

## AFPC

## Sample

2020-04

Grade

MESZ

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	2	11.81	0.00
Ammoniacal Nitrogen, Other		001.99	10	11.78	0.05
Method Group 001.XX PCT			12	11.80	0.05
<b>AMMON &amp; NITRATE N</b>					
Ammon & Nitrate N, Other		009.99	1	11.85	0.00
Method Group 009.XX PCT			1	11.85	0.00
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	2	11.82	0.00
Total Nitrogen, Combustion	993.13	010.60	16	11.86	0.06
Total Nitrogen, Other		010.99	1	11.77	0.00
Method Group 010.XX PCT			19	11.84	0.08
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	1	40.27	0.00
Total Phosphate, Spectrometric	978.02	020.20	20	40.45	0.21
Total Phosphate, ICP	970.03	020.40	2	40.46	0.20
Method Group 020.XX PCT			23	40.45	0.30
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Gravimetric Quimociac	963.03C(a)	030.10	1	0.58	0.00
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	12	0.33	0.12
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	2	0.09	0.02
Insoluble Phosphate, Automated	978.01	030.40	2	0.38	0.06
Method Group 030.XX PCT			17	0.33	0.18
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Spectrometric	960.02	040.20	13	40.28	0.27
Indirect Available Phosphate, Other		040.99	1	40.25	0.00
Method Group 040.XX PCT			14	40.26	0.30
<b>DIRECT AVAILABLE PHOSPHATE</b>					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	39.88	0.20
Direct Available Phosphate, Spectrometric	960.03D	041.20	1	39.96	0.00
Direct Available Phosphate, Automated	978.01	041.40	1	38.40	0.00
Direct Available Phosphate, ICP		041.50	3	40.24	0.87
Direct Available Phosphate, EDTA Extract	993.01	041.60	3	39.70	0.42
Method Group 041.XX PCT			10	39.72	1.13
<b>WATER SOLUBLE PHOSPHATE</b>					
Water Soluble Phosphate, Gravimetric Quimociac	962.03	048.10	1	35.25	0.00
Water Soluble Phosphate, Spectrometric	970.01	048.20	18	35.52	0.22
Water Soluble Phosphate, Other		048.99	2	35.34	0.04
Method Group 048.XX PCT			21	35.50	0.29
<b>SOLUBLE POTASH AS K<sub>2</sub>O</b>					
Soluble Potash, ICP(Oxalate)		050.50	3	0.13	0.01
Soluble Potash, ICP(Citrate)		050.51	1	0.13	0.00
Soluble Potash, Other		050.99	8	0.13	0.01
Method Group 050.XX PCT			12	0.13	0.01
<b>FREE WATER</b>					
Free Water, Vacuum Oven	965.08B	060.00	14	0.87	0.20
Free Water, Vacuum Desiccate	965.08A	060.10	2	0.45	0.01
Free Water, Other		060.99	2	0.89	0.01
Method Group 060.XX PCT			18	0.86	0.26
<b>ACID SOLUBLE CALCIUM AS CaO</b>					
Acid Soluble Calcium, ICP		101.30	16	0.52	0.06
Method Group 101.XX PCT			16	0.52	0.07
<b>ACID SOLUBLE MAGNESIUM AS MgO</b>					
Acid Soluble Magnesium, ICP		121.30	16	0.94	0.03

Method Group 121.XX PCT		16	0.94	0.04	
<b>SULFATE SULFUR (S)</b>					
Sulfur, Gravimetric	980.02(a)	144.01	5	5.33	0.13
Sulfur, Spectrometric		144.70	2	5.14	0.01
Sulfur, Other		144.99	14	5.26	0.12
Method Group 144.XX PCT			21	5.28	0.15
<b>TOTAL SULFUR (S)</b>					
Sulfur, Other		145.99	14	10.20	0.1
Method Group 145.XX PCT			14	10.20	0.1
<b>TOTAL ARSENIC</b>					
Total Arsenic, ICP	980.02(b)	151.02	6	7.5	1.3
Method Group 151.XX PPM			6	7.5	1.6
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Other		165.99	1	234	0.0
Method Group 165.XX PPM			1	234	0.0
<b>WATER SOLUBLE BORON</b>					
Water Soluble Boron, Other		171.99	1	11	0.0
Method Group 171.XX PPM			1	11	0.0
<b>TOTAL CADMIUM</b>					
Total Cadmium, Atomic Absorbtion		181.00	1	3	0.0
Total Cadmium, ICP		181.30	8	2.9	1.2
Method Group 181.XX PPM			9	3.0	1.5
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			16	1.33	0.04
Method Group 190.XX PCT			16	1.33	0.05
<b>TOTAL CHROMIUM</b>					
Total Chromium, ICP		191.30	8	65	5.6
Method Group 191.XX PPM			8	65	6.8
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, ICP		202.30	5	3	0.0
Method Group 202.XX PPM			5	3	0.0
<b>ACID SOLUBLE COPPER</b>					
Method Group 221.XX PPM			6	2.8	0.8
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>					
Acid Soluble Iron, ICP		241.30	16	1.46	0.03
Method Group 241.XX PCT			16	1.46	0.04
<b>TOTAL LEAD</b>					
Total Lead, ICP		251.30	9	2.6	1.0
Method Group 251.XX PPM			9	2.6	1.3
<b>ACID SOLUBLE MANGANESE</b>					
Acid Soluble Manganese, ICP	972.02a	261.30	3	279	8.9
Acid Soluble Manganese, Other		261.99	4	277	11.6
Method Group 261.XX PPM			7	279	15.9
<b>WATER SOLUBLE MANGANESE</b>					
Water Soluble Manganese, ICP	972.03	271.30	1	196	0
Method Group 271.XX PCT			1	196	0.0
<b>TOTAL MERCURY</b>					
Total Mercury, Atomic Absorbtion		281.00	1		0.00
Method Group 281.XX PPM			1	0.00	0.00
<b>TOTAL MOLYBDENUM</b>					
Total Molybdenum, ICP		289.30	7	8	0.9
Method Group 289.XX PPM			7	8	1.1
<b>TOTAL NICKEL</b>					
Total Nickel, ICP		291.30	6	16.0	0.8
Total Nickel, icp		291.99	2	13.1	4.2
Method Group 291.XX PPM			8	16.0	1.7
<b>TOTAL SELENIUM</b>					
Total Selenium, ICP		301.30	1	2.0	0.0
Method Group 301.XX PPM			1	2.0	0.0

<b>SODIUM AS Na<sub>2</sub>O</b>				
Sodium, Other	311.99	11	0.24	0.01
Method Group 311.XX PCT		11	0.24	0.01
<b>ACID SOLUBLE ZINC</b>				
Acid Soluble Zinc, ICP	321.30	20	1.0	0.0
Acid Soluble Zinc, Other	321.99	1	0.9	0.0
Method Group 321.XX %		21	0.98	0.03
<b>FLUORIDE</b>				
Volumetric	325.10	13	1.70	0.13
Distilled/Electrode	325.99	2	1.86	0.01
Method Group 325.XX PCT		15	1.71	0.13

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
31	11.81	0.000
31	11.81	0.000
<b>Median</b>	<b>11.81</b>	<b>0.000</b>

001.99 Ammoniacal Nitrogen		
Lab	Other	
61	11.91	-2.648
24	11.84	-1.271
24	11.83	-1.059
<b>Std Dev</b>	<b>11.83</b>	<b>-1.000</b>
61	11.83	-0.953
79	11.79	-0.212
<b>Median</b>	<b>11.78</b>	<b>0.000</b>
34	11.77	0.212
118	11.77	0.275
23	11.77	0.318
79	11.76	0.424
23	11.75	0.742

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
61	11.91	-2.355
<b>Std Dev</b>	<b>11.84</b>	<b>-1.000</b>
24	11.84	-0.897
24	11.83	-0.673
61	11.83	-0.561
31	11.81	-0.224
31	11.81	-0.224
<b>Median</b>	<b>11.80</b>	<b>0.000</b>
79	11.79	0.224
34	11.77	0.673
118	11.77	0.740
23	11.77	0.785
79	11.76	0.897
<b>Std Dev</b>	<b>11.76</b>	<b>1.000</b>
23	11.75	1.233

009.99 Ammon & Nitrate N		
Lab	Other	
32	11.85	0.000
<b>Median</b>	<b>11.85</b>	<b>0.000</b>

009.XX Ammon & Nitrate N		
Lab	Total Method	
32	11.85	0.000
<b>Median</b>	<b>11.85</b>	<b>0.000</b>

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
43	11.82	0.000
43	11.82	0.000
<b>Median</b>	<b>11.82</b>	<b>0.000</b>

010.60 Total Nitrogen		
Lab	Combustion	
118	12.30	-7.454
31	12.01	-2.512
38	11.94	-1.415
63	11.92	-1.089
<b>Std Dev</b>	<b>11.91</b>	<b>-1.000</b>
14	11.91	-0.837
14	11.90	-0.670
31	11.86	-0.084
140	11.86	-0.084
<b>Median</b>	<b>11.86</b>	<b>0.000</b>
77	11.85	0.084
111	11.84	0.201
79	11.84	0.251
79	11.83	0.419
47	11.83	0.503
<b>Std Dev</b>	<b>11.80</b>	<b>1.000</b>
137	11.69	2.764
66	11.65	3.517
103	11.56	4.941

010.99 Total Nitrogen		
Lab	Other	
32	11.77	0.000
<b>Median</b>	<b>11.77</b>	<b>0.000</b>

010.XX Total Nitrogen		
Lab	Total Method	
118	12.30	-7.204
31	12.01	-2.554
38	11.94	-1.521
63	11.92	-1.214

<b>Std Dev</b>	<b>11.91</b>	<b>-1.000</b>
14	11.91	-0.977
14	11.90	-0.820
31	11.86	-0.268
140	11.86	-0.268
77	11.85	-0.110
111	11.84	0.000
<b>Median</b>	<b>11.84</b>	<b>0.000</b>
79	11.84	0.047
79	11.83	0.205
47	11.83	0.284
43	11.82	0.441
43	11.82	0.441
<b>Std Dev</b>	<b>11.78</b>	<b>1.000</b>
32	11.77	1.151
137	11.69	2.412
66	11.65	3.121
103	11.56	4.461

020.10 Total Phosphate		
Lab	Gravimetric Quimociac	
118	40.27	0.000
<b>Median</b>	<b>40.27</b>	<b>0.000</b>

020.20 Total Phosphate		
Lab	Spectrometric	
32	40.90	-2.062
111	40.89	-2.034
140	40.88	-1.969
31	40.83	-1.736
<b>Std Dev</b>	<b>40.67</b>	<b>-1.000</b>
31	40.61	-0.734
24	40.60	-0.687
24	40.55	-0.431
34	40.54	-0.408
79	40.51	-0.268
32	40.46	-0.012
<b>Median</b>	<b>40.45</b>	<b>0.000</b>
79	40.45	0.012
23	40.41	0.221
23	40.41	0.221
43	40.40	0.268
61	40.33	0.594
61	40.29	0.781

<b>Std Dev</b>	<b>40.24</b>	<b>1.000</b>
14	40.23	1.060
14	40.20	1.200
38	40.10	1.643
43	39.95	2.365

020.40 Total Phosphate		
Lab	Automated	
111	40.73	-1.340
<b>Std Dev</b>	<b>40.66</b>	<b>-1.000</b>
<b>Median</b>	<b>40.46</b>	<b>0.000</b>
<b>Std Dev</b>	<b>40.27</b>	<b>1.000</b>
137	40.20	1.340

020.XX Total Phosphate		
Lab	Total Method	
32	40.90	-1.816
111	40.89	-1.791
140	40.88	-1.734
31	40.83	-1.530
111	40.73	-1.136
<b>Std Dev</b>	<b>40.70</b>	<b>-1.000</b>
31	40.61	-0.653
24	40.60	-0.612
24	40.55	-0.388
34	40.54	-0.367
79	40.51	-0.245
32	40.46	-0.020
79	40.45	0.000
<b>Median</b>	<b>40.45</b>	<b>0.000</b>
23	40.41	0.184
23	40.41	0.184
43	40.40	0.224
61	40.33	0.510
61	40.29	0.673
118	40.27	0.742
14	40.23	0.918
<b>Std Dev</b>	<b>40.20</b>	<b>1.000</b>
137	40.20	1.020
14	40.20	1.041
38	40.10	1.428
43	39.95	2.061

030.10 Insoluble Phosphate		
Lab	Gravimetric Quimociac	
118	0.58	0.000
<b>Median</b>	<b>0.58</b>	<b>0.000</b>

030.20 Insoluble Phosphate		
Lab	Spectrometric	
43	0.75	-3.442
43	0.68	-2.865
61	0.55	-1.793
<b>Std Dev</b>	<b>0.45</b>	<b>-1.000</b>
32	0.43	-0.786
61	0.37	-0.302
140	0.33	-0.020
<b>Median</b>	<b>0.33</b>	<b>0.000</b>
24	0.33	0.020
23	0.32	0.060
23	0.30	0.222
79	0.26	0.544
79	0.23	0.786
24	0.23	0.826

030.30 Insoluble Phosphate		
Lab	Alka. Quimociac	
31	0.12	-1.340
<b>Std Dev</b>	<b>0.11</b>	<b>-1.000</b>
<b>Median</b>	<b>0.09</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.07</b>	<b>1.000</b>
31	0.07	1.340

030.40 Insoluble Phosphate		
Lab	Automated	
32	0.46	-1.340
<b>Std Dev</b>	<b>0.44</b>	<b>-1.000</b>
<b>Median</b>	<b>0.38</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.31</b>	<b>1.000</b>
34	0.29	1.340

030.XX Insoluble Phosphate		
Lab	Total Method	
43	0.75	-2.878
43	0.68	-2.399
118	0.58	-1.675
61	0.55	-1.508

<b>Std Dev</b>	<b>0.47</b>	<b>-1.000</b>
32	0.46	-0.905
32	0.43	-0.670
61	0.37	-0.268
140	0.33	-0.033
24	0.33	0.000
<b>Median</b>	<b>0.33</b>	<b>0.000</b>
23	0.32	0.034
23	0.30	0.168
34	0.29	0.235
79	0.26	0.436
79	0.23	0.637
24	0.23	0.670
<b>Std Dev</b>	<b>0.18</b>	<b>1.000</b>
31	0.12	1.407
31	0.07	1.742

040.20 Indirect Available Phosphate		
Lab	Spectrometric	
31	40.76	-1.781
<b>Std Dev</b>	<b>40.55</b>	<b>-1.000</b>
140	40.55	-0.991
31	40.51	-0.844
32	40.44	-0.587
24	40.32	-0.165
79	40.28	-0.018
24	40.28	0.000
<b>Median</b>	<b>40.28</b>	<b>0.000</b>
79	40.20	0.275
23	40.11	0.624
23	40.07	0.753
32	40.04	0.881
<b>Std Dev</b>	<b>40.00</b>	<b>1.000</b>
61	39.96	1.156
61	39.70	2.111

040.99 Indirect Available Phosphate		
Lab	Other	
34	40.25	0.000
<b>Median</b>	<b>40.25</b>	<b>0.000</b>

040.XX Indirect Available Phosphate		
Lab	Total Method	
31	40.76	-2.036

140	40.55	-1.156
<b>Std Dev</b>	<b>40.51</b>	<b>-1.000</b>
31	40.51	-0.992
32	40.44	-0.706
24	40.32	-0.235
79	40.28	-0.072
24	40.28	-0.051
<b>Median</b>	<b>40.26</b>	<b>0.000</b>
34	40.25	0.051
79	40.20	0.256
23	40.11	0.644
23	40.07	0.788
32	40.04	0.931
<b>Std Dev</b>	<b>40.02</b>	<b>1.000</b>
61	39.96	1.238
61	39.70	2.302

041.10 Direct Available Phosphate		
Lab	Gravimetric Quimociac	
47	40.14	-1.340
<b>Std Dev</b>	<b>40.07</b>	<b>-1.000</b>
<b>Median</b>	<b>39.88</b>	<b>0.000</b>
<b>Std Dev</b>	<b>39.68</b>	<b>1.000</b>
118	39.61	1.340

041.20 Direct Available Phosphate		
Lab	Spectrometric	
47	39.96	0.000
<b>Median</b>	<b>39.96</b>	<b>0.000</b>

041.40 Direct Available Phosphate		
Lab	Automated	
111	38.40	0.000
<b>Median</b>	<b>38.40</b>	<b>0.000</b>

041.50 Direct Available Phosphate		
Lab	ICP	
63	40.75	-0.590
77	40.24	0.000
<b>Median</b>	<b>40.24</b>	<b>0.000</b>
<b>Std Dev</b>	<b>39.36</b>	<b>1.000</b>
111	38.41	2.090

041.60 Direct Available Phosphate		
Lab	EDTA Extract	
79	39.73	-0.071
79	39.70	0.000
<b>Median</b>	<b>39.70</b>	<b>0.000</b>
<b>Std Dev</b>	<b>39.28</b>	<b>1.000</b>
103	38.61	2.609

041.XX Direct Available Phosphate		
Lab	Total Method	
63	40.75	-1.120
<b>Std Dev</b>	<b>40.64</b>	<b>-1.000</b>
77	40.24	-0.563
47	40.14	-0.460
47	39.96	-0.265
79	39.73	-0.016
<b>Median</b>	<b>39.72</b>	<b>0.000</b>
79	39.70	0.016
118	39.61	0.114
<b>Std Dev</b>	<b>38.79</b>	<b>1.000</b>
103	38.61	1.201
111	38.41	1.410
111	38.40	1.427

048.10 Water Soluble Phosphate		
Lab	Gravimetric Quimociac	
118	35.25	0.000
<b>Median</b>	<b>35.25</b>	<b>0.000</b>

048.20 Water Soluble Phosphate		
Lab	Spectrometric	
140	36.43	-4.188
79	35.78	-1.195
24	35.76	-1.102
31	35.76	-1.079
79	35.74	-1.009
<b>Std Dev</b>	<b>35.74</b>	<b>-1.000</b>
23	35.72	-0.893
61	35.66	-0.638
31	35.65	-0.592
32	35.53	-0.035
<b>Median</b>	<b>35.52</b>	<b>0.000</b>
24	35.52	0.035
14	35.50	0.128

14	35.49	0.151
23	35.46	0.290
32	35.44	0.383
43	35.41	0.545
43	35.40	0.568
61	35.39	0.615
Std Dev	35.31	1.000
111	35.23	1.362

048.99 Water Soluble Phosphate		
Lab		Other
34	35.39	-1.340
Std Dev	35.38	-1.000
Median	35.34	0.000
Std Dev	35.30	1.000
111	35.28	1.340

048.XX Water Soluble Phosphate		
Lab		Total Method
140	36.43	-3.956
79	35.78	-1.212
24	35.76	-1.127
31	35.76	-1.106
79	35.74	-1.042
Std Dev	35.73	-1.000
23	35.72	-0.936
61	35.66	-0.702
31	35.65	-0.659
32	35.53	-0.149
24	35.52	-0.085
14	35.50	0.000
Median	35.50	0.000
14	35.49	0.021
23	35.46	0.149
32	35.44	0.234
43	35.41	0.383
43	35.40	0.404
34	35.39	0.447
61	35.39	0.447
111	35.28	0.895
Std Dev	35.26	1.000
118	35.25	1.063
111	35.23	1.132

050.50 %K <sub>2</sub> O Soluble Potash		
Lab		ICP(Oxalate)
111	0.14	-1.191
Std Dev	0.14	-1.000
23	0.13	0.000
Median	0.13	0.000
Std Dev	0.12	1.000
23	0.12	1.489

050.51 %K <sub>2</sub> O Soluble Potash		
Lab		ICP(Citrate)
137	0.13	0.000
Median	0.13	0.000

050.99 %K <sub>2</sub> O Soluble Potash		
Lab		Other
31	0.16	-1.998
31	0.16	-1.998
Std Dev	0.14	-1.000
61	0.14	-0.799
24	0.13	0.000
61	0.13	0.000
Median	0.13	0.000
43	0.13	0.223
43	0.13	0.295
24	0.13	0.400

050.XX %K <sub>2</sub> O Soluble Potash		
Lab		Total Method
31	0.16	-2.675
31	0.16	-2.675
61	0.14	-1.070
Std Dev	0.14	-1.000
111	0.14	-0.856
23	0.13	0.000
24	0.13	0.000
61	0.13	0.000
Median	0.13	0.000
43	0.13	0.299
43	0.13	0.396
24	0.13	0.535
137	0.13	0.535
Std Dev	0.12	1.000
23	0.12	1.070

060.00 Free Water		
Lab		Vacuum Oven
31	1.29	-2.109
24	1.15	-1.390
Std Dev	1.07	-1.000
31	0.99	-0.596
24	0.97	-0.521
34	0.95	-0.422
118	0.89	-0.124
32	0.89	-0.099
Median	0.87	0.000
32	0.85	0.099
23	0.74	0.620
23	0.70	0.844
140	0.70	0.844
Std Dev	0.66	1.000
79	0.64	1.117
79	0.61	1.266
111	0.30	2.829

060.10 Free Water		
Lab		Vacuum Desiccate
61	0.46	-1.340
Std Dev	0.45	-1.000
Median	0.45	0.000
Std Dev	0.44	1.000
61	0.44	1.340

060.99 Free Water		
Lab		Other
14	0.90	-1.340
Std Dev	0.89	-1.000
Median	0.89	0.000
Std Dev	0.88	1.000
14	0.88	1.340

060.XX Free Water		
Lab		Total Method
31	1.29	-2.028
24	1.15	-1.340
Std Dev	1.07	-1.000
31	0.99	-0.581
24	0.97	-0.510

34	0.95	-0.415
14	0.90	-0.154
118	0.89	-0.130
32	0.89	-0.107
14	0.88	-0.083
Median	0.86	0.000
32	0.85	0.083
23	0.74	0.581
23	0.70	0.795
140	0.70	0.795
Std Dev	0.65	1.000
79	0.64	1.055
79	0.61	1.198
61	0.46	1.933
61	0.44	2.004
111	0.30	2.692

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
61	0.66	-2.541
24	0.62	-1.834
Std Dev	0.57	-1.000
32	0.57	-0.950
32	0.57	-0.950
34	0.56	-0.773
61	0.56	-0.773
24	0.54	-0.331
23	0.52	-0.066
Median	0.52	0.000
111	0.51	0.066
23	0.51	0.199
14	0.50	0.376
14	0.49	0.464
43	0.48	0.698
43	0.47	0.793
Std Dev	0.46	1.000
31	0.37	2.568
31	0.36	2.789

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
61	0.66	-2.541
24	0.62	-1.834
Std Dev	0.57	-1.000

32	0.57	-0.950
32	0.57	-0.950
34	0.56	-0.773
61	0.56	-0.773
24	0.54	-0.331
23	0.52	-0.066
<b>Median</b>	<b>0.52</b>	<b>0.000</b>
111	0.51	0.066
23	0.51	0.199
14	0.50	0.376
14	0.49	0.464
43	0.48	0.698
43	0.47	0.793
<b>Std Dev</b>	<b>0.46</b>	<b>1.000</b>
31	0.37	2.568
31	0.36	2.789

121.30	Acid Soluble Magnesium	
Lab	%MgO	ICP

61	1.02	-2.776
34	0.99	-1.908
24	0.98	-1.388
14	0.97	-1.041
<b>Std Dev</b>	<b>0.96</b>	<b>-1.000</b>
14	0.96	-0.867
61	0.95	-0.520
24	0.94	-0.173
31	0.94	-0.173
<b>Median</b>	<b>0.94</b>	<b>0.000</b>
32	0.93	0.173
23	0.93	0.347
23	0.93	0.347
111	0.92	0.399
31	0.92	0.520
32	0.92	0.520
<b>Std Dev</b>	<b>0.91</b>	<b>1.000</b>
43	0.88	2.082
43	0.86	2.602

121.XX	Acid Soluble Magnesium	
Lab	%MgO	Total Method

61	1.02	-2.776
34	0.99	-1.908
24	0.98	-1.388

14	0.97	-1.041
<b>Std Dev</b>	<b>0.96</b>	<b>-1.000</b>
14	0.96	-0.867
61	0.95	-0.520
24	0.94	-0.173
31	0.94	-0.173
<b>Median</b>	<b>0.94</b>	<b>0.000</b>
32	0.93	0.173
23	0.93	0.347
23	0.93	0.347
111	0.92	0.399
31	0.92	0.520
32	0.92	0.520
<b>Std Dev</b>	<b>0.91</b>	<b>1.000</b>
43	0.88	2.082
43	0.86	2.602

144..01	Sulfate Sulfur (S)	
Lab	Gravimetric	

47	10.31	-37.036
118	5.49	-1.191
<b>Std Dev</b>	<b>5.46</b>	<b>-1.000</b>
79	5.33	0.000
<b>Median</b>	<b>5.33</b>	<b>0.000</b>
79	5.31	0.149
140	5.28	0.409

144.70	Sulfur	
Lab	Spectrometric	

43	5.16	-1.340
<b>Std Dev</b>	<b>5.15</b>	<b>-1.000</b>
<b>Median</b>	<b>5.14</b>	<b>0.000</b>
<b>Std Dev</b>	<b>5.13</b>	<b>1.000</b>
43	5.13	1.340

144.99	Sulfate Sulfur (S)	
Lab	Other	

111	5.75	-4.003
38	5.51	-2.051
24	5.43	-1.401
24	5.40	-1.117
<b>Std Dev</b>	<b>5.38</b>	<b>-1.000</b>
23	5.38	-0.995
32	5.32	-0.508

34	5.26	-0.020
<b>Median</b>	<b>5.26</b>	<b>0.000</b>
23	5.26	0.020
31	5.25	0.102
275	5.23	0.223
32	5.23	0.264
31	5.20	0.467
<b>Std Dev</b>	<b>5.13</b>	<b>1.000</b>
241	5.05	1.726
241	5.01	2.051

144.XX	Sulfate Sulfur (S)	
Lab	Total Method	

47	10.31	-39.648
111	5.75	-3.747
38	5.51	-1.852
118	5.49	-1.695
24	5.43	-1.222
<b>Std Dev</b>	<b>5.40</b>	<b>-1.000</b>
24	5.40	-0.946
23	5.38	-0.828
79	5.33	-0.434
32	5.32	-0.355
79	5.31	-0.276
140	5.28	0.000
<b>Median</b>	<b>5.28</b>	<b>0.000</b>
34	5.26	0.118
23	5.26	0.158
31	5.25	0.236
275	5.23	0.355
32	5.23	0.394
31	5.20	0.591
43	5.16	0.946
<b>Std Dev</b>	<b>5.15</b>	<b>1.000</b>
43	5.13	1.182
241	5.05	1.813
241	5.01	2.128

145.99	Total Sulfur (S)	
Lab	Other	

77	10.60	-4.097
140	10.39	-1.881
<b>Std Dev</b>	<b>10.30</b>	<b>-1.000</b>
34	10.27	-0.696

118	10.27	-0.696
23	10.24	-0.387
23	10.22	-0.180
275	10.21	-0.077
<b>Median</b>	<b>10.20</b>	<b>0.000</b>
24	10.20	0.077
32	10.20	0.077
32	10.14	0.644
24	10.13	0.747
<b>Std Dev</b>	<b>10.11</b>	<b>1.000</b>
43	10.05	1.572
43	10.04	1.675
137	9.97	2.448

145.XX	Total Sulfur (S)	
Lab	Total Method	

77	10.60	-4.097
140	10.39	-1.881
<b>Std Dev</b>	<b>10.30</b>	<b>-1.000</b>
34	10.27	-0.696
118	10.27	-0.696
23	10.24	-0.387
23	10.22	-0.180
275	10.21	-0.077
<b>Median</b>	<b>10.20</b>	<b>0.000</b>
24	10.20	0.077
32	10.20	0.077
32	10.14	0.644
24	10.13	0.747
<b>Std Dev</b>	<b>10.11</b>	<b>1.000</b>
43	10.05	1.572
43	10.04	1.675
137	9.97	2.448

151.30	Total Arsenic	
Lab	ICP	

43	10.85	-2.476
43	9.75	-1.661
<b>Std Dev</b>	<b>8.86</b>	<b>-1.000</b>
31	7.60	-0.067
<b>Median</b>	<b>7.51</b>	<b>0.000</b>
118	7.42	0.067
31	7.40	0.082
<b>Std Dev</b>	<b>6.16</b>	<b>1.000</b>

111	2.00	4.085
<b>151.XX Total Arsenic</b>		
Lab	Total Method	
43	10.85	-2.476
43	9.75	-1.661
Std Dev	8.86	-1.000
31	7.60	-0.067
Median	7.51	0.000
118	7.42	0.067
31	7.40	0.082
Std Dev	6.16	1.000
111	2.00	4.085
<b>165.99 Acid Soluble Boron</b>		
Lab	PPM	Other
111	233.50	0.000
Median	233.50	0.000
<b>65.XX, ppm Acid Soluble Boron</b>		
Lab	PPM	Total Method
111	233.50	0.000
Median	233.50	0.000
<b>171.99 Water Soluble Boron</b>		
Lab	PPM	Other
111	10.50	0.000
Median	10.50	0.000
<b>171.XX Water Soluble Boron</b>		
Lab	PPM	Total Method
111	10.50	0.000
Median	10.50	0.000
<b>181.00 Total Cadmium</b>		
Lab	Atomic Absorbion	
118	3.13	0.000
Median	3.13	0.000
<b>181.30 Total Cadmium</b>		
Lab	PPM	ICP
43	3.59	-0.619
43	3.28	-0.354
61	3.00	-0.115

61	3.00	-0.115
Median	2.87	0.000
275	2.73	0.115
Std Dev	1.69	1.000
31	1.50	1.165
111	1.50	1.165
31	1.45	1.208
<b>181.XX Total Cadmium</b>		
Lab	PPM	Total Method
43	3.59	-0.487
43	3.28	-0.231
118	3.13	-0.103
61	3.00	0.000
61	3.00	0.000
Median	3.00	0.000
275	2.73	0.223
Std Dev	1.79	1.000
31	1.50	1.237
111	1.50	1.237
31	1.45	1.278
<b>190.00 Aluminum</b>		
Lab	%Al <sub>2</sub> O <sub>3</sub>	ICP
31	1.40	-1.540
14	1.39	-1.311
14	1.38	-1.197
Std Dev	1.37	-1.000
43	1.37	-0.855
31	1.36	-0.741
32	1.36	-0.627
24	1.34	-0.171
34	1.33	-0.057
Median	1.33	0.000
61	1.33	0.057
43	1.32	0.171
32	1.32	0.285
24	1.31	0.399
Std Dev	1.28	1.083
23	1.28	1.311
61	1.27	1.311
111	0.91	9.543

<b>190.XX Aluminum</b>		
Lab	%Al <sub>2</sub> O <sub>3</sub>	Total Method
31	1.40	-1.540
14	1.39	-1.311
14	1.38	-1.197
Std Dev	1.37	-1.000
43	1.37	-0.855
31	1.36	-0.741
32	1.36	-0.627
24	1.34	-0.171
34	1.33	-0.057
Median	1.33	0.000
61	1.33	0.057
43	1.32	0.171
32	1.32	0.285
24	1.31	0.399
Std Dev	1.28	1.000
23	1.28	1.083
23	1.27	1.311
61	1.27	1.311
111	0.91	9.543
<b>191.30 Total Chromium</b>		
Lab	ICP	
43	71.00	-1.117
43	70.50	-1.027
Std Dev	70.35	-1.000
31	68.50	-0.670
118	64.90	-0.027
Median	64.75	0.000
31	64.60	0.027
111	62.00	0.491
61	60.00	0.849
61	59.50	0.938
<b>191.XX Total Chromium</b>		
Lab	PPM	Total Method
43	71.00	-1.117
43	70.50	-1.027
Std Dev	70.35	-1.000
31	68.50	-0.670
118	64.90	-0.027
Median	64.75	0.000
31	64.60	0.027

111	62.00	0.491
61	60.00	0.849
61	59.50	0.938
<b>202.30 Acid Soluble Cobalt</b>		
Lab	PPM	ICP
<b>202.XX Acid Soluble Cobalt</b>		
Lab	PPM	Total Method
31	<1.0	0.000
31	<1.0	0.000
61	4.00	0.548
43	3.00	0.000
43	3.00	0.000
61	3.00	0.000
Median	3.00	0.000
111	2.50	0.548
<b>221.30 Acid Soluble Copper</b>		
Lab	PPM	ICP
31	<1.0	0.000
31	<1.0	0.000
111	5.00	-3.446
61	3.50	-1.149
Std Dev	3.40	-1.000
43	3.00	-0.383
Median	2.75	0.000
43	2.50	0.383
61	2.50	0.383
118	1.22	2.345
<b>221.XX Acid Soluble Copper</b>		
Lab	PPM	Total Method
31	<1.0	0.000
31	<1.0	0.000
111	5.00	-3.446
61	3.50	-1.149
Std Dev	3.40	-1.000
43	3.00	-0.383
Median	2.75	0.000
43	2.50	0.383
61	2.50	0.383
118	1.22	2.345

241.30		Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	ICP	
111	1.51	-1.812	
14	1.50	-1.419	
14	1.49	-1.104	
<b>Std Dev</b>	<b>1.49</b>	<b>-1.000</b>	
34	1.49	-0.946	
24	1.47	-0.315	
24	1.46	-0.158	
31	1.46	0.000	
32	1.46	0.000	
43	1.46	0.000	
<b>Median</b>	<b>1.46</b>	<b>0.000</b>	
31	1.44	0.631	
43	1.43	0.788	
61	1.43	0.788	
<b>Std Dev</b>	<b>1.42</b>	<b>1.000</b>	
32	1.42	1.104	
23	1.41	1.419	
61	1.41	1.576	
23	1.40	1.892	

241.XX		Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Total Method	
111	1.51	-1.812	
14	1.50	-1.419	
14	1.49	-1.104	
<b>Std Dev</b>	<b>1.49</b>	<b>-1.000</b>	
34	1.49	-0.946	
24	1.47	-0.315	
24	1.46	-0.158	
31	1.46	0.000	
32	1.46	0.000	
43	1.46	0.000	
<b>Median</b>	<b>1.46</b>	<b>0.000</b>	
31	1.44	0.631	
43	1.43	0.788	
61	1.43	0.788	
<b>Std Dev</b>	<b>1.42</b>	<b>1.000</b>	
32	1.42	1.104	
23	1.41	1.419	
61	1.41	1.576	
23	1.40	1.892	

251.30		Total Lead	
Lab	PPM	ICP	
61	4.00	-1.302	
43	3.70	-1.015	
<b>Std Dev</b>	<b>3.68</b>	<b>-1.000</b>	
43	3.40	-0.727	
61	3.00	-0.345	
275	2.64	0.000	
<b>Median</b>	<b>2.64</b>	<b>0.000</b>	
31	2.20	0.421	
31	2.00	0.613	
<b>Std Dev</b>	<b>1.60</b>	<b>1.000</b>	
111	1.00	1.570	
118	0.00	2.527	

251.XX		Total Lead	
Lab	PPM	Total Method	
61	4.00	-1.302	
43	3.70	-1.015	
<b>Std Dev</b>	<b>3.68</b>	<b>-1.000</b>	
43	3.40	-0.727	
61	3.00	-0.345	
275	2.64	0.000	
<b>Median</b>	<b>2.64</b>	<b>0.000</b>	
31	2.20	0.421	
31	2.00	0.613	
<b>Std Dev</b>	<b>1.60</b>	<b>1.000</b>	
111	1.00	1.570	
118	0.00	2.527	

261.30		Acid Soluble Manganese	
Lab	PPM	ICP	
31	287.45	-0.951	
31	278.95	0.000	
<b>Median</b>	<b>278.95</b>	<b>0.000</b>	
<b>Std Dev</b>	<b>270.01</b>	<b>1.000</b>	
111	263.50	1.729	

261.99		Acid Soluble Manganese	
Lab	PPM	Other	
43	286.50	-0.821	
43	283.00	-0.519	
<b>Median</b>	<b>277.00</b>	<b>0.000</b>	
61	271.00	0.519	

<b>Std Dev</b>	<b>265.43</b>	<b>1.000</b>
61	260.50	1.426

261.XX		Acid Soluble Manganese	
Lab	PPM	Total Method	
31	287.45	-0.651	
43	286.50	-0.578	
43	283.00	-0.310	
31	278.95	0.000	
<b>Median</b>	<b>278.95</b>	<b>0.000</b>	
61	271.00	0.609	
<b>Std Dev</b>	<b>265.89</b>	<b>1.000</b>	
111	263.50	1.183	
61	260.50	1.413	

271.30		Water Soluble Manganese	
Lab	PPM	ICP	
111	195.50	0.000	
<b>Median</b>	<b>195.50</b>	<b>0.000</b>	

271.XX		Water Soluble Manganese	
Lab	PPM	Total Method	
111	195.50	0.000	
<b>Median</b>	<b>195.50</b>	<b>0.000</b>	

281.00		Total Mercury	
Lab	PPM	Atomic Absorbtion	
118	0.00	0.000	
<b>Median</b>	<b>0.00</b>	<b>0.000</b>	

281.XX		Total Mercury	
Lab	PPM	Total Method	
118	0.00	0.000	
<b>Median</b>	<b>0.00</b>	<b>0.000</b>	

289.30		Total Molybdenum	
Lab	PPM	ICP	

289.XX		Total Molybdenum	
Lab	PPM	Total Method	
31	8.50	-0.570	
43	8.50	-0.570	
43	8.35	-0.399	
111	8.00	0.000	

<b>Median</b>	<b>8.00</b>	<b>0.000</b>
61	7.50	0.570
<b>Std Dev</b>	<b>7.12</b>	<b>1.000</b>
61	7.00	1.140
31	6.30	1.939

291.30		Total Nickel	
Lab	PPM	ICP	
31			

291.99		Total Nickel	
Lab	PPM	Other	
31	18.75	-1.340	
<b>Std Dev</b>	<b>17.32</b>	<b>-1.000</b>	
<b>Median</b>	<b>13.13</b>	<b>0.000</b>	
<b>Std Dev</b>	<b>8.93</b>	<b>1.000</b>	
111	7.50	1.340	

291.XX		Total Nickel	
Lab	PPM	Total Method	
31	18.75	-1.927	
31	18.15	-1.506	
118	17.50	-1.051	
<b>Std Dev</b>	<b>17.43</b>	<b>-1.000</b>	
43	16.00	0.000	
43	16.00	0.000	
61	16.00	0.000	
<b>Median</b>	<b>16.00</b>	<b>0.000</b>	
61	15.00	0.701	
<b>Std Dev</b>	<b>14.57</b>	<b>1.000</b>	
111	7.50	5.956	

301.30		Total Selenium	
Lab	PPM	ICP	
111	2.00	0.000	
<b>Median</b>	<b>2.00</b>	<b>0.000</b>	

301.XX		Total Selenium	
Lab	PPM	Total Mthod	
111	2.00	0.000	
<b>Median</b>	<b>2.00</b>	<b>0.000</b>	

311.99		Sodium	
Lab	%Na <sub>2</sub> O	Other	
31	0.25	-1.151	

61	0.25	-1.151
Std Dev	0.25	-1.000
23	0.25	-0.576
23	0.24	0.000
24	0.24	0.000
31	0.24	0.000
61	0.24	0.000
Median	0.24	0.000
111	0.23	0.953
Std Dev	0.23	1.000
24	0.23	1.151
43	0.21	3.304
43	0.21	3.343

311.XX Lab	%Na <sub>2</sub> O	Sodium Total Method
31	0.25	-1.151
61	0.25	-1.151
Std Dev	0.25	-1.000
23	0.25	-0.576
23	0.24	0.000
24	0.24	0.000
31	0.24	0.000
61	0.24	0.000
Median	0.24	0.000
111	0.23	0.953
Std Dev	0.23	1.000
24	0.23	1.151
43	0.21	3.304
43	0.21	3.343

321.30 Lab	PPM	Acid Soluble Zinc ICP
103	1.07	-2.914
Std Dev	1.01	-1.000
32	1.01	-0.795
31	1.00	-0.706
32	1.00	-0.618
34	1.00	-0.618
31	1.00	-0.539
47	1.00	-0.442
23	0.99	-0.265
118	0.99	-0.124
137	0.99	-0.088

Median	0.98	0.000
23	0.98	0.088
140	0.98	0.088
61	0.98	0.185
111	0.97	0.344
61	0.96	0.777
24	0.96	0.795
77	0.96	0.971
Std Dev	0.95	1.000
24	0.94	1.501
43	0.92	2.208
43	0.85	4.857

321.99 Lab	Acid Soluble Zinc Other	
38	0.94	0.000
Median	0.94	0.000

321.XX Lab	PPM	Acid Soluble Zinc Total Method
103	1.07	-3.017
Std Dev	1.01	-1.000
32	1.01	-0.887
31	1.00	-0.799
32	1.00	-0.710
34	1.00	-0.710
31	1.00	-0.630
47	1.00	-0.532
23	0.99	-0.355
118	0.99	-0.213
137	0.99	-0.177
23	0.98	0.000
140	0.98	0.000
Median	0.98	0.000
61	0.98	0.098
111	0.97	0.257
61	0.96	0.692
24	0.96	0.710
77	0.96	0.887
Std Dev	0.95	1.000
38	0.94	1.296
24	0.94	1.420
43	0.92	2.130
43	0.85	4.792

325.10 Lab	%	Fluoride Electrode
23	1.79	-0.749
23	1.79	-0.709
34	1.78	-0.670
32	1.77	-0.591
32	1.74	-0.355
24	1.71	-0.118
24	1.70	0.000
Median	1.70	0.000
79	1.69	0.039
79	1.69	0.039
14	1.60	0.749
14	1.60	0.788
31	1.58	0.906
31	1.56	1.104

325.99 Lab	%	Fluoride Other
61	1.87	-1.340
Median	1.86	0.000
61	1.85	1.340

325.XX Lab	%	Fluoride Total Method
61	1.87	-1.559
61	1.85	-1.316
23	1.79	-0.780
23	1.79	-0.731
34	1.78	-0.682
32	1.77	-0.585
32	1.74	-0.292
24	1.71	0.000
Median	1.71	0.000
24	1.70	0.146
79	1.69	0.195
79	1.69	0.195
14	1.60	1.072
14	1.60	1.121
31	1.58	1.267
31	1.56	1.511