

## AFPC

## Sample

2021-02

Grade

18-46-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	1	17.08	0.00
Ammoniacal Nitrogen, Other		001.99	12	17.03	0.25
Method Group 001.XX PCT			13	17.05	0.30
<b>AMMON &amp; NITRATE N</b>					
Ammon & Nitrate N, Other		009.99	2	17.13	0.01
Method Group 009.XX PCT			2	17.13	0.01
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	2	17.64	0.00
Total Nitrogen, Combustion	993.13	010.60	15	17.78	0.12
Total Nitrogen, Other		010.99	6	17.82	0.05
Method Group 010.XX PCT			23	17.78	0.17
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	5	46.88	0.07
Total Phosphate, Spectrometric	978.02	020.20	22	46.89	0.29
Method Group 020.XX PCT			27	46.88	0.31
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Gravimetric Quimociac	963.03C(a)	030.10	1	0.40	0.00
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	10	0.25	0.06
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.15	0.00
Insoluble Phosphate, Automated	978.01	030.40	3	0.18	0.08
Method Group 030.XX PCT			15	0.24	0.10
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Spectrometric	960.02	040.20	13	46.60	0.25
Indirect Available Phosphate, Other		040.99	2	46.45	0.08
Method Group 040.XX PCT			15	46.55	0.30
<b>DIRECT AVAILABLE PHOSPHATE</b>					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	1	47.25	0.00
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	47.25	0.21
Direct Available Phosphate, ICP		041.50	3	46.56	4.24
Direct Available Phosphate, EDTA Extract	993.01	041.60	2	46.64	0.00
Direct Available Phosphate, Other		041.99	1	45.34	0.00
Method Group 041.XX PCT			9	46.64	0.63
<b>WATER SOLUBLE PHOSPHATE</b>					
Water Soluble Phosphate, Gravimetric Quimociac	962.03	048.10	2	42.28	0.07
Water Soluble Phosphate, Spectrometric	970.01	048.20	17	41.79	0.39
Water Soluble Phosphate, Other		048.99	2	42.04	0.20
Method Group 048.XX PCT			21	41.90	0.58
<b>SOLUBLE POTASH AS K<sub>2</sub>O</b>					
Soluble Potash, ICP(Oxalate)		050.50	2	0.25	0.00
Soluble Potash, ICP(Citrate)		050.51	1		0.00
Soluble Potash, Other		050.99	8	0.25	0.01
Method Group 050.XX PCT			11	0.25	0.01
<b>FREE WATER</b>					
Free Water, Vacuum Oven	965.08B	060.00	15	2.33	0.30
Free Water, Other		060.99	3	2.17	0.21
Method Group 060.XX PCT			18	2.23	0.36
<b>ACID SOLUBLE CALCIUM AS CaO</b>					
Acid Soluble Calcium, ICP		101.30	19	0.17	0.04
Method Group 101.XX PCT			19	0.17	0.05
<b>ACID SOLUBLE MAGNESIUM AS MgO</b>					
Acid Soluble Magnesium, ICP		121.30	20	1.37	0.06
Method Group 121.XX PCT			20	1.37	0.08

AFPC Check Sample 2021-02 WATER SOLUBLE MAGNESIUM

Water Soluble Magnesium, Atomic Absorption	965.09	131.00	1	0.07	0.00
Method Group 131.XX PCT			1	0.07	0.00
<b>SULFATE SULFUR (S)</b>					
Sulfur, Gravimetric	980.02(a)	144.01	5	2.02	0.08
Sulfur, Spectrometric		144.70	1	8.18	0.00
Sulfur, Other		144.99	15	1.91	0.03
Method Group 144.XX PCT			21	1.92	0.13
<b>TOTAL SULFUR (S)</b>					
Sulfur, Other		145.99	5	1.92	0.1
Method Group 145.XX PCT			5	1.92	0.1
<b>TOTAL ARSENIC</b>					
Total Arsenic, ICP	980.02(b)	151.02	13	10.0	0.6
Method Group 151.XX PPM			13	10.0	0.7
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Spectrometric	982.02	165.00	1	5	0.0
Acid Soluble Boron, Other		165.99	2	43	27.0
Method Group 165.XX PPM			3	7	33.6
<b>TOTAL CADMIUM</b>					
Total Cadmium, ICP		181.30	13	33.6	1.0
Method Group 181.XX PPM			13	33.6	1.2
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			18	1.18	0.04
Water Soluble Chlorine, Other, %		190.99	1	1.20	0.00
Method Group 190.XX PCT			19	1.19	0.04
<b>TOTAL CHROMIUM</b>					
Total Chromium, ICP		191.30	13	225	10.8
Method Group 191.XX PPM			13	225	13.2
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, Colormetric	965.11	202.20	1	2.28	0.0
Acid Soluble Cobalt, ICP		202.30	9	2	0.4
Method Group 202.XX PPM			10	2	0.4
<b>ACID SOLUBLE COPPER</b>					
Acid Soluble Copper, Other		221.99	1	0.9	0.0
Method Group 221.XX PPM			8	3.0	2.5
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>					
Acid Soluble Iron, ICP		241.30	19	1.10	0.03
Method Group 241.XX PCT			19	1.10	0.03
<b>TOTAL LEAD</b>					
Total Lead, ICP		251.30	10	0.8	1.6
Method Group 251.XX PPM			10	0.8	1.9
<b>ACID SOLUBLE MANGANESE</b>					
Acid Soluble Manganese, ICP	972.02a	261.30	8	131	19.0
Acid Soluble Manganese, Other		261.99	3	140	4.3
Method Group 261.XX PPM			11	132	10.0
<b>TOTAL MERCURY</b>					
Total Mercury, Atomic Absorbtion		281.00	2	0	0.01
Total Mercury, ICP		281.30	1	0.00	0.00
Method Group 281.XX PPM			3	0.03	0.02
<b>TOTAL MOLYBDENUM</b>					
Total Molybdenum, ICP		289.30	9	5	2.9
Method Group 289.XX PPM			9	5	3.5
<b>TOTAL NICKEL</b>					
Total Nickel, ICP		291.30	11	11.3	1.7
Total Nickel, icp		291.99	1	12.0	0.0
Method Group 291.XX PPM			12	11.7	1.7
<b>TOTAL SELENIUM</b>					
Total Selenium, ICP		301.30	4	1.6	2.2
Method Group 301.XX PPM			4	1.6	2.7

<b>SODIUM AS Na<sub>2</sub>O</b>					
Sodium, Flame Photometric	974.01	311.30	1	0.69	0.00
Sodium, Other		311.99	12	0.67	0.04
Method Group 311.XX PCT			13	0.67	0.06
<b>ACID SOLUBLE ZINC</b>					
Acid Soluble Zinc, ICP		321.30	11	93.0	4.6
Method Group 321.XX %			11	93.0	5.6
<b>FLUORIDE</b>					
Volumetric		325.10	16	0.58	0.05
Distilled/Electrode		325.99	3	0.60	0.02
Method Group 325.XX PCT			19	0.58	0.05

AFPC Check Sample 2021-02

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
31	17.08	0.000
<b>Median</b>	<b>17.08</b>	<b>0.000</b>

001.99 Ammoniacal Nitrogen		
Lab	Other	
81	18.06	-4.084
335	18.02	-3.926
79	17.32	-1.157
79	17.31	-1.117
<b>Std Dev</b>	<b>17.28</b>	<b>-1.000</b>
34	17.09	-0.227
113	17.05	-0.069
<b>Median</b>	<b>17.03</b>	<b>0.000</b>
24	17.01	0.069
24	17.00	0.129
140	16.98	0.208
23	16.97	0.227
23	16.94	0.346
38	16.82	0.821

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
81	18.06	-4.060
335	18.02	-3.900
79	17.32	-1.100
79	17.31	-1.060
<b>Std Dev</b>	<b>17.30</b>	<b>-1.000</b>
34	17.09	-0.160
31	17.08	-0.140
113	17.05	0.000
<b>Median</b>	<b>17.05</b>	<b>0.000</b>
24	17.01	0.140
24	17.00	0.200
140	16.98	0.280
23	16.97	0.300
23	16.94	0.420
38	16.82	0.900

009.99 Ammon & Nitrate N		
Lab	Other	
32	17.14	-1.340
<b>Std Dev</b>	<b>17.14</b>	<b>-1.000</b>

<b>Median</b>	<b>17.13</b>	<b>0.000</b>
<b>Std Dev</b>	<b>17.12</b>	<b>1.000</b>
32	17.12	1.340

009.XX Ammon & Nitrate N		
Lab	Total Method	
32	17.14	-1.340
<b>Std Dev</b>	<b>17.14</b>	<b>-1.000</b>
<b>Median</b>	<b>17.13</b>	<b>0.000</b>
<b>Std Dev</b>	<b>17.12</b>	<b>1.000</b>
32	17.12	1.340

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
43	17.64	0.000
43	17.64	0.000
<b>Median</b>	<b>17.64</b>	<b>0.000</b>

010.60 Total Nitrogen		
Lab	Combustion	
39	18.22	-3.816
24	17.95	-1.446
24	17.91	-1.106
<b>Std Dev</b>	<b>17.89</b>	<b>-1.000</b>
77	17.87	-0.766
79	17.86	-0.723
79	17.81	-0.298
38	17.80	-0.213
14	17.78	0.000
<b>Median</b>	<b>17.78</b>	<b>0.000</b>
113	17.77	0.043
14	17.77	0.085
140	17.74	0.340
63	17.68	0.851
<b>Std Dev</b>	<b>17.66</b>	<b>1.000</b>
61	17.50	2.340
61	17.47	2.637
80	16.60	9.997

010.99 Total Nitrogen		
Lab	Other	
335	18.04	-4.138
<b>Std Dev</b>	<b>17.87</b>	<b>-1.000</b>
23	17.84	-0.376

23	17.83	-0.282
<b>Median</b>	<b>17.82</b>	<b>0.000</b>
275	17.80	0.282
<b>Std Dev</b>	<b>17.76</b>	<b>1.000</b>
32	17.75	1.222
32	17.63	3.479

010.XX Total Nitrogen		
Lab	Total Method	
39	18.22	-3.122
335	18.04	-1.810
24	17.95	-1.183
<b>Std Dev</b>	<b>17.92</b>	<b>-1.000</b>
24	17.91	-0.905
77	17.87	-0.626
79	17.86	-0.592
23	17.84	-0.418
23	17.83	-0.383
79	17.81	-0.244
38	17.80	-0.174
275	17.80	-0.174
14	17.78	0.000
<b>Median</b>	<b>17.78</b>	<b>0.000</b>
113	17.77	0.035
14	17.77	0.070
32	17.75	0.174
140	17.74	0.278
63	17.68	0.696
43	17.64	0.975
43	17.64	0.975
<b>Std Dev</b>	<b>17.63</b>	<b>1.000</b>
32	17.63	1.009
61	17.50	1.914
61	17.47	2.158
80	16.60	8.179

020.10 Total Phosphate		
Lab	Gravimetric Quimociac	
84	47.61	-10.869
<b>Std Dev</b>	<b>46.94</b>	<b>-1.000</b>
82	46.92	-0.670
241	46.88	0.000
<b>Median</b>	<b>46.88</b>	<b>0.000</b>
241	46.83	0.670

<b>Std Dev</b>	<b>46.81</b>	<b>1.000</b>
113	46.75	1.936

020.20 Total Phosphate		
Lab	Spectrometric	
83	47.76	-3.010
16	47.33	-1.518
<b>Std Dev</b>	<b>47.18</b>	<b>-1.000</b>
275	47.11	-0.772
14	47.10	-0.737
31	47.08	-0.659
24	47.06	-0.598
14	47.02	-0.460
79	46.96	-0.252
24	46.96	-0.234
79	46.95	-0.217
34	46.93	-0.147
<b>Median</b>	<b>46.89</b>	<b>0.000</b>
81	46.85	0.147
43	46.84	0.182
32	46.78	0.390
140	46.72	0.598
23	46.68	0.737
23	46.66	0.789
32	46.63	0.911
43	46.63	0.911
<b>Std Dev</b>	<b>46.60</b>	<b>1.000</b>
61	46.59	1.032
61	46.59	1.049
335	45.60	4.467

020.XX Total Phosphate		
Lab	Total Method	
83	47.76	-3.418
84	47.61	-2.835
16	47.33	-1.748
<b>Std Dev</b>	<b>47.13</b>	<b>-1.000</b>
275	47.11	-0.913
14	47.10	-0.874
31	47.08	-0.787
24	47.06	-0.719
14	47.02	-0.563
79	46.96	-0.330
24	46.96	-0.311

79	46.95	-0.291
34	46.93	-0.214
82	46.92	-0.175
241	46.88	0.000
<b>Median</b>	<b>46.88</b>	<b>0.000</b>
81	46.85	0.117
43	46.84	0.155
241	46.83	0.175
32	46.78	0.388
113	46.75	0.505
140	46.72	0.621
23	46.68	0.777
23	46.66	0.835
32	46.63	0.971
43	46.63	0.971
<b>Std Dev</b>	<b>46.62</b>	<b>1.000</b>
61	46.59	1.107
61	46.59	-1.126
335	45.60	4.952

030.10	Insoluble Phosphate
Lab	Gravimetric Quimociac
113	0.40
<b>Median</b>	<b>0.40</b>
<b>0.000</b>	<b>0.000</b>

030.20	Insoluble Phosphate
Lab	Spectrometric
61	0.39
140	0.31
<b>Std Dev</b>	<b>0.30</b>
61	0.30
24	0.26
23	0.25
<b>Median</b>	<b>0.25</b>
23	0.24
79	0.22
24	0.21
79	0.21
<b>Std Dev</b>	<b>0.19</b>
16	0.06
3.285	

030.30	Insoluble Phosphate
Lab	Alka. Quimociac
31	0.15
0.000	

<b>Median</b>	<b>0.15</b>	<b>0.000</b>
---------------	-------------	--------------

030.40	Insoluble Phosphate
Lab	Automated
34	0.37
<b>Std Dev</b>	<b>0.26</b>
32	0.18
<b>Median</b>	<b>0.18</b>
32	0.16
0.319	

030.XX	Insoluble Phosphate
Lab	Total Method
113	0.40
61	0.39
34	0.37
<b>Std Dev</b>	<b>0.32</b>
140	0.31
61	0.30
24	0.26
23	0.25
23	0.24
<b>Median</b>	<b>0.24</b>
79	0.22
24	0.21
79	0.21
32	0.18
<b>Std Dev</b>	<b>0.16</b>
32	0.16
31	0.15
16	0.06
2.254	

040.20	Indirect Available Phosphate
Lab	Spectrometric
16	47.27
31	46.93
<b>Std Dev</b>	<b>46.84</b>
24	46.80
79	46.75
24	46.75
79	46.73
32	46.60
<b>Median</b>	<b>46.60</b>
32	46.47
23	46.43
0.690	

23	46.42	0.711
140	46.41	0.772
<b>Std Dev</b>	<b>46.35</b>	<b>1.000</b>
61	46.29	1.238
61	46.20	1.604

040.99	Indirect Available Phosphate
Lab	Other
34	46.55
<b>Std Dev</b>	<b>46.52</b>
<b>Median</b>	<b>46.45</b>
<b>Std Dev</b>	<b>46.37</b>
113	46.35
1.340	

040.XX	Indirect Available Phosphate
Lab	Total Method
16	47.27
31	46.93
<b>Std Dev</b>	<b>46.80</b>
24	46.80
79	46.75
24	46.75
79	46.73
32	46.60
34	46.55
<b>Median</b>	<b>46.55</b>
32	46.47
23	46.43
23	46.42
140	46.41
113	46.35
<b>Std Dev</b>	<b>46.30</b>
61	46.29
61	46.20
1.400	

041.10	Direct Available Phosphate
Lab	Gravimetric Quimociac
77	47.25
<b>Median</b>	<b>47.25</b>
0.000	

041.20	Direct Available Phosphate
Lab	Spectrometric
38	47.54
<b>Std Dev</b>	<b>47.46</b>
-1.340	

<b>Median</b>	<b>47.25</b>	<b>0.000</b>
<b>Std Dev</b>	<b>47.04</b>	<b>1.000</b>
275	46.97	1.340

041.50	Direct Available Phosphate
Lab	ICP
39	56.56
<b>Std Dev</b>	<b>50.79</b>
63	46.56
<b>Median</b>	<b>46.56</b>
80	45.20
0.320	

041.60	Direct Available Phosphate
Lab	EDTA Extract
79	46.64
79	46.64
<b>Median</b>	<b>46.64</b>
0.000	

041.99	Direct Available Phosphate
Lab	Other
335	45.34
<b>Median</b>	<b>45.34</b>
0.000	

041.XX	Direct Available Phosphate
Lab	Total Method
39	56.56
38	47.54
77	47.25
<b>Std Dev</b>	<b>47.15</b>
275	46.97
79	46.64
79	46.64
<b>Median</b>	<b>46.64</b>
63	46.56
<b>Std Dev</b>	<b>46.13</b>
335	45.34
80	45.20
2.797	

048.10	Water Soluble Phosphate
Lab	Gravimetric Quimociac
113	42.38
<b>Std Dev</b>	<b>42.35</b>
<b>Median</b>	<b>42.28</b>
<b>Std Dev</b>	<b>42.21</b>
1.000	

AFPC Check Sample 2021-02

048.20 Water Soluble Phosphate Spectrometric		
Lab		
31	42.33	-1.398
24	42.21	-1.069
140	42.18	-1.005
Std Dev	42.18	-1.000
24	42.13	-0.876
81	42.04	-0.644
79	42.03	-0.618
79	42.02	-0.593
32	41.90	-0.271
23	41.79	0.000
Median	41.79	0.000
32	41.66	0.335
23	41.65	0.374
14	41.55	0.631
14	41.52	0.696
61	41.52	0.709
275	41.44	0.912
Std Dev	41.40	1.000
61	41.37	1.082
16	40.10	4.368

048.99 Water Soluble Phosphate Other		
Lab		
83	42.32	-1.340
Std Dev	42.25	-1.000
Median	42.04	0.000
Std Dev	41.84	1.000
34	41.77	1.340

048.XX Water Soluble Phosphate Total Method		
Lab		
113	42.38	-1.013
Std Dev	42.37	-1.000
31	42.33	-0.923
83	42.32	-0.886
24	42.21	-0.654
82	42.19	-0.623
140	42.18	-0.601
24	42.13	-0.496
81	42.04	-0.306

79	42.03	-0.285
79	42.02	-0.264
32	41.90	0.000
Median	41.90	0.000
23	41.79	0.222
34	41.77	0.264
32	41.66	0.496
23	41.65	0.528
14	41.55	0.739
14	41.52	0.791
61	41.52	0.802
275	41.44	0.969
Std Dev	41.42	1.000
61	41.37	1.108
16	40.10	3.798

050.50 %K <sub>2</sub> O Soluble Potash ICP(Oxalate)		
Lab		
23	0.25	-1.340
Std Dev	0.25	-1.000
Median	0.25	0.000
Std Dev	0.25	1.000
23	0.25	1.340

050.51 %K <sub>2</sub> O Soluble Potash ICP(Citrate)		
Lab		
80	0.00	0.000
Median	0.00	0.000

050.99 %K <sub>2</sub> O Soluble Potash Other		
Lab		
24	0.28	-3.405
24	0.26	-1.119
Std Dev	0.26	-1.000
43	0.26	-0.873
43	0.26	-0.405
Median	0.25	0.000
31	0.25	0.405
61	0.25	0.405
61	0.25	0.405
81	0.25	0.405

050.XX %K <sub>2</sub> O Soluble Potash Total Method		
Lab		

24	0.28	-4.888
24	0.26	-1.955
43	0.26	-1.640
43	0.26	-1.040
Std Dev	0.26	-1.000
23	0.25	0.000
31	0.25	0.000
61	0.25	0.000
61	0.25	0.000
81	0.25	0.000
Median	0.25	0.000
23	0.25	0.978
Std Dev	0.24	1.000
80	0.00	48.878

060.00 Free Water Vacuum Oven		
Lab		
16	2.96	-2.101
Std Dev	2.63	-1.000
61	2.44	-0.364
23	2.38	-0.182
24	2.38	-0.165
23	2.36	-0.116
24	2.36	-0.116
31	2.35	-0.083
61	2.33	0.000
Median	2.33	0.000
113	2.25	0.265
140	2.17	0.529
Std Dev	2.02	1.000
32	1.97	1.191
79	1.96	1.208
32	1.95	1.241
79	1.93	1.307
34	1.43	2.961

060.99 Free Water Other		
Lab		
14	2.21	-0.195
14	2.17	0.000
Median	2.17	0.000
Std Dev	1.96	1.000
275	1.66	2.485

060.XX Free Water Total Method		
Lab		
16	2.96	-2.462
Std Dev	2.53	-1.000
61	2.44	-0.697
23	2.38	-0.512
24	2.38	-0.496
23	2.36	-0.445
24	2.36	-0.445
31	2.35	-0.412
61	2.33	-0.328
113	2.25	-0.059
Median	2.23	0.000
14	2.21	0.059
14	2.17	0.193
140	2.17	0.210
32	1.97	0.882
79	1.96	0.899
32	1.95	0.933
79	1.93	1.000
Std Dev	1.93	1.000
275	1.66	1.907
34	1.43	2.680

101.30 Acid Soluble Calcium ICP		
Lab	%CaO	
81	0.29	-2.714
24	0.26	-2.035
14	0.23	-1.357
14	0.23	-1.357
16	0.23	-1.244
Std Dev	0.21	-1.000
34	0.21	-0.905
32	0.21	-0.792
61	0.21	-0.792
61	0.20	-0.678
32	0.17	0.000
Median	0.17	0.000
24	0.17	0.000
31	0.16	0.130
23	0.16	0.226
23	0.16	0.226
82	0.16	0.305
43	0.16	0.335

43	0.16	0.339
Std Dev	0.13	1.000
84	0.11	1.470
83	0.07	2.375

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
81	0.29	-2.714
24	0.26	-2.035
14	0.23	-1.357
14	0.23	-1.357
16	0.23	-1.244
Std Dev	0.21	-1.000
34	0.21	-0.905
32	0.21	-0.792
61	0.21	-0.792
61	0.20	-0.678
32	0.17	0.000
Median	0.17	0.000
24	0.17	0.000
31	0.16	0.130
23	0.16	0.226
23	0.16	0.226
82	0.16	0.305
43	0.16	0.335
43	0.16	0.339
Std Dev	0.13	1.000
84	0.11	1.470
83	0.07	2.375

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
84	1.48	-1.670
Std Dev	1.44	-1.000
82	1.44	-0.971
335	1.43	-0.893
24	1.41	-0.583
83	1.41	-0.583
34	1.41	-0.505
14	1.40	-0.350
14	1.39	-0.194
61	1.39	-0.194
32	1.38	-0.117
Median	1.37	0.000

24	1.37	0.117
81	1.36	0.194
32	1.34	0.505
31	1.32	0.777
23	1.32	0.816
23	1.32	0.816
16	1.31	0.971
61	1.31	0.971
Std Dev	1.31	1.000
43	1.27	1.592
43	1.27	1.670

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
84	1.48	-1.670
Std Dev	1.44	-1.000
82	1.44	-0.971
335	1.43	-0.893
24	1.41	-0.583
83	1.41	-0.583
34	1.41	-0.505
14	1.40	-0.350
14	1.39	-0.194
61	1.39	-0.194
32	1.38	-0.117
Median	1.37	0.000
24	1.37	0.117
81	1.36	0.194
32	1.34	0.505
31	1.32	0.777
23	1.32	0.816
23	1.32	0.816
16	1.31	0.971
61	1.31	0.971
Std Dev	1.31	1.000
43	1.27	1.592
43	1.27	1.670

131.00 Free Acid		
Lab	Acetone Method	
82	0.07	0.000
Median	0.07	0.000

144..01 Sulfate Sulfur (S)		
Lab	Gravimetric	
83	6.79	-58.046
Std Dev	2.10	-1.000
79	2.03	-0.122
79	2.02	0.000
Median	2.02	0.000
Std Dev	1.94	1.000
241	1.92	1.218
241	1.92	1.279

144.70 Sulfur		
Lab	Spectrometric	
84	8.18	0.000
Median	8.18	0.000

144.99 Sulfate Sulfur (S)		
Lab	Other	
81	6.00	-143.147
31	5.53	-126.543
31	5.42	-122.697
Std Dev	1.93	-1.000
23	1.92	-0.408
24	1.92	-0.350
61	1.91	-0.175
23	1.91	-0.058
14	1.91	0.000
Median	1.91	0.000
14	1.90	0.175
34	1.89	0.524
32	1.88	0.874
Std Dev	1.88	1.000
24	1.88	1.049
61	1.85	2.097
32	1.81	3.321
16	1.78	4.370

144.XX Sulfate Sulfur (S)		
Lab	Total Method	
84	8.18	-59.965
83	6.79	-46.613
81	6.00	-39.099
31	5.53	-34.553
31	5.42	-33.500

79	2.03	-1.101
79	2.02	-1.005
Std Dev	2.02	-1.000
241	1.92	-0.048
23	1.92	-0.016
24	1.92	0.000
241	1.92	0.000
Median	1.92	0.000
61	1.91	0.048
23	1.91	0.080
14	1.91	0.096
14	1.90	0.144
34	1.89	0.239
32	1.88	0.335
24	1.88	0.383
61	1.85	0.670
Std Dev	1.81	1.000
32	1.81	1.005
16	1.78	1.292

145.99 Total Sulfur (S)		
Lab	Other	
43	2.19	-4.094
81	2.00	-1.266
Std Dev	1.98	-1.000
82	1.92	0.000
Median	1.92	0.000
43	1.91	0.074
335	1.86	0.819

145.XX Total Sulfur (S)		
Lab	Total Method	
43	2.19	-4.094
81	2.00	-1.266
Std Dev	1.98	-1.000
82	1.92	0.000
Median	1.92	0.000
43	1.91	0.074
335	1.86	0.819

151.30 Total Arsenic		
Lab	ICP	
83	15.41	-9.666
84	14.50	-8.040

140	12.00	-3.573
Std Dev	10.56	-1.000
43	10.25	-0.447
82	10.20	-0.357
61	10.00	0.000
61	10.00	0.000
Median	10.00	0.000
43	9.75	0.447
24	9.66	0.607
81	9.50	0.893
Std Dev	9.44	1.000
335	8.82	2.108
31	6.65	5.985
113	0.00	17.867

151.XX		Total Arsenic
Lab		Total Method
83	15.41	-9.666
84	14.50	-8.040
140	12.00	-3.573
Std Dev	10.56	-1.000
43	10.25	-0.447
82	10.20	-0.357
61	10.00	0.000
61	10.00	0.000
Median	10.00	0.000
43	9.75	0.447
24	9.66	0.607
81	9.50	0.893
Std Dev	9.44	1.000
335	8.82	2.108
31	6.65	5.985
113	0.00	17.867

165.00		Acid Soluble Boron
Lab		Spectrometric
84	5.00	0.000
Median	5.00	0.000

165.99		Acid Soluble Boron
Lab	PPM	Other
24	78.85	-1.340
Std Dev	69.67	-1.000
Median	42.68	0.000

Std Dev	15.68	1.000
81	6.50	1.340

165.XX, ppm		Acid Soluble Boron
Lab	PPM	Total Method
24	78.85	-2.626
Std Dev	34.06	-1.000
81	6.50	0.000
Median	6.50	0.000
84	5.00	0.054

181.30		Total Cadmium
Lab	PPM	ICP
24	166.00	-138.606
81	36.00	-2.513
113	35.15	-1.623
Std Dev	34.56	-1.000
84	34.50	-0.942
83	34.35	-0.785
16	33.90	-0.314
82	33.60	0.000
Median	33.60	0.000
43	33.60	0.005
31	33.30	0.314
43	33.22	0.398
Std Dev	32.64	1.000
335	29.38	4.423
61	21.00	13.191
61	20.50	13.714

181.XX		Total Cadmium
Lab	PPM	Total Method
24	166.00	-138.606
81	36.00	-2.513
113	35.15	-1.623
Std Dev	34.56	-1.000
84	34.50	-0.942
83	34.35	-0.785
16	33.90	-0.314
82	33.60	0.000
Median	33.60	0.000
43	33.60	0.005
31	33.30	0.314
43	33.22	0.398

Std Dev	32.64	1.000
335	29.38	4.423
61	21.00	13.191
61	20.50	13.714

190.00		Aluminum
Lab	%Al <sub>2</sub> O <sub>3</sub>	ICP
83	1.35	-4.148
84	1.34	-3.892
82	1.26	-1.850
81	1.25	-1.723
Std Dev	1.22	-1.000
14	1.22	-0.830
14	1.21	-0.702
32	1.20	-0.319
32	1.19	-0.191
24	1.19	-0.064
Median	1.18	0.000
24	1.18	0.064
34	1.18	0.064
43	1.18	0.064
43	1.18	0.064
23	1.16	0.702
23	1.15	0.830
Std Dev	1.14	1.000
61	1.14	1.085
61	1.14	1.085
16	1.14	1.212

190.99		Aluminum
Lab	%Al <sub>2</sub> O <sub>3</sub>	Atomic Absorption
31	1.20	0.000
Median	1.20	0.000

190.XX		Aluminum
Lab	%Al <sub>2</sub> O <sub>3</sub>	Total Method
83	1.35	-4.764
84	1.34	-4.467
82	1.26	-2.084
81	1.25	-1.936
Std Dev	1.22	-1.000
14	1.22	-0.893
14	1.21	-0.744
31	1.20	-0.447

32	1.20	-0.298
32	1.19	-0.149
24	1.19	0.000
Median	1.19	0.000
24	1.18	0.149
34	1.18	0.149
43	1.18	0.149
43	1.18	0.149
23	1.16	0.893
Std Dev	1.15	1.000
23	1.15	1.042
61	1.14	1.340
61	1.14	1.340
16	1.14	1.489

191.30		Total Chromium
Lab		ICP
84	263.00	-3.558
83	259.48	-3.232
24	243.50	-1.756
Std Dev	235.32	-1.000
43	233.00	-0.786
61	232.00	-0.693
43	231.50	-0.647
61	224.50	0.000
Median	224.50	0.000
31	220.75	0.347
16	219.50	0.462
82	218.50	0.554
81	216.00	0.786
Std Dev	213.68	1.000
113	201.00	2.172
335	191.33	3.065

191.XX		Total Chromium
Lab	PPM	Total Method
84	263.00	-3.558
83	259.48	-3.232
24	243.50	-1.756
Std Dev	235.32	-1.000
43	233.00	-0.786
61	232.00	-0.693
43	231.50	-0.647
61	224.50	0.000



Median	224.50	0.000
31	220.75	0.347
16	219.50	0.462
82	218.50	0.554
81	216.00	0.786
Std Dev	213.68	1.000
113	201.00	2.172
335	191.33	3.065

202.20	Acid Soluble Cobalt	
Lab	Colormetric	
24	2.28	0.000
Median	2.28	0.000

202.30	Acid Soluble Cobalt	
Lab	PPM	ICP

202.XX	Acid Soluble Cobalt	
Lab	PPM	Total Method
31	<1.00	0.000
81	2.50	-1.602
Std Dev	2.28	-1.000
24	2.28	-0.981
83	2.06	-0.387
43	2.00	-0.221
43	2.00	-0.221
Median	1.92	0.000
16	1.84	0.221
82	1.74	0.497
Std Dev	1.56	1.000
335	1.50	1.160
61	0.00	5.305
61	0.00	5.305

221.30	Acid Soluble Copper	
Lab	PPM	ICP
82	<2	0.000
31	<1.00	0.000
24	<0.0003	0.000
16	7.97	-2.125
Std Dev	5.87	-1.000
61	4.00	0.000
61	4.00	0.000
81	4.00	0.000

Median	4.00	0.000
Std Dev	2.13	1.000
84	2.00	1.072
43	1.00	1.608
43	1.00	1.608

221.99	Acid Soluble Copper	
Lab	Other	
83	1.31	0.000
Median	1.31	0.000

221.XX	Acid Soluble Copper	
Lab	PPM	Total Method
82	<2	0.000
31	<1.00	0.000
24	<0.0003	0.000
16	7.97	-2.401
Std Dev	5.07	-1.000
61	4.00	-0.484
61	4.00	-0.484
81	4.00	-0.484
Median	3.00	0.000
84	2.00	0.484
83	1.31	0.820
43	1.00	0.967
43	1.00	0.967

241.30	Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	ICP
83	1.17	-2.323
84	1.15	-1.787
82	1.14	-1.429
Std Dev	1.13	-1.000
81	1.13	-0.893
24	1.11	-0.357
24	1.11	-0.179
61	1.11	-0.179
14	1.10	0.000
14	1.10	0.000
23	1.10	0.000
Median	1.10	0.000
31	1.09	0.357
34	1.08	0.715
Std Dev	1.07	1.000

16	1.07	1.001
23	1.07	1.072
43	1.07	1.072
61	1.07	1.072
32	1.06	1.429
43	1.06	1.429
32	1.05	1.787

241.XX	Acid Soluble Iron	
Lab	%Fe <sub>2</sub> O <sub>3</sub>	Total Method
83	1.17	-2.323
84	1.15	-1.787
82	1.14	-1.429
Std Dev	1.13	-1.000
81	1.13	-0.893
24	1.11	-0.357
24	1.11	-0.179
61	1.11	-0.179
14	1.10	0.000
14	1.10	0.000
23	1.10	0.000
Median	1.10	0.000
31	1.09	0.357
34	1.08	0.715
Std Dev	1.07	1.000
16	1.07	1.001
23	1.07	1.072
43	1.07	1.072
61	1.07	1.072
32	1.06	1.429
43	1.06	1.429
32	1.05	1.787

251.30	Total Lead	
Lab	PPM	ICP
24	<0.0002	0.000
84	5.00	-2.677
83	4.75	-2.519
81	2.50	-1.100
Std Dev	2.34	-1.000
43	1.00	-0.154
43	1.00	-0.154
Median	0.76	0.000
335	0.51	0.154

16	0.00	0.476
61	0.00	0.476
61	0.00	0.476
113	0.00	0.476

251.XX	Total Lead	
Lab	PPM	Total Method
24	<0.0002	0.000
84	5.00	-2.677
83	4.75	-2.519
81	2.50	-1.100
Std Dev	2.34	-1.000
43	1.00	-0.154
43	1.00	-0.154
Median	0.76	0.000
335	0.51	0.154
16	0.00	0.476
61	0.00	0.476
61	0.00	0.476
113	0.00	0.476

261.30	Acid Soluble Manganese	
Lab	ICP	
84	203.00	-3.803
83	201.73	-3.736
Std Dev	149.80	-1.000
81	138.00	-0.378
31	131.65	-0.043
Median	130.83	0.000
61	130.00	0.043
24	129.50	0.070
16	125.50	0.281
61	124.50	0.333

261.99	Acid Soluble Manganese	
Lab	PPM	Other
43	140.50	-0.117
43	140.00	0.000
Median	140.00	0.000
Std Dev	135.71	1.000
82	129.00	2.563

261.XX	Acid Soluble Manganese	
Lab	PPM	Total Method

AFPC Check Sample 2021-02

84	203.00	-8.692
83	201.73	-8.537
43	140.50	-1.078
43	140.00	-1.017
Std Dev	139.86	-1.000
81	138.00	-0.774
31	131.65	0.000
Median	131.65	0.000
61	130.00	0.201
24	129.50	0.262
82	129.00	0.323
16	125.50	0.749
61	124.50	0.871

281.00 Total Mercury		
Lab	PPM	Atomic Absorbtion
113	0.03	-1.340
Std Dev	0.03	-1.000
Median	0.02	0.000
Std Dev	0.00	1.000
81	0.00	1.340

281.30 Total Mercury		
Lab	PPM	ICP
24	<1	0.000
335	0.03	0.000
Median	0.03	0.000

281.XX Total Mercury		
Lab	PPM	Total Method
24	<1	0.000
113	0.03	-0.298
335	0.03	0.000
Median	0.03	0.000
Std Dev	0.02	1.000
81	0.00	2.382

289.30 Total Molybdenum		
Lab	PPM	ICP

289.XX Total Molybdenum		
Lab	PPM	Total Method
16	8.66	-1.133
Std Dev	8.28	-1.000

61	8.00	-0.903
61	8.00	-0.903
81	6.50	-0.381
24	5.41	0.000
Median	5.41	0.000
82	4.99	0.146
43	4.15	0.437
43	4.15	0.437
31	3.18	0.776

291.30 Total Nickel		
Lab	PPM	ICP

291.99 Total Nickel		
Lab	PPM	Other
81	12.00	0.000
Median	12.00	0.000

291.XX Total Nickel		
Lab	PPM	Total Method
24	22.95	-8.157
31	15.00	-2.418
Std Dev	13.04	-1.000
82	13.00	-0.975
43	12.00	-0.253
43	12.00	-0.253
81	12.00	-0.253
Median	11.65	0.000
16	11.30	0.253
335	10.82	0.599
84	10.50	0.830
Std Dev	10.26	1.000
83	10.08	1.137
61	5.00	4.801
61	4.50	5.161

301.30 Total Selenium		
Lab	PPM	ICP

84	<5	0.000
61	3.50	-0.857
61	3.00	-0.634
Median	1.58	0.000
24	0.16	0.634
335	0.01	0.700

301.XX Total Selenium		
Lab	PPM	Total Method
84	<5	0.000
61	3.50	-0.857
61	3.00	-0.634
Median	1.58	0.000
24	0.16	0.634
335	0.01	0.700

311.30 Sodium		
Lab	%Na <sub>2</sub> O	Flame Photometric
84	0.69	0.000
Median	0.69	0.000

311.99 Sodium		
Lab	%Na <sub>2</sub> O	Other
24	0.77	-2.761
24	0.75	-2.082
23	0.73	-1.675
Std Dev	0.71	-1.000
82	0.71	-0.997
23	0.70	-0.725
43	0.67	-0.040
Median	0.67	0.000
43	0.67	0.040
61	0.67	0.089
31	0.66	0.157
61	0.66	0.225
81	0.65	0.496
Std Dev	0.63	1.000
83	0.50	4.703

311.XX Sodium		
Lab	%Na <sub>2</sub> O	Total Method
24	0.77	-3.161
24	0.75	-2.372
23	0.73	-1.899
82	0.71	-1.111
Std Dev	0.70	-1.000
23	0.70	-0.796
84	0.69	-0.638
43	0.67	0.000
Median	0.67	0.000

43	0.67	0.094
61	0.67	0.150
31	0.66	0.229
61	0.66	0.308
81	0.65	0.623
Std Dev	0.64	1.000
83	0.50	5.510

321.30 Acid Soluble Zinc		
Lab	PPM	ICP
31	115.40	-4.841
43	108.00	-3.242
Std Dev	97.63	-1.000
43	97.50	-0.973
84	95.50	-0.540
83	95.25	-0.486
61	93.00	0.000
Median	93.00	0.000
24	92.70	0.065
82	90.60	0.519
61	90.00	0.648
Std Dev	88.37	1.000
16	88.25	1.027
81	88.00	1.081

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method
31	115.40	-4.841
43	108.00	-3.242
Std Dev	97.63	-1.000
43	97.50	-0.973
84	95.50	-0.540
83	95.25	-0.486
61	93.00	0.000
Median	93.00	0.000
24	92.70	0.065
82	90.60	0.519
61	90.00	0.648
Std Dev	88.37	1.000
16	88.25	1.027
81	88.00	1.081

325.10 Fluoride		
Lab	%	Electrode

AFPC Check Sample 2021-02

79	0.68	-2.274	14	0.50	1.888
79	0.65	-1.624	16	0.39	4.507
83	0.62	-0.866	81	0.38	4.751
32	0.60	-0.541			
32	0.59	-0.325			
31	0.58	-0.108			
24	0.58	0.000			
24	0.58	0.000			
31	0.58	0.000			
Median	0.58	0.000			
23	0.55	0.444			
23	0.55	0.650			
34	0.54	0.758			
14	0.50	1.570			
14	0.50	1.678			
16	0.39	4.006			
81	0.38	4.223			

325.99		Fluoride
Lab	%	Other
61	0.62	-1.654
61	0.60	0.000
Median	0.60	0.000
82	0.58	1.026

325.XX		Fluoride
Lab	%	Total Method
79	0.68	-2.558
79	0.65	-1.827
61	0.62	-1.096
83	0.62	-0.975
32	0.60	-0.609
61	0.60	-0.487
32	0.59	-0.365
31	0.58	-0.122
82	0.58	-0.110
24	0.58	0.000
24	0.58	0.000
31	0.58	0.000
Median	0.58	0.000
23	0.55	0.499
23	0.55	0.731
34	0.54	0.853
14	0.50	1.766