

# AFPC

## Sample

## 2012-12

## Grade

## 10-50-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	1	10.21	0.00
Ammoniacal Nitrogen, Other		001.99	10	10.10	0.08
Method Group 001.XX PCT			11	10.15	0.10
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	10.15	0.03
Total Nitrogen, Salicylic	955.04d	010.12	1	10.11	0.00
Total Nitrogen, Combustion	993.13	010.60	21	10.17	0.11
Total Nitrogen, Other		010.99	3	10.05	0.02
Method Group 010.XX PCT			28	10.15	0.13
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	3	49.26	0.16
Total Phosphate, Spectrometric	978.02	020.20	18	49.40	0.28
Total Phosphate, ICP	970.03	020.40	3	49.31	0.41
Total Phosphate, Other	993.13	020.99	1	49.80	0.00
Method Group 020.XX PCT			25	49.39	0.41
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	10	0.08	0.03
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.08	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	0.10	0.00
Insoluble Phosphate, Other		030.99	2	0.07	0.01
Method Group 030.XX PCT			15	0.08	0.04
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Spectrometric	960.02	040.20	11	49.33	0.13
Indirect Available Phosphate, Automated	960.02	040.40	1	49.70	0.00
Indirect Available Phosphate, Other		040.99	1	49.45	0.00
Method Group 040.XX PCT			13	49.38	0.16
<b>DIRECT AVAILABLE PHOSPHATE</b>					

Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	4	49.11	0.63
Direct Available Phosphate, Automated	978.01	041.40	1	50.13	0.00
Direct Available Phosphate, ICP		041.50	5	49.03	0.11
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	49.32	0.16
Direct Available Phosphate, Other		041.99	1	50.11	0.00
Method Group 041.XX PCT			15	49.32	0.45
<b>WATER SOLUBLE PHOSPHATE</b>					
Water Soluble Phosphate, Spectrometric	970.01	048.20	12	44.05	0.22
Water Soluble Phosphate, Other		048.99	3	43.79	0.49
Method Group 048.XX PCT			15	44.05	0.29
<b>SOLUBLE POTASH AS K<sub>2</sub>O</b>					
Soluble Potash, Atomic Absorption(Oxalate)		050.30	1	1.18	0.00
Soluble Potash, ICP(Oxalate)		050.50	2	0.22	0.00
Soluble Potash, ICP(Citrate)		050.51	1	0.20	0.00
Soluble Potash, Other		050.99	9	0.21	0.01
Method Group 050.XX PCT			13	0.21	0.02
<b>FREE WATER</b>					
Free Water, Vacuum Oven	965.08B	060.00	13	0.98	0.10
Free Water, Vacuum Desiccate	965.08A	060.10	2	0.94	0.02
Method Group 060.XX PCT			15	0.96	0.12
<b>ACID SOLUBLE CALCIUM AS CaO</b>					
Acid Soluble Calcium, ICP		101.30	18	2.08	0.17
Method Group 101.XX PCT			18	2.08	0.21
<b>ACID SOLUBLE MAGNESIUM AS MgO</b>					
Acid Soluble Magnesium, ICP		121.30	18	1.50	0.06
Method Group 121.XX PCT			18	1.50	0.07
<b>SULFATE SULFUR (S)</b>					
Sulfur, Gravimetric	980.02(a)	144.01	4	1.88	0.09
Sulfur, Spectrometric		144.70	2	2.05	0.00
Sulfur, Other		144.99	10	1.96	0.11
Method Group 144.XX PCT			16	1.96	0.20
<b>TOTAL SULFUR (S)</b>					
Sulfur, Other		145.99	3	1.97	0.04

Method Group 145.XX PCT			3	1.97	0.05
<b>TOTAL ARSENIC</b>					
Total Arsenic, ICP	980.02(b)	151.02	7	12	2.4
Method Group 151.XX PPM			7	12	2.9
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Other		165.99	2	44	3.9
Method Group 165.XX PPM			2	44	4.8
<b>TOTAL CADMIUM</b>					
Total Cadmium, ICP		181.30	6	5	0.2
Total Cadmium, Other		181.99	2	5	0.2
Method Group 181.XX PPM			8	5	0.4
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			15	2.56	0.08
Other, AA %		190.99	1	4.13	0.00
Method Group 190.XX PCT			16	2.57	0.14
<b>TOTAL CHROMIUM</b>					
Total Chromium, ICP		191.30	7	86	2.5
Total Chromium, Other		191.99	2	93	6.3
Method Group 191.XX PPM			9	86	4.1
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, ICP		202.30	7	4	0.4
Acid Soluble Cobalt, Other		202.99	1	4	0.0
Method Group 202.XX PPM			8	4	0.4
<b>ACID SOLUBLE COPPER</b>					
Acid Soluble Copper, Atomic Absorption	975.01	221.00	1	2	0.0
Acid Soluble Copper, ICP		221.30	3	5	1.1
Acid Soluble Copper, Other		221.99	2	0	0.2
Method Group 221.XX PPM			5	4	1.1
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>					
Acid Soluble Iron, ICP		241.30	18	1.87	0.06
Method Group 241.XX PCT			19	1.87	0.06
<b>TOTAL LEAD</b>					
Total Lead, ICP		251.30	6	8	0.0

Total Lead, Other		251.99	1	8	0.0
Method Group 251.XX PPM			7	8	0.3
<b>ACID SOLUBLE MANGANESE</b>					
Acid Soluble Manganese, Atomic Absorption	972.02b	261.11	1	386	0.0
Acid Soluble Manganese, ICP	972.02a	261.30	4	388	10.6
Acid Soluble Manganese, Other		261.99	5	382	36.6
Method Group 261.XX PPM			10	385	23.6
<b>TOTAL MOLYBDENUM</b>					
Total Molybdenum, ICP		289.30	6	16	1.0
Total Molybdenum, Other		289.99	1	17	0.0
Method Group 289.XX PPM			7	17	1.1
<b>TOTAL NICKEL</b>					
Total Nickel, ICP		291.30	7	15	1.6
Total Nickel, Other		291.99	1	15	0.0
Method Group 291.XX PPM			8	15	1.6
<b>TOTAL SELENIUM</b>					
Total Selenium, ICP		301.30	3	0	0.1
Method Group 301.XX PPM			3	0	0.2
<b>SODIUM AS Na<sub>2</sub>O</b>					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.48	0.00
Sodium, Other		311.99	8	0.46	0.04
Method Group 311.XX PCT			9	0.47	0.05
<b>ACID SOLUBLE ZINC</b>					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	1	64.5	0.0
Acid Soluble Zinc, ICP		321.30	6	62.1	5.0
Acid Soluble Zinc, Other		321.99	2	65.8	0.2
Method Group 321.XX %			9	63.5	4.1
<b>FLUORIDE</b>					
Volumetric		325.10	11	3.28	0.14
Distilled/Electrode		325.99	2	3.42	0.05
Method Group 325.XX PCT			13	3.34	0.16

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
31	10.21	0.000
<b>Median</b>	<b>10.21</b>	<b>0.000</b>

001.99 Ammoniacal Nitrogen		
Lab	Other	
61	10.19	-1.012
<b>Std Dev</b>	<b>10.18</b>	<b>-1.000</b>
34	10.16	-0.715
23	10.15	-0.596
23	10.15	-0.596
61	10.15	-0.596
<b>Median</b>	<b>10.10</b>	<b>0.000</b>
24	10.05	0.596
32	10.05	0.655
24	10.04	0.774
<b>Std Dev</b>	<b>10.02</b>	<b>1.000</b>
32	10.01	1.132
38	9.42	8.159

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
31	10.21	-0.699
61	10.19	-0.408
34	10.16	-0.117
23	10.15	0.000
23	10.15	0.000
61	10.15	0.000
<b>Median</b>	<b>10.15</b>	<b>0.000</b>
<b>Std Dev</b>	<b>10.06</b>	<b>1.000</b>
24	10.05	1.165
32	10.05	1.223
24	10.04	1.340
32	10.01	1.690
38	9.42	8.564

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
43	10.16	-0.335
43	10.15	0.000
<b>Median</b>	<b>10.15</b>	<b>0.000</b>
<b>Std Dev</b>	<b>10.12</b>	<b>1.000</b>
219	10.08	2.345

010.12 Total Nitrogen		
Lab	Salicylic	
107	10.11	0.000
<b>Median</b>	<b>10.11</b>	<b>0.000</b>

010.60 Total Nitrogen		
Lab	Combustion	
14	10.35	-1.608
14	10.30	-1.117
<b>Std Dev</b>	<b>10.28</b>	<b>-1.000</b>
63	10.26	-0.804
63	10.26	-0.804
47	10.26	-0.759
80	10.25	-0.715
31	10.25	-0.670
219	10.21	-0.313
39	10.18	-0.089
24	10.17	0.000
49	10.17	0.000
<b>Median</b>	<b>10.17</b>	<b>0.000</b>
9	10.16	0.089
35	10.15	0.179
66	10.14	0.268
77	10.11	0.581
95	10.10	0.625
24	10.09	0.759
<b>Std Dev</b>	<b>10.06</b>	<b>1.000</b>
137	10.06	1.027
102	9.96	1.921
103	9.94	2.055
110	9.33	7.549

010.99 Total Nitrogen		
Lab	Other	
99	10.06	-0.731
32	10.05	0.000
<b>Median</b>	<b>10.05</b>	<b>0.000</b>
<b>Std Dev</b>	<b>10.02</b>	<b>1.000</b>
32	10.01	1.949

010.XX Total Nitrogen		
Lab	Total Method	
14	10.35	-1.888

14	10.30	-1.375
63	10.26	-1.049
63	10.26	-1.049
47	10.26	-1.002
<b>Std Dev</b>	<b>10.25</b>	<b>-1.000</b>
80	10.25	-0.955
31	10.25	-0.909
219	10.21	-0.536
39	10.18	-0.303
24	10.17	-0.210
49	10.17	-0.210
9	10.16	-0.117
43	10.16	-0.070
35	10.15	-0.023
<b>Median</b>	<b>10.15</b>	<b>0.000</b>
43	10.15	0.023
66	10.14	0.070
107	10.11	0.350
77	10.11	0.396
95	10.10	0.443
24	10.09	0.583
219	10.08	0.676
99	10.06	0.816
137	10.06	0.862
32	10.05	0.955
<b>Std Dev</b>	<b>10.04</b>	<b>1.000</b>
32	10.01	1.328
102	9.96	1.794
103	9.94	1.934
110	9.33	7.667

020.10 Total Phosphate		
Lab	Gravimetric Quimociac	
241	49.49	-1.431
<b>Std Dev</b>	<b>49.42</b>	<b>-1.000</b>
219	49.26	0.000
<b>Median</b>	<b>49.26</b>	<b>0.000</b>
<b>Std Dev</b>	<b>49.09</b>	<b>1.000</b>
35	49.05	1.249

020.20 Total Phosphate		
Lab	Spectrometric	
95	50.00	-2.144
61	49.95	-1.965

9	49.81	-1.447
102	49.77	-1.322
61	49.74	-1.215
<b>Std Dev</b>	<b>49.68</b>	<b>-1.000</b>
34	49.55	-0.536
24	49.48	-0.286
14	49.42	-0.071
14	49.42	-0.054
<b>Median</b>	<b>49.40</b>	<b>0.000</b>
23	49.39	0.054
32	49.37	0.125
24	49.36	0.143
23	49.36	0.161
32	49.31	0.339
31	49.28	0.447
43	49.27	0.482
43	49.14	0.947
<b>Std Dev</b>	<b>49.12</b>	<b>1.000</b>
110	48.43	3.466

020.40 Total Phosphate		
Lab	Automated	
137	50.39	-2.631
<b>Std Dev</b>	<b>49.72</b>	<b>-1.000</b>
219	49.31	0.000
<b>Median</b>	<b>49.31</b>	<b>0.000</b>
9	49.29	0.049

020.99 Total Phosphate		
Lab	Other	
99	49.80	0.000
<b>Median</b>	<b>49.80</b>	<b>0.000</b>

020.XX Total Phosphate		
Lab	Total Method	
137	50.39	-2.945
95	50.00	-1.811
61	49.95	-1.664
9	49.81	-1.237
99	49.80	-1.222
102	49.77	-1.134
61	49.74	-1.045
<b>Std Dev</b>	<b>49.72</b>	<b>-1.000</b>
34	49.55	-0.486

241	49.49	-0.309
24	49.48	-0.280
14	49.42	-0.103
14	49.42	-0.088
23	49.39	0.000
<b>Median</b>	<b>49.39</b>	<b>0.000</b>
32	49.37	0.059
24	49.36	0.074
23	49.36	0.088
32	49.31	0.236
219	49.31	0.236
9	49.29	0.295
31	49.28	0.324
43	49.27	0.353
219	49.26	0.383
43	49.14	0.736
35	49.05	0.987
<b>Std Dev</b>	<b>49.05</b>	<b>1.000</b>
110	48.43	2.813

030.20	Insoluble Phosphate	
Lab	Spectrometric	
61	0.12	-1.247
61	0.12	-1.247
<b>Std Dev</b>	<b>0.11</b>	<b>-1.000</b>
23	0.09	-0.351
43	0.09	-0.336
23	0.08	-0.052
<b>Median</b>	<b>0.08</b>	<b>0.000</b>
43	0.08	0.052
24	0.06	0.545
<b>Std Dev</b>	<b>0.04</b>	<b>1.000</b>
14	0.04	1.142
14	0.04	1.291
24	0.03	1.441

030.30	Insoluble Phosphate	
Lab	Alka. Quimociac	
31	0.08	0.000
<b>Median</b>	<b>0.08</b>	<b>0.000</b>

030.40	Insoluble Phosphate	
Lab	Automated	
9	0.11	-1.340

<b>Std Dev</b>	<b>0.10</b>	<b>-1.000</b>
<b>Median</b>	<b>0.10</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.10</b>	<b>1.000</b>
34	0.10	1.340

030.99	Insoluble Phosphate	
Lab	Other	
32	0.09	-1.340
<b>Std Dev</b>	<b>0.08</b>	<b>-1.000</b>
<b>Median</b>	<b>0.07</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.05</b>	<b>1.000</b>
32	0.05	1.340

030.XX	Insoluble Phosphate	
Lab	Total Method	
61	0.12	-1.340
61	0.12	-1.340
<b>Std Dev</b>	<b>0.11</b>	<b>-1.000</b>
9	0.11	-0.838
34	0.10	-0.670
23	0.09	-0.335
43	0.09	-0.318
32	0.09	-0.168
23	0.08	0.000
31	0.08	0.000
<b>Median</b>	<b>0.08</b>	<b>0.000</b>
43	0.08	0.117
24	0.06	0.670
<b>Std Dev</b>	<b>0.05</b>	<b>1.000</b>
32	0.05	1.005
14	0.04	1.340
14	0.04	1.508
24	0.03	1.675

040.20	Indirect Available Phosphate	
Lab	Spectrometric	
61	49.83	-4.000
61	49.62	-2.320
<b>Std Dev</b>	<b>49.46</b>	<b>-1.000</b>
24	49.42	-0.720
14	49.39	-0.440
14	49.38	-0.360
24	49.33	0.000
<b>Median</b>	<b>49.33</b>	<b>0.000</b>

23	49.30	0.280
23	49.28	0.440
<b>Std Dev</b>	<b>49.21</b>	<b>1.000</b>
31	49.20	1.080
43	49.19	1.120
43	49.05	2.280

040.40	Indirect Available Phosphate	
Lab	Automated	
9	49.70	0.000
<b>Median</b>	<b>49.70</b>	<b>0.000</b>

040.99	Indirect Available Phosphate	
Lab	Other	
34	49.45	0.000
<b>Median</b>	<b>49.45</b>	<b>0.000</b>

040.XX	Indirect Available Phosphate	
Lab	Total Method	
61	49.83	-3.484
9	49.70	-2.489
61	49.62	-1.876
<b>Std Dev</b>	<b>49.51</b>	<b>-1.000</b>
34	49.45	-0.574
24	49.42	-0.345
14	49.39	-0.077
14	49.38	0.000
<b>Median</b>	<b>49.38</b>	<b>0.000</b>
24	49.33	0.345
23	49.30	0.613
23	49.28	0.766
<b>Std Dev</b>	<b>49.24</b>	<b>1.000</b>
31	49.20	1.378
43	49.19	1.417
43	49.05	2.527

041.10	Direct Available Phosphate	
Lab	Gravimetric Quimociac	
39	49.52	-0.660
47	49.40	-0.469
<b>Median</b>	<b>49.11</b>	<b>0.000</b>
219	48.81	0.469
<b>Std Dev</b>	<b>48.48</b>	<b>1.000</b>
107	47.92	1.885

041.40	Direct Available Phosphate	
Lab	Automated	
103	50.13	0.000
<b>Median</b>	<b>50.13</b>	<b>0.000</b>

041.50	Direct Available Phosphate	
Lab	ICP	
80	49.40	-3.419
<b>Std Dev</b>	<b>49.14</b>	<b>-1.000</b>
63	49.04	-0.092
63	49.03	0.000
<b>Median</b>	<b>49.03</b>	<b>0.000</b>
<b>Std Dev</b>	<b>48.92</b>	<b>1.000</b>
66	48.90	1.248
47	47.91	10.350

041.60	Direct Available Phosphate	
Lab	EDTA Extract	
49	49.90	-3.631
<b>Std Dev</b>	<b>49.48</b>	<b>-1.000</b>
77	49.33	-0.016
<b>Median</b>	<b>49.32</b>	<b>0.000</b>
219	49.32	0.016
<b>Std Dev</b>	<b>49.16</b>	<b>1.000</b>
29	49.07	1.633

041.99	Direct Available Phosphate	
Lab	Other	
137	50.11	0.000
<b>Median</b>	<b>50.11</b>	<b>0.000</b>

041.XX	Direct Available Phosphate	
Lab	Total Method	
103	50.13	-2.182
137	50.11	-2.128
49	49.90	-1.549
<b>Std Dev</b>	<b>49.69</b>	<b>-1.000</b>
39	49.52	-0.539
47	49.40	-0.215
80	49.40	-0.215
77	49.33	-0.013
219	49.32	0.000
<b>Median</b>	<b>49.32</b>	<b>0.000</b>

29	49.07	0.687
63	49.04	0.754
63	49.03	0.781
<b>Std Dev</b>	<b>48.95</b>	<b>1.000</b>
66	48.90	1.145
219	48.81	1.374
107	47.92	3.771
47	47.91	3.798

048.20 Water Soluble Phosphate		
Lab	Spectrometric	
9	44.56	-2.283
<b>Std Dev</b>	<b>44.27</b>	<b>-1.000</b>
23	44.20	-0.647
43	44.13	-0.329
61	44.08	-0.125
43	44.07	-0.079
23	44.06	-0.011
<b>Median</b>	<b>44.05</b>	<b>0.000</b>
61	44.05	0.011
31	43.97	0.397
<b>Std Dev</b>	<b>43.83</b>	<b>1.000</b>
24	43.80	1.147
24	43.79	1.215
14	43.64	1.874
14	43.63	1.919

048.99 Water Soluble Phosphate		
Lab	Other	
32	45.05	-2.567
<b>Std Dev</b>	<b>44.28</b>	<b>-1.000</b>
34	43.79	0.000
<b>Median</b>	<b>43.79</b>	<b>0.000</b>
32	43.74	0.113

048.XX Water Soluble Phosphate		
Lab	Total Method	
32	45.05	-4.233
9	44.56	-2.148
<b>Std Dev</b>	<b>44.29</b>	<b>-1.000</b>
23	44.20	-0.617
43	44.13	-0.319
61	44.08	-0.128
43	44.07	-0.085

23	44.06	-0.021
61	44.05	0.000
<b>Median</b>	<b>44.05</b>	<b>0.000</b>
31	43.97	0.362
<b>Std Dev</b>	<b>43.81</b>	<b>1.000</b>
24	43.80	1.063
34	43.79	1.106
24	43.79	1.127
32	43.74	1.340
14	43.64	1.744
14	43.63	1.787

050.30 Soluble Potash		
Lab	Atomic Absorption(Oxalate)	
95	1.18	0.000
<b>Median</b>	<b>1.18</b>	<b>0.000</b>

050.50 Soluble Potash		
Lab	%K <sub>2</sub> O	ICP(Oxalate)
23	0.22	0.000
23	0.22	0.000
<b>Median</b>	<b>0.22</b>	<b>0.000</b>

050.51 Soluble Potash		
Lab	%K <sub>2</sub> O	ICP(Citrate)
137	0.20	0.000
<b>Median</b>	<b>0.20</b>	<b>0.000</b>

050.99 Soluble Potash		
Lab	%K <sub>2</sub> O	Other
241	0.22	-1.155
<b>Std Dev</b>	<b>0.22</b>	<b>-1.000</b>
102	0.21	-0.185
24	0.21	0.000
61	0.21	0.000
61	0.21	0.000
<b>Median</b>	<b>0.21</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.20</b>	<b>1.000</b>
43	0.20	1.180
43	0.20	1.340
24	0.20	1.732
99	0.16	6.352

050.XX Soluble Potash		
Lab	%K <sub>2</sub> O	Total Method
95	1.18	-64.292
<b>Std Dev</b>	<b>0.23</b>	<b>-1.000</b>
23	0.22	-0.663
23	0.22	-0.663
241	0.22	-0.663
102	0.21	-0.106
24	0.21	0.000
61	0.21	0.000
61	0.21	0.000
<b>Median</b>	<b>0.21</b>	<b>0.000</b>
137	0.20	0.663
43	0.20	0.677
43	0.20	0.769
24	0.20	0.994
<b>Std Dev</b>	<b>0.19</b>	<b>1.000</b>
99	0.16	3.645

060.00 Free Water		
Lab	Vacuum Oven	
14	1.09	-1.053
<b>Std Dev</b>	<b>1.08</b>	<b>-1.000</b>
31	1.08	-0.957
24	1.07	-0.909
14	1.06	-0.814
43	1.05	-0.670
43	1.03	-0.526
23	0.98	0.000
<b>Median</b>	<b>0.98</b>	<b>0.000</b>
23	0.93	0.431
32	0.92	0.526
34	0.92	0.526
24	0.92	0.574
32	0.91	0.670
9	0.88	0.957

060.10 Free Water		
Lab	Vacuum Desiccate	
61	0.96	-1.340
<b>Std Dev</b>	<b>0.95</b>	<b>-1.000</b>
<b>Median</b>	<b>0.94</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.92</b>	<b>1.000</b>
61	0.91	1.340

060.XX Free Water		
Lab	Total Method	
14	1.09	-1.241
31	1.08	-1.141
24	1.07	-1.092
<b>Std Dev</b>	<b>1.06</b>	<b>-1.000</b>
14	1.06	-0.993
43	1.05	-0.844
43	1.03	-0.695
23	0.98	-0.149
61	0.96	0.000
<b>Median</b>	<b>0.96</b>	<b>0.000</b>
23	0.93	0.298
32	0.92	0.397
34	0.92	0.397
24	0.92	0.447
61	0.91	0.496
32	0.91	0.546
9	0.88	0.844

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
31	6.21	-24.156
102	2.39	-1.798
<b>Std Dev</b>	<b>2.25</b>	<b>-1.000</b>
9	2.21	-0.732
14	2.19	-0.615
14	2.19	-0.615
34	2.12	-0.234
61	2.12	-0.234
61	2.09	-0.059
23	2.09	-0.029
<b>Median</b>	<b>2.08</b>	<b>0.000</b>
23	2.08	0.029
39	2.04	0.217
43	1.99	0.504
43	1.98	0.558
24	1.93	0.908
32	1.92	0.966
24	1.91	0.996
<b>Std Dev</b>	<b>1.91</b>	<b>1.000</b>
38	1.89	1.113
32	1.85	1.347

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
31	6.21	-24.156
102	2.39	-1.798
<b>Std Dev</b>	<b>2.25</b>	<b>-1.000</b>
9	2.21	-0.732
14	2.19	-0.615
14	2.19	-0.615
34	2.12	-0.234
61	2.12	-0.234
61	2.09	-0.059
23	2.09	-0.029
<b>Median</b>	<b>2.08</b>	<b>0.000</b>
23	2.08	0.029
39	2.04	0.217
43	1.99	0.504
43	1.98	0.558
24	1.93	0.908
32	1.92	0.966
24	1.91	0.996
<b>Std Dev</b>	<b>1.91</b>	<b>1.000</b>
38	1.89	1.113
32	1.85	1.347

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
24	1.64	-2.334
23	1.58	-1.383
24	1.58	-1.383
23	1.56	-1.037
<b>Std Dev</b>	<b>1.56</b>	<b>-1.000</b>
39	1.54	-0.605
32	1.53	-0.432
61	1.53	-0.432
61	1.52	-0.346
9	1.52	-0.259
<b>Median</b>	<b>1.50</b>	<b>0.000</b>
31	1.49	0.259
102	1.47	0.501
34	1.47	0.519
14	1.46	0.778
14	1.46	0.778
<b>Std Dev</b>	<b>1.44</b>	<b>1.000</b>

32	1.41	1.556
38	1.36	2.421
43	0.84	11.498
43	0.79	12.276

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
24	1.64	-2.334
23	1.58	-1.383
24	1.58	-1.383
23	1.56	-1.037
<b>Std Dev</b>	<b>1.56</b>	<b>-1.000</b>
39	1.54	-0.605
32	1.53	-0.432
61	1.53	-0.432
61	1.52	-0.346
9	1.52	-0.259
<b>Median</b>	<b>1.50</b>	<b>0.000</b>
31	1.49	0.259
102	1.47	0.501
34	1.47	0.519
14	1.46	0.778
14	1.46	0.778
<b>Std Dev</b>	<b>1.44</b>	<b>1.000</b>
32	1.41	1.556
38	1.36	2.421
43	0.84	11.498
43	0.79	12.276

144..01 Sulfate Sulfur (S)		
Lab		Gravimetric
219	2.06	-2.017
<b>Std Dev</b>	<b>1.97</b>	<b>-1.000</b>
241	1.92	-0.470
<b>Median</b>	<b>1.88</b>	<b>0.000</b>
61	1.84	0.470
61	1.83	0.525

144.70 Sulfur		
Lab		Spectrometric
14	2.06	-1.340
<b>Std Dev</b>	<b>2.05</b>	<b>-1.000</b>
<b>Median</b>	<b>2.05</b>	<b>0.000</b>
<b>Std Dev</b>	<b>2.05</b>	<b>1.000</b>

14	2.05	1.340
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144.99 Sulfate Sulfur (S)		
Lab		Other
9	5.80	-36.109
38	3.05	-10.250
<b>Std Dev</b>	<b>2.07</b>	<b>-1.000</b>
23	2.00	-0.376
23	1.99	-0.235
24	1.98	-0.141
<b>Median</b>	<b>1.96</b>	<b>0.000</b>
24	1.95	0.141
34	1.91	0.470
<b>Std Dev</b>	<b>1.85</b>	<b>1.000</b>
31	1.84	1.175
32	1.81	1.411
32	1.72	2.304

144.XX Sulfate Sulfur (S)		
Lab		Total Method
9	5.80	-23.795
38	3.05	-6.754
<b>Std Dev</b>	<b>2.12</b>	<b>-1.000</b>
219	2.06	-0.620
14	2.06	-0.589
14	2.05	-0.558
23	2.00	-0.248
23	1.99	-0.155
24	1.98	-0.093
<b>Median</b>	<b>1.96</b>	<b>0.000</b>
24	1.95	0.093
241	1.92	0.248
34	1.91	0.310
31	1.84	0.775
61	1.84	0.775
61	1.83	0.806
32	1.81	0.929
<b>Std Dev</b>	<b>1.80</b>	<b>1.000</b>
32	1.72	1.518

145.99 Total Sulfur (S)		
Lab		Other
102	2.07	-2.444
<b>Std Dev</b>	<b>2.01</b>	<b>-1.000</b>

43	1.97	0.000
<b>Median</b>	<b>1.97</b>	<b>0.000</b>
43	1.96	0.236

145.XX Total Sulfur (S)		
Lab		Total Method
102	2.07	-2.444
<b>Std Dev</b>	<b>2.01</b>	<b>-1.000</b>
43	1.97	0.000
<b>Median</b>	<b>1.97</b>	<b>0.000</b>
43	1.96	0.236

151.30 Total Arsenic		
Lab		ICP
31	13.75	-0.823
61	13.65	-0.781
61	13.45	-0.697
102	11.79	0.000
<b>Median</b>	<b>11.79</b>	<b>0.000</b>
24	11.10	0.287
43	9.60	0.915
<b>Std Dev</b>	<b>9.40</b>	<b>1.000</b>
43	9.00	1.166

151.XX Total Arsenic		
Lab		Total Method
31	13.75	-0.823
61	13.65	-0.781
61	13.45	-0.697
102	11.79	0.000
<b>Median</b>	<b>11.79</b>	<b>0.000</b>
24	11.10	0.287
43	9.60	0.915
<b>Std Dev</b>	<b>9.40</b>	<b>1.000</b>
43	9.00	1.166

165.99 Acid Soluble Boron		
Lab	PPM	Other
102	48.75	-1.340
<b>Std Dev</b>	<b>47.42</b>	<b>-1.000</b>
<b>Median</b>	<b>43.53</b>	<b>0.000</b>
<b>Std Dev</b>	<b>39.63</b>	<b>1.000</b>
24	38.30	1.340



65.XX, ppm		Acid Soluble Boron	
Lab	PPM	Total Method	
102	48.75	-1.340	
Std Dev	47.42	-1.000	
Median	43.53	0.000	
Std Dev	39.63	1.000	
24	38.30	1.340	

181.30		Total Cadmium	
Lab	PPM	ICP	
43	5.28	-1.467	
43	5.22	-1.147	
Std Dev	5.19	-1.000	
61	5.00	0.000	
61	5.00	0.000	
Median	5.00	0.000	
102	4.88	0.640	
Std Dev	4.81	1.000	
219	3.88	5.973	

181.99		Total Cadmium	
Lab	PPM	Other	
24	5.16	-1.340	
Std Dev	5.08	-1.000	
Median	4.83	0.000	
Std Dev	4.58	1.000	
9	4.50	1.340	

181.XX		Total Cadmium	
Lab	PPM	Total Method	
43	5.28	-0.948	
43	5.22	-0.741	
24	5.16	-0.552	
61	5.00	0.000	
61	5.00	0.000	
Median	5.00	0.000	
102	4.88	0.414	
Std Dev	4.71	1.000	
9	4.50	1.723	
219	3.88	3.861	

190.00		Aluminum	
Lab	%Al <sub>2</sub> O <sub>3</sub>	ICP	
102	2.83	-3.472	

14	2.81	-3.203	
14	2.80	-3.072	
Std Dev	2.64	-1.000	
9	2.64	-0.980	
24	2.60	-0.523	
23	2.58	-0.261	
23	2.57	-0.131	
34	2.56	0.000	
Median	2.56	0.000	
24	2.55	0.131	
32	2.53	0.458	
61	2.52	0.523	
61	2.51	0.654	
Std Dev	2.48	1.000	
32	2.45	1.503	
43	1.75	10.589	
43	1.69	11.374	

190.99		Aluminum	
Lab	%Al <sub>2</sub> O <sub>3</sub>	Atomic Absorption	
31	4.13	0.000	
Median	4.13	0.000	

190.XX		Aluminum	
Lab	%Al <sub>2</sub> O <sub>3</sub>	Total Method	
31	4.13	-13.272	
102	2.83	-2.217	
14	2.81	-2.042	
14	2.80	-1.957	
Std Dev	2.68	-1.000	
9	2.64	-0.596	
24	2.60	-0.298	
23	2.58	-0.128	
23	2.57	-0.043	
Median	2.57	0.000	
34	2.56	0.043	
24	2.55	0.128	
32	2.53	0.340	
61	2.52	0.383	
61	2.51	0.468	
Std Dev	2.45	1.000	
32	2.45	1.021	
43	1.75	6.934	
43	1.69	7.444	

191.30		Total Chromium	
Lab	PPM	ICP	
31	92.05	-2.608	
61	89.50	-1.593	
Std Dev	88.01	-1.000	
219	87.25	-0.697	
43	85.50	0.000	
Median	85.50	0.000	
102	85.02	0.191	
43	85.00	0.199	
61	84.00	0.597	

191.99		Total Chromium	
Lab	PPM	Other	
9	101.50	-1.340	
Std Dev	99.37	-1.000	
Median	93.10	0.000	
Std Dev	86.83	1.000	
24	84.70	1.340	

191.XX		Total Chromium	
Lab	PPM	Total Method	
9	101.50	-4.764	
31	92.05	-1.950	
61	89.50	-1.191	
Std Dev	88.86	-1.000	
219	87.25	-0.521	
43	85.50	0.000	
Median	85.50	0.000	
102	85.02	0.143	
43	85.00	0.149	
24	84.70	0.238	
61	84.00	0.447	

202.30		Acid Soluble Cobalt	
Lab	PPM	ICP	
43	4.00	-1.136	
43	4.00	-1.136	
Std Dev	3.94	-1.000	
219	3.68	-0.409	
9	3.50	0.000	
61	3.50	0.000	
Median	3.50	0.000	

Std Dev	3.06	1.000	
61	3.00	1.136	
102	2.75	1.715	

202.99		Acid Soluble Cobalt	
Lab	PPM	Other	
24	3.59	0.000	
Median	3.59	0.000	

202.XX		Acid Soluble Cobalt	
Lab	PPM	Total Method	
43	4.00	-1.584	
43	4.00	-1.584	
Std Dev	3.83	-1.000	
219	3.68	-0.470	
24	3.59	-0.157	
Median	3.55	0.000	
9	3.50	0.157	
61	3.50	0.157	
Std Dev	3.26	1.000	
61	3.00	1.897	
102	2.75	2.784	

221.00		Acid Soluble Copper	
Lab	PPM	Atomic Absorption	
219	1.90	0.000	
Median	1.90	0.000	

221.30		Acid Soluble Copper	
Lab	PPM	ICP	
61	<1	0.000	
61	<1	0.000	
43	5.00	0.000	
43	5.00	0.000	
Median	5.00	0.000	
102	1.95	2.680	

221.99		Acid Soluble Copper	
Lab	PPM	Other	
24	4.38	-1.340	
Std Dev	4.31	-1.000	
Median	4.10	0.000	
Std Dev	3.89	1.000	
219	3.82	1.340	

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
61	<1	0.000
61	<1	0.000
43	5.00	-0.701
43	5.00	-0.701
24	4.38	0.000
<b>Median</b>	<b>4.38</b>	<b>0.000</b>
219	3.82	0.639
102	1.95	2.754

241.30 Acid Soluble Iron		
Lab	%Fe <sub>2</sub> O <sub>3</sub>	ICP
32	2.21	-6.268
102	1.95	-1.580
14	1.94	-1.363
<b>Std Dev</b>	<b>1.92</b>	<b>-1.000</b>
14	1.91	-0.818
24	1.91	-0.818
39	1.90	-0.545
23	1.89	-0.454
23	1.88	-0.182
34	1.87	-0.091
<b>Median</b>	<b>1.87</b>	<b>0.000</b>
24	1.86	0.091
32	1.86	0.182
61	1.86	0.182
61	1.86	0.182
9	1.83	0.727
<b>Std Dev</b>	<b>1.81</b>	<b>1.000</b>
43	1.81	1.090
31	1.80	1.181
43	1.79	1.363
38	1.72	2.635

241.XX Acid Soluble Iron		
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Total Method
32	2.21	-7.290
102	1.95	-1.757
14	1.94	-1.501
<b>Std Dev</b>	<b>1.92</b>	<b>-1.000</b>
14	1.91	-0.858
24	1.91	-0.858

39	1.90	-0.536
219	1.90	-0.536
23	1.89	-0.429
23	1.88	-0.107
34	1.87	0.000
<b>Median</b>	<b>1.87</b>	<b>0.000</b>
24	1.86	0.214
32	1.86	0.322
61	1.86	0.322
61	1.86	0.322
9	1.83	0.965
<b>Std Dev</b>	<b>1.82</b>	<b>1.000</b>
43	1.81	1.394
31	1.80	1.501
43	1.79	1.715
38	1.72	3.216

251.30 Total Lead		
Lab	PPM	ICP
102	9.19	-19.028
<b>Std Dev</b>	<b>8.51</b>	<b>-1.000</b>
9	8.50	-0.670
61	8.50	-0.670
<b>Median</b>	<b>8.48</b>	<b>0.000</b>
43	8.45	0.670
43	8.45	0.670
<b>Std Dev</b>	<b>8.44</b>	<b>1.000</b>
61	8.00	12.730

251.99 Total Lead		
Lab	PPM	Other
24	7.78	0.000
<b>Median</b>	<b>7.78</b>	<b>0.000</b>

251.XX Total Lead		
Lab	PPM	Total Method
102	9.19	-3.581
<b>Std Dev</b>	<b>8.66</b>	<b>-1.000</b>
9	8.50	-0.244
61	8.50	-0.244
43	8.45	0.000
43	8.45	0.000
<b>Median</b>	<b>8.45</b>	<b>0.000</b>
<b>Std Dev</b>	<b>8.24</b>	<b>1.000</b>

61	8.00	2.193
24	7.78	3.265

261.11 Acid Soluble Manganese		
Lab	PPM	Atomic Absorption
219	385.50	0.000
<b>Median</b>	<b>385.50</b>	<b>0.000</b>

261.30 Acid Soluble Manganese		
Lab	PPM	ICP
31	400.85	-1.234
<b>Std Dev</b>	<b>398.36</b>	<b>-1.000</b>
9	390.50	-0.259
<b>Median</b>	<b>387.75</b>	<b>0.000</b>
39	385.00	0.259
<b>Std Dev</b>	<b>377.14</b>	<b>1.000</b>
102	360.47	2.571

261.99 Acid Soluble Manganese		
Lab	PPM	Other
43	423.50	-1.135
<b>Std Dev</b>	<b>418.57</b>	<b>-1.000</b>
43	418.00	-0.984
61	382.00	0.000
<b>Median</b>	<b>382.00</b>	<b>0.000</b>
24	369.00	0.356
61	367.00	0.410

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
43	423.50	-1.970
43	418.00	-1.687
<b>Std Dev</b>	<b>404.66</b>	<b>-1.000</b>
31	400.85	-0.804
9	390.50	-0.270
219	385.50	-0.013
<b>Median</b>	<b>385.25</b>	<b>0.000</b>
39	385.00	0.013
61	382.00	0.167
24	369.00	0.837
61	367.00	0.940
<b>Std Dev</b>	<b>365.84</b>	<b>1.000</b>
102	360.47	1.277

281.30 Total Mercury		
Lab	PPM	ICP
24	<0.09	0.000
<b>Median</b>	<b>0.00</b>	<b>0.000</b>

281.99 Total Mercury		
Lab	PPM	Other
102	<0.4	0.000
<b>Median</b>	<b>0.00</b>	<b>0.000</b>

281.XX Total Mercury		
Lab	PPM	Total Method
102	<0.4	0.000
24	<0.09	0.000
<b>Median</b>	<b>0.00</b>	<b>0.000</b>

289.30 Total Molybdenum		
Lab	PPM	ICP
9		

289.99 Total Molybdenum		
Lab	PPM	Other
24	16.60	0.000
<b>Median</b>	<b>16.60</b>	<b>0.000</b>

289.XX Total Molybdenum		
Lab	PPM	Total Method
9	17.50	-1.153
<b>Std Dev</b>	<b>17.37</b>	<b>-1.000</b>
102	17.28	-0.893
24	16.60	-0.115
61	16.50	0.000
<b>Median</b>	<b>16.50</b>	<b>0.000</b>
43	15.80	0.807
43	15.75	0.865
<b>Std Dev</b>	<b>15.63</b>	<b>1.000</b>
61	15.00	1.729

291.30 Total Nickel		
Lab	PPM	ICP
219	19.60	-2.949
<b>Std Dev</b>	<b>16.56</b>	<b>-1.000</b>
61	16.00	-0.641
9	15.00	0.000
61	15.00	0.000

Median	15.00	0.000
43	13.50	0.962
Std Dev	13.44	1.000
102	13.32	1.077
43	13.00	1.282

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
219	19.60	-3.621
Std Dev	16.09	-1.000
61	16.00	-0.933
9	15.00	-0.187
61	15.00	-0.187
Median	14.75	0.000
24	14.50	0.187
43	13.50	0.933
Std Dev	13.41	1.000
102	13.32	1.068
43	13.00	1.306

301.30		Total Selenium
Lab	PPM	ICP
102	<5	0.000
24	0.63	-2.642
Std Dev	0.42	-1.000
61	0.29	0.000
Median	0.29	0.000
61	0.28	0.038

301.XX		Total Selenium
Lab	PPM	Total Mthod
102	<5	0.000
24	0.63	-2.642
Std Dev	0.42	-1.000
61	0.29	0.000
Median	0.29	0.000
61	0.28	0.038

311.00		Sodium
Lab	%Na <sub>2</sub> O	Atomic Absorbtion
61	0.48	0.000
Median	0.48	0.000

311.99		Sodium
Lab	%Na <sub>2</sub> O	Other
23	0.50	-1.039
Std Dev	0.49	-1.000
23	0.49	-0.779
24	0.47	-0.389
61	0.47	-0.389
Median	0.46	0.000
24	0.44	0.389
102	0.43	0.750
Std Dev	0.42	1.000
43	0.41	1.161
43	0.41	1.238

311.XX		Sodium
Lab	%Na <sub>2</sub> O	Total Method
23	0.50	-0.622
23	0.49	-0.373
61	0.48	-0.249
24	0.47	0.000
61	0.47	0.000
Median	0.47	0.000
24	0.44	0.746
Std Dev	0.43	1.000
102	0.43	1.091
43	0.41	1.485
43	0.41	1.559

321.00		Acid Soluble Zinc
Lab		Atomic Absorption
219	64.45	0.000
Median	64.45	0.000

321.30		Acid Soluble Zinc
Lab	PPM	ICP
9	68.00	-1.175
Std Dev	67.13	-1.000
61	63.50	-0.273
102	63.28	-0.229

Median	62.14	0.000
61	61.00	0.229
Std Dev	57.15	1.000
219	55.35	1.362
24	53.10	1.813

321.99		Acid Soluble Zinc
Lab		Other
43	66.00	-1.340
Std Dev	65.94	-1.000
Median	65.75	0.000
Std Dev	65.56	1.000
43	65.50	1.340

321.XX		Acid Soluble Zinc
Lab	PPM	Total Method
9	68.00	-1.340
Std Dev	66.86	-1.000
43	66.00	-0.744
43	65.50	-0.596
219	64.45	-0.283
61	63.50	0.000
Median	63.50	0.000
102	63.28	0.066
61	61.00	0.744
Std Dev	60.14	1.000
219	55.35	2.427
24	53.10	3.097

325.10		Fluoride
Lab	%	Electrode
24	3.45	-1.218
9	3.40	-0.870
23	3.40	-0.870
23	3.38	-0.731
24	3.34	-0.452
32	3.28	0.000
Median	3.28	0.000
32	3.27	0.070
34	3.22	0.383
31	3.18	0.696
14	2.81	3.272
14	2.81	3.272

325.99		Fluoride
Lab	%	Other
61	3.49	-1.340
Median	3.42	0.000
61	3.35	1.340

325.XX		Fluoride
Lab	%	Total Method
61	3.49	-1.079
24	3.45	-0.819
9	3.40	-0.447
23	3.40	-0.447
23	3.38	-0.298
61	3.35	-0.074
24	3.34	0.000
Median	3.34	0.000
32	3.28	0.484
32	3.27	0.558
34	3.22	0.893
31	3.18	1.228
14	2.81	3.983
14	2.81	3.983