

AFPC
2013-09 **Grade** 18-46-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, Other		001.99	11	18.22	0.13
Method Group 001.XX PCT			11	18.22	0.16
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	18.39	0.12
Total Nitrogen, Salicylic	955.04d	010.12	1	18.12	0.00
Total Nitrogen, Combustion	993.13	010.60	18	18.31	0.10
Total Nitrogen, Other		010.99	7	18.36	0.02
Method Group 010.XX PCT			29	18.34	0.13
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	46.80	0.00
Total Phosphate, Spectrometric	978.02	020.20	19	46.83	0.18
Total Phosphate, Alka. Quimociac	955.04d	020.30	1	46.40	0.00
Total Phosphate, ICP	970.03	020.40	3	46.80	0.37
Total Phosphate, Other	993.13	020.99	2	46.77	0.21
Method Group 020.XX PCT			26	46.82	0.28
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	12	0.04	0.04
Insoluble Phosphate, Automated	978.01	030.40	2	0.05	0.01
Insoluble Phosphate, Other		030.99	2	0.05	0.01
Method Group 030.XX PCT			16	0.04	0.04
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	13	46.75	0.15
Indirect Available Phosphate, Alka. Quimociac	960.02	040.30	1	46.75	0.00
Indirect Available Phosphate, Other		040.99	1	46.83	0.00
Method Group 040.XX PCT			15	46.75	0.16
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	46.42	0.13
Direct Available Phosphate, Automated	978.01	041.40	2	47.05	0.19
Direct Available Phosphate, ICP		041.50	3	45.68	0.39
Direct Available Phosphate, EDTA Extract	993.01	041.60	6	46.85	0.20
Method Group 041.XX PCT			13	46.66	0.72
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	15	43.87	0.45
Water Soluble Phosphate, Alka. Quimociac	964.04	048.30	1	44.01	0.00
Water Soluble Phosphate, Other		048.99	3	44.35	0.09
Method Group 048.XX PCT			19	44.01	0.48
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.19	0.00
Soluble Potash, ICP(Citrate)		050.51	2	0.18	0.01
Soluble Potash, Flame Photometric(Citrate)	983.02B(b)	050.61	1	0.27	0.00
Soluble Potash, Other		050.99	7	0.19	0.01
Method Group 050.XX PCT			12	0.19	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	15	1.73	0.10
Free Water, Vacuum Desiccate	965.08A	060.10	2	4.01	0.06
Free Water, Other		060.99	2	1.80	0.00
Method Group 060.XX PCT			19	1.76	0.12
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	14	0.61	0.01

Method Group 101.XX PCT		14	0.61	0.02
ACID SOLUBLE MAGNESIUM AS MgO				
Acid Soluble Magnesium, ICP	121.30	16	1.31	0.03
Method Group 121.XX PCT		16	1.31	0.04
SULFATE SULFUR (S)				
Sulfur, Gravimetric	980.02(a) 144.01	3	1.82	0.05
Sulfur, Spectrometric	144.70	2	1.86	0.00
Sulfur, Other	144.99	8	1.86	0.03
Method Group 144.XX PCT		13	1.86	0.05
TOTAL SULFUR (S)				
Sulfur, Other	145.99	3	2.04	0.12
Method Group 145.XX PCT		3	2.04	0.14
TOTAL ARSENIC				
Total Arsenic, ICP	980.02(b) 151.02	5	2	0.4
Total Arsenic, Other	151.99	2	2	0.0
Method Group 151.XX PPM		7	2	0.5
ACID SOLUBLE BORON				
Acid Soluble Boron, Other	165.99	1	96	0.0
Method Group 165.XX PPM		1	96	0.0
TOTAL CADMIUM				
Total Cadmium, ICP	181.30	7	24	0.6
Total Cadmium, Other	181.99	1	21	0.0
Method Group 181.XX PPM		8	24	0.8
ALUMINUM AS Al₂O₃				
ICP, %		16	0.52	0.01
Method Group 190.XX PCT		16	0.52	0.01
TOTAL CHROMIUM				
Total Chromium, ICP	191.30	5	255	0.7
Total Chromium, Other	191.99	1	254	0.0
Method Group 191.XX PPM		6	254	0.8
ACID SOLUBLE COBALT				
Acid Soluble Cobalt, ICP	202.30	5	1	0.4
Acid Soluble Cobalt, Other	202.99	1	1	0.0
Method Group 202.XX PPM		6	1	0.4
ACID SOLUBLE COPPER				
Acid Soluble Copper, Atomic Absorption	975.01 221.00	1	1	0.0
Acid Soluble Copper, ICP	221.30	5	1	0.7
Acid Soluble Copper, Other	221.99	1	0	0.0
Method Group 221.XX PPM		6	1	0.9
ACID SOLUBLE IRON AS Fe₂O₃				
Acid Soluble Iron, ICP	241.30	16	0.64	0.02
Method Group 241.XX PCT		17	0.64	0.02
TOTAL LEAD				
Total Lead, ICP	251.30	7	1	0.6
Total Lead, Other	251.99	1	0	0.0
Method Group 251.XX PPM		8	1	0.8
ACID SOLUBLE MANGANESE				
Acid Soluble Manganese, Atomic Absorption	972.02b 261.11	1	32	0.0
Acid Soluble Manganese, ICP	972.02a 261.30	1	36	0.0
Acid Soluble Manganese, Other	261.99	5	37	4.5
Method Group 261.XX PPM		7	36	4.9
TOTAL MOLYBDENUM				
Total Molybdenum, ICP	289.30	5	4	0.7
Total Molybdenum, Other	289.99	1	4	0.0
Method Group 289.XX PPM		6	4	0.9

TOTAL NICKEL					
Total Nickel, ICP	291.30		5	13	0.0
Total Nickel, Other	291.99		1	13	0.0
Method Group 291.XX PPM			6	13	0.2
TOTAL SELENIUM					
Total Selenium, ICP	301.30		2	0	0.0
Method Group 301.XX PPM			2	0	0.0
SODIUM AS Na₂O					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.28	0.00
Sodium, Other		311.99	8	0.29	0.01
Method Group 311.XX PCT			9	0.28	0.01
ACID SOLUBLE ZINC					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	1	307.8	0.0
Acid Soluble Zinc, ICP		321.30	6	305.3	13.1
Acid Soluble Zinc, Other		321.99	2	327.8	3.9
Method Group 321.XX PPM			9	308.0	16.3
FLUORIDE					
Volumetric	325.10		13	1.40	0.10
Distilled/Electrode	325.99		2	1.39	0.02
Method Group 325.XX PCT			15	1.40	0.11

001.99 Ammoniacal Nitrogen		
Lab		Other
34	18.41	-1.476
79	18.40	-1.359
61	18.39	-1.321
140	18.35	-1.010
Std Dev	18.35	-1.000
24	18.31	-0.699
24	18.22	0.000
Median	18.22	0.000
32	18.22	0.039
275	18.20	0.155
61	18.20	0.194
32	18.19	0.272
275	18.14	0.621

001.XX Ammoniacal Nitrogen		
Lab		Total Method
34	18.41	-1.476
79	18.40	-1.359
61	18.39	-1.321
140	18.35	-1.010
Std Dev	18.35	-1.000
24	18.31	-0.699
24	18.22	0.000
Median	18.22	0.000
32	18.22	0.039
275	18.20	0.155
61	18.20	0.194
32	18.19	0.272
275	18.14	0.621

010.11 Total Nitrogen		
Lab		Modified Comprehensive
219	18.53	-1.210
Std Dev	18.50	-1.000
43	18.39	0.000
Median	18.39	0.000
Std Dev	18.27	1.000
43	18.22	1.470

010.12 Total Nitrogen		
Lab		Salicylic
107	18.12	0.000

Median	18.12	0.000
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010.60 Total Nitrogen		
Lab		Combustion
80	18.95	-6.294
47	18.55	-2.360
79	18.50	-1.869
111	18.42	-1.082
Std Dev	18.41	-1.000
39	18.39	-0.787
66	18.39	-0.738
9	18.39	-0.738
14	18.35	-0.344
49	18.31	0.000
Median	18.31	0.000
219	18.31	0.000
14	18.31	0.049
24	18.30	0.098
137	18.29	0.197
75	18.24	0.688
Std Dev	18.21	1.000
24	18.20	1.082
99	18.19	1.180
110	18.05	2.557
103	18.02	2.901

010.99 Total Nitrogen		
Lab		Other
34	18.45	-4.629
Std Dev	18.38	-1.000
140	18.37	-0.487
23	18.36	0.000
23	18.36	0.000
Median	18.36	0.000
32	18.34	0.975
Std Dev	18.33	1.000
32	18.33	1.218
310	18.09	12.913

010.XX Total Nitrogen		
Lab		Total Method
80	18.95	-5.683
47	18.55	-1.987
219	18.53	-1.756

79	18.50	-1.525
34	18.45	-1.063
Std Dev	18.44	-1.000
111	18.42	-0.786
39	18.39	-0.508
66	18.39	-0.462
9	18.39	-0.462
43	18.39	-0.462
140	18.37	-0.277
23	18.36	-0.185
23	18.36	-0.185
14	18.35	-0.092
32	18.34	0.000
Median	18.34	0.000
32	18.33	0.046
49	18.31	0.231
219	18.31	0.231
14	18.31	0.277
24	18.30	0.323
137	18.29	0.416
75	18.24	0.878
Std Dev	18.23	1.000
43	18.22	1.109
24	18.20	1.248
99	18.19	1.340
107	18.12	1.987
310	18.09	2.264
110	18.05	2.634
103	18.02	2.957

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
219	46.80	0.000
Median	46.80	0.000

020.20 Total Phosphate		
Lab		Spectrometric
110	48.25	-8.040
14	47.15	-1.834
14	47.13	-1.693
275	47.10	-1.552
9	47.05	-1.241
Std Dev	47.00	-1.000
275	46.92	-0.536

140	46.91	-0.451
34	46.86	-0.197
24	46.83	-0.028
32	46.83	0.000
Median	46.83	0.000
61	46.82	0.028
32	46.82	0.056
23	46.79	0.197
23	46.78	0.282
61	46.72	0.621
24	46.70	0.705
79	46.69	0.790
Std Dev	46.65	1.000
43	46.63	1.100
43	46.35	2.680

020.30 Total Phosphate		
Lab		Alka. Quimociac
111	46.40	0.000
Median	46.40	0.000

020.40 Total Phosphate		
Lab		Automated
219	47.56	-2.034
Std Dev	47.17	-1.000
9	46.80	0.000
Median	46.80	0.000
137	46.56	0.646

020.99 Total Phosphate		
Lab		Other
99	47.05	-1.340
Std Dev	46.98	-1.000
Median	46.77	0.000
Std Dev	46.55	1.000
310	46.48	1.340

020.XX Total Phosphate		
Lab		Total Method
110	48.25	-6.192
219	47.56	-3.188
14	47.15	-1.437
14	47.13	-1.329
275	47.10	-1.221

99	47.05	-1.005
Std Dev	47.05	-1.000
9	47.05	-0.983
275	46.92	-0.443
140	46.91	-0.378
34	46.86	-0.184
24	46.83	-0.054
32	46.83	-0.032
61	46.82	-0.011
Median	46.82	0.000
32	46.82	0.011
9	46.80	0.076
219	46.80	0.097
23	46.79	0.119
23	46.78	0.184
61	46.72	0.443
24	46.70	0.508
79	46.69	0.573
43	46.63	0.810
Std Dev	46.59	1.000
137	46.56	1.113
310	46.48	1.459
111	46.40	1.826
43	46.35	2.021

030.20 Insoluble Phosphate		
Lab		Spectrometric
14	0.12	-1.751
14	0.11	-1.627
61	0.09	-1.128
Std Dev	0.08	-1.000
61	0.08	-0.879
43	0.05	-0.106
140	0.05	-0.006
Median	0.04	0.000
43	0.04	0.006
23	0.03	0.368
79	0.03	0.368
23	0.03	0.492
24	0.02	0.617
24	0.02	0.617

030.40 Insoluble Phosphate		
Lab		Automated

9	0.06	-1.340
Std Dev	0.05	-1.000
Median	0.05	0.000
Std Dev	0.04	1.000
34	0.04	1.340
030.99 Insoluble Phosphate		
Lab		Other
32	0.07	-1.340
Std Dev	0.06	-1.000
Median	0.05	0.000
Std Dev	0.03	1.000
32	0.03	1.340

030.XX Insoluble Phosphate		
Lab		Total Method
14	0.12	-2.429
14	0.11	-2.256
61	0.09	-1.565
61	0.08	-1.219
Std Dev	0.07	-1.000
32	0.07	-0.700
9	0.06	-0.354
43	0.05	-0.147
140	0.05	-0.009
Median	0.04	0.000
43	0.04	0.009
34	0.04	0.164
23	0.03	0.510
32	0.03	0.510
79	0.03	0.510
23	0.03	0.683
24	0.02	0.856
24	0.02	0.856

040.20 Indirect Available Phosphate		
Lab		Spectrometric
14	47.04	-1.863
14	47.02	-1.732
9	46.99	-1.569
Std Dev	46.90	-1.000
140	46.86	-0.719
24	46.81	-0.392
23	46.76	-0.065

23	46.75	0.000
Median	46.75	0.000
61	46.73	0.131
24	46.68	0.458
79	46.66	0.621
61	46.64	0.752
Std Dev	46.60	1.000
43	46.59	1.079
43	46.30	2.941

040.30 Indirect Available Phosphate		
Lab		Alka. Quimociac
9	46.75	0.000
Median	46.75	0.000

040.99 Indirect Available Phosphate		
Lab		Other
34	46.83	0.000
Median	46.83	0.000

040.XX Indirect Available Phosphate		
Lab		Total Method
14	47.04	-2.152
14	47.02	-2.001
9	46.99	-1.812
Std Dev	46.88	-1.000
140	46.86	-0.830
34	46.83	-0.604
24	46.81	-0.453
23	46.76	-0.075
23	46.75	0.000
Median	46.75	0.000
9	46.75	0.038
61	46.73	0.151
24	46.68	0.528
79	46.66	0.717
61	46.64	0.868
Std Dev	46.62	1.000
43	46.59	1.246
43	46.30	3.397

041.10 Direct Available Phosphate		
Lab		Gravimetric Quimociac
219	46.59	-1.340

Std Dev	46.55	-1.000
Median	46.42	0.000
Std Dev	46.29	1.000
47	46.25	1.340

041.40 Direct Available Phosphate		
Lab		Automated
103	47.30	-1.340
Std Dev	47.24	-1.000
Median	47.05	0.000
Std Dev	46.86	1.000
49	46.80	1.340

041.50 Direct Available Phosphate		
Lab		ICP
66	46.10	-1.072
Std Dev	46.07	-1.000
47	45.68	0.000
Median	45.68	0.000
Std Dev	45.29	1.000
80	45.05	1.608

041.60 Direct Available Phosphate		
Lab		EDTA Extract
219	47.01	-0.754
275	46.99	-0.679
29	46.89	-0.170
Median	46.85	0.000
275	46.82	0.170
75	46.66	0.994
Std Dev	46.65	1.000
137	45.31	7.738

041.XX Direct Available Phosphate		
Lab		Total Method
103	47.30	-1.097
Std Dev	47.24	-1.000
219	47.01	-0.595
275	46.99	-0.570
29	46.89	-0.396
275	46.82	-0.281
49	46.80	-0.247
75	46.66	0.000
Median	46.66	0.000

219	46.59	0.111
47	46.25	0.697
66	46.10	0.944
Std Dev	46.07	1.000
47	45.68	1.658
137	45.31	2.296
80	45.05	2.729

048.20 Water Soluble Phosphate Spectrometric		
Lab		
9	44.73	-1.932
Std Dev	44.31	-1.000
23	44.29	-0.938
14	44.22	-0.793
61	44.22	-0.793
23	44.21	-0.770
14	44.11	-0.536
61	44.01	-0.324
43	43.87	0.000
Median	43.87	0.000
79	43.77	0.223
43	43.71	0.357
24	43.68	0.413
275	43.55	0.703
24	43.52	0.770
140	43.52	0.782
Std Dev	43.42	1.000
275	43.09	1.731

048.30 Water Soluble Phosphate Alka. Quimociac		
Lab		
111	44.01	0.000
Median	44.01	0.000

048.99 Water Soluble Phosphate Other		
Lab		
32	44.39	-0.383
32	44.35	0.000
Median	44.35	0.000
Std Dev	44.26	1.000
34	44.14	2.297

048.XX Water Soluble Phosphate Total Method		
Lab		

9	44.73	-1.829
Std Dev	44.40	-1.000
32	44.39	-0.953
32	44.35	-0.864
23	44.29	-0.699
14	44.22	-0.533
61	44.22	-0.533
23	44.21	-0.508
34	44.14	-0.330
14	44.11	-0.241
61	44.01	0.000
Median	44.01	0.000
111	44.01	0.013
43	43.87	0.368
79	43.77	0.622
43	43.71	0.775
24	43.68	0.838
Std Dev	43.62	1.000
275	43.55	1.169
24	43.52	1.245
140	43.52	1.257
275	43.09	2.337

050.50 %K ₂ O Soluble Potash ICP(Oxalate)		
Lab		
23	0.19	0.000
23	0.19	0.000
Median	0.19	0.000

050.51 %K ₂ O Soluble Potash ICP(Citrate)		
Lab		
9	0.19	-1.340
Std Dev	0.19	-1.000
Median	0.18	0.000
Std Dev	0.17	1.000
137	0.17	1.340

050.61 Soluble Potash Flame Photometric(Citrate)		
Lab		
219	0.27	0.000
Median	0.27	0.000

050.99 Soluble Potash Other		
Lab	%K ₂ O	

24	0.21	-2.435
43	0.20	-1.205
Std Dev	0.20	-1.000
43	0.19	-0.501
61	0.19	0.000
Median	0.19	0.000
24	0.18	0.487
61	0.18	0.487
Std Dev	0.17	1.000
80	0.11	7.304

050.XX Soluble Potash Total Method		
Lab	%K ₂ O	
219	0.27	-8.968
24	0.21	-2.242
Std Dev	0.20	-1.000
43	0.20	-0.827
43	0.19	-0.016
9	0.19	0.000
23	0.19	0.000
23	0.19	0.000
Median	0.19	0.000
61	0.19	0.561
Std Dev	0.18	1.000
24	0.18	1.121
61	0.18	1.121
137	0.17	2.803
80	0.11	8.968

060.00 Free Water Vacuum Oven		
Lab		
140	1.94	-2.047
24	1.87	-1.413
Std Dev	1.83	-1.000
24	1.82	-0.926
111	1.81	-0.780
79	1.80	-0.731
43	1.76	-0.292
23	1.74	-0.097
23	1.73	0.000
Median	1.73	0.000
9	1.72	0.049
32	1.69	0.341
34	1.67	0.536

32	1.66	0.633
43	1.66	0.633
Std Dev	1.62	1.000
14	0.98	7.260
14	0.98	7.260

060.10 Free Water Vacuum Desiccate		
Lab		
61	4.10	-1.340
Std Dev	4.07	-1.000
Median	4.01	0.000
Std Dev	3.95	1.000
61	3.93	1.340

060.99 Free Water Other		
Lab		
275	1.80	-1.340
Std Dev	1.80	-1.000
Median	1.80	0.000
Std Dev	1.79	1.000
275	1.79	1.340

060.XX Free Water Total Method		
Lab		
61	4.10	-23.665
61	3.93	-21.946
140	1.94	-1.820
24	1.87	-1.163
Std Dev	1.85	-1.000
24	1.82	-0.657
111	1.81	-0.506
79	1.80	-0.455
275	1.80	-0.455
275	1.79	-0.354
43	1.76	0.000
Median	1.76	0.000
23	1.74	0.202
23	1.73	0.303
9	1.72	0.354
32	1.69	0.657
34	1.67	0.860
32	1.66	0.961
43	1.66	0.961
Std Dev	1.66	1.000

14	0.98	7.838
14	0.98	7.838

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
24	0.63	-1.608
34	0.63	-1.608
43	0.62	-1.007
Std Dev	0.62	-1.000
61	0.62	-0.893
32	0.62	-0.536
23	0.61	-0.179
24	0.61	-0.179
Median	0.61	0.000
14	0.61	0.179
23	0.61	0.179
14	0.60	0.536
61	0.60	0.536
43	0.60	0.718
Std Dev	0.59	1.000
32	0.59	1.251
9	0.59	1.608

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
24	0.63	-1.608
34	0.63	-1.608
43	0.62	-1.007
Std Dev	0.62	-1.000
61	0.62	-0.893
32	0.62	-0.536
23	0.61	-0.179
24	0.61	-0.179
Median	0.61	0.000
14	0.61	0.179
23	0.61	0.179
14	0.60	0.536
61	0.60	0.536
43	0.60	0.718
Std Dev	0.59	1.000
32	0.59	1.251
9	0.59	1.608

121.30 Acid Soluble Magnesium			
Lab	%MgO	ICP	
275	1.41	-3.153	
24	1.38	-2.207	
24	1.38	-2.207	
61	1.35	-1.104	
Std Dev	1.34	-1.000	
23	1.34	-0.946	
34	1.33	-0.631	
23	1.33	-0.473	
9	1.31	0.000	
32	1.31	0.000	
32	1.31	0.000	
275	1.31	0.000	
Median	1.31	0.000	
61	1.30	0.315	
43	1.30	0.473	
Std Dev	1.28	1.000	
14	1.25	1.892	
43	1.25	2.049	
14	1.24	2.365	

121.XX Acid Soluble Magnesium			
Lab	%MgO	Total Method	
275	1.41	-3.153	
24	1.38	-2.207	
24	1.38	-2.207	
61	1.35	-1.104	
Std Dev	1.34	-1.000	
23	1.34	-0.946	
34	1.33	-0.631	
23	1.33	-0.473	
9	1.31	0.000	
32	1.31	0.000	
32	1.31	0.000	
275	1.31	0.000	
Median	1.31	0.000	
61	1.30	0.315	
43	1.30	0.473	
Std Dev	1.28	1.000	
14	1.25	1.892	
43	1.25	2.049	
14	1.24	2.365	

144.01 Sulfate Sulfur (S)		
Lab	Gravimetric	
219	1.95	-2.581
Std Dev	1.87	-1.000
61	1.82	0.000
Median	1.82	0.000
61	1.81	0.099

144.70 Sulfur		
Lab	Spectrometric	
14	1.87	-1.340
Std Dev	1.86	-1.000
Median	1.86	0.000
Std Dev	1.86	1.000
14	1.86	1.340

144.99 Sulfate Sulfur (S)		
Lab	Other	
23	1.88	-0.586
24	1.87	-0.391
9	1.87	-0.223
24	1.86	0.000
34	1.86	0.000
Median	1.86	0.000
23	1.85	0.586
Std Dev	1.83	1.000
32	1.80	2.541
32	1.79	2.737

144.XX Sulfate Sulfur (S)		
Lab	Total Method	
219	1.95	-2.247
Std Dev	1.90	-1.000
23	1.88	-0.396
24	1.87	-0.264
9	1.87	-0.151
14	1.87	-0.132
14	1.86	0.000
24	1.86	0.000
34	1.86	0.000
Median	1.86	0.000
23	1.85	0.396
Std Dev	1.82	1.000
61	1.82	1.189

61	1.81	1.322
32	1.80	1.718
32	1.79	1.850

145.99 Total Sulfur (S)		
Lab	Other	
43	2.12	-0.696
43	2.04	0.000
Median	2.04	0.000
Std Dev	1.92	1.000
111	1.81	1.984

145.XX Total Sulfur (S)		
Lab	Total Method	
43	2.12	-0.696
43	2.04	0.000
Median	2.04	0.000
Std Dev	1.92	1.000
111	1.81	1.984

151.30 Total Arsenic		
Lab	ICP	
24	2.55	-2.412
Std Dev	2.02	-1.000
61	2.00	-0.938
43	1.65	0.000
Median	1.65	0.000
43	1.50	0.402
Std Dev	1.28	1.000
9	1.20	1.206

151.99 Total Arsenic		
Lab	Other	
275	2.20	-1.340
Std Dev	2.19	-1.000
Median	2.15	0.000
Std Dev	2.11	1.000
275	2.10	1.340

151.XX Total Arsenic		
Lab	Total Method	
24	2.55	-1.282
Std Dev	2.43	-1.000
275	2.20	-0.466

275	2.10	-0.233
61	2.00	0.000
Median	2.00	0.000
43	1.65	0.816
Std Dev	1.57	1.000
43	1.50	1.165
9	1.20	1.864

165.99	Acid Soluble Boron
Lab	PPM Other
24	95.60 0.000
Median	95.60 0.000

65.XX, ppm	Acid Soluble Boron
Lab	PPM Total Method
24	95.60 0.000
Median	95.60 0.000

181.30	Total Cadmium
Lab	PPM ICP
9	25.20 -1.875
43	24.84 -1.305
Std Dev	24.64 -1.000
275	24.20 -0.313
61	24.00 0.000
Median	24.00 0.000
43	23.82 0.281
61	23.50 0.781
275	23.50 0.781

181.99	Total Cadmium
Lab	PPM Other
24	20.70 0.000
Median	20.70 0.000

181.XX	Total Cadmium
Lab	PPM Total Method
9	25.20 -2.013
43	24.84 -1.443
Std Dev	24.55 -1.000
275	24.20 -0.453
61	24.00 -0.140
Median	23.91 0.000
43	23.82 0.140

61	23.50	0.640
275	23.50	0.640
Std Dev	23.27	1.000
24	20.70	5.009

190.00	Aluminum
Lab	%Al ₂ O ₃ ICP
24	0.55 -3.216
14	0.53 -1.072
14	0.53 -1.072
275	0.53 -1.072
Std Dev	0.53 -1.000
9	0.53 -0.536
43	0.53 -0.536
23	0.52 0.000
23	0.52 0.000
32	0.52 0.000
34	0.52 0.000
275	0.52 0.000
Median	0.52 0.000
32	0.52 0.536
Std Dev	0.51 1.000
24	0.51 1.072
43	0.51 1.608
61	0.50 2.144
61	0.48 4.288

190.XX	Aluminum
Lab	%Al ₂ O ₃ Total Method
24	0.55 -3.216
14	0.53 -1.072
14	0.53 -1.072
275	0.53 -1.072
Std Dev	0.53 -1.000
9	0.53 -0.536
43	0.53 -0.536
23	0.52 0.000
23	0.52 0.000
32	0.52 0.000
34	0.52 0.000
275	0.52 0.000
Median	0.52 0.000
32	0.52 0.536
Std Dev	0.51 1.000

24	0.51	1.072
43	0.51	1.608
61	0.50	2.144
61	0.48	4.288

191.30	Total Chromium
Lab	PPM ICP
43	266.00 -15.410
Std Dev	255.25 -1.000
61	255.00 -0.670
9	254.50 0.000
Median	254.50 0.000
43	254.00 0.670
Std Dev	253.75 1.000
61	251.00 4.690

191.99	Total Chromium
Lab	PPM Other
24	254.00 0.000
Median	254.00 0.000

191.XX	Total Chromium
Lab	PPM Total Method
43	266.00 -17.994
61	255.00 -1.149
Std Dev	254.90 -1.000
9	254.50 -0.383
Median	254.25 0.000
24	254.00 0.383
43	254.00 0.383
Std Dev	253.60 1.000
61	251.00 4.977

202.30	Acid Soluble Cobalt
Lab	PPM ICP
9	1.55 -0.536
61	1.50 -0.402
61	1.35 0.000
Median	1.35 0.000
43	1.00 0.938
43	1.00 0.938

202.99	Acid Soluble Cobalt
Lab	PPM Other

24	0.57	0.000
Median	0.57	0.000

202.XX	Acid Soluble Cobalt
Lab	PPM Total Method
9	1.55 -1.086
Std Dev	1.52 -1.000
61	1.50 -0.942
61	1.35 -0.507
Median	1.18 0.000
43	1.00 0.507
43	1.00 0.507
Std Dev	0.83 1.000
24	0.57 1.753

221.00	Acid Soluble Copper
Lab	PPM Atomic Absorption
219	0.63 0.000
Median	0.63 0.000

221.30	Acid Soluble Copper
Lab	PPM ICP
9	1.90 -1.206
Std Dev	1.75 -1.000
43	1.00 0.000
43	1.00 0.000
Median	1.00 0.000
Std Dev	0.25 1.000
61	0.00 1.340
61	0.00 1.340

221.99	Acid Soluble Copper
Lab	PPM Other
24	0.16 0.000
Median	0.16 0.000

221.XX	Acid Soluble Copper
Lab	PPM Total Method
9	1.90 -1.843
Std Dev	1.30 -1.000
43	1.00 -0.586
43	1.00 -0.586
Median	0.58 0.000
24	0.16 0.586

61	0.00	0.810
61	0.00	0.810

241.30 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	ICP
43	0.66	-0.893
23	0.65	-0.596
24	0.65	-0.596
32	0.65	-0.596
275	0.65	-0.596
23	0.65	-0.298
32	0.65	-0.298
14	0.64	0.000
24	0.64	0.000
34	0.64	0.000
Median	0.64	0.000
14	0.63	0.596
43	0.63	0.596
Std Dev	0.62	1.000
9	0.62	1.191
61	0.62	1.191
61	0.60	2.382
275	0.60	2.382

241.XX Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Total Method
43	0.66	-1.005
Std Dev	0.65	-1.000
23	0.65	-0.670
24	0.65	-0.670
32	0.65	-0.670
275	0.65	-0.670
23	0.65	-0.335
32	0.65	-0.335
14	0.64	0.000
24	0.64	0.000
34	0.64	0.000
Median	0.64	0.000
14	0.63	0.670
43	0.63	0.670
219	0.63	0.670
Std Dev	0.63	1.000
9	0.62	1.340
61	0.62	1.340

61	0.60	2.680
275	0.60	2.680

251.30 Total Lead		
Lab	PPM	ICP
43	1.00	0.000
43	1.00	0.000
275	1.00	0.000
275	1.00	0.000
Median	1.00	0.000
Std Dev	0.40	1.000
9	0.40	1.005
61	0.00	1.675
61	0.00	1.675

251.99 Total Lead		
Lab	PPM	Other
24	0.23	0.000
Median	0.23	0.000

251.XX Total Lead		
Lab	PPM	Total Method
43	1.00	-0.486
43	1.00	-0.486
275	1.00	-0.486
275	1.00	-0.486
Median	0.70	0.000
9	0.40	0.486
24	0.23	0.761
Std Dev	0.08	1.000
61	0.00	1.134
61	0.00	1.134

261.11 Acid Soluble Manganese		
Lab	PPM	Atomic Absorption
219	32.50	0.000
Median	32.50	0.000

261.30 Acid Soluble Manganese		
Lab	PPM	ICP
9	36.10	0.000
Median	36.10	0.000

261.99 Acid Soluble Manganese		
Lab	PPM	Other
43	42.00	-1.050
Std Dev	41.78	-1.000
43	39.00	-0.380
24	37.30	0.000
Median	37.30	0.000
61	33.00	0.960
Std Dev	32.82	1.000
61	32.00	1.184

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
43	42.00	-1.463
Std Dev	40.13	-1.000
43	39.00	-0.719
24	37.30	-0.298
9	36.10	0.000
Median	36.10	0.000
61	33.00	0.769
219	32.50	0.894
Std Dev	32.07	1.000
61	32.00	1.017

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
9		

289.99 Total Molybdenum		
Lab	PPM	Other
24	4.27	0.000
Median	4.27	0.000

289.XX Total Molybdenum		
Lab	PPM	Total Method

24	4.27	-0.386
9	4.25	-0.357
43	4.00	0.000
43	4.00	0.000
Median	4.00	0.000
Std Dev	3.30	1.000
61	3.00	1.429
61	1.00	4.288

291.30 Total Nickel		
Lab	PPM	ICP
9	13.80	0.467
43	13.00	0.000
61	13.00	0.000
61	13.00	0.000
Median	13.00	0.000
43	12.50	0.467

291.99 Total Nickel		
Lab	PPM	Other
24	12.70	0.000
Median	12.70	0.000

291.XX Total Nickel		
Lab	PPM	Total Method
9	13.80	-4.764
Std Dev	13.17	-1.000
43	13.00	0.000
61	13.00	0.000
61	13.00	0.000
Median	13.00	0.000
Std Dev	12.83	1.000
24	12.70	1.787
43	12.50	2.978

301.30 Total Selenium		
Lab	PPM	ICP
24	<0.28	0.000
9	0.10	0.000
61	0.10	0.000
Median	0.10	0.000

301.XX Total Selenium		
Lab	PPM	Total Method

24	<0.28	0.000
9	0.10	0.000
61	0.10	0.000
Median	0.10	0.000

311.00 Sodium		
Lab	%Na ₂ O	Atomic Absorbtion
61	0.28	0.000
Median	0.28	0.000

311.99 Sodium		
Lab	%Na ₂ O	Other
9	0.31	-2.116
Std Dev	0.30	-1.000
23	0.30	-0.846
23	0.29	-0.423
24	0.29	-0.423
Median	0.29	0.000
24	0.28	0.423
43	0.28	0.799
61	0.28	0.846
Std Dev	0.27	1.000
43	0.27	1.689

311.XX Sodium		
Lab	%Na ₂ O	Total Method
9	0.31	-2.783
23	0.30	-1.392
Std Dev	0.29	-1.000
23	0.29	-0.928
24	0.29	-0.928
24	0.28	0.000
61	0.28	0.000
Median	0.28	0.000
43	0.28	0.412
61	0.28	0.464
Std Dev	0.27	1.000
43	0.27	1.388

321.00 Acid Soluble Zinc		
Lab		Atomic Absorption
219	307.75	0.000
Median	307.75	0.000

321.30 Acid Soluble Zinc		
Lab	PPM	ICP
9	320.40	-1.155
24	319.00	-1.048
Std Dev	318.37	-1.000
275	308.00	-0.210
Median	305.25	0.000
61	302.50	0.210
275	297.40	0.599
61	295.50	0.743

321.99 Acid Soluble Zinc		
Lab		Other
43	333.00	-1.340
Std Dev	331.67	-1.000
Median	327.75	0.000
Std Dev	323.83	1.000
43	322.50	1.340

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method
43	333.00	-1.872
43	322.50	-1.085
Std Dev	321.36	-1.000
9	320.40	-0.928
24	319.00	-0.823
275	308.00	0.000
Median	308.00	0.000
219	307.75	0.019
61	302.50	0.412
275	297.40	0.794
61	295.50	0.936

325.10 Fluoride		
Lab	%	Electrode
32	1.53	-1.196
32	1.51	-1.053
23	1.46	-0.526
24	1.41	-0.096
23	1.41	-0.048
24	1.40	0.000
34	1.40	0.000
Median	1.40	0.000
9	1.36	0.431

275	1.31	0.861
275	1.27	1.244
14	1.25	1.436
14	1.24	1.531
111	0.98	4.068

325.99 Fluoride		
Lab	%	Other
61	1.42	-1.340
Median	1.39	0.000
61	1.36	1.340

325.XX Fluoride		
Lab	%	Total Method
32	1.53	-1.340
32	1.51	-1.179
23	1.46	-0.590
61	1.42	-0.214
24	1.41	-0.107
23	1.41	-0.054
24	1.40	0.000
34	1.40	0.000
Median	1.40	0.000
9	1.36	0.482
61	1.36	0.482
275	1.31	0.965
275	1.27	1.394
14	1.25	1.608
14	1.24	1.715
111	0.98	4.556