AFPC

Sample 2021-06 Grade MAP

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	2	10.76	0.00
Ammoniacal Nitrogen, Other		001.99	16	10.83	0.09
Method Group 001.XX PCT			18	10.80	0.11
TOTAL NITROGEN					
Total Nitrogen, Combustion	993.13	010.60	13	10.87	0.08
Method Group 010.XX PCT			13	10.87	0.10
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	4	52.38	0.07
Total Phosphate, Spectrometric	978.02	020.20	21	52.31	0.19
Total Phosphate, ICP	970.03	020.40	2	52.55	0.35
Total Phosphate, Other	993.13	020.99	1	52.24	0.00
Method Group 020.XX PCT			28	52.32	0.24
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	10	0.31	0.12
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	2	0.41	0.04
Insoluble Phosphate, Automated	978.01	030.40	4	0.25	0.06
Method Group 030.XX PCT			16	0.31	0.14
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	14	52.00	0.08
Indirect Available Phosphate, Automated	960.02	040.40	1	51.82	0.00
Indirect Available Phosphate, Other		040.99	1	52.21	0.00
Method Group 040.XX PCT			16	52.00	0.14
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	3	51.84	0.26
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	51.48	0.28
Direct Available Phosphate, ICP		041.50	1	52.18	0.00
Direct Available Phosphate, EDTA Extract	993.01	041.60	2	51.66	1.23
Direct Available Phosphate, Other		041.99	1	49.30	0.00
Method Group 041.XX PCT			9	51.84	0.97
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Gravimetric Quimociac	962.03	048.10	2	46.86	0.07
Water Soluble Phosphate, Spectrometric	970.01	048.20	18	46.76	0.14
Water Soluble Phosphate, Other		048.99	2	45.44	1.07
Method Group 048.XX PCT			22	46.77	0.19
SOLUBLE POTASH AS K_2O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.17	0.00
Soluble Potash, Other		050.99	7	0.17	0.01
Method Group 050.XX PCT			9	0.17	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	15	1.47	0.15
Free Water, Other		060.99	2	1.39	0.00
Method Group 060.XX PCT			17	1.47	0.15
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	19	0.53	0.03
Acid Soluble Calcium, Titrimetric	945.03	101.70	1	0.56	0.00
Method Group 101.XX PCT			20	0.54	0.04
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, ICP		121.30	20	1.42	0.05
Method Group 121.XX PCT			20	1.42	0.07
WATER SOLUBLE MAGNESIUM					
Water Soluble Magnesium, Other		131.99	1	0.21	0.00
Method Group 131.XX PCT			1	0.21	0.00

SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	5	1.38	0.07
Sulfur, Other		144.99	14	1.32	0.06
Method Group 144.XX PCT			19	1.34	0.10
TOTAL SULFUR (S)					
Sulfur, Other		145.99	2	2.42	0.8
Method Group 145.XX PCT			2	2.42	0.9
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	8	13.4	2.5
Total Arsenic, Other		151.99	1	13.8	0.0
Method Group 151.XX PPM			9	13.6	2.8
ACID SOLUBLE BORON					
Acid Soluble Boron, Turbidimetric	949.02	165.70	1	1.34	0.0
Acid Soluble Boron, Other		165.99	1	108	0.0
Method Group 165.XX PPM			2	55	48.5
TOTAL CADMIUM					
Total Cadmium, ICP		181.30	11	4.1	1.5
Method Group 181.XX PPM			11	4.1	1.9
ALUMINUM AS Al_2O_3					
ICP, %			18	1.94	0.04
Method Group 190.XX PCT			18	1.94	0.05
TOTAL CHROMIUM					
Total Chromium, ICP		191.30	12	93	7.0
Method Group 191.XX PPM			12	93	8.5
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	8	4	0.9
Method Group 202.XX PPM			8	4	1.2
ACID SOLUBLE COPPER					
Method Group 221.XX PPM			5	1.2	0.8
ACID SOLUBLE IRON AS Fe_2O_3					
Acid Soluble Iron, ICP		241.30	19	1.82	0.04
Method Group 241.XX PCT			19	1.82	0.05
TOTAL LEAD					
Total Lead, ICP		251.30	12	1.9	0.6
Method Group 251.XX PPM			12	1.9	0.8
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	11	372	9.0
Method Group 261.XX PPM			11	372	11.0
TOTAL MERCURY					
Total Mercury, Atomic Absorbtion		281.00	2	1	0.42
Total Mercury, ICP		281.30	1	0.00	0.00
Method Group 281.XX PPM			3	0.01	0.51
TOTAL MOLYBDENUM					
Total Molybdenum, ICP		289.30	10	16	2.5
Method Group 289.XX PPM			10	16	3.0
TOTAL NICKEL					
Total Nickel, ICP		291.30	10	14.4	2.6
Total Nickel, icp		291.99	1	16.6	0.0
Method Group 291.XX PPM			11	14.8	3.2
TOTAL SELENIUM					
Total Selenium, ICP		301.30	3	0.0	0.3
Method Group 301.XX PPM			3	0.0	0.4
SODIUM AS Na_2O					
Sodium, Flame Photometric	974.01	311.30	1	0.07	0.00
Sodium, Other		311.99	12	0.22	0.02
Method Group 311.XX PCT			13	0.22	0.02
ACID SOLUBLE ZINC					
Acid Soluble Zinc, ICP		321.30	11	90.5	10.4
Acid Soluble Zinc, Other		321.99	1	800.0	0.0

Method Group 321.XX %		12	90.8	16.3
FLUORIDE				
Volumentric	325.10	18	2.25	0.10
Distilled/Electrode	325.99	2	2.39	0.01
Method Group 325.XX PCT		20	2.27	0.12

001.10 Lab		Ammoniacal Nitrogen MgO distillation
31	10.77	-1.340
Std Dev	10.76	-1.000
Median	10.76	0.000
Std Dev	10.76	1.000
31	10.76	1.340

001.99 Lab		Ammoniacal Nitrogen Other
38	11.20	-4.323
61	10.92	-1.037
Std Dev	10.91	-1.000
335	10.89	-0.692
34	10.88	-0.634
79	10.88	-0.634
79	10.88	-0.634
237	10.86	-0.403
32	10.85	-0.231
Median	10.83	0.000
275	10.81	0.231
32	10.80	0.346
24	10.79	0.403
81	10.77	0.692
23	10.76	0.749
24	10.76	0.807
Std Dev	10.74	1.000
23	10.72	1.210
61	10.69	1.614

001.XX Lab		Ammoniacal Nitrogen Total Method
38	11.20	-4.514
61	10.92	-1.298
Std Dev	10.89	-1.000
335	10.89	-0.959
34	10.88	-0.903
79	10.88	-0.903
79	10.88	-0.903
237	10.86	-0.677
32	10.85	-0.508
275	10.81	-0.056
Median	10.80	0.000
32	10.80	0.056
24	10.79	0.113
31	10.77	0.395
81	10.77	0.395
23	10.76	0.451
31	10.76	0.451
24	10.76	0.508
23	10.72	0.903
Std Dev	10.71	1.000
61	10.69	1.298

010.60 Lab		Total Nitrogen Combustion
79	11.02	-1.941
77	10.98	-1.378
79	10.97	-1.315
Std Dev	10.94	-1.000
39	10.91	-0.589
14	10.89	-0.313
14	10.89	-0.313
63	10.87	0.000
Median	10.87	0.000
103	10.83	0.438
140	10.82	0.564
31	10.81	0.751
31	10.79	0.939
Std Dev	10.79	1.000
29	10.79	1.002
38	10.65	2.693

010.XX Lab		Total Nitrogen Total Method
79	11.02	-1.941
77	10.98	-1.378
79	10.97	-1.315
Std Dev	10.94	-1.000
39	10.91	-0.589
14	10.89	-0.313
14	10.89	-0.313
63	10.87	0.000
Median	10.87	0.000
103	10.83	0.438
140	10.82	0.564
31	10.81	0.751
31	10.79	0.939
Std Dev	10.79	1.000
29	10.79	1.002
38	10.65	2.693

020.10 Lab		Total Phosphate Gravimetric Quimociac
241	52.47	-1.269
Std Dev	52.45	-1.000
83	52.39	-0.212
Median	52.38	0.000
82	52.36	0.212
Std Dev	52.30	1.000
84	52.18	2.821

020.20 Lab		Total Phosphate Spectrometric
31	52.64	-1.701
34	52.61	-1.520
31	52.59	-1.417
79	52.53	-1.134
79	52.52	-1.082
Std Dev	52.50	-1.000
38	52.45	-0.722
61	52.45	-0.722
140	52.45	-0.696
61	52.36	-0.232
32	52.33	-0.103
84	52.31	0.000
Median	52.31	0.000
16	52.28	0.139
23	52.22	0.490
81	52.21	0.515
32	52.20	0.567
14	52.19	0.618
14	52.19	0.618
23	52.19	0.644
24	52.17	0.722
24	52.14	0.876
Std Dev	52.12	1.000
237	52.10	1.082

020.40 Lab		Total Phosphate Automated
335	53.03	-1.340
Std Dev	52.91	-1.000
Median	52.55	0.000
Std Dev	52.20	1.000
16	52.08	1.340

020.99 Lab		Total Phosphate Other
275	52.24	0.000
Median	52.24	0.000

020.XX Lab		Total Phosphate Total Method
335	53.03	-3.582
31	52.64	-1.626
34	52.61	-1.448
31	52.59	-1.346
79	52.53	-1.067
79	52.52	-1.016
Std Dev	52.52	-1.000
241	52.47	-0.737
38	52.45	-0.660
61	52.45	-0.660
140	52.45	-0.635
83	52.39	-0.356
82	52.36	-0.203
61	52.36	-0.178
32	52.33	-0.051
Median	52.32	0.000
84	52.31	0.051
16	52.28	0.188
275	52.24	0.384
23	52.22	0.533
81	52.21	0.559
32	52.20	0.610
14	52.19	0.660
14	52.19	0.660
23	52.19	0.686
84	52.18	0.737
24	52.17	0.762
24	52.14	0.915
Std Dev	52.12	1.000
237	52.10	1.118
16	52.08	1.219

030.20 Lab		Insoluble Phosphate Spectrometric
79	0.51	-1.694
79	0.50	-1.608
140	0.46	-1.265
Std Dev	0.43	-1.000
23	0.38	-0.536
23	0.33	-0.107
Median	0.31	0.000
61	0.30	0.107
61	0.29	0.193
16	0.28	0.279
24	0.22	0.836
24	0.22	0.836

030.30 Lab		Insoluble Phosphate Alka. Quimociac
31	0.47	-1.340
Std Dev	0.46	-1.000
Median	0.41	0.000
Std Dev	0.37	1.000
31	0.36	1.340

030.40 Lab		Insoluble Phosphate Automated
34	0.40	-2.725
Std Dev	0.30	-1.000
16	0.27	-0.363
Median	0.25	0.000
32	0.23	0.363
32	0.22	0.454

030.XX Lab		Insoluble Phosphate Total Method
79	0.51	-1.694
79	0.50	-1.608
31	0.47	-1.351
140	0.46	-1.265
Std Dev	0.43	-1.000
34	0.40	-0.708
23	0.38	-0.536
31	0.36	-0.364
23	0.33	-0.107
Median	0.31	0.000
61	0.30	0.107
61	0.29	0.193
16	0.28	0.279
16	0.27	0.407
32	0.23	0.750
32	0.22	0.793
24	0.22	0.836
24	0.22	0.836

040.20 Lab		Indirect Available Phosphate Spectrometric
31	52.17	-2.055
61	52.15	-1.816
32	52.11	-1.340
Std Dev	52.08	-1.000
61	52.05	-0.625
79	52.03	-0.387
16	52.02	-0.244
79	52.01	-0.149
Median	52.00	0.000
140	51.99	0.149
32	51.98	0.208
24	51.96	0.506
24	51.93	0.864
Std Dev	51.91	1.000
23	51.86	1.638
23	51.84	1.876
31	51.62	4.556

040.40 Lab		Indirect Available Phosphate Automated
16	51.82	0.000
Median	51.82	0.000

040.99 Lab		Indirect Available Phosphate Other
34	52.21	0.000
Median	52.21	0.000

040.XX Lab		Indirect Available Phosphate Total Method
34	52.21	-1.822
31	52.17	-1.479
61	52.15	-1.308
Std Dev	52.11	-1.000
32	52.11	-0.965
61	52.05	-0.450
79	52.03	-0.279
16	52.02	-0.176
79	52.01	-0.107
Median	52.00	0.000
140	51.99	0.107
32	51.98	0.150
24	51.96	0.364
24	51.93	0.622
Std Dev	51.88	1.000
23	51.86	1.179
23	51.84	1.351
16	51.82	1.565
31	51.62	3.280

041.10 Lab		Direct Available Phosphate Gravimetric Quimociac
77	52.41	-2.179
Std Dev	52.10	-1.000
79	51.84	0.000
Median	51.84	0.000
79	51.71	0.501

041.20 Lab		Direct Available Phosphate Spectrometric
38	51.85	-1.340
Std Dev	51.76	-1.000
Median	51.48	0.000
Std Dev	51.20	1.000
237	51.11	1.340

041.50 Lab		Direct Available Phosphate ICP
63	52.18	0.000
Median	52.18	0.000

041.60 Lab		Direct Available Phosphate EDTA Extract
29	53.31	-1.340
Std Dev	52.89	-1.000
Median	51.66	0.000
Std Dev	50.43	1.000
103	50.02	1.340

041.99 Lab		Direct Available Phosphate Other
335	49.30	0.000
Median	49.30	0.000

041.XX Lab		Direct Available Phosphate Total Method
29	53.31	-1.850
Std Dev	52.63	-1.000
77	52.41	-0.711
63	52.18	-0.422
38	51.85	-0.013
79	51.84	0.000
Median	51.84	0.000
79	51.71	0.164
237	51.11	0.918
Std Dev	51.05	1.000
103	50.02	2.296
335	49.30	3.202

048.10 Lab		Water Soluble Phosphate Gravimetric Quimociac
82	46.96	-1.340
Std Dev	46.93	-1.000
Median	46.86	0.000
Std Dev	46.79	1.000
83	46.77	1.340

048.20 Lab		Water Soluble Phosphate Spectrometric
61	46.90	-0.963
81	46.90	-0.928
16	46.88	-0.823
24	46.84	-0.543
140	46.83	-0.438
32	46.82	-0.403
31	46.79	-0.158
61	46.78	-0.088
32	46.77	-0.053
Median	46.76	0.000
31	46.76	0.053
24	46.75	0.123

14	46.73	0.228
14	46.73	0.228
Std Dev	46.62	1.000
79	46.60	1.139
79	46.56	1.419
16	46.43	2.330
23	46.37	2.750
23	46.37	2.785

048.99		Water Soluble Phosphate
Lab		Other
34	46.88	-1.340
Std Dev	46.51	-1.000
Median	45.44	0.000
Std Dev	44.36	1.000
335	44.00	1.340

048.XX		Water Soluble Phosphate
Lab		Total Method
82	46.96	-1.233
Std Dev	46.92	-1.000
61	46.90	-0.871
81	46.90	-0.839
16	46.88	-0.740
34	46.88	-0.707
24	46.84	-0.477
140	46.83	-0.378
32	46.82	-0.345
31	46.79	-0.115
61	46.78	-0.049
32	46.77	-0.016
Median	46.77	0.000
83	46.77	0.016
31	46.76	0.082
24	46.75	0.148
14	46.73	0.247
14	46.73	0.247
Std Dev	46.62	1.000
79	46.60	1.102
79	46.56	1.365
16	46.43	2.220
23	46.37	2.614
23	46.37	2.647
335	44.00	18.201

050.50	$\%K_2O$	Soluble Potash
Lab		ICP(Oxalate)
23	0.17	-1.340
Std Dev	0.17	-1.000
Median	0.17	0.000
Std Dev	0.16	1.000
23	0.16	1.340

050.99		Soluble Potash
Lab	$\%K_2O$	Other
24	0.22	-5.896
24	0.18	-1.608
Std Dev	0.17	-1.000
61	0.17	-0.536
31	0.17	0.000
61	0.17	0.000
Median	0.17	0.000
31	0.16	0.536
81	0.16	0.536

050.XX		Soluble Potash
Lab	$\%K_2O$	Total Method
24	0.22	-7.370
24	0.18	-2.010
Std Dev	0.17	-1.000
23	0.17	-0.670
61	0.17	-0.670
31	0.17	0.000
61	0.17	0.000
Median	0.17	0.000
23	0.16	0.670
31	0.16	0.670
81	0.16	0.670

060.00		Free Water
Lab		Vacuum Oven
31	1.86	-2.486
31	1.64	-1.066
24	1.63	-1.001
Std Dev	1.62	-1.000
32	1.59	-0.775
24	1.55	-0.484
23	1.51	-0.226
23	1.48	-0.065
32	1.47	0.000
140	1.47	0.000
Median	1.47	0.000
16	1.46	0.097
79	1.39	0.517
79	1.33	0.904
Std Dev	1.32	1.000
61	1.05	2.712
61	1.02	2.906
34	0.35	7.233

060.99		Free Water
Lab		Other
14	1.39	0.000
14	1.39	0.000
Median	1.39	0.000

060.XX		Free Water
Lab		Total Method
31	1.86	-3.224
31	1.64	-1.382
24	1.63	-1.298
32	1.59	-1.005
Std Dev	1.59	-1.000
24	1.55	-0.628
23	1.51	-0.293
23	1.48	-0.084
32	1.47	0.000
140	1.47	0.000
Median	1.47	0.000
16	1.46	0.126
79	1.39	0.670
14	1.39	0.712
14	1.39	0.712
Std Dev	1.35	1.000
79	1.33	1.173
61	1.05	3.518
61	1.02	3.769
34	0.35	9.380

101.30		Acid Soluble Calcium
Lab	%CaO	ICP
32	0.63	-3.268
32	0.63	-3.105
24	0.62	-2.778
82	0.57	-1.307
Std Dev	0.56	-1.000
61	0.56	-0.817
61	0.56	-0.817
335	0.56	-0.817
34	0.55	-0.654
24	0.54	-0.327
23	0.53	0.000
Median	0.53	0.000
237	0.53	0.069
23	0.52	0.327
81	0.52	0.327
31	0.52	0.425
31	0.51	0.621
14	0.51	0.654
14	0.51	0.654
Std Dev	0.50	1.000
84	0.40	4.412
16	0.18	11.439

101.70		Acid Soluble Calcium
Lab	%CaO	Titrimetric
83	0.56	0.000
Median	0.56	0.000

101.XX		Acid Soluble Calcium
Lab	%CaO	Total Method
32	0.63	-3.124
32	0.63	-2.960
24	0.62	-2.631
82	0.57	-1.151
Std Dev	0.57	-1.000
83	0.56	-0.822
61	0.56	-0.658
61	0.56	-0.658
335	0.56	-0.658
34	0.55	-0.493
24	0.54	-0.164
Median	0.54	0.000
23	0.53	0.164
237	0.53	0.233
23	0.52	0.493

81	0.52	0.493
31	0.52	0.592
31	0.51	0.789
14	0.51	0.822
14	0.51	0.822
Std Dev	0.50	1.000
84	0.40	4.604
16	0.18	11.674

121.30		Acid Soluble Magnesium
Lab	%MgO	ICP
335	1.63	-3.881
82	1.50	-1.571
32	1.49	-1.386
32	1.48	-1.201
34	1.48	-1.109
Std Dev	1.47	-1.000
24	1.46	-0.832
237	1.45	-0.647
24	1.43	-0.185
23	1.42	-0.092
23	1.42	0.000
83	1.42	0.000
Median	1.42	0.000
61	1.41	0.185
84	1.41	0.185
31	1.40	0.370
61	1.40	0.370
31	1.38	0.647
81	1.38	0.739
14	1.37	0.832
14	1.37	0.832
Std Dev	1.36	1.000
16	1.36	1.017

121.XX		Acid Soluble Magnesium
Lab	%MgO	Total Method
335	1.63	-3.881
82	1.50	-1.571
32	1.49	-1.386
32	1.48	-1.201
34	1.48	-1.109
Std Dev	1.47	-1.000
24	1.46	-0.832
237	1.45	-0.647
24	1.43	-0.185
23	1.42	-0.092
23	1.42	0.000
83	1.42	0.000
Median	1.42	0.000
61	1.41	0.185
84	1.41	0.185
31	1.40	0.370
61	1.40	0.370
31	1.38	0.647
81	1.38	0.739
14	1.37	0.832
14	1.37	0.832
Std Dev	1.36	1.000
16	1.36	1.017

144..01		Sulfate Sulfur (S)
Lab		Gravimetric
16	4.17	-41.540
Std Dev	1.45	-1.000
83	1.43	-0.744
241	1.38	0.000
Median	1.38	0.000
79	1.34	0.596
79	1.33	0.744

144.99		Sulfate Sulfur (S)
Lab		Other
31	3.67	-41.167
31	3.64	-40.639
84	1.41	-1.538
Std Dev	1.38	-1.000
23	1.35	-0.513
32	1.35	-0.395
23	1.35	-0.395
34	1.34	-0.220
Median	1.32	0.000
32	1.31	0.220
24	1.29	0.571
24	1.29	0.659
61	1.27	0.923
Std Dev	1.27	1.000
81	1.26	1.098
61	1.21	1.977
237	0.57	13.234

144.XX		Sulfate Sulfur (S)
Lab		Total Method
16	4.17	-35.276
31	3.67	-28.981
31	3.64	-28.607
83	1.43	-1.122
Std Dev	1.42	-1.000
84	1.41	-0.873
241	1.38	-0.499
23	1.35	-0.145
32	1.35	-0.062
23	1.35	-0.062
79	1.34	0.000
Median	1.34	0.000
34	1.34	0.062
79	1.33	0.125
32	1.31	0.374
24	1.29	0.623
24	1.29	0.686
61	1.27	0.873
81	1.26	0.997
Std Dev	1.26	1.000
61	1.21	1.620
237	0.57	9.605

145.99		Total Sulfur (S)
Lab		Other
82	3.44	-1.340
Std Dev	3.18	-1.000
Median	2.42	0.000
Std Dev	1.66	1.000
335	1.40	1.340

145.XX		Total Sulfur (S)
Lab		Total Method
82	3.44	-1.340
Std Dev	3.18	-1.000
Median	2.42	0.000
Std Dev	1.66	1.000
335	1.40	1.340

151.30		Total Arsenic
Lab		ICP
140	16.10	-1.066
Std Dev	15.93	-1.000
82	15.20	-0.707
81	14.00	-0.229
24	13.60	-0.070
Median	13.43	0.000
335	13.25	0.070
31	10.95	0.986
Std Dev	10.92	1.000
31	10.90	1.006
84	9.20	1.684

151.99		Total Arsenic
Lab		Other
275	13.85	0.000
Median	13.85	0.000

151.XX		Total Arsenic
Lab		Total Method
140	16.10	-1.098
Std Dev	15.88	-1.000
82	15.20	-0.703
81	14.00	-0.176
275	13.85	-0.108
24	13.60	0.000
Median	13.60	0.000
335	13.25	0.154
Std Dev	11.32	1.000
31	10.95	1.164
31	10.90	1.186
84	9.20	1.933

165.70		Acid Soluble Boron
Lab		Turbidimetric
24	1.34	0.000
Median	1.34	0.000

165.99		Acid Soluble Boron
Lab	PPM	Other
84	108.00	0.000
Median	108.00	0.000

65.XX, ppm		Acid Soluble Boron
Lab	PPM	Total Method
84	108.00	-1.340
Std Dev	94.47	-1.000
Median	54.67	0.000
Std Dev	14.87	1.000
24	1.34	1.340

181.30		Total Cadmium
Lab	PPM	ICP
31	<1.0	0.000
335	5.41	-0.879
82	5.30	-0.808
83	5.00	-0.613
84	4.80	-0.483
81	4.35	-0.191
237	4.06	0.000
Median	4.06	0.000
16	3.98	0.049
24	3.87	0.120
Std Dev	2.51	1.000
61	1.80	1.463
61	1.50	1.658
31	0.85	2.080

181.XX		Total Cadmium
Lab	PPM	Total Method
31	<1.0	0.000
335	5.41	-0.879
82	5.30	-0.808
83	5.00	-0.613
84	4.80	-0.483
81	4.35	-0.191
237	4.06	0.000
Median	4.06	0.000
16	3.98	0.049
24	3.87	0.120
Std Dev	2.51	1.000
61	1.80	1.463
61	1.50	1.658
31	0.85	2.080

190.00		Aluminum
Lab	$\%Al_2O_3$	ICP
84	2.09	-3.633
14	1.99	-1.251
14	1.99	-1.251
82	1.98	-1.012
Std Dev	1.98	-1.000
32	1.97	-0.655
237	1.95	-0.298
23	1.95	-0.179
32	1.94	-0.060
34	1.94	-0.060
Median	1.94	0.000
23	1.94	0.060
31	1.93	0.298
81	1.92	0.536
24	1.91	0.774
31	1.91	0.774
Std Dev	1.90	1.000
24	1.90	1.012
61	1.82	2.799
61	1.81	3.037
16	1.80	3.276

190.XX		Aluminum
Lab	$\%Al_2O_3$	Total Method
84	2.09	-3.633
14	1.99	-1.251
14	1.99	-1.251
82	1.98	-1.012
Std Dev	1.98	-1.000
32	1.97	-0.655
237	1.95	-0.298
23	1.95	-0.179
32	1.94	-0.060
34	1.94	-0.060
Median	1.94	0.000
23	1.94	0.060
31	1.93	0.298
81	1.92	0.536
24	1.91	0.774
31	1.91	0.774
Std Dev	1.90	1.000
24	1.90	1.012
61	1.82	2.799
61	1.81	3.037
16	1.80	3.276

191.30		Total Chromium
Lab		ICP
335	110.57	-2.505
16	100.50	-1.069
Std Dev	100.01	-1.000
24	98.00	-0.713
61	97.50	-0.641
61	94.50	-0.214
83	94.50	-0.214
Median	93.00	0.000
84	91.50	0.214
237	90.93	0.295
82	88.50	0.641
31	87.40	0.798
31	87.10	0.841
Std Dev	85.99	1.000
81	67.00	3.706

191.XX		Total Chromium
Lab	PPM	Total Method
335	110.57	-2.505
16	100.50	-1.069
Std Dev	100.01	-1.000
24	98.00	-0.713
61	97.50	-0.641
61	94.50	-0.214
83	94.50	-0.214
Median	93.00	0.000
84	91.50	0.214
237	90.93	0.295
82	88.50	0.641
31	87.40	0.798
31	87.10	0.841
Std Dev	85.99	1.000
81	67.00	3.706

202.30		Acid Soluble Cobalt
Lab	PPM	ICP
31	<1.00	0.000
31	<1.00	0.000

202.XX		Acid Soluble Cobalt
Lab	PPM	Total Method
31	<1.00	0.000
31	<1.00	0.000
61	<1	0.000
61	<1	0.000
335	5.67	-2.209
83	5.00	-1.499
Std Dev	4.53	-1.000
84	4.35	-0.810
81	3.60	-0.016
Median	3.59	0.000
82	3.57	0.016
16	3.36	0.238
237	2.91	0.715
24	2.58	1.065

221.30		Acid Soluble Copper
Lab	PPM	ICP
31	<1.00	0.000
31	<1.00	0.000
83	<1	0.000
84	<1	0.000
24	<0.0003	0.000
61	2.00	-1.266
61	2.00	-1.266
Std Dev	1.82	-1.000
82	1.15	0.000
Median	1.15	0.000
81	1.10	0.074
16	0.00	1.712

221.XX		Acid Soluble Copper
Lab	PPM	Total Method
31	<1.00	0.000
31	<1.00	0.000
83	<1	0.000
84	<1	0.000
24	<0.0003	0.000
61	2.00	-1.266
61	2.00	-1.266
Std Dev	1.82	-1.000
82	1.15	0.000
Median	1.15	0.000

81	1.10	0.074
16	0.00	1.712

241.30		Acid Soluble Iron
Lab	$\%Fe_2O_3$	ICP
83	1.98	-4.084
84	1.98	-3.956
Std Dev	1.86	-1.000
23	1.86	-0.893
34	1.86	-0.893
82	1.86	-0.893
23	1.85	-0.766
24	1.84	-0.510
81	1.84	-0.510
24	1.83	-0.128
14	1.82	0.000
14	1.82	0.000
32	1.82	0.000
Median	1.82	0.000
16	1.82	0.115
32	1.81	0.383
237	1.80	0.638
Std Dev	1.78	1.000
31	1.76	1.531
61	1.76	1.659
31	1.75	1.914
61	1.71	2.808

241.XX		Acid Soluble Iron
Lab	$\%Fe_2O_3$	Total Method
83	1.98	-4.084
84	1.98	-3.956
Std Dev	1.86	-1.000
23	1.86	-0.893
34	1.86	-0.893
82	1.86	-0.893
23	1.85	-0.766
24	1.84	-0.510
81	1.84	-0.510
24	1.83	-0.128
14	1.82	0.000
14	1.82	0.000
32	1.82	0.000
Median	1.82	0.000
16	1.82	0.115
32	1.81	0.383
237	1.80	0.638
Std Dev	1.78	1.000
31	1.76	1.531
61	1.76	1.659
31	1.75	1.914
61	1.71	2.808

251.30		Total Lead
Lab	PPM	ICP
61	3.00	-1.816
Std Dev	2.48	-1.000
24	2.22	-0.584
81	2.21	-0.568
31	2.10	-0.395
61	2.00	-0.237
82	1.90	-0.079
Median	1.85	0.000
31	1.80	0.079
16	1.63	0.355
335	1.33	0.829
Std Dev	1.22	1.000
237	1.14	1.121
84	1.10	1.184
83	1.00	1.342

251.XX		Total Lead
Lab	PPM	Total Method
61	3.00	-1.816
Std Dev	2.48	-1.000
24	2.22	-0.584
81	2.21	-0.568
31	2.10	-0.395
61	2.00	-0.237
82	1.90	-0.079
Median	1.85	0.000
31	1.80	0.079
16	1.63	0.355
335	1.33	0.829
Std Dev	1.22	1.000
237	1.14	1.121
84	1.10	1.184
83	1.00	1.342

261.30		Acid Soluble Manganese
Lab		ICP
83	379.00	-0.795
61	377.50	-0.628
84	376.00	-0.461
24	374.00	-0.239
61	373.50	-0.183
237	371.85	0.000
Median	371.85	0.000
31	365.60	0.695
82	363.50	0.929
Std Dev	362.86	1.000
31	362.40	1.051
16	361.50	1.151
81	360.00	1.318

261.XX		Acid Soluble Manganese
Lab	PPM	Total Method
83	379.00	-0.795
61	377.50	-0.628
84	376.00	-0.461
24	374.00	-0.239
61	373.50	-0.183
237	371.85	0.000
Median	371.85	0.000
31	365.60	0.695
82	363.50	0.929
Std Dev	362.86	1.000
31	362.40	1.051
16	361.50	1.151
81	360.00	1.318

281.00		Total Mercury
Lab	PPM	Atomic Absorbtion
82	1.13	-1.340
Std Dev	0.99	-1.000
Median	0.57	0.000
Std Dev	0.14	1.000
81	0.00	1.340

281.30		Total Mercury
Lab	PPM	ICP
24	<0.001	0.000
335	0.01	0.000
Median	0.01	0.000

281.XX		Total Mercury
Lab	PPM	Total Method
24	<0.001	0.000
82	1.13	-2.656
Std Dev	0.43	-1.000
335	0.01	0.000
Median	0.01	0.000
81	0.00	0.024

289.30		Total Molybdenum
Lab	PPM	ICP

289.XX		Total Molybdenum
Lab	PPM	Total Method
83	40.50	-9.916
16	19.00	-1.320
24	18.90	-1.280
Std Dev	18.20	-1.000
82	16.80	-0.440
61	16.00	-0.120
Median	15.70	0.000
31	15.40	0.120
31	15.05	0.260
237	15.02	0.274
Std Dev	13.20	1.000
61	13.00	1.080
81	7.50	3.279

291.30		Total Nickel
Lab		ICP
335		

291.99		Total Nickel
Lab	PPM	Other
31	16.55	0.000
Median	16.55	0.000

291.XX		Total Nickel
Lab	PPM	Total Method
335	30.16	-5.908
84	18.00	-1.246
Std Dev	17.36	-1.000

31	16.55	-0.690
24	15.30	-0.211
31	14.90	-0.058
82	14.75	0.000
Median	14.75	0.000
16	13.95	0.307
237	13.86	0.341
Std Dev	12.14	1.000
61	11.00	1.438
81	10.75	1.534
61	8.00	2.588

301.30		Total Selenium
Lab	PPM	ICP
84	0.85	-2.562
Std Dev	0.36	-1.000
24	0.05	0.000
Median	0.05	0.000
335	0.01	0.118

301.XX		Total Selenium
Lab	PPM	Total Mthod
84	0.85	-2.562
Std Dev	0.36	-1.000
24	0.05	0.000
Median	0.05	0.000
335	0.01	0.118

311.30		Sodium
Lab	$\%Na_2O$	Flame Photometric
237	0.07	0.000
Median	0.07	0.000

311.99		Sodium
Lab	$\%Na_2O$	Other
23	0.25	-2.207
23	0.24	-1.576
Std Dev	0.23	-1.000
24	0.23	-0.946
82	0.23	-0.631
84	0.23	-0.631
24	0.22	0.000
31	0.22	0.000
83	0.22	0.000
Median	0.22	0.000
31	0.21	0.631
61	0.21	0.631
61	0.20	0.946
81	0.20	0.946

311.XX		Sodium
Lab	$\%Na_2O$	Total Method
23	0.25	-2.345
23	0.24	-1.675
24	0.23	-1.005
Std Dev	0.23	-1.000
82	0.23	-0.670
84	0.23	-0.670
24	0.22	0.000
31	0.22	0.000
83	0.22	0.000
Median	0.22	0.000
31	0.21	0.670
61	0.21	0.670
Std Dev	0.20	1.000
61	0.20	1.005
81	0.20	1.005
237	0.07	9.715

321.30		Acid Soluble Zinc
Lab	PPM	ICP
81	129.50	-3.766
24	113.00	-2.173
31	102.60	-1.169
Std Dev	100.85	-1.000
31	99.15	-0.835
237	91.11	-0.059
61	90.50	0.000
Median	90.50	0.000
61	88.00	0.241
84	87.50	0.290
83	86.50	0.386
82	84.35	0.594
Std Dev	80.15	1.000
16	61.30	2.820

321.99		Acid Soluble Zinc
Lab		Other
38	800.00	0.000
Median	800.00	0.000

321.XX		Acid Soluble Zinc
Lab	PPM	Total Method
38	800.00	-52.943
81	129.50	-2.889
24	113.00	-1.657
Std Dev	104.20	-1.000
31	102.60	-0.881
31	99.15	-0.623
237	91.11	-0.023
Median	90.81	0.000
61	90.50	0.023
61	88.00	0.209
84	87.50	0.247
83	86.50	0.321
82	84.35	0.482
Std Dev	77.41	1.000
16	61.30	2.203

325.10		Fluoride
Lab	%	Electrode
79	2.36	-1.038
34	2.35	-0.942
79	2.35	-0.942
16	2.30	-0.410
23	2.30	-0.410
23	2.30	-0.410
83	2.27	-0.169
32	2.27	-0.121
32	2.27	-0.121
Median	2.25	0.000
31	2.24	0.121
84	2.24	0.169
24	2.22	0.362
31	2.19	0.604
24	2.15	1.038
14	2.08	1.666
14	2.08	1.666
82	1.97	2.728
81	1.91	3.356

325.99		Fluoride
Lab	%	Other
61	2.40	-1.340
Median	2.39	0.000
61	2.38	1.340

325.XX		Fluoride
Lab	%	Total Method
61	2.40	-1.340
61	2.38	-1.134
79	2.36	-0.979
34	2.35	-0.876
79	2.35	-0.876
16	2.30	-0.309
23	2.30	-0.309
23	2.30	-0.309
83	2.27	-0.052
32	2.27	0.000
32	2.27	0.000
Median	2.27	0.000
31	2.24	0.258
84	2.24	0.309
24	2.22	0.515
31	2.19	0.773
24	2.15	1.237
14	2.08	1.907
14	2.08	1.907
82	1.97	3.041
81	1.91	3.711