

# AFPC

**Sample**

**2015-10**

**Grade**

**11-52-0**

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, Other		001.99	12	11.56	0.13
Method Group 001.XX PCT			12	11.56	0.16
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	11.58	0.03
Total Nitrogen, Salicylic	955.04d	010.12	1	11.45	0.00
Total Nitrogen, Combustion	993.13	010.60	21	11.55	0.11
Total Nitrogen, Other		010.99	2	11.43	0.00
Method Group 010.XX PCT			27	11.55	0.16
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	2	52.39	0.01
Total Phosphate, Spectrometric	978.02	020.20	18	52.38	0.07
Total Phosphate, ICP	970.03	020.40	1	52.04	0.00
Total Phosphate, ICP, Lithium	970.02	020.50	1	52.24	0.00
Method Group 020.XX PCT			22	52.37	0.12
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	8	0.02	0.01
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.04	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.03	0.00
Insoluble Phosphate, Other		030.99	2	0.04	0.00
Method Group 030.XX PCT			12	0.03	0.02
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Spectrometric	960.02	040.20	9	52.32	0.04
Indirect Available Phosphate, Other		040.99	1	52.52	0.00
Method Group 040.XX PCT			10	52.33	0.07
<b>DIRECT AVAILABLE PHOSPHATE</b>					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	52.12	0.44
Direct Available Phosphate, Spectrometric	960.03D	041.20	1	51.36	0.00
Direct Available Phosphate, Automated	978.01	041.40	2	52.64	0.04
Direct Available Phosphate, ICP		041.50	4	52.18	1.09
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	52.52	0.53
Direct Available Phosphate, Other		041.99	1	56.61	0.00
Method Group 041.XX PCT			14	52.52	0.96
<b>WATER SOLUBLE PHOSPHATE</b>					
Water Soluble Phosphate, Spectrometric	970.01	048.20	12	48.35	0.27
Water Soluble Phosphate, Other		048.99	4	48.67	0.47
Method Group 048.XX PCT			16	48.37	0.37
<b>SOLUBLE POTASH AS K<sub>2</sub>O</b>					
Soluble Potash, ICP(Oxalate)		050.50	2	0.28	0.00
Soluble Potash, Other		050.99	9	0.26	0.02
Method Group 050.XX PCT			11	0.27	0.02
<b>FREE WATER</b>					
Free Water, Vacuum Oven	965.08B	060.00	13	1.35	0.14
Free Water, Other		060.99	2	1.10	0.01
Method Group 060.XX PCT			15	1.31	0.20
<b>ACID SOLUBLE CALCIUM AS CaO</b>					
Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	0.12	0.00
Acid Soluble Calcium, ICP		101.30	17	0.19	0.03
Acid Soluble Calcium, Other		101.99	1	0.13	0.00
Method Group 101.XX PCT			19	0.19	0.03
<b>ACID SOLUBLE MAGNESIUM AS MgO</b>					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	1	1.71	0.00
Acid Soluble Magnesium, ICP		121.30	17	1.68	0.13
Acid Soluble Magnesium, Other		121.99	1	1.58	0.00
Method Group 121.XX PCT			19	1.68	0.14
<b>SULFATE SULFUR (S)</b>					

Sulfur, Gravimetric	980.02(a)	144.01	1	2.30	0.00
Sulfur, Spectrometric		144.70	2	2.02	0.01
Sulfur, Other		144.99	11	2.31	0.04
Method Group 144.XX PCT			14	2.30	0.09
<b>TOTAL SULFUR (S)</b>					
Sulfur, Other		145.99	4	2.3	0.1
Method Group 145.XX PCT			4	2.3	0.1
<b>TOTAL ARSENIC</b>					
Total Arsenic, ICP	980.02(b)	151.02	7	2	2.1
Method Group 151.XX PPM			7	2	2.6
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Other		165.99	1	105	0.0
Method Group 165.XX PPM			1	105	0.0
<b>TOTAL CADMIUM</b>					
Total Cadmium, ICP		181.30	10	39.3	4.7
Total Cadmium, Other		181.99	1	35.3	0.0
Method Group 181.XX PPM			11	38.7	6.1
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			15	0.85	0.01
Water Soluble Chlorine, Other, %		190.99	2	0.83	0.00
Method Group 190.XX PCT			17	0.84	0.02
<b>TOTAL CHROMIUM</b>					
Total Chromium, ICP		191.30	10	352	12.9
Total Chromium, Other		191.99	1	323	0.0
Method Group 191.XX PPM			11	352	16.2
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, ICP		202.30	6	3	1.4
Acid Soluble Cobalt, Other		202.99	1	1	0.0
Method Group 202.XX PPM			7	3	2.0
<b>ACID SOLUBLE COPPER</b>					
Acid Soluble Copper, ICP		221.30	5	1.0	0.2
Acid Soluble Copper, Other		221.99	1	0.0	0.0
Method Group 221.XX PPM			6	0.9	0.5
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>					
Acid Soluble Iron, ICP		241.30	17	1.44	0.06
Acid Soluble Iron, Other		241.99	1	1.50	0.00
Method Group 241.XX PCT			19	1.45	0.07
<b>TOTAL LEAD</b>					
Total Lead, ICP		251.30	5	1	1.2
Total Lead, Other		251.99	1	0.1	0.0
Method Group 251.XX PPM			6	1	1.7
<b>ACID SOLUBLE MANGANESE</b>					
Acid Soluble Manganese, ICP	972.02a	261.30	5	91	2.7
Acid Soluble Manganese, Other		261.99	7	97	3.9
Method Group 261.XX PPM			12	92	6.0
<b>TOTAL MERCURY</b>					
Total Mercury, ICP		281.30	1	0.00	0.00
Method Group 281.XX PPM			1	0.05	0.00
<b>TOTAL MOLYBDENUM</b>					
Total Molybdenum, ICP		289.30	10	9	2.5
Total Molybdenum, Other		289.99	1	13	0.0
Method Group 289.XX PPM			11	10	2.9
<b>TOTAL NICKEL</b>					
Total Nickel, ICP		291.30	7	30.0	0.6
Total Nickel, icp		291.99	4	29.0	4.1
Method Group 291.XX PPM			11	29.5	0.8
<b>TOTAL SELENIUM</b>					
Total Selenium, ICP		301.30	2	1.0	0.4
Method Group 301.XX PPM			2	1.0	0.4
<b>SODIUM AS Na<sub>2</sub>O</b>					
Sodium, Other		311.99	11	0.33	0.03

Method Group 311.XX PCT			11	0.33	0.04
<b>ACID SOLUBLE ZINC</b>					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	1	619.7	0.0
Acid Soluble Zinc, ICP		321.30	9	619.0	31.5
Acid Soluble Zinc, Other		321.99	3	585.5	14.8
Method Group 321.XX %			13	619.0	41.5
<b>FLUORIDE</b>					
Volumetric		325.10	13	0.57	0.04
Distilled/Electrode		325.99	2	0.58	0.01
Method Group 325.XX PCT			15	0.57	0.05

001.99 Ammoniacal Nitrogen		
Lab		Other
24	11.65	-0.738
34	11.65	-0.738
23	11.60	-0.350
24	11.60	-0.350
23	11.58	-0.194
61	11.58	-0.194
<b>Median</b>	<b>11.56</b>	<b>0.000</b>
79	11.53	0.194
61	11.51	0.350
32	11.43	0.971
<b>Std Dev</b>	<b>11.43</b>	<b>1.000</b>
32	11.42	1.049
310	11.01	4.234
38	11.00	4.350

001.XX Ammoniacal Nitrogen		
Lab		Total Method
24	11.65	-0.738
34	11.65	-0.738
23	11.60	-0.350
24	11.60	-0.350
23	11.58	-0.194
61	11.58	-0.194
<b>Median</b>	<b>11.56</b>	<b>0.000</b>
79	11.53	0.194
61	11.51	0.350
32	11.43	0.971
<b>Std Dev</b>	<b>11.43</b>	<b>1.000</b>
32	11.42	1.049
310	11.01	4.234
38	11.00	4.350

010.11 Total Nitrogen		
Lab		Modified Comprehensive
219	11.64	-2.144
<b>Std Dev</b>	<b>11.61</b>	<b>-1.000</b>
43	11.58	0.000
<b>Median</b>	<b>11.58</b>	<b>0.000</b>
43	11.57	0.536

010.12 Total Nitrogen		
Lab		Salicylic
66	11.68	-1.049

107	11.45	0.000
<b>Median</b>	<b>11.45</b>	<b>0.000</b>

010.60 Total Nitrogen		
Lab		Combustion
110	11.95	-3.618
49	11.85	-2.725
47	11.78	-2.099
66	11.68	-1.206
219	11.68	-1.161
<b>Std Dev</b>	<b>11.66</b>	<b>-1.000</b>
24	11.62	-0.670
24	11.62	-0.670
63	11.61	-0.581
77	11.58	-0.268
9	11.55	-0.045
79	11.55	0.000
<b>Median</b>	<b>11.55</b>	<b>0.000</b>
29	11.50	0.402
31	11.50	0.402
111	11.50	0.402
64	11.49	0.536
315	11.47	0.670
14	11.45	0.849
14	11.44	0.938
<b>Std Dev</b>	<b>11.43</b>	<b>1.000</b>
80	11.40	1.295
103	11.36	1.697
39	10.91	5.713

010.99 Total Nitrogen		
Lab		Other
32	11.43	-1.340
<b>Std Dev</b>	<b>11.43</b>	<b>-1.000</b>
<b>Median</b>	<b>11.43</b>	<b>0.000</b>
<b>Std Dev</b>	<b>11.42</b>	<b>1.000</b>
32	11.42	1.340

010.XX Total Nitrogen		
Lab		Total Method
110	11.95	-3.146
49	11.85	-2.369
47	11.78	-1.826
66	11.68	-1.049

219	11.68	-1.010
<b>Std Dev</b>	<b>11.67</b>	<b>-1.000</b>
219	11.64	-0.738
24	11.62	-0.583
24	11.62	-0.583
63	11.61	-0.505
43	11.58	-0.272
77	11.58	-0.233
43	11.57	-0.155
9	11.55	-0.039
79	11.55	0.000
<b>Median</b>	<b>11.55</b>	<b>0.000</b>
29	11.50	0.350
31	11.50	0.350
111	11.50	0.350
64	11.49	0.466
315	11.47	0.583
14	11.45	0.738
107	11.45	0.777
14	11.44	0.816
32	11.43	0.893
32	11.42	0.971
<b>Std Dev</b>	<b>11.42</b>	<b>1.000</b>
80	11.40	1.126
103	11.36	1.476
39	10.91	4.968

020.10 Total Phosphate		
Lab		Gravimetric Quimociac
310	52.41	-1.340
<b>Std Dev</b>	<b>52.41</b>	<b>-1.000</b>
<b>Median</b>	<b>52.39</b>	<b>0.000</b>
<b>Std Dev</b>	<b>52.38</b>	<b>1.000</b>
219	52.38	1.340

020.20 Total Phosphate		
Lab		Spectrometric
34	52.55	-2.398
9	52.51	-1.834
32	52.47	-1.199
61	52.47	-1.199
<b>Std Dev</b>	<b>52.45</b>	<b>-1.000</b>
61	52.42	-0.494
43	52.41	-0.353

24	52.40	-0.282
32	52.40	-0.212
111	52.39	-0.141
<b>Median</b>	<b>52.38</b>	<b>0.000</b>
24	52.37	0.141
31	52.33	0.705
43	52.33	0.705
79	52.33	0.776
23	52.32	0.917
<b>Std Dev</b>	<b>52.31</b>	<b>1.000</b>
23	52.27	1.622
14	52.09	4.091
14	52.08	4.232
315	51.90	6.771

020.40 Total Phosphate		
Lab		Automated
219	52.04	0.000
<b>Median</b>	<b>52.04</b>	<b>0.000</b>

020.50 Total Phosphate		
Lab		ICP
111	52.24	0.000
<b>Median</b>	<b>52.24</b>	<b>0.000</b>

020.XX Total Phosphate		
Lab		Total Method
34	52.55	-1.812
9	52.51	-1.404
<b>Std Dev</b>	<b>52.47</b>	<b>-1.000</b>
32	52.47	-0.944
61	52.47	-0.944
61	52.42	-0.434
310	52.41	-0.383
43	52.41	-0.332
24	52.40	-0.281
32	52.40	-0.230
111	52.39	-0.179
219	52.38	-0.026
<b>Median</b>	<b>52.37</b>	<b>0.000</b>
24	52.37	0.026
31	52.33	0.434
43	52.33	0.434
79	52.33	0.485

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23	52.32	0.587
Std Dev	52.27	1.000
23	52.27	1.098
111	52.24	1.404
14	52.09	2.884
14	52.08	2.986
219	52.04	3.395
315	51.90	4.824

030.20 Insoluble Phosphate Spectrometric		
Lab		
61	0.06	-4.188
43	0.05	-3.350
Std Dev	0.03	-1.000
23	0.03	-0.279
23	0.03	-0.279
Median	0.02	0.000
24	0.02	0.279
24	0.02	0.279
43	0.02	0.335
Std Dev	0.01	1.000
79	0.01	1.396

030.30 Insoluble Phosphate Alka. Quimociac		
Lab		
31	0.04	0.000
Median	0.04	0.000

030.40 Insoluble Phosphate Automated		
Lab		
34	0.03	0.000
Median	0.03	0.000

030.99 Insoluble Phosphate Other		
Lab		
32	0.05	-1.340
Std Dev	0.04	-1.000
Median	0.04	0.000
Std Dev	0.04	1.000
32	0.04	1.340

030.XX Insoluble Phosphate Total Method		
Lab		
61	0.06	-2.049

43	0.05	-1.576
32	0.05	-1.104
Std Dev	0.04	-1.000
31	0.04	-0.788
32	0.04	-0.473
34	0.03	-0.158
Median	0.03	0.000
23	0.03	0.158
23	0.03	0.158
24	0.02	0.473
24	0.02	0.473
43	0.02	0.504
Std Dev	0.01	1.000
79	0.01	1.104

040.20 Indirect Available Phosphate Spectrometric		
Lab		
61	52.39	-1.563
24	52.38	-1.452
Std Dev	52.36	-1.000
43	52.36	-0.893
24	52.35	-0.782
79	52.32	0.000
Median	52.32	0.000
43	52.31	0.112
31	52.30	0.447
23	52.29	0.558
Std Dev	52.27	1.000
23	52.24	1.675

040.99 Indirect Available Phosphate Other		
Lab		
34	52.52	0.000
Median	52.52	0.000

040.XX Indirect Available Phosphate Total Method		
Lab		
34	52.52	-3.350
Std Dev	52.39	-1.000
61	52.39	-0.938
24	52.38	-0.849
43	52.36	-0.402
24	52.35	-0.313
Median	52.33	0.000

79	52.32	0.313
43	52.31	0.402
31	52.30	0.670
23	52.29	0.759
Std Dev	52.28	1.000
23	52.24	1.653

041.10 Direct Available Phosphate Gravimetric Quimociac		
Lab		
107	52.71	-1.340
Std Dev	52.56	-1.000
Median	52.12	0.000
Std Dev	51.68	1.000
47	51.53	1.340

041.20 Direct Available Phosphate Spectrometric		
Lab		
47	51.36	0.000
Median	51.36	0.000

041.40 Direct Available Phosphate Automated		
Lab		
38	52.69	-1.340
Std Dev	52.68	-1.000
Median	52.64	0.000
Std Dev	52.60	1.000
49	52.59	1.340

041.50 Direct Available Phosphate ICP		
Lab		
63	52.81	-0.575
64	52.38	-0.181
Median	52.18	0.000
66	51.99	0.181
Std Dev	51.09	1.000
80	48.15	3.698

041.60 Direct Available Phosphate EDTA Extract		
Lab		
29	53.47	-1.803
Std Dev	53.05	-1.000
77	52.56	-0.080
Median	52.52	0.000
219	52.48	0.080

Std Dev	51.99	1.000
103	50.89	3.075

041.99 Direct Available Phosphate Other		
Lab		
39	56.61	0.000
Median	56.61	0.000

041.XX Direct Available Phosphate Total Method		
Lab		
39	56.61	-5.187
29	53.47	-1.210
Std Dev	53.31	-1.000
63	52.81	-0.371
107	52.71	-0.238
38	52.69	-0.217
49	52.59	-0.092
77	52.56	-0.054
Median	52.52	0.000
219	52.48	0.054
64	52.38	0.174
66	51.99	0.675
Std Dev	51.73	1.000
47	51.53	1.252
47	51.36	1.467
103	50.89	2.063
80	48.15	5.536

048.20 Water Soluble Phosphate Spectrometric		
Lab		
9	48.93	-2.193
Std Dev	48.61	-1.000
31	48.59	-0.918
61	48.58	-0.862
61	48.51	-0.618
23	48.37	-0.094
23	48.37	-0.094
Median	48.35	0.000
79	48.32	0.094
24	48.19	0.581
14	48.17	0.656
14	48.17	0.675
Std Dev	48.08	1.000
24	48.07	1.031

111	47.30	3.917
048.99 Water Soluble Phosphate		
Lab		Other
32	48.87	-0.435
32	48.83	-0.350
Median	48.67	0.000
34	48.50	0.350
Std Dev	48.19	1.000
111	47.34	2.823

048.XX Water Soluble Phosphate		
Lab		Total Method
9	48.93	-1.830
32	48.87	-1.634
32	48.83	-1.503
Std Dev	48.68	-1.000
31	48.59	-0.719
61	48.58	-0.670
61	48.51	-0.458
34	48.50	-0.425
23	48.37	0.000
23	48.37	0.000
Median	48.37	0.000
79	48.32	0.163
24	48.19	0.588
14	48.17	0.654
14	48.17	0.670
24	48.07	0.980
Std Dev	48.06	1.000
111	47.34	3.383
111	47.30	3.497

050.50 %K <sub>2</sub> O Soluble Potash		
Lab		ICP(Oxalate)
23	0.29	-1.340
Std Dev	0.28	-1.000
Median	0.28	0.000
Std Dev	0.28	1.000
23	0.28	1.340

050.99 Soluble Potash		
Lab		Other
61	0.30	-1.882

61	0.30	-1.882
Std Dev	0.28	-1.000
111	0.28	-0.941
24	0.27	-0.471
24	0.26	0.000
31	0.26	0.000
Median	0.26	0.000
43	0.25	0.399
43	0.25	0.603
Std Dev	0.24	1.000
80	0.20	2.823

050.XX Soluble Potash		
Lab	%K <sub>2</sub> O	Total Method
61	0.30	-1.503
61	0.30	-1.503
Std Dev	0.29	-1.000
23	0.29	-0.752
23	0.28	-0.501
111	0.28	-0.501
24	0.27	0.000
Median	0.27	0.000
24	0.26	0.501
31	0.26	0.501
43	0.25	0.926
Std Dev	0.25	1.000
43	0.25	1.143
80	0.20	3.508

060.00 Free Water		
Lab		Vacuum Oven
61	1.82	-3.404
61	1.74	-2.861
31	1.51	-1.159
Std Dev	1.48	-1.000
24	1.41	-0.471
24	1.39	-0.326
32	1.35	-0.036
32	1.35	0.000
Median	1.35	0.000
9	1.31	0.254
79	1.23	0.869
111	1.23	0.869
Std Dev	1.21	1.000

23	1.19	1.123
23	1.18	1.231
34	1.15	1.412
060.99 Free Water		
Lab		Other
14	1.12	-1.340
Std Dev	1.11	-1.000
Median	1.10	0.000
Std Dev	1.09	1.000
14	1.09	1.340

060.XX Free Water		
Lab		Total Method
61	1.82	-3.111
61	1.74	-2.649
31	1.51	-1.201
Std Dev	1.47	-1.000
24	1.41	-0.616
24	1.39	-0.493
32	1.35	-0.246
32	1.35	-0.216
9	1.31	0.000
Median	1.31	0.000
79	1.23	0.524
111	1.23	0.524
23	1.19	0.739
23	1.18	0.832
34	1.15	0.986
Std Dev	1.15	1.000
14	1.12	1.201
14	1.09	1.355

101.00 Acid Soluble Calcium		
Lab	%CaO	Atomic Absorption
219	0.12	0.000
Median	0.12	0.000

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
24	0.22	-1.149
24	0.22	-1.149
61	0.22	-1.149
61	0.22	-1.149

Std Dev	0.22	-1.000
32	0.22	-0.957
32	0.22	-0.957
111	0.21	-0.766
34	0.20	-0.383
23	0.19	0.000
Median	0.19	0.000
14	0.19	0.191
14	0.19	0.191
23	0.19	0.191
9	0.18	0.383
31	0.18	0.383
315	0.18	0.574
43	0.17	0.642
43	0.17	0.701

101.99 Acid Soluble Calcium		
Lab	%CaO	Other
219	0.13	0.000
Median	0.13	0.000

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
24	0.22	-1.251
24	0.22	-1.251
61	0.22	-1.251
61	0.22	-1.251
32	0.22	-1.072
32	0.22	-1.072
Std Dev	0.21	-1.000
111	0.21	-0.893
34	0.20	-0.536
23	0.19	-0.179
14	0.19	0.000
14	0.19	0.000
23	0.19	0.000
Median	0.19	0.000
9	0.18	0.179
31	0.18	0.179
315	0.18	0.357
43	0.17	0.421
43	0.17	0.476
Std Dev	0.16	1.000
219	0.13	2.001

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219	0.12	2.215
121.00	Acid Soluble Magnesium	
Lab	%MgO	Atomic Absorption
219	1.71	0.000
Median	1.71	0.000

121.30	Acid Soluble Magnesium	
Lab	%MgO	ICP
111	1.79	-0.842
24	1.77	-0.689
24	1.76	-0.613
23	1.73	-0.345
23	1.72	-0.268
61	1.71	-0.191
34	1.69	-0.077
32	1.69	-0.038
32	1.68	0.000
61	1.68	0.000
Median	1.68	0.000
9	1.64	0.306
315	1.60	0.613
Std Dev	1.55	1.000
31	1.54	1.072
14	1.50	1.417
14	1.50	1.417
43	1.50	1.417
43	1.49	1.455

121.99	Acid Soluble Magnesium	
Lab	%MgO	Other
219	1.58	0.000
Median	1.58	0.000

121.XX	Acid Soluble Magnesium	
Lab	%MgO	Total Method
111	1.79	-0.940
24	1.77	-0.769
24	1.76	-0.684
23	1.73	-0.385
23	1.72	-0.299
219	1.71	-0.291
61	1.71	-0.214
34	1.69	-0.085

32	1.69	-0.043
32	1.68	0.000
61	1.68	0.000
Median	1.68	0.000
9	1.64	0.342
315	1.60	0.684
219	1.58	0.893
Std Dev	1.56	1.000
31	1.54	1.197
14	1.50	1.581
14	1.50	1.581
43	1.50	1.581
43	1.49	1.624

144.01	Sulfate Sulfur (S)	
Lab	Gravimetric	
79	2.30	0.000
Median	2.30	0.000

144.70	Sulfur	
Lab	Spectrometric	
14	2.04	-1.340
Std Dev	2.03	-1.000
Median	2.02	0.000
Std Dev	2.01	1.000
14	2.01	1.340

144.99	Sulfate Sulfur (S)	
Lab	Other	
24	2.35	-1.049
Std Dev	2.35	-1.000
9	2.33	-0.466
24	2.31	-0.117
32	2.31	-0.117
23	2.31	0.000
32	2.31	0.000
Median	2.31	0.000
23	2.29	0.350
34	2.28	0.583
Std Dev	2.26	1.000
61	2.23	1.864
31	2.21	2.330
61	2.21	2.330

145.99	Total Sulfur (S)	
Lab	Other	
43	2.37	-0.670
43	2.35	-0.479
Median	2.31	0.000
111	2.28	0.479
Std Dev	2.23	1.000
315	2.17	1.819

144.XX	Sulfate Sulfur (S)	
Lab	Total Method	
24	2.35	-0.746
9	2.33	-0.407
24	2.31	-0.204
32	2.31	-0.204
23	2.31	-0.136
32	2.31	-0.136
79	2.30	-0.068
Median	2.30	0.000
23	2.29	0.068
34	2.28	0.204
61	2.23	0.950
Std Dev	2.22	1.000
31	2.21	1.221
61	2.21	1.221
14	2.04	3.528
14	2.01	3.867

145.99	Total Sulfur (S)	
Lab	Other	
43	2.37	-0.670
43	2.35	-0.479
Median	2.31	0.000
111	2.28	0.479
Std Dev	2.23	1.000
315	2.17	1.819

145.XX	Total Sulfur (S)	
Lab	Total Method	
43	2.37	-0.670
43	2.35	-0.479
Median	2.31	0.000
111	2.28	0.479
Std Dev	2.23	1.000
315	2.17	1.819

151.30	Total Arsenic	
Lab	ICP	
43	5.40	-1.606
43	5.20	-1.511
Std Dev	4.12	-1.000
18	3.85	-0.870
315	2.02	0.000

Median	2.02	0.000
18	1.95	0.031
24	1.45	0.268
31	1.25	0.363

151.XX	Total Arsenic	
Lab	Total Method	
43	5.40	-1.606
43	5.20	-1.511
Std Dev	4.12	-1.000
18	3.85	-0.870
315	2.02	0.000
Median	2.02	0.000
18	1.95	0.031
24	1.45	0.268
31	1.25	0.363

165.99	Acid Soluble Boron	
Lab	PPM	Other
24	105.00	0.000
Median	105.00	0.000

165.XX, ppm	Acid Soluble Boron	
Lab	PPM	Total Method
24	105.00	0.000
Median	105.00	0.000

181.30	Total Cadmium	
Lab	PPM	ICP
315	42.32	-0.648
61	42.00	-0.581
61	41.50	-0.475
31	41.25	-0.422
18	39.80	-0.113
Median	39.27	0.000
64	38.74	0.113
18	38.55	0.153
Std Dev	34.57	1.000
111	34.00	1.120
43	19.12	4.285
43	17.00	4.736

181.99	Total Cadmium	
Lab	Other	

24	35.30	0.000
Median	35.30	0.000

181.XX Total Cadmium		
Lab	PPM	Total Method
315	42.32	-0.713
61	42.00	-0.651
61	41.50	-0.551
31	41.25	-0.501
18	39.80	-0.212
64	38.74	0.000
Median	38.74	0.000
18	38.55	0.037
24	35.30	0.684
111	34.00	0.943
Std Dev	33.72	1.000
43	19.12	3.908
43	17.00	4.331

190.00 Aluminum ICP		
Lab	%Al <sub>2</sub> O <sub>3</sub>	ICP
9	0.90	-3.685
14	0.89	-2.680
14	0.88	-2.345
24	0.86	-1.005
24	0.86	-1.005
Std Dev	0.86	-1.000
23	0.85	-0.335
32	0.85	-0.335
32	0.85	0.000
Median	0.85	0.000
34	0.84	0.335
43	0.84	0.335
61	0.84	0.335
315	0.84	0.335
23	0.84	0.670
43	0.84	0.670
Std Dev	0.83	1.000
111	0.58	18.090

190.99 Aluminum Atomic Absorption		
Lab	%Al <sub>2</sub> O <sub>3</sub>	Atomic Absorption
31	0.83	0.000
61	0.83	0.000

Median	0.83	0.000
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190.XX Aluminum Total Method		
Lab	%Al <sub>2</sub> O <sub>3</sub>	Total Method
9	0.90	-3.216
14	0.89	-2.412
14	0.88	-2.144
24	0.86	-1.072
24	0.86	-1.072
Std Dev	0.86	-1.000
23	0.85	-0.536
32	0.85	-0.536
32	0.85	-0.268
34	0.84	0.000
43	0.84	0.000
61	0.84	0.000
315	0.84	0.000
Median	0.84	0.000
23	0.84	0.268
43	0.84	0.268
31	0.83	0.804
61	0.83	0.804
Std Dev	0.82	1.000
111	0.58	14.204

191.30 Total Chromium ICP		
Lab	PPM	ICP
61	381.00	-2.234
61	373.00	-1.615
111	368.50	-1.268
Std Dev	365.04	-1.000
315	362.00	-0.765
43	352.50	-0.031
Median	352.10	0.000
31	351.70	0.031
43	351.00	0.085
18	349.05	0.236
64	345.71	0.494
18	340.65	0.885

191.99 Total Chromium Other		
Lab	PPM	Other
24	323.00	0.000
Median	323.00	0.000

191.XX Total Chromium Total Method		
Lab	PPM	Total Method
61	381.00	-2.197
61	373.00	-1.597
111	368.50	-1.260
Std Dev	365.04	-1.000
315	362.00	-0.772
43	352.50	-0.060
31	351.70	0.000
Median	351.70	0.000
43	351.00	0.052
18	349.05	0.199
64	345.71	0.449
18	340.65	0.828
Std Dev	338.36	1.000
24	323.00	2.152

202.30 Acid Soluble Cobalt ICP		
Lab	PPM	ICP
61		

202.99 Acid Soluble Cobalt Other		
Lab	PPM	Other
24	1.07	0.000
Median	1.07	0.000

202.XX Acid Soluble Cobalt Total Method		
Lab	PPM	Total Method
61	3.30	-0.371
43	3.00	-0.186
43	3.00	-0.186
61	2.70	0.000
Median	2.70	0.000
Std Dev	1.08	1.000
24	1.07	1.009
18	0.60	1.300
18	0.60	1.300

221.00 Acid Soluble Copper Atomic Absorption		
Lab	PPM	Atomic Absorption
219	1.49	0.000
Median	1.49	0.000

221.30 Acid Soluble Copper ICP		
Lab	PPM	ICP
61	<1.1	0.000
61	<1.1	0.000
111	1.50	-2.680
Std Dev	1.19	-1.000
43	1.00	0.000
43	1.00	0.000
Median	1.00	0.000
Std Dev	0.81	1.000
18	0.75	1.340
18	0.20	4.288

221.99 Acid Soluble Copper Other		
Lab	PPM	Other
24	0.31	0.000
Median	0.31	0.000

221.XX Acid Soluble Copper Total Method		
Lab	PPM	Total Method
61	<1.1	0.000
61	<1.1	0.000
111	1.50	-1.444
Std Dev	1.31	-1.000
43	1.00	-0.289
43	1.00	-0.289
Median	0.88	0.000
18	0.75	0.289
Std Dev	0.44	1.000
24	0.31	1.305
18	0.20	1.559

241.30 Acid Soluble Iron ICP		
Lab	%Fe <sub>2</sub> O <sub>3</sub>	ICP
315	1.54	-1.787
Std Dev	1.49	-1.000
61	1.49	-0.893
24	1.48	-0.804
24	1.47	-0.625
111	1.47	-0.625
32	1.46	-0.447
34	1.46	-0.447
32	1.45	-0.268
23	1.44	0.000



Median	1.44	0.000
23	1.42	0.268
61	1.42	0.268
9	1.41	0.447
14	1.40	0.715
14	1.39	0.893
Std Dev	1.38	1.000
43	1.37	1.251
43	1.36	1.340
31	1.35	1.519

241.99		Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Other	
219	1.50	0.000	
Median	1.50	0.000	

241.XX		Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Total Method	
315	1.54	-1.571	
Std Dev	1.50	-1.000	
219	1.50	-0.832	
219	1.49	-0.749	
61	1.49	-0.647	
24	1.48	-0.554	
24	1.47	-0.370	
111	1.47	-0.370	
32	1.46	-0.185	
34	1.46	-0.185	
32	1.45	0.000	
Median	1.45	0.000	

23	1.44	0.277
23	1.42	0.554
61	1.42	0.554
9	1.41	0.739
Std Dev	1.40	1.000
14	1.40	1.017
14	1.39	1.201
43	1.37	1.571
43	1.36	1.663
31	1.35	1.848

251.30		Total Lead	
Lab	PPM	ICP	
61	<1.2	0.000	

61	<1.2	0.000
18	2.60	-1.383
18	2.55	-1.340
Std Dev	2.16	-1.000
43	1.00	0.000
43	1.00	0.000
Median	1.00	0.000
111	0.00	0.865

251.99		Total Lead	
Lab	PPM	Other	
24	0.09	0.000	
Median	0.09	0.000	

251.XX		Total Lead	
Lab	PPM	Total Method	
61	<1.2	0.000	
61	<1.2	0.000	
18	2.60	-1.162	
18	2.55	-1.126	
Std Dev	2.38	-1.000	
43	1.00	0.000	
43	1.00	0.000	
Median	1.00	0.000	
24	0.09	0.661	
111	0.00	0.726	

261.30		Acid Soluble Manganese	
Lab	PPM	ICP	
111	93.00	-0.752	
315	91.51	-0.203	
31	90.95	0.000	
Median	90.95	0.000	
Std Dev	88.22	1.000	
18	87.85	1.137	
18	85.10	2.145	

261.99		Acid Soluble Manganese	
Lab	PPM	Other	
43	98.00	-0.258	
219	97.85	-0.218	
219	97.04	-0.010	
43	97.00	0.000	
Median	97.00	0.000	

Std Dev	93.13	1.000
61	93.00	1.032
61	91.50	1.419
24	88.60	2.168

261.XX		Acid Soluble Manganese	
Lab	PPM	Total Method	
43	98.00	-1.159	
219	97.85	-1.127	
Std Dev	97.21	-1.000	
219	97.04	-0.965	
43	97.00	-0.957	
61	93.00	-0.151	
111	93.00	-0.151	
Median	92.25	0.000	
315	91.51	0.151	
61	91.50	0.152	
31	90.95	0.263	
24	88.60	0.736	
18	87.85	0.887	
Std Dev	87.29	1.000	
18	85.10	1.442	

281.30		Total Mercury	
Lab	PPM	ICP	
24	0.05	0.000	
Median	0.05	0.000	

281.XX		Total Mercury	
Lab	PPM	Total Method	
24	0.05	0.000	
Median	0.05	0.000	

289.30		Total Molybdenum	
Lab	PPM	ICP	
315			

289.99		Total Molybdenum	
Lab	PPM	Other	
24	12.60	0.000	
Median	12.60	0.000	

289.XX		Total Molybdenum	
Lab	PPM	Total Method	
24	12.60	-1.298	

Std Dev	11.89	-1.000
315	11.55	-0.858
64	10.25	-0.314
43	10.20	-0.293
43	10.15	-0.272
61	9.50	0.000
Median	9.50	0.000
61	9.00	0.209
111	7.50	0.838
Std Dev	7.11	1.000
18	6.55	1.235
18	6.45	1.277
31	6.10	1.424

291.30		Total Nickel	
Lab	PPM	ICP	
315			

291.99		Total Nickel	
Lab	PPM	Other	
24	30.10	-0.267	
18	29.50	-0.121	
Median	29.00	0.000	
18	28.50	0.121	
Std Dev	24.88	1.000	
111	11.00	4.366	

291.XX		Total Nickel	
Lab	PPM	Total Method	
315	30.72	-1.895	
61	30.50	-1.554	
Std Dev	30.14	-1.000	
24	30.10	-0.932	
43	30.00	-0.777	
61	30.00	-0.777	
18	29.50	0.000	
31	29.50	0.000	
43	29.50	0.000	
Median	29.50	0.000	
64	28.88	0.971	
Std Dev	28.86	1.000	
18	28.50	1.554	
111	11.00	28.742	

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301.30 Total Selenium		
Lab	PPM	ICP
24	1.47	-1.340
Std Dev	1.35	-1.000
Median	0.99	0.000
Std Dev	0.62	1.000
111	0.50	1.340

301.XX Total Selenium		
Lab	PPM	Total Method
24	1.47	-1.340
Std Dev	1.35	-1.000
Median	0.99	0.000
Std Dev	0.62	1.000
111	0.50	1.340

311.99 Sodium		
Lab	%Na <sub>2</sub> O	Other
111	0.37	-1.340
Std Dev	0.35	-1.000
24	0.34	-0.503
24	0.34	-0.503
61	0.34	-0.503
61	0.33	-0.168
23	0.33	0.000
Median	0.33	0.000
23	0.32	0.168
31	0.30	0.838
315	0.30	0.838
Std Dev	0.30	1.000
43	0.26	2.161
43	0.26	2.316

311.XX Sodium		
Lab	%Na <sub>2</sub> O	Total Method
111	0.37	-1.340
Std Dev	0.35	-1.000
24	0.34	-0.503
24	0.34	-0.503
61	0.34	-0.503
61	0.33	-0.168
23	0.33	0.000
Median	0.33	0.000
23	0.32	0.168

31	0.30	0.838
315	0.30	0.838
Std Dev	0.30	1.000
43	0.26	2.161
43	0.26	2.316

321.00 Acid Soluble Zinc		
Lab	Atomic Absorption	
219	619.65	0.000
Median	619.65	0.000

321.30 Acid Soluble Zinc		
Lab	PPM	ICP
315	647.00	-0.888
61	634.00	-0.476
61	632.50	-0.428
31	631.10	-0.384
24	619.00	0.000
Median	619.00	0.000
18	600.60	0.584
64	590.27	0.912
Std Dev	587.48	1.000
18	583.40	1.129
111	10.00	19.322

321.99 Acid Soluble Zinc		
Lab	Other	
219	623.10	-2.545
Std Dev	600.28	-1.000
43	585.50	0.000
Median	585.50	0.000
43	583.50	0.135

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method
315	647.00	-0.823
61	634.00	-0.441
61	632.50	-0.397
31	631.10	-0.356
219	623.10	-0.120
219	619.65	-0.019
24	619.00	0.000
Median	619.00	0.000
18	600.60	0.541

64	590.27	0.844
43	585.50	0.984
Std Dev	584.97	1.000
43	583.50	1.043
18	583.40	1.046
111	10.00	17.896

325.10 Fluoride		
Lab	%	Electrode
32	0.65	-1.949
32	0.65	-1.949
23	0.59	-0.487
23	0.59	-0.365
9	0.58	-0.122
24	0.57	0.000
79	0.57	0.000
Median	0.57	0.000
24	0.56	0.244
14	0.54	0.719
31	0.53	0.975
14	0.53	1.035
34	0.52	1.218
111	0.16	10.111

325.99 Fluoride		
Lab	%	Other
61	0.59	-1.340
Median	0.58	0.000
61	0.57	1.340

325.XX Fluoride		
Lab	%	Total Method
32	0.65	-2.155
32	0.65	-2.155
23	0.59	-0.539
23	0.59	-0.404
61	0.59	-0.404
9	0.58	-0.135
24	0.57	0.000
79	0.57	0.000
Median	0.57	0.000
61	0.57	0.135
24	0.56	0.269
14	0.54	0.795

31	0.53	1.077
14	0.53	1.145
34	0.52	1.347
111	0.16	11.178