AFPC

Sample 2013-11 Grade 18-46-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, Other		001.99	7	17.47	0.13
Method Group 001.XX PCT			7	17.47	0.15
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	18.34	0.02
Total Nitrogen, Combustion	993.13	010.60	23	18.34	0.12
Total Nitrogen, Other		010.99	8	18.31	0.08
Method Group 010.XX PCT			34	18.33	0.12
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	2	46.97	0.04
Total Phosphate, Spectrometric	978.02	020.20	19	46.71	0.30
Total Phosphate, Alka. Quimociac	955.04d	020.30	1	46.81	0.00
Total Phosphate, ICP	970.03	020.40	3	46.76	0.08
Total Phosphate, Other	993.13	020.99	2	46.70	0.20
Method Group 020.XX PCT			27	46.81	0.32
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	9	0.35	0.06
Insoluble Phosphate, Automated	978.01	030.40	2	0.29	0.15
Insoluble Phosphate, Other		030.99	2	0.44	0.05
Method Group 030.XX PCT			13	0.37	0.15
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	9	46.50	0.22
Indirect Available Phosphate, Other		040.99	2	46.77	0.15
Method Group 040.XX PCT			11	46.54	0.42
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	46.11	0.40
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	46.31	0.04
Direct Available Phosphate, Automated	978.01	041.40	3	46.31	0.37
Direct Available Phosphate, ICP		041.50	5	44.91	0.98
Direct Available Phosphate, EDTA Extract	993.01	041.60	5	46.63	0.10
Method Group 041.XX PCT			17	46.31	0.96
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	11	41.78	0.15
Water Soluble Phosphate, Alka. Quimociac	964.04	048.30	1	40.50	0.00
Water Soluble Phosphate, Other		048.99	5	41.96	0.03
Method Group 048.XX PCT			17	41.79	0.30
SOLUBLE POTASH AS K_2O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.16	0.00
Soluble Potash, ICP(Citrate)		050.51	1	0.24	0.00
Soluble Potash, Other		050.99	9	0.16	0.00
Method Group 050.XX PCT			12	0.16	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	16	1.84	0.07
Free Water, Vacuum Desiccate	965.08A	060.10	2	2.59	0.19
Free Water, Other		060.99	2	1.79	0.03
Method Group 060.XX PCT			20	1.84	0.12

ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	0.15	0.00
Acid Soluble Calcium, ICP		101.30	16	0.24	0.03
Acid Soluble Calcium, Other		101.99	1	0.15	0.00
Method Group 101.XX PCT			18	0.23	0.04
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	1	0.79	0.00
Acid Soluble Magnesium, ICP		121.30	16	1.02	0.04
Acid Soluble Magnesium, Other		121.99	1	1.00	0.00
Method Group 121.XX PCT			18	1.02	0.05
SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	3	1.78	0.05
Sulfur, Spectrometric		144.70	2	1.74	0.00
Sulfur, Other		144.99	10	1.72	0.04
Method Group 144.XX PCT			15	1.72	0.04
TOTAL SULFUR (S)					
Sulfur, Other		145.99	4	1.70	0.05
Method Group 145.XX PCT			4	1.70	0.06
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	9	12	1.5
Method Group 151.XX PPM			9	12	1.9
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	1	61	0.0
Method Group 165.XX PPM			1	61	0.0
TOTAL CADMIUM					
Total Cadmium, ICP		181.30	8	18	2.1
Total Cadmium, Other		181.99	1	16	0.0
Method Group 181.XX PPM			9	17	1.9
ALUMINUM AS Al_2O_3					
ICP, %			16	1.44	0.03
Method Group 190.XX PCT			16	1.44	0.04
TOTAL CHROMIUM					
Total Chromium, ICP		191.30	8	180	6.0
Total Chromium, Other		191.99	1	174	0.0
Method Group 191.XX PPM			9	180	8.6
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	8	3	0.3
Acid Soluble Cobalt, Other		202.99	1	2	0.0
Method Group 202.XX PPM			9	3	0.3
ACID SOLUBLE COPPER					
Acid Soluble Copper, Atomic Absorption	975.01	221.00	1	1	0.0
Acid Soluble Copper, ICP		221.30	6	4	1.1
Acid Soluble Copper, Other		221.99	1	0	0.0
Method Group 221.XX PPM			8	4	2.2
ACID SOLUBLE IRON AS Fe_2O_3					
Acid Soluble Iron, ICP		241.30	16	1.06	0.03
Acid Soluble Iron, Other		241.99	1	1.02	0.00
Method Group 241.XX PCT			18	1.06	0.04
TOTAL LEAD					
Total Lead, ICP		251.30	5	1	0.4
Total Lead, Other		251.99	1	1	0.0
Method Group 251.XX PPM			6	1	0.4
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, Atomic Absorption	972.02b	261.11	1	203	0.0
Acid Soluble Manganese, ICP	972.02a	261.30	3	198	7.1

Acid Soluble Manganese, Other	261.99	6	197	13.5
Method Group 261.XX PPM		10	199	9.6

TOTAL MOLYBDENUM					
Total Molybdenum, ICP		289.30	8	9	0.6
Total Molybdenum, Other		289.99	1	10	0.0
Method Group 289.XX PPM			9	10	0.6
TOTAL NICKEL					
Total Nickel, ICP		291.30	7	24	1.5
Total Nickel, Other		291.99	2	23	0.5
Method Group 291.XX PPM			9	23	1.8
TOTAL SELENIUM					
Total Selenium, ICP		301.30	3	1	5.6
Method Group 301.XX PPM			3	1	6.8
SODIUM AS Na_2O					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.17	0.00
Sodium, Other		311.99	9	0.17	0.03
Method Group 311.XX PCT			10	0.17	0.04
ACID SOLUBLE ZINC					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	1	206.3	0.0
Acid Soluble Zinc, ICP		321.30	7	215.0	10.6
Acid Soluble Zinc, Other		321.99	3	201.1	0.2
Method Group 321.XX PPM			11	205.0	14.3
FLUORIDE					
Water Soluble Zinc, Atomic Absorption		325.00	1	0.93	0.00
Volumentric		325.10	11	0.97	0.03
Distilled/Electrode		325.99	2	0.97	0.01
Method Group 325.XX PCT			14	0.96	0.04

001.99 Lab		Ammoniacal Nitrogen Other
79	17.59	-0.960
34	17.52	-0.400
24	17.51	-0.320
24	17.47	0.000
Median	17.47	0.000
32	17.41	0.480
Std Dev	17.35	1.000
32	17.29	1.480
310	17.06	3.280

001.XX Lab		Ammoniacal Nitrogen Total Method
79	17.59	-0.960
34	17.52	-0.400
24	17.51	-0.320
24	17.47	0.000
Median	17.47	0.000
32	17.41	0.480
Std Dev	17.35	1.000
32	17.29	1.480
310	17.06	3.280

010.11 Lab		Total Nitrogen Modified Comprehensive
43	18.34	0.000
219	18.34	0.000
Median	18.34	0.000
Std Dev	18.32	1.000
43	18.30	2.680

010.60 Lab		Total Nitrogen Combustion
47	18.61	-2.268
39	18.47	-1.113
Std Dev	18.46	-1.000
24	18.45	-0.948
24	18.45	-0.948
315	18.45	-0.948
49	18.43	-0.742
14	18.42	-0.701
219	18.41	-0.618
14	18.40	-0.536
79	18.36	-0.206
61	18.35	-0.124
64	18.34	0.000
Median	18.34	0.000
9	18.32	0.124
80	18.30	0.289
110	18.30	0.289
77	18.29	0.371
61	18.29	0.412
66	18.24	0.825
Std Dev	18.21	1.000
111	18.07	2.185
103	18.01	2.721
137	17.89	3.711
63	11.10	59.702
63	11.10	59.702

010.99 Lab		Total Nitrogen Other
275	18.41	-1.249
34	18.40	-1.127
Std Dev	18.39	-1.000
99	18.36	-0.640
23	18.31	-0.030
Median	18.31	0.000
23	18.31	0.030
32	18.27	0.518
32	18.25	0.761
Std Dev	18.23	1.000
275	18.18	1.553

010.XX Lab		Total Nitrogen Total Method
47	18.61	-2.753
39	18.47	-1.389
24	18.45	-1.194
24	18.45	-1.194
315	18.45	-1.194
Std Dev	18.43	-1.000
49	18.43	-0.950
14	18.42	-0.901
219	18.41	-0.804
275	18.41	-0.804
14	18.40	-0.707
34	18.40	-0.707
79	18.36	-0.317
99	18.36	-0.317
61	18.35	-0.219
43	18.34	-0.122
219	18.34	-0.122
64	18.34	-0.073
Median	18.33	0.000
9	18.32	0.073
23	18.31	0.171
23	18.31	0.219
80	18.30	0.268
110	18.30	0.268
43	18.30	0.317
77	18.29	0.365
61	18.29	0.414
32	18.27	0.609
32	18.25	0.804
66	18.24	0.901
Std Dev	18.22	1.000
275	18.18	1.437
111	18.07	2.509
103	18.01	3.143
137	17.89	4.312
63	11.10	70.484
63	11.10	70.484

020.10 Lab		Total Phosphate Gravimetric Quimociac
241	47.02	-1.340
Std Dev	47.01	-1.000
Median	46.97	0.000
Std Dev	46.92	1.000
219	46.91	1.340

020.20 Lab		Total Phosphate Spectrometric
14	47.09	-1.250
9	47.06	-1.134
14	47.05	-1.118
34	47.05	-1.118
Std Dev	47.01	-1.000
32	46.95	-0.773
32	46.95	-0.773
79	46.87	-0.510
24	46.86	-0.493
24	46.85	-0.460
23	46.71	0.000
Median	46.71	0.000
61	46.70	0.049
23	46.66	0.181
61	46.62	0.296
43	46.56	0.510
275	46.52	0.625
43	46.46	0.839
275	46.41	0.987
Std Dev	46.41	1.000
315	46.17	1.770
110	45.80	2.992

020.30 Lab		Total Phosphate Alka. Quimociac
111	46.81	0.000
Median	46.81	0.000

020.40 Lab		Total Phosphate Automated
219	46.90	-1.830
Std Dev	46.83	-1.000
137	46.76	0.000
Median	46.76	0.000
111	46.69	0.850

020.99 Lab		Total Phosphate Other
99	46.96	-1.340
Std Dev	46.89	-1.000
Median	46.70	0.000
Std Dev	46.50	1.000
310	46.43	1.340

020.XX Lab		Total Phosphate Total Method
14	47.09	-1.050
Std Dev	47.08	-1.000
9	47.06	-0.918
14	47.05	-0.900
34	47.05	-0.900

241	47.02	-0.787
99	46.96	-0.562
32	46.95	-0.506
32	46.95	-0.506
219	46.91	-0.375
219	46.90	-0.319
79	46.87	-0.206
24	46.86	-0.187
24	46.85	-0.150
111	46.81	0.000
Median	46.81	0.000
137	46.76	0.206
23	46.71	0.375
61	46.70	0.431
111	46.69	0.450
23	46.66	0.581
61	46.62	0.712
43	46.56	0.956
Std Dev	46.54	1.000
275	46.52	1.087
43	46.46	1.331
310	46.43	1.424
275	46.41	1.499
315	46.17	2.392
110	45.80	3.786

030.20 Lab		Insoluble Phosphate Spectrometric
61	0.56	-3.232
61	0.53	-2.759
Std Dev	0.41	-1.000
23	0.40	-0.709
23	0.40	-0.709
24	0.35	0.000
Median	0.35	0.000
79	0.33	0.394
24	0.31	0.631
Std Dev	0.29	1.000
14	0.12	3.626
14	0.12	3.626

030.40 Lab		Insoluble Phosphate Automated
34	0.48	-1.340
Std Dev	0.43	-1.000
Median	0.29	0.000
Std Dev	0.14	1.000
9	0.09	1.340

030.99 Lab		Insoluble Phosphate Other
32	0.50	-1.340
Std Dev	0.48	-1.000
Median	0.44	0.000
Std Dev	0.39	1.000
32	0.37	1.340

030.XX Lab		Insoluble Phosphate Total Method
61	0.56	-1.458
61	0.53	-1.222
32	0.50	-1.025
Std Dev	0.50	-1.000
34	0.48	-0.867
23	0.40	-0.197
23	0.40	-0.197
32	0.37	0.000
Median	0.37	0.000
24	0.35	0.158
79	0.33	0.355
24	0.31	0.473
Std Dev	0.24	1.000
14	0.12	1.971
14	0.12	1.971
9	0.09	2.207

040.20 Lab		Indirect Available Phosphate Spectrometric
14	47.02	-2.403
14	46.93	-1.987
Std Dev	46.72	-1.000
24	46.55	-0.231
79	46.54	-0.185
24	46.50	0.000
Median	46.50	0.000
23	46.32	0.855
Std Dev	46.28	1.000
23	46.26	1.109
61	46.14	1.663
61	46.10	1.871

040.99 Lab		Indirect Available Phosphate Other
9	46.97	-1.340
Std Dev	46.91	-1.000
Median	46.77	0.000
Std Dev	46.62	1.000
34	46.57	1.340

040.XX Lab		Indirect Available Phosphate Total Method
14	47.02	-1.391
9	46.97	-1.231
14	46.93	-1.130
Std Dev	46.89	-1.000
34	46.57	-0.087
24	46.55	-0.029
79	46.54	0.000
Median	46.54	0.000
24	46.50	0.116
23	46.32	0.652
23	46.26	0.811
Std Dev	46.19	1.000
61	46.14	1.159
61	46.10	1.289

041.10 Lab		Direct Available Phosphate Gravimetric Quimociac
219	46.65	-1.340
Std Dev	46.51	-1.000
Median	46.11	0.000
Std Dev	45.70	1.000
47	45.57	1.340

041.20 Lab		Direct Available Phosphate Spectrometric
275	46.36	-1.340
Std Dev	46.35	-1.000
Median	46.31	0.000
Std Dev	46.26	1.000
275	46.25	1.340

041.40 Lab		Direct Available Phosphate Automated
49	47.27	-2.599
Std Dev	46.67	-1.000
39	46.31	0.000
Median	46.31	0.000
103	46.28	0.081

041.50 Lab		Direct Available Phosphate ICP
80	46.45	-1.575
Std Dev	45.89	-1.000
66	45.84	-0.951
47	44.91	0.000
Median	44.91	0.000
63	44.53	0.389
63	44.38	0.542

041.60 Lab		Direct Available Phosphate EDTA Extract
29	46.96	-3.484
Std Dev	46.72	-1.000
64	46.68	-0.515
219	46.63	0.000
Median	46.63	0.000
77	46.55	0.825
Std Dev	46.53	1.000
137	45.44	12.215

041.XX Lab		Direct Available Phosphate Total Method
49	47.27	-1.214
Std Dev	47.10	-1.000
29	46.96	-0.832
64	46.68	-0.468
219	46.65	-0.430
219	46.63	-0.405
77	46.55	-0.303
80	46.45	-0.183
275	46.36	-0.070
39	46.31	0.000
Median	46.31	0.000
103	46.28	0.038
275	46.25	0.070

66	45.84	0.588
47	45.57	0.935
Std Dev	45.51	1.000
137	45.44	1.093
47	44.91	1.763
63	44.53	2.244
63	44.38	2.433

048.20 Lab		Water Soluble Phosphate Spectrometric
23	42.08	-2.062
Std Dev	41.93	-1.000
23	41.90	-0.790
14	41.87	-0.584
14	41.82	-0.241
79	41.79	-0.069
24	41.78	0.000
Median	41.78	0.000
24	41.75	0.206
275	41.70	0.550
Std Dev	41.63	1.000
275	41.59	1.306
61	41.48	2.096
61	41.45	2.268

048.30 Lab		Water Soluble Phosphate Alka. Quimociac
111	40.50	0.000
Median	40.50	0.000

048.99 Lab		Water Soluble Phosphate Other
9	42.45	-14.591
Std Dev	41.99	-1.000
32	41.97	-0.298
34	41.96	0.000
Median	41.96	0.000
Std Dev	41.93	1.000
32	41.93	1.042
111	40.20	52.409

048.XX Lab		Water Soluble Phosphate Total Method
9	42.45	-2.640
23	42.08	-1.160
Std Dev	42.04	-1.000
32	41.97	-0.720
34	41.96	-0.680
32	41.93	-0.540
23	41.90	-0.420
14	41.87	-0.300
14	41.82	-0.100
79	41.79	0.000
Median	41.79	0.000
24	41.78	0.040
24	41.75	0.160
275	41.70	0.360
275	41.59	0.800
Std Dev	41.54	1.000
61	41.48	1.260
61	41.45	1.360
111	40.50	5.180
111	40.20	6.360

050.50 Lab	%K_2O	Soluble Potash ICP(Oxalate)
23	0.16	-1.340
Std Dev	0.16	-1.000
Median	0.16	0.000
Std Dev	0.16	1.000
23	0.16	1.340

050.51 Lab	%K_2O	Soluble Potash ICP(Citrate)
137	0.24	0.000
Median	0.24	0.000

050.99 Lab	%K_2O	Soluble Potash Other
99	0.21	-10.270
80	0.20	-9.129
Std Dev	0.16	-1.000
24	0.16	0.000
61	0.16	0.000
61	0.16	0.000
Median	0.16	0.000
Std Dev	0.16	1.000
43	0.15	1.258
43	0.15	1.340
24	0.15	2.282
111	0.14	4.564

050.XX Lab	%K_2O	Soluble Potash Total Method
137	0.24	-6.442
99	0.21	-3.865
80	0.20	-3.436
Std Dev	0.17	-1.000
23	0.16	0.000
24	0.16	0.000
61	0.16	0.000
61	0.16	0.000
Median	0.16	0.000
23	0.16	0.429
43	0.15	0.473
43	0.15	0.504
24	0.15	0.859
Std Dev	0.15	1.000
111	0.14	1.718

060.00 Lab		Free Water Vacuum Oven
315	2.05	-2.997
79	1.94	-1.446
219	1.94	-1.375
24	1.92	-1.164
Std Dev	1.91	-1.000
32	1.87	-0.458
24	1.86	-0.317
111	1.86	-0.317
43	1.86	-0.247
Median	1.84	0.000
23	1.82	0.247
23	1.81	0.458
9	1.80	0.529
32	1.79	0.670
14	1.78	0.811
14	1.78	0.811
Std Dev	1.77	1.000
43	1.77	1.023
34	1.74	1.375

060.10 Lab		Free Water Vacuum Desiccate
61	2.84	-1.340
Std Dev	2.78	-1.000
Median	2.59	0.000
Std Dev	2.39	1.000
61	2.33	1.340

060.99 Lab		Free Water Other
275	1.83	-1.340
Std Dev	1.82	-1.000
Median	1.79	0.000
Std Dev	1.75	1.000
275	1.74	1.340

060.XX Lab		Free Water Total Method
61	2.84	-9.810
61	2.33	-4.794
315	2.05	-2.041
Std Dev	1.94	-1.000
79	1.94	-0.959
219	1.94	-0.910
24	1.92	-0.762
32	1.87	-0.270
24	1.86	-0.172
111	1.86	-0.172
43	1.86	-0.123
Median	1.84	0.000
275	1.83	0.123
23	1.82	0.221
23	1.81	0.369
9	1.80	0.418
32	1.79	0.516
14	1.78	0.615
14	1.78	0.615
43	1.77	0.762
Std Dev	1.74	1.000
34	1.74	1.008
275	1.74	1.008

101.00 Lab	%CaO	Acid Soluble Calcium Atomic Absorption

219	0.15	0.000
Median	0.15	0.000

101.30		Acid Soluble Calcium
Lab	%CaO	ICP
34	0.28	-1.270
Std Dev	0.27	-1.000
9	0.26	-0.593
24	0.26	-0.593
23	0.25	-0.254
24	0.25	-0.254
61	0.25	-0.254
23	0.25	-0.085
61	0.25	-0.085
Median	0.24	0.000
32	0.24	0.085
32	0.23	0.593
14	0.22	0.762
Std Dev	0.21	1.000
43	0.21	1.085
43	0.21	1.088
14	0.21	1.100
111	0.20	1.439
315	0.19	1.947

101.99		Acid Soluble Calcium
Lab	%CaO	Other
219	0.15	0.000
Median	0.15	0.000

101.XX		Acid Soluble Calcium
Lab	%CaO	Total Method
34	0.28	-1.595
Std Dev	0.26	-1.000
9	0.26	-0.923
24	0.26	-0.923
23	0.25	-0.588
24	0.25	-0.588
61	0.25	-0.588
23	0.25	-0.420
61	0.25	-0.420
32	0.24	-0.252
Median	0.23	0.000
32	0.23	0.252
14	0.22	0.420
43	0.21	0.741
43	0.21	0.743
14	0.21	0.755
Std Dev	0.20	1.000
111	0.20	1.091
315	0.19	1.595
219	0.15	2.770
219	0.15	2.804

121.00		Acid Soluble Magnesium
Lab	%MgO	Atomic Absorption
219	0.79	0.000
Median	0.79	0.000

121.30		Acid Soluble Magnesium
Lab	%MgO	ICP
24	1.08	-1.649
24	1.06	-1.099
Std Dev	1.06	-1.000
34	1.05	-0.825
32	1.04	-0.412
23	1.03	-0.275
23	1.03	-0.137
9	1.02	0.000
61	1.02	0.000
61	1.02	0.000
Median	1.02	0.000
32	1.01	0.275
14	1.00	0.687
315	0.99	0.962
Std Dev	0.98	1.000
14	0.98	1.237
43	0.98	1.237
111	0.97	1.512
43	0.96	1.649

121.99		Acid Soluble Magnesium
Lab	%MgO	Other
219	1.00	0.000
Median	1.00	0.000

121.XX		Acid Soluble Magnesium
Lab	%MgO	Total Method
24	1.08	-1.700
24	1.06	-1.177
Std Dev	1.05	-1.000
34	1.05	-0.915
32	1.04	-0.523
23	1.03	-0.392
23	1.03	-0.261
9	1.02	-0.131
61	1.02	-0.131
61	1.02	-0.131
Median	1.02	0.000
32	1.01	0.131
219	1.00	0.510
14	1.00	0.523
315	0.99	0.784
Std Dev	0.98	1.000
14	0.98	1.046
43	0.98	1.046
111	0.97	1.307
43	0.96	1.438
219	0.79	5.844

144..01		Sulfate Sulfur (S)
Lab		Gravimetric
79	1.84	-1.244
Std Dev	1.83	-1.000
219	1.78	0.000
Median	1.78	0.000
Std Dev	1.72	1.000
241	1.70	1.436

144.70		Sulfur
Lab		Spectrometric
14	1.74	0.000
14	1.74	0.000
Median	1.74	0.000

144.99		Sulfate Sulfur (S)
Lab		Other
9	5.13	-87.164
Std Dev	1.75	-1.000
24	1.73	-0.383
23	1.73	-0.255
23	1.72	-0.128
24	1.72	-0.128
Median	1.72	0.000
34	1.71	0.128
61	1.69	0.638
Std Dev	1.68	1.000
32	1.67	1.276
32	1.66	1.531
61	1.66	1.531

144.XX		Sulfate Sulfur (S)
Lab		Total Method
9	5.13	-114.235
79	1.84	-4.020
219	1.78	-1.843
Std Dev	1.75	-1.000
14	1.74	-0.502
14	1.74	-0.502
24	1.73	-0.335
23	1.73	-0.168
23	1.72	0.000
24	1.72	0.000
Median	1.72	0.000
34	1.71	0.335
241	1.70	0.670
Std Dev	1.69	1.000
61	1.69	1.005
32	1.67	1.843
32	1.66	2.178
61	1.66	2.178

145.99		Total Sulfur (S)
Lab		Other
43	1.75	-0.987
43	1.71	-0.235
Median	1.70	0.000
315	1.69	0.235
Std Dev	1.64	1.000
111	1.54	2.962

145.XX		Total Sulfur (S)
Lab		Total Method
43	1.75	-0.987
43	1.71	-0.235
Median	1.70	0.000

315	1.69	0.235
Std Dev	1.64	1.000
111	1.54	2.962

151.30		Total Arsenic
Lab		ICP
111	16.00	-2.320
Std Dev	13.98	-1.000
64	13.13	-0.441
9	13.05	-0.392
61	12.70	-0.163
61	12.45	0.000
Median	12.45	0.000
315	11.05	0.915
24	11.00	0.948
Std Dev	10.92	1.000
43	10.60	1.209
43	10.35	1.373

151.XX		Total Arsenic
Lab		Total Method
111	16.00	-2.320
Std Dev	13.98	-1.000
64	13.13	-0.441
9	13.05	-0.392
61	12.70	-0.163
61	12.45	0.000
Median	12.45	0.000
315	11.05	0.915
24	11.00	0.948
Std Dev	10.92	1.000
43	10.60	1.209
43	10.35	1.373

165.99		Acid Soluble Boron
Lab	PPM	Other
24	60.70	0.000
Median	60.70	0.000

65.XX, ppm		Acid Soluble Boron
Lab	PPM	Total Method
24	60.70	0.000
Median	60.70	0.000

181.30		Total Cadmium
Lab	PPM	ICP
111	31.00	-6.478
Std Dev	19.66	-1.000
9	18.70	-0.538
61	18.00	-0.200
64	17.72	-0.065
Median	17.59	0.000
315	17.45	0.065
61	17.00	0.282
Std Dev	15.51	1.000
43	10.60	3.373
43	10.35	3.494

181.99		Total Cadmium
Lab		Other
24	15.90	0.000
Median	15.90	0.000

181.XX		Total Cadmium
Lab	PPM	Total Method
111	31.00	-8.646
Std Dev	19.02	-1.000
9	18.70	-0.798
61	18.00	-0.351
64	17.72	-0.172
315	17.45	0.000
Median	17.45	0.000
61	17.00	0.287
24	15.90	0.989
Std Dev	15.88	1.000
43	10.60	4.371
43	10.35	4.530

190.00		Aluminum
Lab	$\%Al_2O_3$	ICP
9	1.54	-3.631
32	1.51	-2.421
14	1.49	-1.902
14	1.49	-1.902
Std Dev	1.46	-1.000
32	1.46	-0.865
43	1.46	-0.865
23	1.44	-0.173
43	1.44	-0.173
Median	1.44	0.000
24	1.43	0.173
24	1.43	0.173
34	1.43	0.173
61	1.43	0.173
23	1.43	0.346
61	1.42	0.692
Std Dev	1.41	1.000
315	1.31	4.323
111	0.97	16.253

190.XX		Aluminum
Lab	$\%Al_2O_3$	Total Method
9	1.54	-3.631
32	1.51	-2.421
14	1.49	-1.902
14	1.49	-1.902
Std Dev	1.46	-1.000
32	1.46	-0.865
43	1.46	-0.865
23	1.44	-0.173
43	1.44	-0.173
Median	1.44	0.000
24	1.43	0.173
24	1.43	0.173
34	1.43	0.173
61	1.43	0.173
23	1.43	0.346
61	1.42	0.692
Std Dev	1.41	1.000
315	1.31	4.323
111	0.97	16.253

191.30		Total Chromium
Lab		ICP
9	191.45	-1.853
64	188.90	-1.430
Std Dev	186.29	-1.000
61	185.50	-0.869
61	181.00	-0.124
Median	180.25	0.000
43	179.50	0.124
43	179.00	0.207
315	176.00	0.703
Std Dev	174.21	1.000
111	170.00	1.696

191.99		Total Chromium
Lab	PPM	Other
24	174.00	0.000
Median	174.00	0.000

191.XX		Total Chromium
Lab	PPM	Total Method
9	191.45	-1.686
64	188.90	-1.325
Std Dev	186.59	-1.000
61	185.50	-0.846
61	181.00	-0.212
43	179.50	0.000
Median	179.50	0.000
43	179.00	0.071
315	176.00	0.494
24	174.00	0.776
Std Dev	172.41	1.000
111	170.00	1.340

202.30		Acid Soluble Cobalt
Lab	PPM	ICP
111	6.00	-9.571
9	3.80	-2.552
Std Dev	3.31	-1.000
64	3.12	-0.367
43	3.00	0.000
43	3.00	0.000
Median	3.00	0.000
61	2.90	0.319
315	2.77	0.750
61	2.70	0.957

202.99		Acid Soluble Cobalt
Lab		Other
24	2.30	0.000
Median	2.30	0.000

202.XX		Acid Soluble Cobalt
Lab	PPM	Total Method

111	6.00	-11.486
9	3.80	-3.063
Std Dev	3.26	-1.000
64	3.12	-0.440
43	3.00	0.000
43	3.00	0.000
Median	3.00	0.000
61	2.90	0.383
315	2.77	0.900
Std Dev	2.74	1.000
61	2.70	1.149
24	2.30	2.680

221.00		Acid Soluble Copper
Lab		Atomic Absorption
219	1.09	0.000
Median	1.09	0.000

221.30		Acid Soluble Copper
Lab	PPM	ICP
111	9.00	-4.467
Std Dev	5.12	-1.000
9	5.00	-0.893
43	4.00	0.000
61	4.00	0.000
Median	4.00	0.000
43	3.00	0.893
Std Dev	2.88	1.000
61	1.00	2.680

221.99		Acid Soluble Copper
Lab		Other
24	2.49	0.000
Median	2.49	0.000

221.XX		Acid Soluble Copper
Lab	PPM	Total Method
111	9.00	-2.721
219	6.34	-1.273
Std Dev	5.84	-1.000
9	5.00	-0.544
43	4.00	0.000
61	4.00	0.000
Median	4.00	0.000
43	3.00	0.544
24	2.49	0.822
Std Dev	2.16	1.000
61	1.00	1.632

241.30		Acid Soluble Iron
Lab	$\%Fe_2O_3$	ICP
32	1.51	-15.302
32	1.46	-13.746
Std Dev	1.09	-1.000
24	1.08	-0.605
34	1.08	-0.605
24	1.07	-0.259
14	1.07	-0.086
23	1.07	-0.086
23	1.07	-0.086
Median	1.06	0.000
14	1.06	0.086
43	1.04	0.778
43	1.04	0.778
9	1.04	0.951
Std Dev	1.03	1.000
61	1.03	1.124
111	1.03	1.124
61	1.03	1.297
315	1.00	2.161

241.99		Acid Soluble Iron
Lab	$\%Fe_2O_3$	Other
219	1.02	0.000
Median	1.02	0.000

241.XX		Acid Soluble Iron
Lab	$\%Fe_2O_3$	Total Method
32	1.51	-12.821
32	1.46	-11.517
Std Dev	1.10	-1.000
219	1.09	-0.826
24	1.08	-0.507
34	1.08	-0.507
24	1.07	-0.217
14	1.07	-0.072
23	1.07	-0.072
23	1.07	-0.072
Median	1.06	0.000
14	1.06	0.072
43	1.04	0.652
43	1.04	0.652
9	1.04	0.797
61	1.03	0.942
111	1.03	0.942
Std Dev	1.03	1.000
61	1.03	1.086
219	1.02	1.144
315	1.00	1.811

251.30		Total Lead
Lab	PPM	ICP
43	1.00	0.000
43	1.00	0.000
61	1.00	0.000
Median	1.00	0.000
Std Dev	0.63	1.000
315	0.51	1.340
61	0.50	1.367

251.99		Total Lead
Lab		Other
24	0.52	0.000
Median	0.52	0.000

251.XX		Total Lead
Lab	PPM	Total Method
43	1.00	-0.660
43	1.00	-0.660
61	1.00	-0.660
Median	0.76	0.000
24	0.52	0.660
315	0.51	0.687
61	0.50	0.715

261.11		Acid Soluble Manganese
Lab		Atomic Absorption
219	203.10	0.000
Median	203.10	0.000

261.30		Acid Soluble Manganese
Lab		ICP
9	204.00	-0.846
315	198.00	0.000
Median	198.00	0.000
Std Dev	190.91	1.000
111	185.00	1.834

261.99		Acid Soluble Manganese
Lab	PPM	Other
43	216.50	-1.479
43	215.50	-1.405
Std Dev	210.03	-1.000
219	199.00	-0.185
Median	196.50	0.000
24	194.00	0.185
61	193.00	0.259
61	190.00	0.481

261.XX		Acid Soluble Manganese
Lab	PPM	Total Method
43	216.50	-2.292
43	215.50	-2.164
Std Dev	206.35	-1.000
9	204.00	-0.700
219	203.10	-0.586
219	199.00	-0.064
Median	198.50	0.000
315	198.00	0.064
24	194.00	0.573
61	193.00	0.700
Std Dev	190.65	1.000
61	190.00	1.082
111	185.00	1.719

281.30		Total Mercury
Lab	PPM	ICP
24	<0.06	0.000
Median	0.00	0.000

281.XX		Total Mercury
Lab	PPM	Total Method
24	<0.06	0.000
Median	0.00	0.000

289.30		Total Molybdenum
Lab	PPM	ICP
111	13.00	-6.225
Std Dev	10.04	-1.000

289.99		Total Molybdenum
Lab	PPM	Other
24	10.10	0.000
Median	10.10	0.000

289.XX		Total Molybdenum
Lab	PPM	Total Method
111	13.00	-7.215
9	10.75	-2.577
24	10.10	-1.237
Std Dev	9.99	-1.000
64	9.90	-0.814
61	9.50	0.000
Median	9.50	0.000
43	9.45	0.103
43	9.45	0.103
315	9.05	0.928
Std Dev	9.01	1.000
61	8.00	3.092

291.30		Total Nickel
Lab		ICP
9	26.20	-1.424
Std Dev	25.54	-1.000
64	25.14	-0.738
61	25.00	-0.647
61	24.00	0.000
Median	24.00	0.000
43	23.00	0.647
43	23.00	0.647
Std Dev	22.46	1.000
315	22.15	1.198

291.99		Total Nickel
Lab	PPM	Other
24	23.40	-1.340
Std Dev	23.22	-1.000
Median	22.70	0.000
Std Dev	22.18	1.000
111	22.00	1.340

291.XX		Total Nickel
Lab	PPM	Total Method
9	26.20	-1.876
64	25.14	-1.166
61	25.00	-1.072
Std Dev	24.89	-1.000
61	24.00	-0.402
24	23.40	0.000
Median	23.40	0.000
43	23.00	0.268
43	23.00	0.268
315	22.15	0.838
111	22.00	0.938

301.30		Total Selenium
Lab	PPM	ICP
24	<0.28	0.000
111	15.00	-2.591
Std Dev	6.10	-1.000
61	0.50	0.000
Median	0.50	0.000
61	0.00	0.089

301.XX		Total Selenium
Lab	PPM	Total Mthod
24	<0.28	0.000
111	15.00	-2.591
Std Dev	6.10	-1.000
61	0.50	0.000
Median	0.50	0.000
61	0.00	0.089

311.00		Sodium
Lab	$\%Na_2O$	Atomic Absorbtion
61	0.17	0.000
Median	0.17	0.000

311.99		Sodium
Lab	$\%Na_2O$	Other
23	0.19	-0.580
23	0.19	-0.580
24	0.19	-0.580
24	0.19	-0.580
61	0.17	0.000
Median	0.17	0.000
43	0.15	0.687
43	0.14	0.760
Std Dev	0.14	1.000
111	0.14	1.015
315	0.14	1.015

311.XX		Sodium
Lab	$\%Na_2O$	Total Method
23	0.19	-0.662
23	0.19	-0.662
24	0.19	-0.662
24	0.19	-0.662
61	0.17	-0.074
Median	0.17	0.000
61	0.17	0.074
43	0.15	0.623
43	0.14	0.697
111	0.14	0.956
315	0.14	0.956

321.00		Acid Soluble Zinc
Lab		Atomic Absorption
219	206.30	0.000
Median	206.30	0.000

321.30		Acid Soluble Zinc
Lab	PPM	ICP
111	334.50	-11.277
Std Dev	225.60	-1.000
64	219.40	-0.415
9	219.00	-0.377
24	215.00	0.000
Median	215.00	0.000
61	205.00	0.944
315	205.00	0.944
Std Dev	204.40	1.000
61	198.50	1.557

321.99		Acid Soluble Zinc
Lab		Other
43	201.50	-2.412
Std Dev	201.24	-1.000
219	201.05	0.000
Median	201.05	0.000
43	201.00	0.268

321.XX		Acid Soluble Zinc
Lab	PPM	Total Method
111	334.50	-11.035
64	219.40	-1.227
9	219.00	-1.193
Std Dev	216.74	-1.000
24	215.00	-0.852
219	206.30	-0.111
61	205.00	0.000
315	205.00	0.000
Median	205.00	0.000
43	201.50	0.298
219	201.05	0.337
43	201.00	0.341
61	198.50	0.554

325.00		Fluoride
Lab		Volumetric
9	0.93	0.000
Median	0.93	0.000

325.10		Fluoride
Lab	%	Electrode
111	2.13	-34.512
32	1.03	-1.757
23	1.00	-0.864
23	1.00	-0.864
32	0.99	-0.566
79	0.97	0.000
Median	0.97	0.000
34	0.96	0.179
14	0.95	0.476
14	0.95	0.476
24	0.94	0.774
24	0.94	0.774

325.99		Fluoride
Lab	%	Other
61	0.99	-1.340
Median	0.97	0.000

61	0.96	1.340

325.XX		Fluoride
Lab	%	Total Method
111	2.13	-36.637
32	1.03	-1.955
23	1.00	-1.009
23	1.00	-1.009
32	0.99	-0.694
61	0.99	-0.694
79	0.97	-0.095
Median	0.96	0.000
34	0.96	0.095
61	0.96	0.095
14	0.95	0.410
14	0.95	0.410
24	0.94	0.725
24	0.94	0.725
9	0.93	1.198