AFPC

Sample 2017-11 Grade 18-46-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, Other		001.99	11	17.34	0.12
Method Group 001.XX PCT			11	17.34	0.15
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	2	17.53	0.04
Total Nitrogen, Combustion	993.13	010.60	21	17.64	0.24
Total Nitrogen, Other		010.99	8	17.66	0.23
Method Group 010.XX PCT			31	17.64	0.28
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	2	47.01	0.09
Total Phosphate, Spectrometric	978.02	020.20	17	46.82	0.33
Total Phosphate, ICP	970.03	020.40	3	47.07	0.43
Total Phosphate, Other	993.13	020.99	1	47.73	0.00
Method Group 020.XX PCT			23	46.86	0.47
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	9	0.20	0.03
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.09	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.32	0.00
Insoluble Phosphate, Other		030.99	2	0.17	0.01
Method Group 030.XX PCT			13	0.19	0.05
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	9	46.66	0.20
Indirect Available Phosphate, Other		040.99	5	46.61	0.06
Method Group 040.XX PCT			14	46.65	0.22
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	46.49	0.03
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	46.42	0.57
Direct Available Phosphate, ICP		041.50	3	46.39	1.25
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	47.06	0.61
Direct Available Phosphate, Other		041.99	1	47.12	0.00
Method Group 041.XX PCT			12	46.63	0.78
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Gravimetric Quimociac	962.03	048.10	1	42.38	0.00
Water Soluble Phosphate, Spectrometric	970.01	048.20	12	41.97	0.17
Water Soluble Phosphate, Other		048.99	3	42.42	0.05
Method Group 048.XX PCT			16	42.10	0.34
SOLUBLE POTASH AS K_2O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.25	0.00
Soluble Potash, ICP(Citrate)		050.51	1	0.27	0.00
Soluble Potash, Other		050.99	6	0.26	0.03
Method Group 050.XX PCT			9	0.26	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	13	1.71	0.28
Free Water, Other		060.99	5	1.85	0.18
Method Group 060.XX PCT			18	1.72	0.27
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	0.09	0.00
Acid Soluble Calcium, ICP		101.30	13	0.20	0.03
Method Group 101.XX PCT			14	0.20	0.05
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	3	1.36	0.01
Acid Soluble Magnesium, ICP		121.30	12	1.35	0.07
Acid Soluble Magnesium, Other		121.99	1	1.34	0.00
Method Group 121.XX PCT			16	1.35	0.04
WATER SOLUBLE MAGNESIUM					
Water Soluble Magnesium, Other		131.99	1		0.00
Method Group 131.XX PCT			1	0.00	0.00

SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	1	2.19	0.00
Sulfur, Other		144.99	15	2.17	0.07
Method Group 144.XX PCT			16	2.17	0.08
TOTAL ARSENIC					
Total Arsenic, Atomic Absorbtion	980.02(a)	151.01	1	9	0.0
Total Arsenic, ICP	980.02(b)	151.02	6	10.0	1.6
Method Group 151.XX PPM			7	9.3	2.0
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	1	109	0.0
Method Group 165.XX PPM			1	109	0.0
WATER SOLUBLE BORON					
Water Soluble Boron, Other		171.99	1	49	0.0
Method Group 171.XX PPM			1	49	0.0
TOTAL CADMIUM					
Total Cadmium, Atomic Absorbtion		181.00	3	27	3.6
Total Cadmium, ICP		181.30	7	27.8	2.9
Total Cadmium, Other		181.99	1	28.1	0.0
Method Group 181.XX PPM			11	27.8	2.6
ALUMINUM AS Al_2O_3					
ICP, %			11	1.19	0.02
Water Soluble Chlorine, Other, %		190.99	2	1.27	0.06
Method Group 190.XX PCT			13	1.19	0.03
TOTAL CHROMIUM					
Total Chromium, Atomic Absorbtion		191.00	3	188	2.9
Total Chromium, ICP		191.30	5	210	11.1
Total Chromium, Other		191.99	1	212	0.0
Method Group 191.XX PPM			9	206	21.4
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	4	4	1.5
Acid Soluble Cobalt, Other		202.99	1	2	0.0
Method Group 202.XX PPM			5	3	2.8
ACID SOLUBLE COPPER					
Acid Soluble Copper, Other		221.99	1	0.9	0.0
Method Group 221.XX PPM			5	4.6	2.7
ACID SOLUBLE IRON AS Fe_2O_3					
Acid Soluble Iron, ICP		241.30	12	1.01	0.05
Acid Soluble Iron, Other		241.99	1	0.96	0.00
Method Group 241.XX PCT			14	1.01	0.11
TOTAL LEAD					
Total Lead, Atomic Absorbtion		251.00	1	1	0.0
Total Lead, ICP		251.30	5	1	0.1
Total Lead, Other		251.99	1	0.5	0.0
Method Group 251.XX PPM			7	1	0.4
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	2	256	31.8
Acid Soluble Manganese, Other		261.99	4	132	9.4
Method Group 261.XX PPM			6	138	59.8
WATER SOLUBLE MANGANESE					
Water Soluble Manganese, Other		271.99	1	16	0
Method Group 271.XX PCT			1	16	0.0
TOTAL MERCURY					
Total Mercury, ICP		281.30	1	0.00	0.00
Total Mercury, Other		281.99	2	0	0.00
Method Group 281.XX PPM			3	0.00	0.01
TOTAL MOLYBDENUM					
Total Molybdenum, ICP		289.30	5	12	0.5
Total Molybdenum, Other		289.99	1	13	0.0
Method Group 289.XX PPM			6	12	0.6
TOTAL NICKEL					
Total Nickel, ICP		291.30	6	14.1	0.7
Total Nickel, icp		291.99	1	14.5	0.0

Method Group 291.XX PPM			7	14.5	0.8
TOTAL SELENIUM					
Total Selenium, ICP		301.30	3	1.0	0.5
Total Selenium, Other		301.99	1	1	0.0
Method Group 301.XX PPM			4	1.1	0.4
SODIUM AS Na_2O					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.49	0.00
Sodium, Other		311.99	7	0.65	0.01
Method Group 311.XX PCT			8	0.65	0.05
ACID SOLUBLE ZINC					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	1	204.1	0.0
Acid Soluble Zinc, ICP		321.30	5	200.5	6.0
Acid Soluble Zinc, Other		321.99	1	180.5	0.0
Method Group 321.XX %			7	200.5	14.4
FLUORIDE					
Volumentric		325.10	11	0.57	0.02
Distilled/Electrode		325.99	3	0.59	0.02
Method Group 325.XX PCT			14	0.58	0.03

001.99 Lab		Ammoniacal Nitrogen Other
330	17.98	-5.198
113	17.51	-1.381
Std Dev	17.46	-1.000
24	17.45	-0.853
140	17.37	-0.244
24	17.35	-0.041
310	17.34	0.000
Median	17.34	0.000
32	17.33	0.081
32	17.27	0.568
Std Dev	17.22	1.000
34	17.22	1.015
79	17.18	1.340
38	16.87	3.817

001.XX Lab		Ammoniacal Nitrogen Total Method
330	17.98	-5.198
113	17.51	-1.381
Std Dev	17.46	-1.000
24	17.45	-0.853
140	17.37	-0.244
24	17.35	-0.041
310	17.34	0.000
Median	17.34	0.000
32	17.33	0.081
32	17.27	0.568
Std Dev	17.22	1.000
34	17.22	1.015
79	17.18	1.340
38	16.87	3.817

010.11 Lab		Total Nitrogen Modified Comprehensive
113	17.59	-1.340
Std Dev	17.57	-1.000
Median	17.53	0.000
Std Dev	17.49	1.000
219	17.48	1.340

010.60 Lab		Total Nitrogen Combustion
80	18.05	-1.717
24	17.99	-1.466
24	17.94	-1.256
Std Dev	17.88	-1.000
63	17.83	-0.796
61	17.81	-0.691
137	17.80	-0.649
49	17.77	-0.523
31	17.76	-0.502
64	17.67	-0.126
110	17.65	-0.042
79	17.64	0.000
Median	17.64	0.000
219	17.58	0.272
38	17.57	0.314
61	17.57	0.314
140	17.57	0.314
14	17.48	0.691
14	17.47	0.733
77	17.41	0.963
Std Dev	17.40	1.000
29	17.37	1.131
99	17.30	1.445
47	17.19	1.884

010.99 Lab		Total Nitrogen Other
330	18.06	-1.717
335	18.03	-1.608
Std Dev	17.89	-1.000
23	17.69	-0.120
23	17.68	-0.055
Median	17.66	0.000
32	17.65	0.055
32	17.51	0.689
Std Dev	17.43	1.000
275	17.36	1.324
275	17.27	1.717

010.XX Lab		Total Nitrogen Total Method
330	18.06	-1.838
80	18.05	-1.816
335	18.03	-1.728
24	17.99	-1.550
24	17.94	-1.329
Std Dev	17.87	-1.000
63	17.83	-0.842
61	17.81	-0.731
137	17.80	-0.687
49	17.77	-0.554
31	17.76	-0.532
23	17.69	-0.221
23	17.68	-0.155
64	17.67	-0.133
32	17.65	-0.044
110	17.65	-0.044
79	17.64	0.000
Median	17.64	0.000
113	17.59	0.244
219	17.58	0.288
38	17.57	0.332
61	17.57	0.332
140	17.57	0.332
32	17.51	0.598
219	17.48	0.709
14	17.48	0.731
14	17.47	0.775
Std Dev	17.41	1.000
77	17.41	1.019
29	17.37	1.196
275	17.36	1.240
99	17.30	1.528
275	17.27	1.639
47	17.19	1.993

020.10 Lab		Total Phosphate Gravimetric Quimociac
219	47.13	-1.340
Std Dev	47.10	-1.000
Median	47.01	0.000
Std Dev	46.92	1.000
113	46.89	1.340

020.20 Lab		Total Phosphate Spectrometric
99	47.72	-2.710
61	47.17	-1.039
Std Dev	47.15	-1.000
24	47.15	-0.994
24	47.12	-0.888
61	47.05	-0.678
34	46.92	-0.301
23	46.86	-0.105
140	46.83	-0.030
23	46.82	0.000
32	46.82	0.000
Median	46.82	0.000
32	46.82	0.015
14	46.60	0.662
79	46.60	0.662
14	46.56	0.798
Std Dev	46.49	1.000
310	46.34	1.445
31	46.07	2.273
38	45.56	3.809

020.40 Lab		Total Phosphate Automated
110	47.17	-0.232
219	47.07	0.000
Median	47.07	0.000
Std Dev	46.64	1.000
137	46.02	2.448

020.99 Lab		Total Phosphate Other
330	47.73	0.000
Median	47.73	0.000

020.XX Lab		Total Phosphate Total Method
330	47.73	-2.244
99	47.72	-2.218
Std Dev	47.24	-1.000
110	47.17	-0.808
61	47.17	-0.795
24	47.15	-0.757
219	47.13	-0.705
24	47.12	-0.667
219	47.07	-0.551
61	47.05	-0.487

34	46.92	-0.167
113	46.89	-0.096
23	46.86	0.000
Median	46.86	0.000
140	46.83	0.064
23	46.82	0.090
32	46.82	0.090
32	46.82	0.103
14	46.60	0.654
79	46.60	0.654
14	46.56	0.769
Std Dev	46.47	1.000
310	46.34	1.321
31	46.07	2.026
137	46.02	2.154
38	45.56	3.334

030.20 Lab		Insoluble Phosphate Spectrometric
113	0.33	-3.871
61	0.27	-1.936
Std Dev	0.23	-1.000
24	0.23	-0.744
24	0.21	-0.298
23	0.20	0.000
Median	0.20	0.000
23	0.19	0.447
61	0.18	0.596
140	0.17	0.893
Std Dev	0.17	1.000
79	0.16	1.340

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

030.40 Lab		Insoluble Phosphate Automated
34	0.32	0.000
Median	0.32	0.000

030.99 Lab		Insoluble Phosphate Other
32	0.18	-1.340
Std Dev	0.18	-1.000
Median	0.17	0.000
Std Dev	0.16	1.000
32	0.16	1.340

030.XX Lab		Insoluble Phosphate Total Method
113	0.33	-3.533
34	0.32	-3.167
61	0.27	-1.949
Std Dev	0.23	-1.000
24	0.23	-0.975
24	0.21	-0.609
23	0.20	-0.365
23	0.19	0.000
Median	0.19	0.000
32	0.18	0.122
61	0.18	0.122
140	0.17	0.365
32	0.16	0.731
79	0.16	0.731
Std Dev	0.14	1.000
31	0.09	2.315

040.20 Lab		Indirect Available Phosphate Spectrometric
24	46.93	-1.340
24	46.91	-1.239
61	46.90	-1.214
61	46.87	-1.037
Std Dev	46.86	-1.000
140	46.66	0.000
Median	46.66	0.000
23	46.66	0.025
23	46.64	0.126
Std Dev	46.46	1.000
79	46.45	1.087
31	45.97	3.489

040.99 Lab		Indirect Available Phosphate Other
32	46.67	-1.072
Std Dev	46.66	-1.000
32	46.64	-0.536
34	46.61	0.000
Median	46.61	0.000
113	46.56	0.804
Std Dev	46.55	1.000
137	45.84	13.757

040.XX Lab		Indirect Available Phosphate Total Method
24	46.93	-1.539
24	46.91	-1.429
61	46.90	-1.402
61	46.87	-1.209
Std Dev	46.83	-1.000
32	46.67	-0.110
140	46.66	-0.082
23	46.66	-0.055
Median	46.65	0.000
23	46.64	0.055
32	46.64	0.055
34	46.61	0.220
113	46.56	0.467
Std Dev	46.46	1.000
79	46.45	1.099
31	45.97	3.711
137	45.84	4.453

041.10 Lab		Direct Available Phosphate Gravimetric Quimociac
47	46.53	-1.340
Std Dev	46.52	-1.000
Median	46.49	0.000
Std Dev	46.45	1.000
219	46.44	1.340

041.20 Lab		Direct Available Phosphate Spectrometric
47	47.18	-1.340
Std Dev	46.99	-1.000
Median	46.42	0.000
Std Dev	45.86	1.000
38	45.67	1.340

041.50 Lab		Direct Available Phosphate ICP
63	48.29	-1.525
Std Dev	47.64	-1.000
64	46.39	0.000
Median	46.39	0.000
Std Dev	45.14	1.000
80	44.95	1.155

041.60 Lab		Direct Available Phosphate EDTA Extract
77	47.62	-0.919
29	47.39	-0.543
Median	47.06	0.000
219	46.73	0.543
Std Dev	46.45	1.000
49	46.34	1.181

041.99 Lab		Direct Available Phosphate Other
335	47.12	0.000
Median	47.12	0.000

041.XX Lab		Direct Available Phosphate Total Method
63	48.29	-2.602
77	47.62	-1.553
29	47.39	-1.193
Std Dev	47.27	-1.000
47	47.18	-0.865
335	47.12	-0.771
219	46.73	-0.153
Median	46.63	0.000
47	46.53	0.153
219	46.44	0.293
64	46.39	0.372
49	46.34	0.458
Std Dev	45.99	1.000
38	45.67	1.506
80	44.95	2.625

048.10 Lab		Water Soluble Phosphate Gravimetric Quimociac
113	42.38	0.000

Median	42.38	0.000

048.20		Water Soluble Phosphate
Lab		Spectrometric
330	43.98	-12.053
23	42.25	-1.692
23	42.22	-1.482
140	42.15	-1.063
Std Dev	42.13	-1.000
61	42.05	-0.494
14	41.98	-0.045
Median	41.97	0.000
79	41.96	0.045
14	41.95	0.105
61	41.94	0.165
24	41.94	0.195
Std Dev	41.80	1.000
24	41.60	2.231
31	41.26	4.267

048.99		Water Soluble Phosphate
Lab		Other
32	42.45	-0.479
32	42.42	0.000
Median	42.42	0.000
Std Dev	42.37	1.000
34	42.31	2.201

048.XX		Water Soluble Phosphate
Lab		Total Method
330	43.98	-6.687
32	42.45	-1.234
32	42.42	-1.146
113	42.38	-1.018
Std Dev	42.38	-1.000
34	42.31	-0.737
23	42.25	-0.542
23	42.22	-0.417
140	42.15	-0.169
Median	42.10	0.000
61	42.05	0.169
14	41.98	0.435
79	41.96	0.488
14	41.95	0.524
61	41.94	0.559
24	41.94	0.577
Std Dev	41.82	1.000
24	41.60	1.785
31	41.26	2.993

050.50	$\%K_2O$	Soluble Potash
Lab		ICP(Oxalate)
23	0.26	-1.340
Std Dev	0.25	-1.000
Median	0.25	0.000
Std Dev	0.25	1.000
23	0.25	1.340

050.51	$\%K_2O$	Soluble Potash
Lab		ICP(Citrate)
137	0.27	0.000
Median	0.27	0.000

050.99		Soluble Potash
Lab	$\%K_2O$	Other
61	0.27	-0.236
24	0.26	-0.079
61	0.26	-0.079
Median	0.26	0.000
24	0.26	0.079
Std Dev	0.23	1.000
330	0.21	1.655
80	0.10	4.966

050.XX		Soluble Potash
Lab	$\%K_2O$	Total Method
137	0.27	-2.010
61	0.27	-1.340
Std Dev	0.26	-1.000
24	0.26	-0.670
61	0.26	-0.670
23	0.26	0.000
24	0.26	0.000
Median	0.26	0.000
23	0.25	0.670
Std Dev	0.25	1.000
330	0.21	6.700
80	0.10	20.770

060.00		Free Water
Lab		Vacuum Oven
31	2.40	-2.416
34	2.05	-1.181
24	2.01	-1.058
Std Dev	1.99	-1.000
24	1.95	-0.829
23	1.75	-0.141
140	1.74	-0.088
23	1.71	0.000
Median	1.71	0.000
32	1.67	0.141
32	1.64	0.247
61	1.57	0.511
61	1.53	0.635
113	1.46	0.899
Std Dev	1.43	1.000
79	1.05	2.327

060.99		Free Water
Lab		Other
14	1.88	-0.140
275	1.87	-0.112
14	1.85	0.000
Median	1.85	0.000
Std Dev	1.67	1.000
275	1.63	1.228
330	0.24	9.017

060.XX		Free Water
Lab		Total Method
31	2.40	-3.081
34	2.05	-1.477
24	2.01	-1.317
24	1.95	-1.019
Std Dev	1.94	-1.000
14	1.88	-0.699
275	1.87	-0.676
14	1.85	-0.584
23	1.75	-0.126
140	1.74	-0.057
Median	1.72	0.000
23	1.71	0.057
32	1.67	0.241
32	1.64	0.378
275	1.63	0.424
61	1.57	0.722
61	1.53	0.882
Std Dev	1.50	1.000
113	1.46	1.225
79	1.05	3.081
330	0.24	6.815

101.00		Acid Soluble Calcium
Lab	%CaO	Atomic Absorption
219	0.09	0.000
Median	0.09	0.000

101.30		Acid Soluble Calcium
Lab	%CaO	ICP
31	0.32	-3.618
14	0.30	-2.978
330	0.24	-1.042
Std Dev	0.23	-1.000
24	0.23	-0.893
32	0.22	-0.596
14	0.21	-0.298
61	0.20	0.000
Median	0.20	0.000
24	0.19	0.298
61	0.19	0.298
32	0.19	0.447
Std Dev	0.17	1.000
23	0.17	1.042
23	0.16	1.191
34	0.16	1.191

101.XX		Acid Soluble Calcium
Lab	%CaO	Total Method
31	0.32	-2.948
14	0.30	-2.447
Std Dev	0.24	-1.000
330	0.24	-0.932
24	0.23	-0.816
32	0.22	-0.583
14	0.21	-0.350
61	0.20	-0.117

Median	0.20	0.000
24	0.19	0.117
61	0.19	0.117
32	0.19	0.233
23	0.17	0.699
23	0.16	0.816
34	0.16	0.816
Std Dev	0.15	1.000
219	0.09	2.419

121.00		Acid Soluble Magnesium
Lab	%MgO	Atomic Absorption
219	1.37	-0.832
275	1.36	0.000
Median	1.36	0.000
Std Dev	1.35	1.000
275	1.34	1.848

121.30		Acid Soluble Magnesium
Lab	%MgO	ICP
31	1.49	-2.189
14	1.46	-1.661
14	1.45	-1.585
Std Dev	1.41	-1.000
34	1.38	-0.528
61	1.36	-0.151
23	1.35	-0.075
Median	1.35	0.000
32	1.34	0.075
23	1.33	0.226
61	1.31	0.528
24	1.31	0.604
32	1.30	0.679
24	1.29	0.830

121.99		Acid Soluble Magnesium
Lab	%MgO	Other
330	1.34	0.000
Median	1.34	0.000

121.XX		Acid Soluble Magnesium
Lab	%MgO	Total Method
31	1.49	-4.156
14	1.46	-3.153
14	1.45	-3.010
34	1.38	-1.003
Std Dev	1.38	-1.000
219	1.37	-0.688
275	1.36	-0.430
61	1.36	-0.287
23	1.35	-0.143
Median	1.35	0.000
32	1.34	0.143
275	1.34	0.143
330	1.34	0.143
23	1.33	0.430
Std Dev	1.31	1.000
61	1.31	1.003
24	1.31	1.147
32	1.30	1.290
24	1.29	1.576

144..01		Sulfate Sulfur (S)
Lab		Gravimetric
79	2.19	0.000
Median	2.19	0.000

144.99		Sulfate Sulfur (S)
Lab		Other
330	5.53	-48.602
14	2.27	-1.449
23	2.26	-1.231
Std Dev	2.24	-1.000
14	2.23	-0.797
23	2.23	-0.797
32	2.19	-0.330
61	2.18	-0.072
275	2.17	0.000
Median	2.17	0.000
32	2.16	0.178
24	2.15	0.290
24	2.14	0.507
34	2.13	0.579
61	2.13	0.652
Std Dev	2.10	1.000
275	2.04	1.883
31	1.20	14.124

144.XX		Sulfate Sulfur (S)
Lab		Total Method
330	5.53	-49.231
14	2.27	-1.432
23	2.26	-1.212
Std Dev	2.24	-1.000
14	2.23	-0.771
23	2.23	-0.771
32	2.19	-0.298
79	2.19	-0.184
61	2.18	-0.037
Median	2.17	0.000
275	2.17	0.037
32	2.16	0.217
24	2.15	0.330
24	2.14	0.551
34	2.13	0.624
61	2.13	0.698
Std Dev	2.10	1.000
275	2.04	1.946
31	1.20	14.355

151.00		Total Arsenic
Lab		Atomic Absorbtion
113	8.80	0.000
Median	8.80	0.000

151.30		Total Arsenic
Lab		ICP
31	11.75	-1.092
Std Dev	11.60	-1.000
335	11.47	-0.918
330	10.66	-0.424
Median	9.96	0.000
24	9.27	0.424
64	9.00	0.586
Std Dev	8.32	1.000
140	7.69	1.385

151.XX		Total Arsenic
Lab		Total Method
31	11.75	-1.542
335	11.47	-1.365
Std Dev	10.88	-1.000
330	10.66	-0.862
24	9.27	0.000
Median	9.27	0.000
64	9.00	0.164
113	8.80	0.288
140	7.69	0.977

165.99		Acid Soluble Boron
Lab	PPM	Other
24	108.50	0.000
Median	108.50	0.000

165.XX, ppm		Acid Soluble Boron
Lab	PPM	Total Method
24	108.50	0.000
Median	108.50	0.000

171.99		Water Soluble Boron
Lab	PPM	Other
330	49.39	0.000
Median	49.39	0.000

171.XX		Water Soluble Boron
Lab	PPM	Total Method
330	49.39	0.000
Median	49.39	0.000

181.00		Total Cadmium
Lab		Atomic Absorbtion
113	36.04	-2.632
Std Dev	30.14	-1.000
330	26.53	0.000
Median	26.53	0.000
330	26.35	0.048

181.30		Total Cadmium
Lab	PPM	ICP
335	31.38	-1.226
Std Dev	30.72	-1.000
61	30.00	-0.756
61	28.50	-0.245
64	27.78	0.000
Median	27.78	0.000
275	27.12	0.225

Std Dev	24.84	1.000
275	23.51	1.454
31	2.85	8.490

181.99		Total Cadmium
Lab		Other
24	28.10	0.000
Median	28.10	0.000

181.XX		Total Cadmium
Lab	PPM	Total Method
113	36.04	-3.935
335	31.38	-1.715
61	30.00	-1.058
Std Dev	29.88	-1.000
61	28.50	-0.343
24	28.10	-0.152
64	27.78	0.000
Median	27.78	0.000
275	27.12	0.314
330	26.53	0.598
330	26.35	0.681
Std Dev	25.68	1.000
275	23.51	2.034
31	2.85	11.878

190.00		Aluminum
Lab	$\%Al_2O_3$	ICP
14	1.36	-7.593
14	1.35	-7.147
Std Dev	1.21	-1.000
32	1.21	-0.893
32	1.19	-0.223
23	1.19	0.000
34	1.19	0.000
Median	1.19	0.000
24	1.18	0.223
23	1.17	0.670
24	1.17	0.893
Std Dev	1.16	1.000
61	1.15	1.563
61	1.11	3.350

190.99		Aluminum
Lab	$\%Al_2O_3$	Atomic Absorption
31	1.36	-1.340
Std Dev	1.33	-1.000
Median	1.27	0.000
Std Dev	1.21	1.000
330	1.19	1.340

190.XX		Aluminum
Lab	$\%Al_2O_3$	Total Method
14	1.36	-6.509
31	1.36	-6.509
14	1.35	-6.126
Std Dev	1.21	-1.000
32	1.21	-0.766
32	1.19	-0.191
330	1.19	-0.191
23	1.19	0.000
34	1.19	0.000
Median	1.19	0.000
24	1.18	0.191
23	1.17	0.574
24	1.17	0.766
Std Dev	1.16	1.000
61	1.15	1.340
61	1.11	2.871

191.00		Total Chromium
Lab		Atomic Absorbtion
330	193.50	-1.907
Std Dev	190.86	-1.000
330	187.95	0.000
Median	187.95	0.000
113	185.70	0.773

191.30		Total Chromium
Lab		ICP
335	256.04	-4.152
Std Dev	221.09	-1.000
61	221.00	-0.992
61	210.00	0.000
Median	210.00	0.000
64	206.14	0.348
Std Dev	198.91	1.000
31	109.30	9.081

191.99		Total Chromium
Lab	PPM	Other
24	211.50	0.000
Median	211.50	0.000

191.XX		Total Chromium
Lab	PPM	Total Method
335	256.04	-2.839
Std Dev	223.71	-1.000
61	221.00	-0.846
24	211.50	-0.305
61	210.00	-0.220
64	206.14	0.000
Median	206.14	0.000
330	193.50	0.719
Std Dev	188.57	1.000
330	187.95	1.035
113	185.70	1.163
31	109.30	5.510

202.30		Acid Soluble Cobalt
Lab	PPM	ICP
61		

202.99		Acid Soluble Cobalt
Lab		Other
24	1.66	0.000
Median	1.66	0.000

202.XX		Acid Soluble Cobalt
Lab	PPM	Total Method
61	4.80	-0.779
61	4.70	-0.735
31	3.03	0.000
Median	3.03	0.000
24	1.66	0.605
330	1.53	0.662

221.00		Acid Soluble Copper
Lab		Atomic Absorption
219	1.10	0.000
Median	1.10	0.000

221.30		Acid Soluble Copper
Lab	PPM	ICP
64	4.56	-2.680
Std Dev	4.21	-1.000
61	4.00	0.000
61	4.00	0.000
Median	4.00	0.000

221.99		Acid Soluble Copper
Lab		Other
24	7.83	0.000
Median	7.83	0.000

221.XX		Acid Soluble Copper
Lab	PPM	Total Method
24	7.83	-1.491
219	6.94	-1.085
Std Dev	6.75	-1.000
64	4.56	0.000
Median	4.56	0.000
61	4.00	0.255
61	4.00	0.255

241.30		Acid Soluble Iron
Lab	$\%Fe_2O_3$	ICP
31	1.65	-12.156
14	1.55	-10.337
14	1.12	-2.106
Std Dev	1.06	-1.000
24	1.03	-0.383
23	1.02	-0.096
34	1.02	-0.096
Median	1.01	0.000
23	1.01	0.096
24	1.00	0.287
32	0.99	0.383
32	0.96	0.957
Std Dev	0.96	1.000
61	0.83	3.541
61	0.79	4.211

241.99		Acid Soluble Iron
Lab	$\%Fe_2O_3$	Other
330	0.96	0.000

Median	0.96	0.000

241.XX		Acid Soluble Iron
Lab	$\%Fe_2O_3$	Total Method
31	1.65	-7.280
14	1.55	-6.191
14	1.12	-1.261
219	1.10	-1.061
Std Dev	1.10	-1.000
24	1.03	-0.229
23	1.02	-0.057
34	1.02	-0.057
Median	1.01	0.000
23	1.01	0.057
24	1.00	0.172
32	0.99	0.229
32	0.96	0.573
330	0.96	0.631
Std Dev	0.92	1.000
61	0.83	2.121
61	0.79	2.522

251.00		Total Lead
Lab		Atomic Absorbtion
330	0.56	0.000
Median	0.56	0.000

251.30		Total Lead
Lab	PPM	ICP
61	1.00	-0.503
61	1.00	-0.503
275	0.97	0.000
Median	0.97	0.000
275	0.92	0.837
Std Dev	0.91	1.000
335	0.60	6.281

251.99		Total Lead
Lab		Other
24	0.50	0.000
Median	0.50	0.000

251.XX		Total Lead
Lab	PPM	Total Method
61	1.00	-0.261
61	1.00	-0.261
275	0.97	-0.163
275	0.92	0.000
Median	0.92	0.000
Std Dev	0.61	1.000
335	0.60	1.062
330	0.56	1.193
24	0.50	1.389

261.30		Acid Soluble Manganese
Lab		ICP
31	298.20	-1.340
Std Dev	287.39	-1.000
Median	255.60	0.000
Std Dev	223.81	1.000
330	213.00	1.340

261.99		Acid Soluble Manganese
Lab	PPM	Other
219	138.25	-0.720
24	137.50	-0.640
Median	131.50	0.000
61	125.50	0.640
61	124.00	0.800

261.XX		Acid Soluble Manganese
Lab	PPM	Total Method
31	298.20	-3.264
330	213.00	-1.530
Std Dev	186.99	-1.000
219	138.25	-0.008
Median	137.88	0.000
24	137.50	0.008
61	125.50	0.252
61	124.00	0.283

271.99		Water Soluble Manganese
Lab		Other
330	15.95	0.000
Median	15.95	0.000

271.XX		Water Soluble Manganese
Lab	PPM	Total Method
330	15.95	0.000
Median	15.95	0.000

281.30		Total Mercury
Lab	PPM	ICP
24	<0.001	0.000
335	0.02	0.000
Median	0.02	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		Total Mercury
Lab	PPM	Total Method
24	<0.001	0.000
335	0.02	-2.646
Std Dev	0.01	-1.000
275	0.00	0.000
Median	0.00	0.000
275	0.00	0.034

289.30		Total Molybdenum
Lab	PPM	ICP
330		

289.99		Total Molybdenum
Lab	PPM	Other
24	12.70	0.000
Median	12.70	0.000

289.XX		Total Molybdenum
Lab	PPM	Total Method
330	14.20	-3.586
Std Dev	12.86	-1.000
24	12.70	-0.694
64	12.68	-0.656
Median	12.34	0.000
61	12.00	0.656
61	12.00	0.656
Std Dev	11.82	1.000
31	6.65	10.971

291.30		Total Nickel
Lab		ICP
335		

291.99		Total Nickel
Lab	PPM	Other
24	14.50	0.000
Median	14.50	0.000

291.XX		Total Nickel
Lab	PPM	Total Method
335	16.13	-2.468
Std Dev	15.16	-1.000
24	14.50	0.000
61	14.50	0.000
61	14.50	0.000
Median	14.50	0.000
Std Dev	13.84	1.000
330	13.65	1.287
64	13.58	1.393
31	10.45	6.132

301.30		Total Selenium
Lab	PPM	ICP
24	1.28	-0.625
140	0.98	0.000
Median	0.98	0.000
Std Dev	0.51	1.000
335	0.01	2.055

301.99		Total Selenium
Lab	PPM	Other
330	1.18	0.000
Median	1.18	0.000

301.XX		Total Selenium
Lab	PPM	Total Mthod
24	1.28	-0.572
330	1.18	-0.282
Median	1.08	0.000
140	0.98	0.282
Std Dev	0.73	1.000
335	0.01	3.093

311.00 Lab	$\%Na_2O$	Sodium Atomic Absorbtion
330	0.49	0.000
Median	0.49	0.000

311.99 Lab	$\%Na_2O$	Sodium Other
24	0.69	-3.127
Std Dev	0.66	-1.000
24	0.66	-0.447
61	0.66	-0.447
23	0.65	0.000
Median	0.65	0.000
23	0.65	0.447
Std Dev	0.64	1.000
61	0.64	1.340
31	0.26	35.287

311.XX Lab	$\%Na_2O$	Sodium Total Method
24	0.69	-0.893
24	0.66	-0.179
61	0.66	-0.179
23	0.65	-0.060
Median	0.65	0.000
23	0.65	0.060
61	0.64	0.298
Std Dev	0.61	1.000
330	0.49	3.752
31	0.26	9.350

321.00 Lab		Acid Soluble Zinc Atomic Absorption
219	204.10	0.000
Median	204.10	0.000

321.30 Lab	PPM	Acid Soluble Zinc ICP
64	210.75	-1.717
Std Dev	206.47	-1.000
24	200.50	0.000
61	200.50	0.000
Median	200.50	0.000
Std Dev	194.53	1.000
61	192.50	1.340
31	91.30	18.291

321.99 Lab		Acid Soluble Zinc Other
330	180.50	0.000
Median	180.50	0.000

321.XX Lab	PPM	Acid Soluble Zinc Total Method
64	210.75	-0.869
219	204.10	-0.305
24	200.50	0.000
61	200.50	0.000
Median	200.50	0.000
61	192.50	0.678
Std Dev	188.71	1.000
330	180.50	1.696
31	91.30	9.261

325.10 Lab	%	Fluoride Electrode
31	1.94	-60.970
32	0.60	-1.340
23	0.60	-1.117
32	0.60	-1.117
23	0.59	-0.670
24	0.57	0.000
Median	0.57	0.000
24	0.57	0.000
34	0.57	0.223
79	0.57	0.223
14	0.56	0.670
14	0.55	1.050

325.99 Lab	%	Fluoride Other
61	0.61	-0.893
61	0.59	0.000
Median	0.59	0.000
330	0.56	1.787

325.XX Lab	%	Fluoride Total Method
31	1.94	-60.635
61	0.61	-1.228
32	0.60	-1.005
23	0.60	-0.782
32	0.60	-0.782
61	0.59	-0.558
23	0.59	-0.335
Median	0.58	0.000
24	0.57	0.335
24	0.57	0.335
34	0.57	0.558
79	0.57	0.558
330	0.56	0.782
14	0.56	1.005
14	0.55	1.385