
Std Dev	44.79	-1.000
79	44.70	-0.656
61	44.68	-0.600
14	44.61	-0.337
32	44.61	-0.337
14	44.57	-0.187
23	44.53	-0.019
23	44.52	0.000
Median	44.52	0.000
32	44.30	0.843
61	44.29	0.862
24	44.26	0.993
Std Dev	44.25	1.000
34	44.25	1.012
31	44.25	1.031
24	43.93	2.230
275	43.70	3.074

050.50	%K ₂ O	Soluble Potash
Lab		ICP(Oxalate)
99	0.23	-2.233
Std Dev	0.22	-1.000
23	0.21	0.000
Median	0.21	0.000
23	0.20	0.447

050.99	%K ₂ O	Soluble Potash
Lab		Other
80	0.35	-38.190
Std Dev	0.21	-1.000
61	0.21	-0.670
61	0.21	-0.670
Median	0.21	0.000
24	0.21	0.670
31	0.21	0.670
Std Dev	0.20	1.000
24	0.20	2.010

050.XX	%K ₂ O	Soluble Potash
Lab		Total Method
80	0.35	-38.860
99	0.23	-6.700
61	0.21	-1.340

61	0.21	-1.340
Std Dev	0.21	-1.000
23	0.21	0.000
24	0.21	0.000
31	0.21	0.000
Median	0.21	0.000
Std Dev	0.20	1.000
23	0.20	1.340
24	0.20	1.340

060.00	Free Water	
Lab	Vacuum Oven	
32	1.04	-1.826
32	0.96	-1.314
31	0.95	-1.212
Std Dev	0.91	-1.000
79	0.85	-0.529
24	0.78	-0.051
Median	0.77	0.000
9	0.76	0.051
34	0.75	0.119
23	0.72	0.358
24	0.68	0.597
23	0.68	0.632

060.10	Free Water	
Lab	Vacuum Desiccate	
61	0.95	-1.340
Std Dev	0.94	-1.000
Median	0.91	0.000
Std Dev	0.88	1.000
61	0.87	1.340

060.99	Free Water	
Lab	Other	
275	0.77	-2.062
Std Dev	0.72	-1.000
14	0.67	0.000
Median	0.67	0.000
14	0.64	0.618

060.XX	Free Water	
Lab	Total Method	
32	1.04	-1.691

32	0.96	-1.212
61	0.95	-1.149
31	0.95	-1.117
Std Dev	0.93	-1.000
61	0.87	-0.638
79	0.85	-0.479
24	0.78	-0.032
275	0.77	0.000
Median	0.77	0.000
9	0.76	0.064
34	0.75	0.128
23	0.72	0.351
24	0.68	0.574
23	0.68	0.606
14	0.67	0.638
14	0.64	0.830

101.00	%CaO	Acid Soluble Calcium
Lab		Atomic Absorption
219	1.76	0.000
Median	1.76	0.000

101.30	%CaO	Acid Soluble Calcium
Lab		ICP
32	2.34	-6.588
32	2.32	-6.253
31	2.10	-1.318
Std Dev	2.08	-1.000
24	2.08	-0.893
9	2.05	-0.223
24	2.04	0.000
34	2.04	0.000
Median	2.04	0.000
61	2.04	0.112
61	2.04	0.112
23	2.02	0.447
23	2.01	0.670
Std Dev	2.00	1.000
14	1.96	1.787
14	1.96	1.787

101.XX	%CaO	Acid Soluble Calcium
Lab		Total Method
32	2.34	-6.644

32	2.32	-6.309
31	2.10	-1.374
Std Dev	2.08	-1.000
24	2.08	-0.949
9	2.05	-0.279
24	2.04	-0.056
34	2.04	-0.056
Median	2.04	0.000
61	2.04	0.056
61	2.04	0.056
23	2.02	0.391
23	2.01	0.614
Std Dev	1.99	1.000
14	1.96	1.731
14	1.96	1.731
219	1.76	6.220

121.00	%MgO	Acid Soluble Magnesium
Lab		Atomic Absorption
219	1.44	0.000
Median	1.44	0.000

121.30	%MgO	Acid Soluble Magnesium
Lab		ICP
61	1.51	-0.552
24	1.50	-0.473
24	1.50	-0.394
32	1.50	-0.394
61	1.49	-0.315
23	1.48	-0.079
23	1.47	0.000
Median	1.47	0.000
32	1.46	0.236
9	1.45	0.315
34	1.41	0.946
Std Dev	1.41	1.000
31	1.40	1.182
14	1.34	2.128
14	1.33	2.286

121.XX	%MgO	Acid Soluble Magnesium
Lab		Total Method
61	1.51	-0.743
24	1.50	-0.656

24	1.50	-0.568
32	1.50	-0.568
61	1.49	-0.481
23	1.48	-0.219
23	1.47	-0.131
Median	1.46	0.000
32	1.46	0.131
9	1.45	0.219
219	1.44	0.420
34	1.41	0.918
Std Dev	1.41	1.000
31	1.40	1.180
14	1.34	2.230
14	1.33	2.405

144..01		Sulfate Sulfur (S)
Lab		Gravimetric
241	2.00	-1.340
Std Dev	1.99	-1.000
Median	1.97	0.000
Std Dev	1.94	1.000
79	1.94	1.340

144.70		Sulfur
Lab		Spectrometric
14	1.99	-1.340
Std Dev	1.98	-1.000
Median	1.98	0.000
Std Dev	1.98	1.000
14	1.98	1.340

144.99		Sulfate Sulfur (S)
Lab		Other
34	2.06	-3.254
32	2.02	-1.723
Std Dev	2.00	-1.000
24	1.99	-0.574
24	1.99	-0.574
23	1.98	0.000
32	1.98	0.000
Median	1.98	0.000
23	1.96	0.574
61	1.96	0.574
9	1.95	0.957

Std Dev	1.95	1.000
61	1.88	3.637
31	1.81	6.509

144.XX		Sulfate Sulfur (S)
Lab		Total Method
34	2.06	-3.254
32	2.02	-1.723
Std Dev	2.00	-1.000
241	2.00	-0.957
24	1.99	-0.574
24	1.99	-0.574
14	1.99	-0.383
14	1.98	-0.191
23	1.98	0.000
32	1.98	0.000

Median	1.98	0.000
23	1.96	0.574
61	1.96	0.574
9	1.95	0.957
Std Dev	1.95	1.000
79	1.94	1.531
61	1.88	3.637
31	1.81	6.509

151.30		Total Arsenic
Lab		ICP
18	14.55	-1.472
Std Dev	14.13	-1.000
64	14.09	-0.945
9	13.80	-0.623
18	13.60	-0.396

151.30		Total Arsenic
Lab		ICP
18	14.55	-1.472
Std Dev	14.13	-1.000
64	14.09	-0.945
9	13.80	-0.623
18	13.60	-0.396

151.XX		Total Arsenic
Lab		Total Method
18	14.55	-1.472
Std Dev	14.13	-1.000
64	14.09	-0.945

9	13.80	-0.623
18	13.60	-0.396
Median	13.25	0.000
61	12.90	0.396
61	12.75	0.566
24	12.50	0.849
Std Dev	12.37	1.000
31	8.05	5.886

165.99		Acid Soluble Boron
Lab	PPM	Other
24	47.90	0.000
Median	47.90	0.000

165.XX, ppm		Acid Soluble Boron
Lab	PPM	Total Method
24	47.90	0.000
Median	47.90	0.000

181.30		Total Cadmium
Lab	PPM	ICP
64	4.79	-0.157
18	4.75	-0.092
9	4.70	0.000
18	4.70	0.000
Median	4.70	0.000
Std Dev	4.16	1.000
61	4.00	1.294
61	4.00	1.294
31	3.05	3.050

181.99		Total Cadmium
Lab		Other
24	4.47	0.000
Median	4.47	0.000

181.XX		Total Cadmium
Lab	PPM	Total Method
64	4.79	-0.376
18	4.75	-0.310
9	4.70	-0.216
18	4.70	-0.216
Median	4.59	0.000
24	4.47	0.216

Std Dev	4.05	1.000
61	4.00	1.100
61	4.00	1.100
31	3.05	2.887

190.00		Aluminum
Lab	%Al ₂ O ₃	ICP
9	2.59	-4.181
32	2.56	-2.680
Std Dev	2.52	-1.000
61	2.52	-0.965
24	2.50	-0.322
34	2.50	-0.322
61	2.50	-0.107
Median	2.49	0.000
14	2.49	0.107
24	2.49	0.107
14	2.48	0.750
Std Dev	2.47	1.000
23	2.47	1.179
32	2.47	1.179
23	2.45	1.822

190.99		Aluminum
Lab	%Al ₂ O ₃	Atomic Absorption
31	2.70	0.000
Median	2.70	0.000

190.XX		Aluminum
Lab	%Al ₂ O ₃	Total Method
31	2.70	-6.868
9	2.59	-3.183
32	2.56	-2.010
Std Dev	2.52	-1.000
61	2.52	-0.670
24	2.50	-0.167
34	2.50	-0.167
61	2.50	0.000
Median	2.50	0.000
14	2.49	0.167
24	2.49	0.167
14	2.48	0.670
Std Dev	2.47	1.000
23	2.47	1.005

32	2.47	1.005
23	2.45	1.508

191.30 Total Chromium		
Lab	ICP	
18	94.65	-1.400
61	94.50	-1.280
Std Dev	94.15	-1.000
61	93.00	-0.080
9	92.90	0.000
Median	92.90	0.000
18	92.70	0.160
Std Dev	91.65	1.000
31	91.45	1.160
64	84.06	7.076

191.99 Total Chromium		
Lab	PPM	Other
24	81.80	0.000
Median	81.80	0.000

191.XX Total Chromium		
Lab	PPM	Total Method
18	94.65	-0.657
61	94.50	-0.604
61	93.00	-0.071
9	92.90	-0.036
Median	92.80	0.000
18	92.70	0.036
31	91.45	0.479
Std Dev	89.98	1.000
64	84.06	3.105
24	81.80	3.906

202.30 Acid Soluble Cobalt		
Lab	PPM	ICP
61		

202.99 Acid Soluble Cobalt		
Lab	Other	
24	2.78	0.000
Median	2.78	0.000

202.XX Acid Soluble Cobalt		
Lab	PPM	Total Method

61	5.00	-2.347
61	4.00	-1.290
Std Dev	3.73	-1.000
64	3.69	-0.957
24	2.78	0.000
Median	2.78	0.000
18	2.60	0.190
18	2.55	0.243
31	2.00	0.830

221.00 Acid Soluble Copper		
Lab	Atomic Absorption	
219	1.90	0.000
Median	1.90	0.000

221.30 Acid Soluble Copper		
Lab	PPM	ICP
18	0.53	-1.340
Std Dev	0.49	-1.000
Median	0.40	0.000
Std Dev	0.31	1.000
18	0.28	1.340

221.99 Acid Soluble Copper		
Lab	Other	
24	1.03	0.000
Median	1.03	0.000

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
24	1.03	-1.793
Std Dev	0.81	-1.000
18	0.53	0.000
Median	0.53	0.000
18	0.28	0.887

241.30 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	ICP
32	1.90	-2.345
32	1.88	-1.675
24	1.86	-1.005
24	1.86	-1.005
Std Dev	1.86	-1.000
34	1.84	-0.335

61	1.84	-0.167
23	1.83	0.000
23	1.83	0.000
61	1.83	0.000
Median	1.83	0.000
9	1.82	0.335
Std Dev	1.80	1.000
31	1.78	1.843
14	1.76	2.345
14	1.75	2.680

241.XX Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Total Method
32	1.90	-2.412
219	1.90	-2.287
32	1.88	-1.697
Std Dev	1.86	-1.000
24	1.86	-0.983
24	1.86	-0.983
34	1.84	-0.268
61	1.84	-0.089
Median	1.83	0.000
23	1.83	0.089
23	1.83	0.089
61	1.83	0.089
9	1.82	0.447
Std Dev	1.80	1.000
31	1.78	2.055
14	1.76	2.591
14	1.75	2.948

251.30 Total Lead		
Lab	PPM	ICP
9	8.55	-1.967
18	8.00	-1.378
Std Dev	7.65	-1.000
61	7.00	-0.306
64	6.72	0.000
Median	6.72	0.000
18	6.50	0.230
61	6.00	0.766
Std Dev	5.78	1.000
31	5.00	1.838

251.99 Total Lead		
Lab	Other	
24	7.69	0.000
Median	7.69	0.000

251.XX Total Lead		
Lab	PPM	Total Method
9	8.55	-1.629
18	8.00	-1.099
Std Dev	7.90	-1.000
24	7.69	-0.801
61	7.00	-0.137
Median	6.86	0.000
64	6.72	0.137
18	6.50	0.344
61	6.00	0.825
Std Dev	5.82	1.000
31	5.00	1.787

261.11 Acid Soluble Manganese		
Lab	Atomic Absorption	
219	390.85	0.000
Median	390.85	0.000

261.30 Acid Soluble Manganese		
Lab	ICP	
9	398.00	-3.244
Std Dev	382.49	-1.000
18	377.00	-0.206
Median	375.58	0.000
31	374.15	0.206
18	369.50	0.879

261.99 Acid Soluble Manganese		
Lab	PPM	Other
24	440.00	-1.985
Std Dev	406.01	-1.000
61	371.50	0.000
Median	371.50	0.000
61	347.50	0.695

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
24	440.00	-3.990

9	398.00	-1.389
Std Dev	391.72	-1.000
219	390.85	-0.946
18	377.00	-0.088
Median	375.58	0.000
31	374.15	0.088
61	371.50	0.252
18	369.50	0.376
Std Dev	359.43	1.000
61	347.50	1.739

281.30	Total Mercury	
Lab	PPM	ICP
24	0.05	0.000
Median	0.05	0.000

281.XX	Total Mercury	
Lab	PPM	Total Method
24	0.05	0.000
Median	0.05	0.000

289.30	Total Molybdenum	
Lab	PPM	ICP
64		

289.99	Total Molybdenum	
Lab	PPM	Other
24	19.20	0.000
Median	19.20	0.000

289.XX	Total Molybdenum	
Lab	PPM	Total Method
24	19.20	-4.229
64	15.45	-1.175
Std Dev	15.23	-1.000

61	15.00	-0.813
61	14.00	0.000
Median	14.00	0.000
18	13.70	0.244
18	13.45	0.447
Std Dev	12.77	1.000
31	9.85	3.375

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Median		
291.99	Total Nickel	
Lab	PPM	Other
24	15.70	-4.522
9	14.60	-1.596
Std Dev	14.38	-1.000
64	14.36	-0.944
61	14.00	0.000
61	14.00	0.000
Median	14.00	0.000
18	13.95	0.133
18	13.80	0.532
Std Dev	13.62	1.000
31	8.15	15.561

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301.30	Total Selenium	
Lab	PPM	ICP
24	0.94	-2.318
Std Dev	0.58	-1.000
61	0.30	0.000
Median	0.30	0.000
61	0.20	0.362

301.XX	Total Selenium	
Lab	PPM	Total Mthod
24	0.94	-2.318
Std Dev	0.58	-1.000
61	0.30	0.000
Median	0.30	0.000
61	0.20	0.362

311.99	Sodium	
Lab	%Na ₂ O	Other
61	0.50	-3.350
24	0.47	-1.675
Std Dev	0.46	-1.000
24	0.45	-0.335
23	0.45	0.000
Median	0.45	0.000
31	0.44	0.335
61	0.44	0.335

23	0.44	0.670
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311.XX	Sodium	
Lab	%Na ₂ O	Total Method
61	0.50	-3.350
24	0.47	-1.675
Std Dev	0.46	-1.000
24	0.45	-0.335
23	0.45	0.000
Median	0.45	0.000
31	0.44	0.335
61	0.44	0.335
23	0.44	0.670

321.00	Acid Soluble Zinc	
Lab		Atomic Absorption
219	63.25	0.000
Median	63.25	0.000

321.30	Acid Soluble Zinc	
Lab	PPM	ICP
31	92.80	-3.692
64	77.23	-1.027
Std Dev	77.07	-1.000
24	72.70	-0.252
9	71.45	-0.038
Median	71.23	0.000
18	71.00	0.038
18	68.50	0.466
Std Dev	65.38	1.000
61	58.50	2.177
61	57.00	2.434

321.XX	Acid Soluble Zinc	
Lab	PPM	Total Method
31	92.80	-3.090
Std Dev	78.06	-1.000
64	77.23	-0.882
24	72.70	-0.241
9	71.45	-0.064
18	71.00	0.000
Median	71.00	0.000
18	68.50	0.354
Std Dev	63.94	1.000

219	63.25	1.099
61	58.50	1.772
61	57.00	1.984

325.10	Fluoride	
Lab	%	Electrode
9	3.40	-0.831
32	3.36	-0.580
23	3.34	-0.423
32	3.33	-0.392
23	3.32	-0.298
24	3.28	-0.078
24	3.27	-0.016
Median	3.27	0.000
79	3.27	0.016
275	3.21	0.360
34	3.12	0.925
275	3.11	0.987
14	3.08	1.207
14	3.06	1.301
31	2.82	2.837

325.99	Fluoride	
Lab	%	Other
61	3.59	-1.340
Median	3.56	0.000
61	3.54	1.340

325.XX	Fluoride	
Lab	%	Total Method
61	3.59	-1.857
61	3.54	-1.587
9	3.40	-0.749
32	3.36	-0.509
23	3.34	-0.359
32	3.33	-0.329
23	3.32	-0.240
24	3.28	-0.030
Median	3.28	0.000
24	3.27	0.030
79	3.27	0.060
275	3.21	0.389
34	3.12	0.928
275	3.11	0.988

14	3.08	1.198
14	3.06	1.288
31	2.82	2.755