

## AFPC

2015-01

Grade

11-52-0

## Sample

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, Other		001.99	12	11.38	0.08
Method Group 001.XX PCT			12	11.38	0.09
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	11.38	0.05
Total Nitrogen, Salicylic	955.04d	010.12	1	11.22	0.00
Total Nitrogen, Combustion	993.13	010.60	20	11.38	0.06
Total Nitrogen, Other		010.99	3	11.31	0.06
Method Group 010.XX PCT			27	11.38	0.10
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	2	53.17	0.11
Total Phosphate, Spectrometric	978.02	020.20	18	52.91	0.16
Total Phosphate, ICP	970.03	020.40	3	53.04	2.66
Total Phosphate, Other	993.13	020.99	1	52.14	0.00
Method Group 020.XX PCT			24	52.96	0.22
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	9	0.17	0.06
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.19	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.21	0.00
Insoluble Phosphate, Other		030.99	2	0.16	0.02
Method Group 030.XX PCT			13	0.17	0.05
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Spectrometric	960.02	040.20	10	52.68	0.15
Indirect Available Phosphate, Other		040.99	3	52.62	0.04
Method Group 040.XX PCT			13	52.67	0.15
<b>DIRECT AVAILABLE PHOSPHATE</b>					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	52.45	0.10
Direct Available Phosphate, Automated	978.01	041.40	2	51.41	1.02
Direct Available Phosphate, ICP		041.50	3	52.15	1.36
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	52.66	1.65
Method Group 041.XX PCT			11	52.46	1.15
<b>WATER SOLUBLE PHOSPHATE</b>					
Water Soluble Phosphate, Spectrometric	970.01	048.20	13	47.85	0.21
Water Soluble Phosphate, Other		048.99	3	47.74	0.17
Method Group 048.XX PCT			16	47.83	0.22
<b>SOLUBLE POTASH AS K<sub>2</sub>O</b>					
Soluble Potash, ICP(Oxalate)		050.50	3	0.12	0.01
Soluble Potash, ICP(Citrate)		050.51	1	0.27	0.00
Soluble Potash, Other		050.99	7	0.12	0.00
Method Group 050.XX PCT			11	0.12	0.01
<b>FREE WATER</b>					
Free Water, Vacuum Oven	965.08B	060.00	12	0.90	0.12
Free Water, Vacuum Desiccate	965.08A	060.10	2	1.07	0.12
Free Water, Other		060.99	4	1.06	0.05
Method Group 060.XX PCT			18	0.96	0.18
<b>ACID SOLUBLE CALCIUM AS CaO</b>					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	0.77	0.00
Acid Soluble Calcium, ICP		101.30	15	0.81	0.03
Method Group 101.XX PCT			16	0.80	0.05
<b>ACID SOLUBLE MAGNESIUM AS MgO</b>					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	1	1.23	0.00
Acid Soluble Magnesium, ICP		121.30	15	1.29	0.05
Method Group 121.XX PCT			16	1.29	0.06
<b>SULFATE SULFUR (S)</b>					
Sulfur, Gravimetric	980.02(a)	144.01	1	1.70	0.00
Sulfur, Spectrometric		144.70	2	1.67	0.00

Sulfur, Other	144.99	12	1.61	0.10
Method Group 144.XX PCT		15	1.62	0.13
<b>TOTAL SULFUR (S)</b>				
Sulfur, Other	145.99	3	1.65	0.02
Method Group 145.XX PCT		3	1.65	0.03
<b>TOTAL ARSENIC</b>				
Total Arsenic, ICP	980.02(b) 151.02	8	22	2.3
Total Arsenic, Other	151.99	1	16	0.0
Method Group 151.XX PPM		9	22	3.7
<b>ACID SOLUBLE BORON</b>				
Acid Soluble Boron, Other	165.99	1	34	0.0
Method Group 165.XX PPM		1	34	0.0
<b>TOTAL CADMIUM</b>				
Total Cadmium, ICP	181.30	6	140	0.9
Total Cadmium, Other	181.99	1	127	0.0
Method Group 181.XX PPM		7	140	1.9
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>				
ICP, %		13	1.57	0.05
Water Soluble Chlorine, Other, %	190.99	2	1.60	0.00
Method Group 190.XX PCT		15	1.58	0.05
<b>TOTAL CHROMIUM</b>				
Total Chromium, ICP	191.30	7	526	11.6
Total Chromium, Other	191.99	1	498	0.0
Method Group 191.XX PPM		8	521	16.6
<b>ACID SOLUBLE COBALT</b>				
Acid Soluble Cobalt, ICP	202.30	5	5	0.0
Acid Soluble Cobalt, Other	202.99	1	4	0.0
Method Group 202.XX PPM		6	5	0.6
<b>ACID SOLUBLE COPPER</b>				
Acid Soluble Copper, ICP	221.30	5	78.0	1.5
Acid Soluble Copper, Other	221.99	1	0.0	0.0
Method Group 221.XX PPM		7	78.0	2.7
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>				
Acid Soluble Iron, ICP	241.30	14	1.14	0.02
Acid Soluble Iron, Other	241.99	1	1.17	0.00
Method Group 241.XX PCT		16	1.14	0.02
<b>TOTAL LEAD</b>				
Total Lead, ICP	251.30	5	3	1.2
Total Lead, Other	251.99	1	1.6	0.0
Method Group 251.XX PPM		6	3	1.5
<b>ACID SOLUBLE MANGANESE</b>				
Acid Soluble Manganese, Atomic Absorption	972.02b 261.11	1	193	0.0
Acid Soluble Manganese, ICP	972.02a 261.30	3	187	2.4
Acid Soluble Manganese, Other	261.99	5	187	12.3
Method Group 261.XX PPM		9	187	7.8
<b>TOTAL MERCURY</b>				
Total Mercury, Atomic Absorbtion	281.00	1	0	0.00
Total Mercury, ICP	281.30	1	0.00	0.00
Method Group 281.XX PPM		2	0.03	0.02
<b>TOTAL MOLYBDENUM</b>				
Total Molybdenum, ICP	289.30	5	16	0.7
Total Molybdenum, Other	289.99	1	18	0.0
Method Group 289.XX PPM		6	16	1.0
<b>TOTAL NICKEL</b>				
Total Nickel, ICP	291.30	5	256	1.8
Total Nickel, icp	291.99	2	256	2.8
Method Group 291.XX PPM		7	256	4.5
<b>TOTAL SELENIUM</b>				
Total Selenium, ICP	301.30	3	0.3	0.0
Method Group 301.XX PPM		3	0.3	0.0

Sodium, Other	311.99	8	0.17	0.02
Method Group 311.XX PCT		8	0.17	0.03
<b>ACID SOLUBLE ZINC</b>				
Acid Soluble Zinc, Atomic Absorption	975.02 321.00	1	1808.5	0.0
Acid Soluble Zinc, ICP	321.30	4	1806.3	54.0
Acid Soluble Zinc, Other	321.99	2	1681.5	1.5
Method Group 321.XX PPM		7	1779.5	90.7
<b>FLUORIDE</b>				
Volumetric	325.10	10	1.48	0.11
Distilled/Electrode	325.99	3	1.65	0.09
Method Group 325.XX PCT		13	1.49	0.20

001.99 Ammoniacal Nitrogen		
Lab		Other
24	11.44	-0.794
23	11.40	-0.265
24	11.40	-0.265
23	11.40	-0.199
275	11.40	-0.199
34	11.38	0.000
32	11.38	0.000
<b>Median</b>	<b>11.38</b>	<b>0.000</b>
61	11.37	0.132
32	11.31	0.993
<b>Std Dev</b>	<b>11.30</b>	<b>1.000</b>
61	11.27	1.522
275	11.26	1.654
310	11.15	3.044

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<b>Median</b>	<b>11.38</b>	<b>0.000</b>
61	11.37	0.132
32	11.31	0.993
<b>Std Dev</b>	<b>11.30</b>	<b>1.000</b>
61	11.27	1.522
275	11.26	1.654
310	11.15	3.044

010.11 Total Nitrogen		
Lab		Modified Comprehensive
43	11.43	-1.072
<b>Std Dev</b>	<b>11.42</b>	<b>-1.000</b>
43	11.38	0.000
<b>Median</b>	<b>11.38</b>	<b>0.000</b>
<b>Std Dev</b>	<b>11.33</b>	<b>1.000</b>
219	11.30	1.608

010.12 Total Nitrogen		
Lab		Salicylic
107	11.22	0.000
<b>Median</b>	<b>11.22</b>	<b>0.000</b>

010.60 Total Nitrogen		
Lab		Combustion
137	17.45	-103.244
49	11.66	-4.722
42	11.55	-2.850
80	11.50	-2.084
<b>Std Dev</b>	<b>11.44</b>	<b>-1.000</b>
31	11.43	-0.893
14	11.43	-0.808
14	11.41	-0.553
79	11.41	-0.468
110	11.39	-0.128
24	11.38	-0.043
<b>Median</b>	<b>11.38</b>	<b>0.000</b>
9	11.38	0.043
275	11.37	0.128
24	11.37	0.128
275	11.36	0.298
219	11.36	0.383
77	11.33	0.893
<b>Std Dev</b>	<b>11.32</b>	<b>1.000</b>
66	11.28	1.659
9	11.28	1.744
99	10.98	6.849
103	10.97	7.019

010.99 Total Nitrogen		
Lab		Other
32	11.38	-1.297
<b>Std Dev</b>	<b>11.36</b>	<b>-1.000</b>
32	11.31	0.000
<b>Median</b>	<b>11.31</b>	<b>0.000</b>
<b>Std Dev</b>	<b>11.25</b>	<b>1.000</b>
40	11.23	1.383

010.XX Total Nitrogen		
Lab		Total Method
137	17.45	-70.729
49	11.66	-3.263

42	11.55	-1.981
80	11.50	-1.457
<b>Std Dev</b>	<b>11.46</b>	<b>-1.000</b>
31	11.43	-0.641
14	11.43	-0.583
43	11.43	-0.583
14	11.41	-0.408
79	11.41	-0.350
110	11.39	-0.117
24	11.38	-0.058
32	11.38	-0.058
9	11.38	0.000
43	11.38	0.000
<b>Median</b>	<b>11.38</b>	<b>0.000</b>
275	11.37	0.058
24	11.37	0.058
275	11.36	0.175
219	11.36	0.233
77	11.33	0.583
32	11.31	0.816
219	11.30	0.874
<b>Std Dev</b>	<b>11.29</b>	<b>1.000</b>
66	11.28	1.107
9	11.28	1.165
40	11.23	1.748
107	11.22	1.864
99	10.98	4.661
103	10.97	4.777

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
219	53.32	-1.340
<b>Std Dev</b>	<b>53.28</b>	<b>-1.000</b>
<b>Median</b>	<b>53.17</b>	<b>0.000</b>
<b>Std Dev</b>	<b>53.06</b>	<b>1.000</b>
241	53.02	1.340

020.20 Total Phosphate		
Lab		Spectrometric
110	54.60	-10.657
99	53.15	-1.482
<b>Std Dev</b>	<b>53.07</b>	<b>-1.000</b>
43	53.07	-0.977
9	53.03	-0.757

14	53.02	-0.694
61	53.01	-0.599
14	52.99	-0.504
24	52.97	-0.378
43	52.96	-0.284
<b>Median</b>	<b>52.91</b>	<b>0.000</b>
23	52.87	0.284
34	52.83	0.504
23	52.83	0.536
31	52.82	0.599
32	52.80	0.694
61	52.77	0.914
<b>Std Dev</b>	<b>52.75</b>	<b>1.000</b>
32	52.74	1.072
24	52.71	1.261
79	52.60	1.955

020.40 Total Phosphate		
Lab		Automated
219	53.30	-0.098
9	53.04	0.000
<b>Median</b>	<b>53.04</b>	<b>0.000</b>
<b>Std Dev</b>	<b>50.38</b>	<b>1.000</b>
137	46.17	2.582

020.99 Total Phosphate		
Lab		Other
310	52.14	0.000
<b>Median</b>	<b>52.14</b>	<b>0.000</b>

020.XX Total Phosphate		
Lab		Total Method
110	54.60	-9.095
219	53.32	-1.986
219	53.30	-1.875
99	53.15	-1.014
<b>Std Dev</b>	<b>53.14</b>	<b>-1.000</b>
43	53.07	-0.569
9	53.04	-0.430
9	53.03	-0.375
241	53.02	-0.319
14	53.02	-0.319
61	53.01	-0.236
14	52.99	-0.153

24	52.97	-0.042
<b>Median</b>	<b>52.96</b>	<b>0.000</b>
43	52.96	0.042
23	52.87	0.542
34	52.83	0.736
23	52.83	0.764
31	52.82	0.819
32	52.80	0.903
<b>Std Dev</b>	<b>52.78</b>	<b>1.000</b>
61	52.77	1.097
32	52.74	1.236
24	52.71	1.402
79	52.60	2.013
310	52.14	4.568
137	46.17	37.756

030.20		Insoluble Phosphate Spectrometric	
Lab			
61	0.33	-2.680	
43	0.27	-1.750	
61	0.23	-1.005	
<b>Std Dev</b>	<b>0.23</b>	<b>-1.000</b>	
43	0.17	-0.050	
24	0.17	0.000	
<b>Median</b>	<b>0.17</b>	<b>0.000</b>	
24	0.16	0.168	
79	0.15	0.335	
23	0.14	0.503	
23	0.14	0.586	

030.30		Insoluble Phosphate Alka. Quimociac	
Lab			
31	0.19	0.000	
<b>Median</b>	<b>0.19</b>	<b>0.000</b>	

030.40		Insoluble Phosphate Automated	
Lab			
34	0.21	0.000	
<b>Median</b>	<b>0.21</b>	<b>0.000</b>	

030.99		Insoluble Phosphate Other	
Lab			
32	0.19	-1.340	
<b>Std Dev</b>	<b>0.18</b>	<b>-1.000</b>	

<b>Median</b>	<b>0.16</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.14</b>	<b>1.000</b>
32	0.13	1.340

030.XX		Insoluble Phosphate Total Method	
Lab			
61	0.33	-3.506	
43	0.27	-2.267	
61	0.23	-1.273	
<b>Std Dev</b>	<b>0.22</b>	<b>-1.000</b>	
34	0.21	-0.826	
31	0.19	-0.380	
32	0.19	-0.268	
43	0.17	0.000	
<b>Median</b>	<b>0.17</b>	<b>0.000</b>	
24	0.17	0.067	
24	0.16	0.290	
79	0.15	0.514	
23	0.14	0.737	
23	0.14	0.849	
32	0.13	0.960	

040.20		Indirect Available Phosphate Spectrometric	
Lab			
24	52.82	-0.939	
43	52.80	-0.768	
43	52.78	-0.666	
23	52.73	-0.290	
23	52.69	-0.051	
<b>Median</b>	<b>52.68</b>	<b>0.000</b>	
61	52.68	0.051	
31	52.63	0.358	
24	52.55	0.905	
<b>Std Dev</b>	<b>52.54</b>	<b>1.000</b>	
61	52.54	1.007	
79	52.45	1.588	

040.99		Indirect Available Phosphate Other	
Lab			
32	52.67	-1.165	
<b>Std Dev</b>	<b>52.66</b>	<b>-1.000</b>	
34	52.62	0.000	
<b>Median</b>	<b>52.62</b>	<b>0.000</b>	
<b>Std Dev</b>	<b>52.58</b>	<b>1.000</b>	

32	52.56	1.515
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040.XX		Indirect Available Phosphate Total Method	
Lab			
24	52.82	-1.182	
<b>Std Dev</b>	<b>52.80</b>	<b>-1.000</b>	
43	52.80	-0.985	
43	52.78	-0.867	
23	52.73	-0.434	
23	52.69	-0.158	
61	52.68	-0.039	
32	52.67	0.000	
<b>Median</b>	<b>52.67</b>	<b>0.000</b>	
31	52.63	0.315	
34	52.62	0.394	
32	52.56	0.906	
24	52.55	0.946	
<b>Std Dev</b>	<b>52.54</b>	<b>1.000</b>	
61	52.54	1.064	
79	52.45	1.734	

041.10		Direct Available Phosphate Gravimetric Quimociac	
Lab			
219	52.58	-1.340	
<b>Std Dev</b>	<b>52.54</b>	<b>-1.000</b>	
<b>Median</b>	<b>52.45</b>	<b>0.000</b>	
<b>Std Dev</b>	<b>52.35</b>	<b>1.000</b>	
107	52.32	1.340	

041.40		Direct Available Phosphate Automated	
Lab			
49	52.78	-1.340	
<b>Std Dev</b>	<b>52.43</b>	<b>-1.000</b>	
<b>Median</b>	<b>51.41</b>	<b>0.000</b>	
<b>Std Dev</b>	<b>50.38</b>	<b>1.000</b>	
103	50.04	1.340	

041.50		Direct Available Phosphate ICP	
Lab			
42	54.60	-1.803	
<b>Std Dev</b>	<b>53.51</b>	<b>-1.000</b>	
66	52.15	0.000	
<b>Median</b>	<b>52.15</b>	<b>0.000</b>	
80	50.95	0.877	

041.60		Direct Available Phosphate EDTA Extract	
Lab			
29	53.52	-0.526	
219	52.85	-0.118	
<b>Median</b>	<b>52.66</b>	<b>0.000</b>	
77	52.46	0.118	
<b>Std Dev</b>	<b>51.01</b>	<b>1.000</b>	
137	45.86	4.124	

041.XX		Direct Available Phosphate Total Method	
Lab			
42	54.60	-2.262	
29	53.52	-1.124	
<b>Std Dev</b>	<b>53.41</b>	<b>-1.000</b>	
219	52.85	-0.412	
49	52.78	-0.338	
219	52.58	-0.122	
77	52.46	0.000	
<b>Median</b>	<b>52.46</b>	<b>0.000</b>	
107	52.32	0.153	
66	52.15	0.333	
<b>Std Dev</b>	<b>51.51</b>	<b>1.000</b>	
80	50.95	1.596	
103	50.04	2.564	
137	45.86	6.983	

048.20		Water Soluble Phosphate Spectrometric	
Lab			
9	48.20	-1.675	
23	48.15	-1.436	
23	48.12	-1.268	
<b>Std Dev</b>	<b>48.06</b>	<b>-1.000</b>	
79	48.01	-0.766	
14	47.89	-0.191	
14	47.88	-0.120	
31	47.85	0.000	
<b>Median</b>	<b>47.85</b>	<b>0.000</b>	
61	47.85	0.024	
61	47.82	0.167	
24	47.73	0.574	
<b>Std Dev</b>	<b>47.64</b>	<b>1.000</b>	
43	47.51	1.651	
43	47.34	2.465	

24 47.33 2.489

048.99 Water Soluble Phosphate		
Lab	Other	
34	47.81	-0.437
32	47.74	0.000
<b>Median</b>	<b>47.74</b>	<b>0.000</b>
<b>Std Dev</b>	<b>47.56</b>	<b>1.000</b>
32	47.35	2.243

048.XX Water Soluble Phosphate		
Lab	Total Method	
9	48.20	-2.013
23	48.15	-1.741
23	48.12	-1.551
<b>Std Dev</b>	<b>48.01</b>	<b>-1.000</b>
79	48.01	-0.979
14	47.89	-0.326
14	47.88	-0.245
31	47.85	-0.109
61	47.85	-0.082
<b>Median</b>	<b>47.83</b>	<b>0.000</b>
61	47.82	0.082
34	47.81	0.109
32	47.74	0.517
24	47.73	0.544
<b>Std Dev</b>	<b>47.65</b>	<b>1.000</b>
43	47.51	1.769
32	47.35	2.612
43	47.34	2.694
24	47.33	2.721

050.50 %K <sub>2</sub> O Soluble Potash		
Lab	ICP(Oxalate)	
99	0.14	-2.144
<b>Std Dev</b>	<b>0.13</b>	<b>-1.000</b>
23	0.12	0.000
<b>Median</b>	<b>0.12</b>	<b>0.000</b>
23	0.12	0.536

050.51 %K <sub>2</sub> O Soluble Potash		
Lab	ICP(Citrate)	
137	0.27	0.000
<b>Median</b>	<b>0.27</b>	<b>0.000</b>

050.99 Soluble Potash		
Lab	%K <sub>2</sub> O	Other
80	0.30	-189.458
43	0.12	-1.752
<b>Std Dev</b>	<b>0.12</b>	<b>-1.000</b>
43	0.12	-0.928
24	0.12	0.000
24	0.12	0.000
61	0.12	0.000
61	0.12	0.000
<b>Median</b>	<b>0.12</b>	<b>0.000</b>

050.XX Soluble Potash		
Lab	%K <sub>2</sub> O	Total Method
80	0.30	-22.267
137	0.27	-18.556
99	0.14	-2.474
<b>Std Dev</b>	<b>0.13</b>	<b>-1.000</b>
43	0.12	-0.206
43	0.12	-0.109
23	0.12	0.000
24	0.12	0.000
24	0.12	0.000
61	0.12	0.000
61	0.12	0.000
<b>Median</b>	<b>0.12</b>	<b>0.000</b>
23	0.12	0.619

060.00 Free Water		
Lab	Vacuum Oven	
32	1.13	-1.984
32	1.07	-1.435
<b>Std Dev</b>	<b>1.01</b>	<b>-1.000</b>
24	0.99	-0.802
79	0.98	-0.675
24	0.95	-0.464
31	0.92	-0.211
<b>Median</b>	<b>0.90</b>	<b>0.000</b>
34	0.87	0.211
9	0.86	0.295
23	0.83	0.549
23	0.79	0.886
43	0.79	0.886

43 0.79 0.929

060.10 Free Water		
Lab	Vacuum Desiccate	
61	1.24	-1.340
<b>Std Dev</b>	<b>1.19</b>	<b>-1.000</b>
<b>Median</b>	<b>1.07</b>	<b>0.000</b>
<b>Std Dev</b>	<b>0.95</b>	<b>1.000</b>
61	0.91	1.340

060.99 Free Water		
Lab	Other	
275	1.09	-0.585
275	1.09	-0.585
<b>Median</b>	<b>1.06</b>	<b>0.000</b>
14	1.03	0.585
<b>Std Dev</b>	<b>1.00</b>	<b>1.000</b>
14	0.99	1.267

060.XX Free Water		
Lab	Total Method	
61	1.24	-1.897
32	1.13	-1.166
<b>Std Dev</b>	<b>1.11</b>	<b>-1.000</b>
275	1.09	-0.853
275	1.09	-0.853
32	1.07	-0.714
14	1.03	-0.435
14	0.99	-0.191
24	0.99	-0.191
79	0.98	-0.087
<b>Median</b>	<b>0.96</b>	<b>0.000</b>
24	0.95	0.087
31	0.92	0.296
61	0.91	0.365
34	0.87	0.644
9	0.86	0.714
23	0.83	0.922
<b>Std Dev</b>	<b>0.82</b>	<b>1.000</b>
23	0.79	1.201
43	0.79	1.201
43	0.79	1.236

101.00 Acid Soluble Calcium		
Lab	%CaO	Atomic Absorption
219	0.77	0.000
<b>Median</b>	<b>0.77</b>	<b>0.000</b>

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
32	1.04	-6.849
32	0.94	-3.871
<b>Std Dev</b>	<b>0.84</b>	<b>-1.000</b>
61	0.83	-0.596
24	0.83	-0.596
61	0.83	-0.596
43	0.82	-0.264
31	0.81	-0.134
34	0.81	0.000
<b>Median</b>	<b>0.81</b>	<b>0.000</b>
14	0.80	0.447
23	0.80	0.447
23	0.80	0.447
<b>Std Dev</b>	<b>0.78</b>	<b>1.000</b>
14	0.78	1.042
9	0.77	1.191
24	0.77	1.191
43	0.71	2.867

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
32	1.04	-5.773
32	0.94	-3.342
<b>Std Dev</b>	<b>0.84</b>	<b>-1.000</b>
61	0.83	-0.668
24	0.83	-0.668
61	0.83	-0.668
43	0.82	-0.398
31	0.81	-0.292
34	0.81	-0.182
<b>Median</b>	<b>0.80</b>	<b>0.000</b>
14	0.80	0.182
23	0.80	0.182
23	0.80	0.182
14	0.78	0.668
219	0.77	0.681
9	0.77	0.790

24	0.77	0.790
Std Dev	0.76	1.000
43	0.71	2.158

121.00 Acid Soluble Magnesium		
Lab	%MgO	Atomic Absorption
219	1.23	0.000
Median	1.23	0.000

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
14	1.66	-7.826
14	1.65	-7.718
Std Dev	1.34	-1.000
32	1.32	-0.536
61	1.30	-0.107
61	1.30	-0.107
23	1.29	0.000
24	1.29	0.000
24	1.29	0.000
Median	1.29	0.000
23	1.28	0.214
Std Dev	1.24	1.000

34	1.24	1.072
9	1.24	1.179
31	1.23	1.286
32	1.21	1.822
43	1.10	4.181
43	1.08	4.502

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
14	1.66	-7.526
14	1.65	-7.425
Std Dev	1.33	-1.000
32	1.32	-0.610
61	1.30	-0.203
61	1.30	-0.203
23	1.29	-0.102
24	1.29	-0.102
24	1.29	-0.102
Median	1.29	0.000
23	1.28	0.102
34	1.24	0.915

Std Dev	1.24	1.000
9	1.24	1.017
31	1.23	1.119
219	1.23	1.190
32	1.21	1.627
43	1.10	3.865
43	1.08	4.170

144..01 Sulfate Sulfur (S)		
Lab	Gravimetric	
241	1.70	0.000
Median	1.70	0.000

144.70 Sulfur		
Lab	Spectrometric	
14	1.67	-1.340
Std Dev	1.67	-1.000
Median	1.67	0.000
Std Dev	1.67	1.000
14	1.67	1.340

144.99 Sulfate Sulfur (S)		
Lab	Other	
32	1.75	-1.364
Std Dev	1.71	-1.000
34	1.70	-0.877
32	1.69	-0.780
23	1.64	-0.292
9	1.62	-0.049
24	1.61	0.000
24	1.61	0.000
Median	1.61	0.000
31	1.56	0.536
61	1.52	0.926
61	1.52	0.926
Std Dev	1.51	1.000
275	1.21	3.898
275	1.20	4.030

144.XX Sulfate Sulfur (S)		
Lab	Total Method	
32	1.75	-1.248
Std Dev	1.72	-1.000
34	1.70	-0.786

241	1.70	-0.786
32	1.69	-0.693
14	1.67	-0.508
14	1.67	-0.462
23	1.64	-0.231
9	1.62	0.000
Median	1.62	0.000
24	1.61	0.046
24	1.61	0.046
31	1.56	0.554
61	1.52	0.924
61	1.52	0.924
Std Dev	1.51	1.000
275	1.21	3.743
275	1.20	3.868

145.99 Total Sulfur (S)		
Lab	Other	
219	1.71	-2.268
Std Dev	1.67	-1.000
43	1.65	0.000
Median	1.65	0.000
43	1.64	0.412

145.XX Total Sulfur (S)		
Lab	Total Method	
219	1.71	-2.268
Std Dev	1.67	-1.000
43	1.65	0.000
Median	1.65	0.000
43	1.64	0.412

151.30 Total Arsenic		
Lab	ICP	
18	25.25	-1.507
Std Dev	24.07	-1.000
43	22.30	-0.237
43	22.00	-0.108
61	21.95	-0.086
Median	21.75	0.000
61	21.55	0.086
Std Dev	19.43	1.000
24	19.30	1.055
9	17.95	1.636

31	16.10	2.432
151.99	Total Arsenic	
Lab	Other	
275	16.00	0.000
Median	16.00	0.000

151.XX Total Arsenic		
Lab	Total Method	
18	25.25	-1.224
Std Dev	24.57	-1.000
43	22.30	-0.248
43	22.00	-0.149
61	21.95	-0.132
61	21.55	0.000
Median	21.55	0.000
24	19.30	0.744
Std Dev	18.53	1.000
9	17.95	1.191
31	16.10	1.803
275	16.00	1.836

165.99 Acid Soluble Boron		
Lab	PPM	Other
24	34.20	0.000
Median	34.20	0.000

165.XX, ppm Acid Soluble Boron		
Lab	PPM	Total Method
24	34.20	0.000
Median	34.20	0.000

181.30 Total Cadmium		
Lab	PPM	ICP
9	140.55	-0.161
61	140.50	-0.107
61	140.50	-0.107
Median	140.40	0.000
43	140.30	0.107
Std Dev	139.47	1.000
18	138.90	1.608
43	137.85	2.739

181.99		Total Cadmium	
Lab		Other	
24	127.00	0.000	
<b>Median</b>	<b>127.00</b>	<b>0.000</b>	

181.XX		Total Cadmium	
Lab	PPM	Total Method	
9	140.55	-0.157	
61	140.50	-0.126	
61	140.50	-0.126	
43	140.30	0.000	
<b>Median</b>	<b>140.30</b>	<b>0.000</b>	
18	138.90	0.882	
<b>Std Dev</b>	<b>138.71</b>	<b>1.000</b>	
43	137.85	1.546	
24	127.00	8.377	

190.00		Aluminum	
Lab	%Al <sub>2</sub> O <sub>3</sub>	ICP	
32	1.69	-2.474	
14	1.68	-2.268	
14	1.67	-2.165	
9	1.62	-1.031	
<b>Std Dev</b>	<b>1.61</b>	<b>-1.000</b>	
61	1.59	-0.412	
24	1.58	-0.309	
23	1.57	0.000	
<b>Median</b>	<b>1.57</b>	<b>0.000</b>	
23	1.56	0.206	
61	1.56	0.206	
24	1.55	0.309	
32	1.55	0.412	
<b>Std Dev</b>	<b>1.52</b>	<b>1.000</b>	
43	1.48	1.752	
43	1.48	1.855	

190.99		Aluminum	
Lab	%Al <sub>2</sub> O <sub>3</sub>	Atomic Absorption	
31	1.60	0.000	
34	1.60	0.000	
<b>Median</b>	<b>1.60</b>	<b>0.000</b>	

190.XX		Aluminum	
Lab	%Al <sub>2</sub> O <sub>3</sub>	Total Method	

32	1.69	-2.558
14	1.68	-2.315
14	1.67	-2.193
<b>Std Dev</b>	<b>1.62</b>	<b>-1.000</b>
9	1.62	-0.853
31	1.60	-0.487
34	1.60	-0.487
61	1.59	-0.122
24	1.58	0.000
<b>Median</b>	<b>1.58</b>	<b>0.000</b>
23	1.57	0.365
23	1.56	0.609
61	1.56	0.609
24	1.55	0.731
32	1.55	0.853
<b>Std Dev</b>	<b>1.54</b>	<b>1.000</b>
43	1.48	2.436
43	1.48	2.558

191.30		Total Chromium	
Lab		ICP	
61	537.00	-0.994	
61	535.00	-0.821	
18	528.50	-0.259	
31	525.50	0.000	
<b>Median</b>	<b>525.50</b>	<b>0.000</b>	
43	517.00	0.735	
43	515.50	0.865	
<b>Std Dev</b>	<b>513.93</b>	<b>1.000</b>	
9	501.10	2.109	

191.99		Total Chromium	
Lab	PPM	Other	
24	498.00	0.000	
<b>Median</b>	<b>498.00</b>	<b>0.000</b>	

191.XX		Total Chromium	
Lab	PPM	Total Method	
61	537.00	-1.158	
61	535.00	-1.011	
<b>Std Dev</b>	<b>534.85</b>	<b>-1.000</b>	
18	528.50	-0.533	
31	525.50	-0.312	
<b>Median</b>	<b>521.25</b>	<b>0.000</b>	

43	517.00	0.312
43	515.50	0.423
<b>Std Dev</b>	<b>507.65</b>	<b>1.000</b>
9	501.10	1.482
24	498.00	1.709

202.30		Acid Soluble Cobalt	
Lab	PPM	ICP	
43			

202.99		Acid Soluble Cobalt	
Lab		Other	
24	4.17	0.000	
<b>Median</b>	<b>4.17</b>	<b>0.000</b>	

202.XX		Acid Soluble Cobalt	
Lab	PPM	Total Method	
43	5.00	-0.053	
43	5.00	-0.053	
61	5.00	-0.053	
<b>Median</b>	<b>4.98</b>	<b>0.000</b>	
18	4.95	0.053	
<b>Std Dev</b>	<b>4.50</b>	<b>1.000</b>	
24	4.17	1.699	
61	4.00	2.057	

221.00		Acid Soluble Copper	
Lab		Atomic Absorption	
219	1.13	0.000	
<b>Median</b>	<b>1.13</b>	<b>0.000</b>	

221.30		Acid Soluble Copper	
Lab	PPM	ICP	
18	78.95	-0.636	
43	78.50	-0.335	
43	78.00	0.000	
<b>Median</b>	<b>78.00</b>	<b>0.000</b>	
<b>Std Dev</b>	<b>76.51</b>	<b>1.000</b>	
61	76.50	1.005	
61	75.00	2.010	

221.99		Acid Soluble Copper	
Lab		Other	
24	73.50	0.000	
<b>Median</b>	<b>73.50</b>	<b>0.000</b>	

221.XX		Acid Soluble Copper	
Lab	PPM	Total Method	
219	79.97	-0.885	
18	78.95	-0.428	
43	78.50	-0.225	
43	78.00	0.000	
<b>Median</b>	<b>78.00</b>	<b>0.000</b>	
61	76.50	0.676	
<b>Std Dev</b>	<b>75.78</b>	<b>1.000</b>	
61	75.00	1.351	
24	73.50	2.027	

241.30		Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	ICP	
32	1.23	-4.264	
32	1.21	-3.289	
<b>Std Dev</b>	<b>1.16</b>	<b>-1.000</b>	
24	1.15	-0.609	
61	1.15	-0.365	
23	1.14	-0.122	
24	1.14	-0.122	
61	1.14	-0.122	
<b>Median</b>	<b>1.14</b>	<b>0.000</b>	
23	1.14	0.122	
31	1.14	0.122	
14	1.12	0.853	
<b>Std Dev</b>	<b>1.12</b>	<b>1.000</b>	
14	1.12	1.096	
9	1.11	1.340	
43	1.09	2.558	
43	1.08	2.802	

241.99		Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Other	
34	1.17	0.000	
<b>Median</b>	<b>1.17</b>	<b>0.000</b>	

241.XX		Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Total Method	
32	1.23	-4.264	
32	1.21	-3.289	
34	1.17	-1.584	
<b>Std Dev</b>	<b>1.16</b>	<b>-1.000</b>	



24	1.15	-0.609
61	1.15	-0.365
23	1.14	-0.122
24	1.14	-0.122
61	1.14	-0.122
Median	1.14	0.000
23	1.14	0.122
31	1.14	0.122
219	1.13	0.244
14	1.12	0.853
Std Dev	1.12	1.000
14	1.12	1.096
9	1.11	1.340
43	1.09	2.558
43	1.08	2.802

251.30		Total Lead
Lab	PPM	ICP
43	4.15	-1.047
43	4.10	-1.005
Std Dev	4.09	-1.000
9	2.90	0.000
Median	2.90	0.000
61	2.50	0.335
61	2.00	0.754

251.99		Total Lead
Lab		Other
24	1.63	0.000
Median	1.63	0.000

251.XX		Total Lead
Lab	PPM	Total Method
43	4.15	-1.160
43	4.10	-1.120
Std Dev	3.95	-1.000
9	2.90	-0.160
Median	2.70	0.000
61	2.50	0.160
61	2.00	0.560
24	1.63	0.856

261.11		Acid Soluble Manganese
Lab		Atomic Absorption

219	193.05	0.000
Median	193.05	0.000

261.30		Acid Soluble Manganese
Lab	PPM	ICP
31	188.30	-0.348
9	187.45	0.000
Median	187.45	0.000
Std Dev	185.01	1.000
18	181.75	2.332

261.99		Acid Soluble Manganese
Lab	PPM	Other
43	201.00	-1.137
43	201.00	-1.137
Std Dev	199.31	-1.000
61	187.00	0.000
Median	187.00	0.000
61	184.50	0.203
24	178.00	0.731

261.XX		Acid Soluble Manganese
Lab	PPM	Total Method
43	201.00	-2.124
43	201.00	-2.124
Std Dev	193.83	-1.000
219	193.05	-0.878
31	188.30	-0.133
9	187.45	0.000
Median	187.45	0.000
61	187.00	0.071
61	184.50	0.462
18	181.75	0.893
Std Dev	181.07	1.000
24	178.00	1.481

281.00		Total Mercury
Lab	PPM	Atomic Absorbtion
275	0.01	0.000
Median	0.01	0.000

281.30		Total Mercury
Lab	PPM	ICP
24	0.05	0.000

Median	0.05	0.000
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281.XX		Total Mercury
Lab	PPM	Total Method
24	0.05	-1.340
Std Dev	0.05	-1.000
Median	0.03	0.000
Std Dev	0.02	1.000
275	0.01	1.340

289.30		Total Molybdenum
Lab	PPM	ICP
18		

289.99		Total Molybdenum
Lab	PPM	Other
24	18.00	0.000
Median	18.00	0.000

289.XX		Total Molybdenum
Lab	PPM	Total Method
24	18.00	-2.132
Std Dev	17.07	-1.000
18	16.90	-0.792
61	16.50	-0.305
Median	16.25	0.000
61	16.00	0.305
43	15.60	0.792
43	15.55	0.853

291.30		Total Nickel
Lab		ICP
61		

291.99		Total Nickel
Lab	PPM	Other
24	260.00	-1.340
Std Dev	259.05	-1.000
Median	256.28	0.000
Std Dev	253.50	1.000
18	252.55	1.340

291.XX		Total Nickel
Lab	PPM	Total Method

301.30		Total Selenium
Lab	PPM	ICP
24	0.33	-2.042
Std Dev	0.29	-1.000
61	0.25	0.000
Median	0.25	0.000
61	0.23	0.638

301.XX		Total Selenium
Lab	PPM	Total Mthod
24	0.33	-2.042
Std Dev	0.29	-1.000
61	0.25	0.000
Median	0.25	0.000
61	0.23	0.638

311.99		Sodium
Lab	%Na <sub>2</sub> O	Other
61	0.21	-1.621
61	0.20	-1.418
Std Dev	0.19	-1.000
24	0.18	-0.608
24	0.17	-0.203
Median	0.17	0.000
23	0.16	0.203
23	0.16	0.203
Std Dev	0.14	1.000
43	0.13	1.511
43	0.13	1.547

311.XX		Sodium
Lab	%Na <sub>2</sub> O	Total Method
61	0.21	-1.621
61	0.20	-1.418
Std Dev	0.19	-1.000
24	0.18	-0.608
24	0.17	-0.203
Median	0.17	0.000
23	0.16	0.203
23	0.16	0.203
Std Dev	0.14	1.000
43	0.13	1.511
43	0.13	1.547

321.00	Acid Soluble Zinc	
Lab	Atomic Absorption	
219	1808.50	0.000
Median	1808.50	0.000

321.30	Acid Soluble Zinc	
Lab	PPM	ICP
24	1887.00	-1.496
Std Dev	1860.23	-1.000
275	1833.06	-0.496
Median	1806.28	0.000
61	1779.50	0.496
61	1758.50	0.886

321.99	Acid Soluble Zinc	
Lab	Other	
43	1683.50	-1.340
Std Dev	1682.99	-1.000
Median	1681.50	0.000
Std Dev	1680.01	1.000
43	1679.50	1.340

321.XX	Acid Soluble Zinc	
Lab	PPM	Total Method
24	1887.00	-1.444
Std Dev	1853.96	-1.000
275	1833.06	-0.719
219	1808.50	-0.389
61	1779.50	0.000
Median	1779.50	0.000
61	1758.50	0.282
Std Dev	1705.04	1.000
43	1683.50	1.289
43	1679.50	1.343

325.10	Fluoride	
Lab	%	Electrode
32	1.68	-1.864
32	1.66	-1.678
9	1.56	-0.746
24	1.53	-0.466
24	1.49	-0.093
Median	1.48	0.000
23	1.47	0.093

23	1.47	0.140
31	1.39	0.839
14	1.32	1.538
14	1.31	1.631

325.99	Fluoride	
Lab	%	Other
61	1.68	-0.322
61	1.65	0.000
Median	1.65	0.000
34	1.43	2.358

325.XX	Fluoride	
Lab	%	Total Method
32	1.68	-1.157
61	1.68	-1.157
32	1.66	-1.035
61	1.65	-0.975
9	1.56	-0.426
24	1.53	-0.244
24	1.49	0.000
Median	1.49	0.000
23	1.47	0.122
23	1.47	0.152
34	1.43	0.365
31	1.39	0.609
14	1.32	1.066
14	1.31	1.127

291.XX	Total Nickel	
Lab	PPM	Total Method
61	263	
StDev	260.45	
24	260	
9	258.35	
43	256	Median
43	256	
18	252.55	
61	251.5	