

# AFPC

## 2013-12      Grade 10-49-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, Other		001.99	15	10.02	0.04
Method Group 001.XX PCT			15	10.02	0.05
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	1	10.03	0.00
Total Nitrogen, Salicylic	955.04d	010.12	1	10.02	0.00
Total Nitrogen, Combustion	993.13	010.60	21	10.04	0.10
Total Nitrogen, Other		010.99	3	10.01	0.08
Method Group 010.XX PCT			26	10.03	0.12
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	1	49.77	0.00
Total Phosphate, Spectrometric	978.02	020.20	20	49.72	0.22
Total Phosphate, Alka. Quimociac	955.04d	020.30	1	49.20	0.00
Total Phosphate, ICP	970.03	020.40	4	49.60	0.60
Total Phosphate, Other	993.13	020.99	2	49.68	0.17
Method Group 020.XX PCT			28	49.71	0.28
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	10	0.09	0.04
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.13	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	0.14	0.00
Insoluble Phosphate, Other		030.99	2	0.19	0.01
Method Group 030.XX PCT			15	0.13	0.07
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Spectrometric	960.02	040.20	12	49.58	0.21
Indirect Available Phosphate, Automated	960.02	040.40	1	49.52	0.00
Indirect Available Phosphate, Other		040.99	1	49.69	0.00
Method Group 040.XX PCT			14	49.58	0.23
<b>DIRECT AVAILABLE PHOSPHATE</b>					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	3	49.19	0.32
Direct Available Phosphate, Automated	978.01	041.40	2	49.69	0.16
Direct Available Phosphate, ICP		041.50	5	48.43	0.94
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	49.85	0.90
Direct Available Phosphate, Other		041.99	2	49.52	0.06
Method Group 041.XX PCT			16	49.45	0.67
<b>WATER SOLUBLE PHOSPHATE</b>					
Water Soluble Phosphate, Spectrometric	970.01	048.20	14	44.41	0.24
Water Soluble Phosphate, Alka. Quimociac	964.04	048.30	1	44.79	0.00
Water Soluble Phosphate, Other		048.99	4	44.62	0.44
Method Group 048.XX PCT			19	44.46	0.35
<b>SOLUBLE POTASH AS K<sub>2</sub>O</b>					
Soluble Potash, Atomic Absorption(Oxalate)		050.30	1		0.00
Soluble Potash, ICP(Oxalate)		050.50	2	0.24	0.00
Soluble Potash, ICP(Citrate)		050.51	1	0.25	0.00
Soluble Potash, Other		050.99	7	0.24	0.00
Method Group 050.XX PCT			11	0.24	0.00
<b>FREE WATER</b>					
Free Water, Vacuum Oven	965.08B	060.00	15	0.86	0.16
Free Water, Vacuum Desiccate	965.08A	060.10	2	0.85	0.01
Free Water, Other		060.99	2	1.07	0.06
Method Group 060.XX PCT			19	0.87	0.18

<b>ACID SOLUBLE CALCIUM AS CaO</b>					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	2.33	0.00
Acid Soluble Calcium, ICP		101.30	14	2.04	0.04
Method Group 101.XX PCT			15	2.05	0.05
<b>ACID SOLUBLE MAGNESIUM AS MgO</b>					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	1	1.47	0.00
Acid Soluble Magnesium, ICP		121.30	14	1.45	0.04
Method Group 121.XX PCT			15	1.46	0.05
<b>SULFATE SULFUR (S)</b>					
Sulfur, Gravimetric	980.02(a)	144.01	2	2.06	0.03
Sulfur, Spectrometric		144.70	2	1.91	0.01
Sulfur, Other		144.99	12	2.00	0.06
Method Group 144.XX PCT			16	2.00	0.08
<b>TOTAL SULFUR (S)</b>					
Sulfur, Other		145.99	1	1.71	0.00
Method Group 145.XX PCT			1	1.71	0.00
<b>TOTAL ARSENIC</b>					
Total Arsenic, ICP	980.02(b)	151.02	5	12	0.2
Method Group 151.XX PPM			5	12	0.2
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Other		165.99	1	45	0.0
Method Group 165.XX PPM			1	45	0.0
<b>TOTAL CADMIUM</b>					
Total Cadmium, ICP		181.30	5	4	0.6
Total Cadmium, Other		181.99	1	4	0.0
Method Group 181.XX PPM			6	4	0.6
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			13	2.40	0.09
Other		190.99	1	2.39	0.00
Method Group 190.XX PCT			14	2.40	0.10
<b>TOTAL CHROMIUM</b>					
Total Chromium, ICP		191.30	4	87	1.8
Total Chromium, Other		191.99	1	84	0.0
Method Group 191.XX PPM			5	86	2.7
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, ICP		202.30	3	4	0.5
Acid Soluble Cobalt, Other		202.99	1	3	0.0
Method Group 202.XX PPM			4	4	0.5
<b>ACID SOLUBLE COPPER</b>					
Acid Soluble Copper, ICP		221.30	3		2.6
Acid Soluble Copper, Other		221.99	1	0	0.0
Method Group 221.XX PPM			4	1	2.6
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>					
Acid Soluble Iron, ICP		241.30	14	2.13	0.07
Acid Soluble Iron, Other		241.99	1	2.16	0.00
Method Group 241.XX PCT			15	2.13	0.09
<b>TOTAL LEAD</b>					
Total Lead, ICP		251.30	5	8	1.4
Total Lead, Other		251.99	1	7	0.0
Method Group 251.XX PPM			6	7	1.5
<b>ACID SOLUBLE MANGANESE</b>					
Acid Soluble Manganese, Atomic Absorption	972.02b	261.11	1	344	0.0
Acid Soluble Manganese, ICP	972.02a	261.30	2	323	13.7
Acid Soluble Manganese, Other		261.99	3	335	1.5
Method Group 261.XX PPM			6	336	6.4

<b>TOTAL MOLYBDENUM</b>					
Total Molybdenum, ICP	289.30	3	13	1.1	
Total Molybdenum, Other	289.99	1	17	0.0	
Method Group 289.XX PPM		4	15	2.9	
<b>TOTAL NICKEL</b>					
Total Nickel, ICP	291.30	2	16	0.4	
Total Nickel, Other	291.99	1	18	0.0	
Method Group 291.XX PPM		3	16	1.5	
<b>TOTAL SELENIUM</b>					
Total Selenium, ICP	301.30	4	1	3.4	
Method Group 301.XX PPM		4	1	4.1	
<b>SODIUM AS Na<sub>2</sub>O</b>					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.47	0.00
Sodium, Other		311.99	6	0.46	0.04
Method Group 311.XX PCT			7	0.46	0.03
<b>ACID SOLUBLE ZINC</b>					
Acid Soluble Zinc, ICP	321.30	6	63.8	8.4	
Method Group 321.XX PPM		6	63.8	10.2	
<b>FLUORIDE</b>					
Volumetric	325.10	15	3.14	0.16	
Distilled/Electrode	325.99	2	3.25	0.01	
Method Group 325.XX PCT		17	3.14	0.19	

001.99 Ammoniacal Nitrogen		
Lab		Other
32	10.17	-3.829
140	10.11	-2.297
275	10.06	-1.149
38	10.06	-1.021
<b>Std Dev</b>	<b>10.05</b>	<b>-1.000</b>
23	10.05	-0.893
24	10.02	-0.128
34	10.02	-0.128
61	10.02	0.000
79	10.02	0.000
<b>Median</b>	<b>10.02</b>	<b>0.000</b>
32	10.01	0.128
24	10.00	0.383
310	10.00	0.383
23	9.99	0.766
<b>Std Dev</b>	<b>9.98</b>	<b>1.000</b>
61	9.96	1.404
275	9.89	3.190

001.XX Ammoniacal Nitrogen		
Lab		Total Method
32	10.17	-3.829
140	10.11	-2.297
275	10.06	-1.149
38	10.06	-1.021
<b>Std Dev</b>	<b>10.05</b>	<b>-1.000</b>
23	10.05	-0.893
24	10.02	-0.128
34	10.02	-0.128
61	10.02	0.000
79	10.02	0.000
<b>Median</b>	<b>10.02</b>	<b>0.000</b>
32	10.01	0.128
24	10.00	0.383
310	10.00	0.383
23	9.99	0.766
<b>Std Dev</b>	<b>9.98</b>	<b>1.000</b>
61	9.96	1.404
275	9.89	3.190

010.11 Total Nitrogen		
Lab		Modified Comprehensive

219	10.03	0.000
<b>Median</b>	<b>10.03</b>	<b>0.000</b>

010.12 Total Nitrogen		
Lab		Salicylic
107	10.02	0.000
<b>Median</b>	<b>10.02</b>	<b>0.000</b>

010.60 Total Nitrogen		
Lab		Combustion
110	10.70	-6.803
49	10.40	-3.762
47	10.22	-1.907
219	10.18	-1.495
<b>Std Dev</b>	<b>10.13</b>	<b>-1.000</b>
14	10.12	-0.825
14	10.07	-0.361
66	10.07	-0.361
80	10.05	-0.155
24	10.04	-0.052
63	10.04	0.000
79	10.04	0.000
<b>Median</b>	<b>10.04</b>	<b>0.000</b>
24	10.03	0.103
63	10.03	0.103
103	9.96	0.773
137	9.95	0.876
9	9.94	0.979
<b>Std Dev</b>	<b>9.94</b>	<b>1.000</b>
31	9.93	1.082
111	9.76	2.835
95	9.70	3.453
77	9.69	3.608
29	9.53	5.205

010.99 Total Nitrogen		
Lab		Other
32	10.17	-1.846
<b>Std Dev</b>	<b>10.09</b>	<b>-1.000</b>
32	10.01	0.000
<b>Median</b>	<b>10.01</b>	<b>0.000</b>
99	9.94	0.834

010.XX Total Nitrogen		
Lab		Total Method
110	10.70	-7.042
49	10.40	-3.941
47	10.22	-2.049
219	10.18	-1.629
32	10.17	-1.471
<b>Std Dev</b>	<b>10.12</b>	<b>-1.000</b>
14	10.12	-0.946
14	10.07	-0.473
66	10.07	-0.473
80	10.05	-0.263
24	10.04	-0.158
63	10.04	-0.105
79	10.04	-0.105
24	10.03	0.000
63	10.03	0.000
<b>Median</b>	<b>10.03</b>	<b>0.000</b>
219	10.03	0.000
107	10.02	0.053
32	10.01	0.158
103	9.96	0.683
137	9.95	0.788
99	9.94	0.893
9	9.94	0.893
31	9.93	0.998
<b>Std Dev</b>	<b>9.93</b>	<b>1.000</b>
111	9.76	2.785
95	9.70	3.416
77	9.69	3.573
29	9.53	5.202

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
219	49.77	0.000
<b>Median</b>	<b>49.77</b>	<b>0.000</b>

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
219	49.77	0.000
<b>Median</b>	<b>49.77</b>	<b>0.000</b>

020.20 Total Phosphate		
Lab		Spectrometric
95	58.10	-38.076
140	50.07	-1.601
<b>Std Dev</b>	<b>49.94</b>	<b>-1.000</b>
34	49.83	-0.511
275	49.82	-0.466

31	49.82	-0.443
14	49.80	-0.375
61	49.80	-0.375
32	49.78	-0.261
61	49.74	-0.079
14	49.73	-0.034
<b>Median</b>	<b>49.72</b>	<b>0.000</b>
32	49.71	0.034
9	49.71	0.057
24	49.64	0.352
275	49.64	0.352
23	49.51	0.943
23	49.51	0.965
<b>Std Dev</b>	<b>49.50</b>	<b>1.000</b>
79	49.46	1.170
24	49.34	1.737
110	48.45	5.780
38	46.17	16.114

020.30 Total Phosphate		
Lab		Alka. Quimociac
111	49.20	0.000
<b>Median</b>	<b>49.20</b>	<b>0.000</b>

020.40 Total Phosphate		
Lab		Automated
137	52.33	-4.533
<b>Std Dev</b>	<b>50.20</b>	<b>-1.000</b>
9	49.65	-0.071
<b>Median</b>	<b>49.60</b>	<b>0.000</b>
219	49.56	0.071
111	49.36	0.403

020.99 Total Phosphate		
Lab		Other
99	49.91	-1.340
<b>Std Dev</b>	<b>49.85</b>	<b>-1.000</b>
<b>Median</b>	<b>49.68</b>	<b>0.000</b>
<b>Std Dev</b>	<b>49.52</b>	<b>1.000</b>
310	49.46	1.340

020.XX Total Phosphate		
Lab		Total Method
95	58.10	-36.277

137	52.33	-11.336
140	50.07	-1.567
<b>Std Dev</b>	<b>49.94</b>	<b>-1.000</b>
99	49.91	-0.854
34	49.83	-0.530
275	49.82	-0.486
31	49.82	-0.465
14	49.80	-0.400
61	49.80	-0.400
32	49.78	-0.292
219	49.77	-0.270
61	49.74	-0.119
14	49.73	-0.076
32	49.71	-0.011
<b>Median</b>	<b>49.71</b>	<b>0.000</b>
9	49.71	0.011
9	49.65	0.270
24	49.64	0.292
275	49.64	0.292
219	49.56	0.638
23	49.51	0.854
23	49.51	0.875
<b>Std Dev</b>	<b>49.48</b>	<b>1.000</b>
310	49.46	1.070
79	49.46	1.070
111	49.36	1.502
24	49.34	1.610
111	49.20	2.194
110	48.45	5.457
38	46.17	15.291

030.20 Insoluble Phosphate		
Lab		Spectrometric
61	0.17	-1.981
61	0.16	-1.748
<b>Std Dev</b>	<b>0.13</b>	<b>-1.000</b>
23	0.13	-0.932
23	0.11	-0.466
140	0.09	-0.117
<b>Median</b>	<b>0.09</b>	<b>0.000</b>
24	0.08	0.117
79	0.07	0.350
14	0.06	0.583
14	0.06	0.699

24	0.05	0.816
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030.30 Insoluble Phosphate		
Lab		Alka. Quimociac
31	0.13	0.000
<b>Median</b>	<b>0.13</b>	<b>0.000</b>

030.40 Insoluble Phosphate		
Lab		Automated
34	0.14	-1.340
<b>Std Dev</b>	<b>0.14</b>	<b>-1.000</b>
<b>Median</b>	<b>0.14</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.13</b>	<b>1.000</b>
9	0.13	1.340

030.99 Insoluble Phosphate		
Lab		Other
32	0.20	-1.340
<b>Std Dev</b>	<b>0.20</b>	<b>-1.000</b>
<b>Median</b>	<b>0.19</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.17</b>	<b>1.000</b>
32	0.17	1.340

030.XX Insoluble Phosphate		
Lab		Total Method
32	0.20	-1.340
<b>Std Dev</b>	<b>0.18</b>	<b>-1.000</b>
61	0.17	-0.804
32	0.17	-0.804
61	0.16	-0.625
34	0.14	-0.268
9	0.13	-0.089
31	0.13	-0.089
23	0.13	0.000
<b>Median</b>	<b>0.13</b>	<b>0.000</b>
23	0.11	0.357
140	0.09	0.625
24	0.08	0.804
79	0.07	0.983
<b>Std Dev</b>	<b>0.07</b>	<b>1.000</b>
14	0.06	1.161
14	0.06	1.251
24	0.05	1.340

040.20 Indirect Available Phosphate		
Lab		Spectrometric
140	49.98	-1.928
<b>Std Dev</b>	<b>49.79</b>	<b>-1.000</b>
14	49.74	-0.764
31	49.69	-0.497
14	49.67	-0.424
61	49.63	-0.230
24	49.59	-0.036
<b>Median</b>	<b>49.58</b>	<b>0.000</b>
9	49.58	0.036
61	49.58	0.036
23	49.40	0.885
79	49.39	0.934
23	49.39	0.958
<b>Std Dev</b>	<b>49.38</b>	<b>1.000</b>
24	49.26	1.589

040.40 Indirect Available Phosphate		
Lab		Automated
9	49.52	0.000
<b>Median</b>	<b>49.52</b>	<b>0.000</b>

040.99 Indirect Available Phosphate		
Lab		Other
34	49.69	0.000
<b>Median</b>	<b>49.69</b>	<b>0.000</b>

040.XX Indirect Available Phosphate		
Lab		Total Method
140	49.98	-2.110
<b>Std Dev</b>	<b>49.77</b>	<b>-1.000</b>
14	49.74	-0.836
34	49.69	-0.570
31	49.69	-0.544
14	49.67	-0.464
61	49.63	-0.252
24	49.59	-0.040
<b>Median</b>	<b>49.58</b>	<b>0.000</b>
9	49.58	0.040
61	49.58	0.040
9	49.52	0.358
23	49.40	0.969
<b>Std Dev</b>	<b>49.39</b>	<b>1.000</b>

79	49.39	1.022
23	49.39	1.048
24	49.26	1.738

041.10 Direct Available Phosphate		
Lab		Gravimetric Quimociac
219	49.66	-1.432
<b>Std Dev</b>	<b>49.51</b>	<b>-1.000</b>
47	49.19	0.000
<b>Median</b>	<b>49.19</b>	<b>0.000</b>
<b>Std Dev</b>	<b>48.87</b>	<b>1.000</b>
107	48.79	1.248

041.40 Direct Available Phosphate		
Lab		Automated
49	49.91	-1.340
<b>Std Dev</b>	<b>49.85</b>	<b>-1.000</b>
<b>Median</b>	<b>49.69</b>	<b>0.000</b>
<b>Std Dev</b>	<b>49.52</b>	<b>1.000</b>
103	49.47	1.340

041.50 Direct Available Phosphate		
Lab		ICP
80	49.45	-1.085
<b>Std Dev</b>	<b>49.37</b>	<b>-1.000</b>
66	48.91	-0.510
47	48.43	0.000
<b>Median</b>	<b>48.43</b>	<b>0.000</b>
63	47.65	0.830
63	47.61	0.872

041.60 Direct Available Phosphate		
Lab		EDTA Extract
137	52.17	-2.582
<b>Std Dev</b>	<b>50.75</b>	<b>-1.000</b>
29	50.19	-0.376
<b>Median</b>	<b>49.85</b>	<b>0.000</b>
219	49.52	0.376
77	49.39	0.521

041.99 Direct Available Phosphate		
Lab		Other
275	49.60	-1.340
<b>Std Dev</b>	<b>49.58</b>	<b>-1.000</b>

Median	49.52	0.000
Std Dev	49.46	1.000
275	49.44	1.340

041.XX Direct Available Phosphate		
Lab	Total Method	
137	52.17	-4.959
29	50.19	-1.356
Std Dev	49.99	-1.000
49	49.91	-0.839
219	49.66	-0.383
275	49.60	-0.283
219	49.52	-0.128
103	49.47	-0.036
80	49.45	-0.009
Median	49.45	0.000
275	49.44	0.009
77	49.39	0.109
47	49.19	0.465
66	48.91	0.975
Std Dev	48.90	1.000
107	48.79	1.203
47	48.43	1.850
63	47.65	3.273
63	47.61	3.345

048.20 Water Soluble Phosphate		
Lab	Spectrometric	
14	44.78	-1.489
9	44.76	-1.407
79	44.68	-1.078
Std Dev	44.66	-1.000
14	44.66	-0.996
23	44.50	-0.339
140	44.47	-0.216
23	44.46	-0.175
Median	44.41	0.000
24	44.37	0.175
31	44.33	0.339
61	44.33	0.339
24	44.28	0.565
Std Dev	44.17	1.000
61	44.13	1.160
275	43.30	4.569

275 43.20 4.980

048.30 Water Soluble Phosphate		
Lab	Alka. Quimociac	
111	44.79	0.000
Median	44.79	0.000

048.99 Water Soluble Phosphate		
Lab	Other	
32	45.02	-0.908
32	44.90	-0.636
Median	44.62	0.000
34	44.34	0.636
111	44.34	0.636

048.XX Water Soluble Phosphate		
Lab	Total Method	
32	45.02	-1.966
32	44.90	-1.549
111	44.79	-1.166
14	44.78	-1.114
9	44.76	-1.044
Std Dev	44.74	-1.000
79	44.68	-0.766
14	44.66	-0.696
23	44.50	-0.139
140	44.47	-0.035
23	44.46	0.000
Median	44.46	0.000
24	44.37	0.296
34	44.34	0.400
111	44.34	0.400
31	44.33	0.435
61	44.33	0.435
24	44.28	0.626
Std Dev	44.17	1.000
61	44.13	1.131
275	43.30	4.020
275	43.20	4.368

050.30 Soluble Potash		
Lab	Atomic Absorption(Oxalate)	
95	0.00	0.000
Median	0.00	0.000

050.50 %K <sub>2</sub> O Soluble Potash		
Lab	ICP(Oxalate)	
23	0.24	0.000
23	0.24	0.000
Median	0.24	0.000

050.51 %K <sub>2</sub> O Soluble Potash		
Lab	ICP(Citrate)	
137	0.25	0.000
Median	0.25	0.000

050.99 Soluble Potash		
Lab	%K <sub>2</sub> O	Other
80	0.35	-29.480
Std Dev	0.24	-1.000
24	0.24	0.000
61	0.24	0.000
61	0.24	0.000
111	0.24	0.000
Median	0.24	0.000
Std Dev	0.24	1.000
24	0.23	2.680
99	0.05	52.260

050.XX Soluble Potash		
Lab	%K <sub>2</sub> O	Total Method
80	0.35	-29.480
137	0.25	-2.680
Std Dev	0.24	-1.000
23	0.24	0.000
23	0.24	0.000
24	0.24	0.000
61	0.24	0.000
61	0.24	0.000
111	0.24	0.000
Median	0.24	0.000
Std Dev	0.24	1.000
24	0.23	2.680
99	0.05	52.260
95	0.00	64.320

060.00 Free Water		
Lab	Vacuum Oven	

14	1.61	-4.590
14	1.60	-4.528
140	1.07	-1.294
Std Dev	1.02	-1.000
32	0.98	-0.739
24	0.94	-0.493
32	0.91	-0.308
24	0.90	-0.246
31	0.86	0.000
Median	0.86	0.000
79	0.86	0.000
34	0.82	0.246
9	0.75	0.678
111	0.74	0.770
23	0.73	0.832
23	0.72	0.893
Std Dev	0.70	1.000
219	0.70	1.010

060.10 Free Water		
Lab	Vacuum Desiccator	
61	0.87	-1.340
Std Dev	0.86	-1.000
Median	0.85	0.000
Std Dev	0.84	1.000
61	0.84	1.340

060.99 Free Water		
Lab	Other	
275	1.15	-1.340
Std Dev	1.13	-1.000
Median	1.07	0.000
Std Dev	1.00	1.000
275	0.98	1.340

060.XX Free Water		
Lab	Total Method	
14	1.61	-5.085
14	1.60	-5.016
275	1.15	-1.958
140	1.07	-1.409
Std Dev	1.01	-1.000
32	0.98	-0.790
275	0.98	-0.790

24	0.94	-0.515
32	0.91	-0.309
24	0.90	-0.241
61	0.87	0.000
<b>Median</b>	<b>0.87</b>	<b>0.000</b>
31	0.86	0.034
79	0.86	0.034
61	0.84	0.206
34	0.82	0.309
9	0.75	0.790
111	0.74	0.893
23	0.73	0.962
<b>Std Dev</b>	<b>0.72</b>	<b>1.000</b>
23	0.72	1.031
219	0.70	1.161

101.00 Acid Soluble Calcium		
Lab	%CaO	Atomic Absorption
219	2.33	0.000
<b>Median</b>	<b>2.33</b>	<b>0.000</b>

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
111	2.15	-2.742
34	2.13	-2.244
<b>Std Dev</b>	<b>2.08</b>	<b>-1.000</b>
61	2.06	-0.499
61	2.06	-0.499
24	2.06	-0.499
14	2.05	-0.125
14	2.05	-0.125
<b>Median</b>	<b>2.04</b>	<b>0.000</b>
24	2.04	0.125
23	2.02	0.623
23	2.01	0.748
9	2.01	0.873
<b>Std Dev</b>	<b>2.00</b>	<b>1.000</b>
31	2.00	1.122
32	1.96	1.994
32	1.92	2.992

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
219	2.33	-7.376

111	2.15	-2.680
34	2.13	-2.170
<b>Std Dev</b>	<b>2.08</b>	<b>-1.000</b>
61	2.06	-0.383
61	2.06	-0.383
24	2.06	-0.383
14	2.05	0.000
14	2.05	0.000
<b>Median</b>	<b>2.05</b>	<b>0.000</b>
24	2.04	0.255
23	2.02	0.766
23	2.01	0.893
<b>Std Dev</b>	<b>2.01</b>	<b>1.000</b>
9	2.01	1.021
31	2.00	1.276
32	1.96	2.170
32	1.92	3.190

121.00 Acid Soluble Magnesium		
Lab	%MgO	Atomic Absorption
219	1.47	0.000
<b>Median</b>	<b>1.47</b>	<b>0.000</b>

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
24	1.51	-1.483
<b>Std Dev</b>	<b>1.49</b>	<b>-1.000</b>
24	1.48	-0.798
23	1.47	-0.456
23	1.47	-0.456
32	1.46	-0.342
61	1.46	-0.228
61	1.46	-0.228
<b>Median</b>	<b>1.45</b>	<b>0.000</b>
32	1.44	0.228
111	1.44	0.228
34	1.42	0.570
<b>Std Dev</b>	<b>1.40</b>	<b>1.000</b>
9	1.40	1.026
14	1.40	1.140
14	1.39	1.254
31	1.39	1.369

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
24	1.51	-1.340
<b>Std Dev</b>	<b>1.50</b>	<b>-1.000</b>
24	1.48	-0.609
219	1.47	-0.451
23	1.47	-0.244
23	1.47	-0.244
32	1.46	-0.122
61	1.46	0.000
61	1.46	0.000
<b>Median</b>	<b>1.46</b>	<b>0.000</b>
32	1.44	0.487
111	1.44	0.487
34	1.42	0.853
<b>Std Dev</b>	<b>1.41</b>	<b>1.000</b>
9	1.40	1.340
14	1.40	1.462
14	1.39	1.584
31	1.39	1.705

144..01 Sulfate Sulfur (S)		
Lab		Gravimetric
79	2.10	-1.340
<b>Std Dev</b>	<b>2.09</b>	<b>-1.000</b>
<b>Median</b>	<b>2.06</b>	<b>0.000</b>
<b>Std Dev</b>	<b>2.03</b>	<b>1.000</b>
219	2.03	1.340

144.70 Sulfur		
Lab		Spectrometric
14	1.92	-1.340
<b>Std Dev</b>	<b>1.92</b>	<b>-1.000</b>
<b>Median</b>	<b>1.91</b>	<b>0.000</b>
<b>Std Dev</b>	<b>1.91</b>	<b>1.000</b>
14	1.91	1.340

144.99 Sulfate Sulfur (S)		
Lab		Other
9	5.94	-68.081
31	5.66	-63.239
38	2.12	-2.032
<b>Std Dev</b>	<b>2.06</b>	<b>-1.000</b>
24	2.02	-0.303

23	2.01	-0.043
61	2.01	-0.043
<b>Median</b>	<b>2.00</b>	<b>0.000</b>
24	2.00	0.043
23	2.00	0.130
61	1.97	0.562
34	1.96	0.735
32	1.96	0.821
<b>Std Dev</b>	<b>1.94</b>	<b>1.000</b>
32	1.94	1.167

144.XX Sulfate Sulfur (S)		
Lab		Total Method
9	5.94	-63.000
31	5.66	-58.520
38	2.12	-1.880
79	2.10	-1.480
<b>Std Dev</b>	<b>2.07</b>	<b>-1.000</b>
219	2.03	-0.360
24	2.02	-0.280
23	2.01	-0.040
61	2.01	-0.040
<b>Median</b>	<b>2.00</b>	<b>0.000</b>
24	2.00	0.040
23	2.00	0.120
61	1.97	0.520
34	1.96	0.680
32	1.96	0.760
<b>Std Dev</b>	<b>1.94</b>	<b>1.000</b>
32	1.94	1.080
14	1.92	1.320
14	1.91	1.560

145.99 Total Sulfur (S)		
Lab		Other
111	1.71	0.000
<b>Median</b>	<b>1.71</b>	<b>0.000</b>

145.XX Total Sulfur (S)		
Lab		Total Method
111	1.71	0.000
<b>Median</b>	<b>1.71</b>	<b>0.000</b>

151.30 Total Arsenic		
Lab		ICP
111	15.00	-13.668
Std Dev	12.64	-1.000
61	12.45	0.000
61	12.45	0.000
Median	12.45	0.000
Std Dev	12.26	1.000
24	12.20	1.340
31	8.35	21.976

151.XX Total Arsenic		
Lab		Total Method
111	15.00	-13.668
Std Dev	12.64	-1.000
61	12.45	0.000
61	12.45	0.000
Median	12.45	0.000
Std Dev	12.26	1.000
24	12.20	1.340
31	8.35	21.976

165.99 Acid Soluble Boron		
Lab	PPM	Other
24	44.50	0.000
Median	44.50	0.000

65.XX, ppm Acid Soluble Boron		
Lab	PPM	Total Method
24	44.50	0.000
Median	44.50	0.000

181.30 Total Cadmium		
Lab	PPM	ICP
111	17.00	-21.440
275	4.90	-1.173
Std Dev	4.80	-1.000
275	4.20	0.000
Median	4.20	0.000
61	4.10	0.168
61	4.00	0.335

181.99 Total Cadmium		
Lab		Other

24	4.10	0.000
Median	4.10	0.000

181.XX Total Cadmium		
Lab	PPM	Total Method
111	17.00	-27.550
275	4.90	-1.608
Std Dev	4.62	-1.000
275	4.20	-0.107
Median	4.15	0.000
24	4.10	0.107
61	4.10	0.107
61	4.00	0.322

190.00 Aluminum		
Lab	%Al <sub>2</sub> O <sub>3</sub>	ICP
32	2.50	-1.117
14	2.50	-1.061
14	2.49	-1.005
Std Dev	2.49	-1.000
32	2.47	-0.726
9	2.45	-0.558
24	2.40	0.000
24	2.40	0.000
Median	2.40	0.000
34	2.38	0.223
23	2.36	0.502
23	2.35	0.614
61	2.33	0.782
61	2.33	0.837
Std Dev	2.31	1.000
111	1.71	7.705

190.99 Aluminum		
Lab	%Al <sub>2</sub> O <sub>3</sub>	Atomic Absorption
31	2.39	0.000
Median	2.39	0.000

190.XX Aluminum		
Lab	%Al <sub>2</sub> O <sub>3</sub>	Total Method
32	2.50	-1.237
14	2.50	-1.178
14	2.49	-1.119
Std Dev	2.48	-1.000

32	2.47	-0.825
9	2.45	-0.648
24	2.40	-0.059
24	2.40	-0.059
Median	2.40	0.000
31	2.39	0.059
34	2.38	0.177
23	2.36	0.471
23	2.35	0.589
61	2.33	0.766
61	2.33	0.825
Std Dev	2.31	1.000
111	1.71	8.069

191.30 Total Chromium		
Lab		ICP
31	90.20	-2.045
Std Dev	88.31	-1.000
61	87.00	-0.276
Median	86.50	0.000
61	86.00	0.276
Std Dev	84.69	1.000
111	83.50	1.658

191.99 Total Chromium		
Lab	PPM	Other
24	84.00	0.000
Median	84.00	0.000

191.XX Total Chromium		
Lab	PPM	Total Method
31	90.20	-1.876
Std Dev	88.24	-1.000
61	87.00	-0.447
61	86.00	0.000
Median	86.00	0.000
24	84.00	0.893
Std Dev	83.76	1.000
111	83.50	1.117

202.30 Acid Soluble Cobalt		
Lab	PPM	ICP
111	5.00	-2.680
Std Dev	4.15	-1.000

61	3.65	0.000
61	3.65	0.000
Median	3.65	0.000

202.99 Acid Soluble Cobalt		
Lab		Other
24	2.96	0.000
Median	2.96	0.000

202.XX Acid Soluble Cobalt		
Lab	PPM	Total Method
111	5.00	-3.547
Std Dev	4.03	-1.000
61	3.65	0.000
61	3.65	0.000
Median	3.65	0.000
Std Dev	3.27	1.000
24	2.96	1.813

221.30 Acid Soluble Copper		
Lab	PPM	ICP
111	7.00	-2.680
Std Dev	2.61	-1.000
61	0.00	0.000
61	0.00	0.000
Median	0.00	0.000

221.99 Acid Soluble Copper		
Lab		Other
24	1.50	0.000
Median	1.50	0.000

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
111	7.00	-2.913
Std Dev	2.90	-1.000
24	1.50	-0.350
Median	0.75	0.000
61	0.00	0.350
61	0.00	0.350

241.30 Acid Soluble Iron		
Lab	%Fe <sub>2</sub> O <sub>3</sub>	ICP
14	2.20	-0.928



14	2.19	-0.790
32	2.19	-0.790
32	2.18	-0.722
34	2.14	-0.172
61	2.14	-0.103
24	2.13	-0.034
<b>Median</b>	<b>2.13</b>	<b>0.000</b>
61	2.13	0.034
111	2.11	0.241
23	2.08	0.653
9	2.07	0.790
24	2.07	0.790
23	2.07	0.859
31	2.07	0.859

241.99 Acid Soluble Iron		
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Other
219	2.16	0.000
<b>Median</b>	<b>2.16</b>	<b>0.000</b>

241.XX Acid Soluble Iron		
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Total Method
14	2.20	-0.896
14	2.19	-0.758
32	2.19	-0.758
32	2.18	-0.689
219	2.16	-0.475
34	2.14	-0.138
61	2.14	-0.069
24	2.13	0.000
<b>Median</b>	<b>2.13</b>	<b>0.000</b>
61	2.13	0.069
111	2.11	0.276
23	2.08	0.689
9	2.07	0.827
24	2.07	0.827
23	2.07	0.896
31	2.07	0.896

251.30 Total Lead		
Lab	PPM	ICP
61	8.20	-0.290
61	7.95	-0.109
275	7.80	0.000

<b>Median</b>	<b>7.80</b>	<b>0.000</b>
<b>Std Dev</b>	<b>6.42</b>	<b>1.000</b>
275	6.10	1.231
111	5.00	2.028

251.99 Total Lead		
Lab	PPM	Other
24	6.72	0.000
<b>Median</b>	<b>6.72</b>	<b>0.000</b>

251.XX Total Lead		
Lab	PPM	Total Method
61	8.20	-0.760
61	7.95	-0.558
275	7.80	-0.437
<b>Median</b>	<b>7.26</b>	<b>0.000</b>
24	6.72	0.437
275	6.10	0.938
<b>Std Dev</b>	<b>6.02</b>	<b>1.000</b>
111	5.00	1.827

261.11 Acid Soluble Manganese		
Lab	PPM	Atomic Absorption
219	344.40	0.000
<b>Median</b>	<b>344.40</b>	<b>0.000</b>

261.30 Acid Soluble Manganese		
Lab	PPM	ICP
31	341.70	-1.340
<b>Std Dev</b>	<b>337.04</b>	<b>-1.000</b>
<b>Median</b>	<b>323.35</b>	<b>0.000</b>
<b>Std Dev</b>	<b>309.66</b>	<b>1.000</b>
111	305.00	1.340

261.99 Acid Soluble Manganese		
Lab	PPM	Other
24	337.00	-1.340
<b>Std Dev</b>	<b>336.49</b>	<b>-1.000</b>
61	335.00	0.000
<b>Median</b>	<b>335.00</b>	<b>0.000</b>
<b>Std Dev</b>	<b>333.51</b>	<b>1.000</b>
61	333.00	1.340

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
219	344.40	-1.602
31	341.70	-1.087
<b>Std Dev</b>	<b>341.24</b>	<b>-1.000</b>
24	337.00	-0.191
<b>Median</b>	<b>336.00</b>	<b>0.000</b>
61	335.00	0.191
61	333.00	0.572
<b>Std Dev</b>	<b>330.76</b>	<b>1.000</b>
111	305.00	5.913

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

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

289.30 Total Molybdenum		
Lab	PPM	ICP
111	18.00	-5.156
<b>Std Dev</b>	<b>3.96</b>	<b>-1.000</b>
24	0.66	-0.024
<b>Median</b>	<b>0.58</b>	<b>0.000</b>
61	0.50	0.024
61	0.37	0.062

289.99 Total Molybdenum		
Lab	PPM	Other
24	16.70	0.000
<b>Median</b>	<b>16.70</b>	<b>0.000</b>

289.XX Total Molybdenum		
Lab	PPM	Total Method
24	16.70	-0.929
111	16.00	-0.633
<b>Median</b>	<b>14.50</b>	<b>0.000</b>
61	13.00	0.633
61	13.00	0.633

291.30 Total Nickel		
Lab	PPM	ICP
61	16.00	-1.340
<b>Std Dev</b>	<b>15.87</b>	<b>-1.000</b>
<b>Median</b>	<b>15.50</b>	<b>0.000</b>
<b>Std Dev</b>	<b>15.13</b>	<b>1.000</b>

61	15.00	1.340
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291.99 Total Nickel		
Lab	PPM	Other
24	18.30	0.000
<b>Median</b>	<b>18.30</b>	<b>0.000</b>

291.XX Total Nickel		
Lab	PPM	Total Method
24	18.30	-1.868
<b>Std Dev</b>	<b>17.23</b>	<b>-1.000</b>
61	16.00	0.000
<b>Median</b>	<b>16.00</b>	<b>0.000</b>
61	15.00	0.812

301.30 Total Selenium		
Lab	PPM	ICP
111	18.00	-5.156
<b>Std Dev</b>	<b>3.96</b>	<b>-1.000</b>
24	0.66	-0.024
<b>Median</b>	<b>0.58</b>	<b>0.000</b>
61	0.50	0.024
61	0.37	0.062

301.XX Total Selenium		
Lab	PPM	Total Mthod
111	18.00	-5.156
<b>Std Dev</b>	<b>3.96</b>	<b>-1.000</b>
24	0.66	-0.024
<b>Median</b>	<b>0.58</b>	<b>0.000</b>
61	0.50	0.024
61	0.37	0.062

311.00 Sodium		
Lab	%Na <sub>2</sub> O	Atomic Absrbtion
61	0.47	0.000
<b>Median</b>	<b>0.47</b>	<b>0.000</b>

311.99 Sodium		
Lab	%Na <sub>2</sub> O	Other
24	0.49	-0.825
61	0.47	-0.137
23	0.46	0.000
23	0.46	0.000

Median	0.46	0.000
Std Dev	0.42	1.000
24	0.40	1.649
111	0.40	1.787

311.XX		Sodium
Lab	%Na <sub>2</sub> O	Total Method
24	0.49	-1.149
Std Dev	0.49	-1.000
61	0.47	-0.191
61	0.47	-0.191
23	0.46	0.000
Median	0.46	0.000
23	0.46	0.000
Std Dev	0.43	1.000
24	0.40	2.297
111	0.40	2.489

321.30		Acid Soluble Zinc
Lab	PPM	ICP
111	311.00	-29.444
Std Dev	72.20	-1.000
275	65.40	-0.191
275	64.70	-0.107
Median	63.80	0.000
24	62.90	0.107
Std Dev	55.40	1.000
61	51.00	1.525
61	50.00	1.644

321.XX		Acid Soluble Zinc
Lab	PPM	Total Method
111	311.00	-29.444
Std Dev	72.20	-1.000
275	65.40	-0.191
275	64.70	-0.107
Median	63.80	0.000
24	62.90	0.107
Std Dev	55.40	1.000
61	51.00	1.525
61	50.00	1.644

325.10		Fluoride
Lab	%	Electrode

111	3.58	-2.742
23	3.35	-1.309
23	3.35	-1.278
32	3.32	-1.122
32	3.31	-1.028
9	3.16	-0.125
275	3.14	0.000
275	3.14	0.000
Median	3.14	0.000
24	3.12	0.125
24	3.11	0.187
14	3.10	0.249
14	3.10	0.280
31	3.08	0.405
79	3.07	0.436
34	2.95	1.184

325.99		Fluoride
Lab	%	Other
61	3.26	-1.340
Median	3.25	0.000
61	3.24	1.340

325.XX		Fluoride
Lab	%	Total Method
111	3.58	-2.876
23	3.35	-1.373
23	3.35	-1.340
32	3.32	-1.177
32	3.31	-1.079
61	3.26	-0.752
61	3.24	-0.621
9	3.16	-0.131
275	3.14	0.000
275	3.14	0.000
Median	3.14	0.000
24	3.12	0.131
24	3.11	0.196
14	3.10	0.261
14	3.10	0.294
31	3.08	0.425
79	3.07	0.458
34	2.95	1.242