

AFPC

Sample

2018-09

Grade

18-46-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	1	18.17	0.00
Ammoniacal Nitrogen, Other		001.99	9	18.20	0.12
Method Group 001.XX PCT			10	18.19	0.13
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	18.25	0.03
Total Nitrogen, Combustion	993.13	010.60	19	18.20	0.15
Total Nitrogen, Other		010.99	4	18.32	0.18
Method Group 010.XX PCT			26	18.23	0.14
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	46.74	0.00
Total Phosphate, Spectrometric	978.02	020.20	18	46.81	0.26
Total Phosphate, ICP	970.03	020.40	2	46.83	0.00
Total Phosphate, Other	993.13	020.99	1	46.41	0.00
Method Group 020.XX PCT			22	46.81	0.31
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	9	0.04	0.03
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.03	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.04	0.00
Method Group 030.XX PCT			11	0.04	0.03
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	10	46.75	0.33
Indirect Available Phosphate, Other		040.99	2	47.55	0.57
Method Group 040.XX PCT			12	46.78	0.37
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	3	46.70	0.37
Direct Available Phosphate, Spectrometric	960.03D	041.20	3	46.39	0.23
Direct Available Phosphate, ICP		041.50	1	46.00	0.00
Direct Available Phosphate, EDTA Extract	993.01	041.60	5	46.84	0.71
Direct Available Phosphate, Other		041.99	1	46.71	0.00
Method Group 041.XX PCT			13	46.70	0.41
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	16	44.13	0.46
Water Soluble Phosphate, Other		048.99	2	43.89	0.28
Method Group 048.XX PCT			18	44.13	0.60
SOLUBLE POTASH AS K₂O					
Soluble Potash, Atomic Absorption(Citrate)		050.31	1	0.16	0.00
Soluble Potash, ICP(Oxalate)		050.50	2	0.17	0.00
Soluble Potash, Other		050.99	11	0.16	0.01
Method Group 050.XX PCT			14	0.16	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	12	0.76	0.24
Free Water, Other		060.99	6	1.15	0.32
Method Group 060.XX PCT			18	0.82	0.38
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	14	0.36	0.03
Method Group 101.XX PCT			14	0.36	0.03
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, ICP		121.30	12	1.42	0.08
Acid Soluble Magnesium, Other		121.99	2	1.40	0.04
Method Group 121.XX PCT			14	1.42	0.10
WATER SOLUBLE MAGNESIUM					
Water Soluble Magnesium, Other		131.99	1		0.00
Method Group 131.XX PCT			1	0.00	0.00
SULFATE SULFUR (S)					

AFPC Check Sample 09-2018	Sulfur, Gravimetric	980.02(a)	144.01	2	6.01	2.83
	Sulfur, Other		144.99	11	2.16	0.08
	Method Group 144.XX PCT			13	2.16	0.11
	TOTAL SULFUR (S)					
	Sulfur, Other		145.99	3	2.19	0.0
	Method Group 145.XX PCT			3	2.19	0.0
	TOTAL ARSENIC					
	Total Arsenic, ICP	980.02(b)	151.02	6	2.4	1.5
	Method Group 151.XX PPM			6	2.4	1.8
	ACID SOLUBLE BORON					
	Acid Soluble Boron, Other		165.99	2	76	4.9
	Method Group 165.XX PPM			2	76	5.9
	WATER SOLUBLE BORON					
	Water Soluble Boron, Other		171.99	1	56	0.0
	Method Group 171.XX PPM			1	56	0.0
	TOTAL CADMIUM					
	Total Cadmium, Atomic Absorbtion		181.00	1	30	0.0
	Total Cadmium, ICP		181.30	9	34.2	1.6
	Total Cadmium, Other		181.99	1	38.4	0.0
	Method Group 181.XX PPM			11	34.2	2.3
	ALUMINUM AS Al₂O₃					
	ICP, %			14	0.50	0.02
	Water Soluble Chlorine, Other, %		190.99	2	0.45	0.02
	Method Group 190.XX PCT			16	0.49	0.03
	TOTAL CHROMIUM					
	Total Chromium, Atomic Absorbtion		191.00	1	182	0.0
	Total Chromium, ICP		191.30	7	218	4.4
	Total Chromium, Other		191.99	1	241	0.0
	Method Group 191.XX PPM			9	218	8.2
	ACID SOLUBLE COBALT					
	Acid Soluble Cobalt, ICP		202.30	5	2	0.0
	Acid Soluble Cobalt, Other		202.99	1	1	0.0
	Method Group 202.XX PPM			6	2	0.6
	ACID SOLUBLE COPPER					
	Acid Soluble Copper, Other		221.99	1	0.9	0.0
	Method Group 221.XX PPM			5	0.8	0.3
	ACID SOLUBLE IRON AS Fe₂O₃					
	Acid Soluble Iron, ICP		241.30	15	0.71	0.04
	Acid Soluble Iron, Other		241.99	1	0.61	0.00
	Method Group 241.XX PCT			16	0.71	0.05
	TOTAL LEAD					
	Total Lead, ICP		251.30	7	0.9	1.0
	Total Lead, Other		251.99	1	0.5	0.0
	Method Group 251.XX PPM			8	0.8	1.0
	ACID SOLUBLE MANGANESE					
	Acid Soluble Manganese, ICP	972.02a	261.30	3	52	3.9
	Acid Soluble Manganese, Other		261.99	5	55	4.5
	Method Group 261.XX PPM			8	54	4.6
	TOTAL MERCURY					
	Total Mercury, ICP		281.30	2	0.00	0.17
	Total Mercury, Other		281.99	1	0	0.00
	Method Group 281.XX PPM			3	0.02	0.21
	TOTAL MOLYBDENUM					
	Total Molybdenum, ICP		289.30	7	3	1.1
	Total Molybdenum, Other		289.99	1	5	0.0
	Method Group 289.XX PPM			8	4	1.5
	TOTAL NICKEL					
	Total Nickel, ICP		291.30	7	17.0	0.2
	Total Nickel, icp		291.99	1	18.8	0.0
	Method Group 291.XX PPM			8	17.0	0.1

TOTAL SELENIUM					
Total Selenium, ICP	301.30		3	0.4	0.4
Method Group 301.XX PPM			3	0.4	0.4
SODIUM AS Na₂O					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.22	0.00
Sodium, Other		311.99	12	0.21	0.02
Method Group 311.XX PCT			13	0.21	0.02
ACID SOLUBLE ZINC					
Acid Soluble Zinc, ICP		321.30	6	423.3	22.5
Acid Soluble Zinc, Other		321.99	3	440.5	12.9
Method Group 321.XX %			9	426.5	27.3
FLUORIDE					
Volumetric		325.10	9	1.36	0.08
Distilled/Electrode		325.99	3	1.40	0.01
Method Group 325.XX PCT			12	1.38	0.09

AFPC Check Sample 09
-2018

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
31	18.17	0.000
Median	18.17	0.000

001.99 Ammoniacal Nitrogen		
Lab	Other	
330	19.46	-10.553
275	18.33	-1.089
Std Dev	18.32	-1.000
335	18.32	-0.963
275	18.28	-0.670
24	18.20	0.000
Median	18.20	0.000
34	18.17	0.251
24	18.16	0.377
79	18.13	0.586
Std Dev	18.08	1.000
38	17.68	4.397

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
330	19.46	-11.583
275	18.33	-1.317
335	18.32	-1.181
Std Dev	18.30	-1.000
275	18.28	-0.863
24	18.20	-0.136
Median	18.19	0.000
31	18.17	0.136
34	18.17	0.136
24	18.16	0.273
79	18.13	0.500
Std Dev	18.07	1.000
38	17.68	4.633

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
43	18.25	-0.179
219	18.25	0.000
Median	18.25	0.000
Std Dev	18.22	1.000
43	18.18	2.501

010.60 Total Nitrogen		
Lab	Combustion	
111	19.06	-5.835
49	18.40	-1.357
Std Dev	18.35	-1.000
61	18.31	-0.712
63	18.30	-0.678
66	18.30	-0.678
79	18.29	-0.611
107	18.28	-0.509
47	18.22	-0.102
219	18.21	-0.034
24	18.20	0.000
Median	18.20	0.000
24	18.20	0.034
61	18.17	0.237
14	18.14	0.441
31	18.11	0.645
29	18.09	0.746
103	18.07	0.882
14	18.06	0.950
77	18.06	0.984
Std Dev	18.05	1.000
38	18.05	1.018

010.99 Total Nitrogen		
Lab	Other	
330	19.23	-5.147
Std Dev	18.49	-1.000
23	18.32	-0.014
Median	18.32	0.000
335	18.32	0.014
23	18.30	0.128

010.XX Total Nitrogen		
Lab	Total Method	
330	19.23	-8.465
111	19.06	-7.062
49	18.40	-1.446
Std Dev	18.35	-1.000
23	18.32	-0.766
335	18.32	-0.723
61	18.31	-0.638
63	18.30	-0.596

66	18.30	-0.596
23	18.30	-0.553
79	18.29	-0.510
107	18.28	-0.383
43	18.25	-0.170
219	18.25	-0.128
Median	18.23	0.000
47	18.22	0.128
219	18.21	0.213
24	18.20	0.255
24	18.20	0.298
43	18.18	0.468
61	18.17	0.553
14	18.14	0.808
Std Dev	18.11	1.000
31	18.11	1.063
29	18.09	1.191
103	18.07	1.361
14	18.06	1.446
77	18.06	1.489
38	18.05	1.531

020.10 Total Phosphate		
Lab	Gravimetric Quimociac	
219	46.74	0.000
Median	46.74	0.000

020.20 Total Phosphate		
Lab	Spectrometric	
275	47.01	-0.771
24	46.96	-0.578
24	46.90	-0.347
23	46.90	-0.328
23	46.88	-0.251
111	46.87	-0.212
275	46.86	-0.193
14	46.83	-0.058
34	46.82	-0.039
Median	46.81	0.000
31	46.80	0.039
79	46.76	0.212
14	46.60	0.810
61	46.60	0.810
Std Dev	46.55	1.000

38	46.50	1.195
43	46.46	1.350
43	46.39	1.639
335	46.34	1.812
61	46.30	1.967

020.40 Total Phosphate		
Lab	Automated	
219	46.84	-1.340
Std Dev	46.83	-1.000
Median	46.83	0.000
Std Dev	46.83	1.000
111	46.83	1.340

020.99 Total Phosphate		
Lab	Other	
330	46.41	0.000
Median	46.41	0.000

020.XX Total Phosphate		
Lab	Total Method	
275	47.01	-0.791
24	46.96	-0.593
24	46.90	-0.356
23	46.90	-0.336
23	46.88	-0.257
111	46.87	-0.218
275	46.86	-0.198
219	46.84	-0.099
14	46.83	-0.059
111	46.83	-0.059
34	46.82	-0.040
Median	46.81	0.000
31	46.80	0.040
79	46.76	0.218
219	46.74	0.297
14	46.60	0.831
61	46.60	0.831
Std Dev	46.56	1.000
38	46.50	1.226
43	46.46	1.385
330	46.41	1.582
43	46.39	1.681
335	46.34	1.859

AFPC Check Sample 09
-2018

61	46.30	2.017
030.20 Insoluble Phosphate Spectrometric		
Lab		
61	0.12	-2.884
61	0.07	-1.187
43	0.07	-1.170
Std Dev	0.06	-1.000
43	0.06	-0.967
24	0.04	0.000
Median	0.04	0.000
23	0.03	0.170
23	0.03	0.170
24	0.03	0.170
79	0.03	0.339
030.30 Insoluble Phosphate Alka. Quimociac		
Lab		
31	0.03	0.000
Median	0.03	0.000
030.40 Insoluble Phosphate Automated		
Lab		
34	0.04	0.000
Median	0.04	0.000
030.XX Insoluble Phosphate Total Method		
Lab		
61	0.12	-3.121
61	0.07	-1.285
43	0.07	-1.267
43	0.06	-1.046
Std Dev	0.06	-1.000
34	0.04	-0.184
24	0.04	0.000
Median	0.04	0.000
23	0.03	0.184
23	0.03	0.184
24	0.03	0.184
31	0.03	0.367
79	0.03	0.367
040.20 Indirect Available Phosphate Spectrometric		
Lab		

24	46.93	-0.536
24	46.87	-0.370
23	46.87	-0.355
23	46.85	-0.294
31	46.78	-0.083
Median	46.75	0.000
79	46.72	0.083
61	46.48	0.808
Std Dev	46.42	1.000
43	46.40	1.064
43	46.32	1.306
61	46.23	1.563
040.99 Indirect Available Phosphate Other		
Lab		
63	48.31	-1.340
Std Dev	48.12	-1.000
Median	47.55	0.000
Std Dev	46.97	1.000
34	46.78	1.340
040.XX Indirect Available Phosphate Total Method		
Lab		
63	48.31	-5.039
Std Dev	47.08	-1.000
24	46.93	-0.485
24	46.87	-0.304
23	46.87	-0.288
23	46.85	-0.222
34	46.78	-0.008
Median	46.78	0.000
31	46.78	0.008
79	46.72	0.189
61	46.48	0.978
Std Dev	46.47	1.000
43	46.40	1.258
43	46.32	1.521
61	46.23	1.800
041.10 Direct Available Phosphate Gravimetric Quimociac		
Lab		
107	47.54	-2.249
Std Dev	47.07	-1.000
219	46.70	0.000

Median	46.70	0.000
47	46.54	0.431
041.20 Direct Available Phosphate Spectrometric		
Lab		
47	46.78	-1.713
Std Dev	46.62	-1.000
275	46.39	0.000
Median	46.39	0.000
275	46.17	0.967
041.50 Direct Available Phosphate ICP		
Lab		
66	46.00	0.000
Median	46.00	0.000
041.60 Direct Available Phosphate EDTA Extract		
Lab		
49	47.71	-1.234
29	47.56	-1.021
Std Dev	47.55	-1.000
219	46.84	0.000
Median	46.84	0.000
77	46.62	0.319
103	46.36	0.688
041.99 Direct Available Phosphate Other		
Lab		
79	46.71	0.000
Median	46.71	0.000
041.XX Direct Available Phosphate Total Method		
Lab		
49	47.71	-3.008
29	47.56	-2.561
107	47.54	-2.486
Std Dev	47.04	-1.000
219	46.84	-0.417
47	46.78	-0.238
79	46.71	-0.015
219	46.70	0.000
Median	46.70	0.000
77	46.62	0.253
47	46.54	0.476

275	46.39	0.923
Std Dev	46.36	1.000
103	46.36	1.027
275	46.17	1.578
66	46.00	2.084
048.20 Water Soluble Phosphate Spectrometric		
Lab		
31	44.48	-0.751
14	44.44	-0.665
14	44.43	-0.654
61	44.42	-0.621
330	44.33	-0.427
24	44.22	-0.189
23	44.17	-0.092
23	44.15	-0.038
Median	44.13	0.000
61	44.11	0.038
24	44.04	0.200
79	44.01	0.254
43	43.77	0.783
Std Dev	43.66	1.000
43	43.62	1.108
111	43.50	1.367
275	42.96	2.523
275	42.66	3.172
048.99 Water Soluble Phosphate Other		
Lab		
34	44.26	-1.340
Std Dev	44.16	-1.000
Median	43.89	0.000
Std Dev	43.61	1.000
111	43.51	1.340
048.XX Water Soluble Phosphate Total Method		
Lab		
31	44.48	-0.710
14	44.44	-0.628
14	44.43	-0.618
61	44.42	-0.587
330	44.33	-0.403
34	44.26	-0.271
24	44.22	-0.179

AFPC Check Sample 09
-2018

23	44.17	-0.087
23	44.15	-0.036
Median	44.13	0.000
61	44.11	0.036
24	44.04	0.189
79	44.01	0.240
43	43.77	0.740
Std Dev	43.64	1.000
43	43.62	1.046
111	43.51	1.261
111	43.50	1.292
275	42.96	2.384
275	42.66	2.996

050.31 Soluble Potash		
Lab	Atomic Absorption(Citrate)	
107	0.16	0.000
Median	0.16	0.000

050.50 %K ₂ O Soluble Potash		
Lab	ICP(Oxalate)	
23	0.17	0.000
23	0.17	0.000
Median	0.17	0.000

050.99 Soluble Potash		
Lab	%K ₂ O	Other
111	0.18	-1.926
Std Dev	0.17	-1.000
43	0.17	-0.875
43	0.16	-0.754
61	0.16	-0.385
24	0.16	0.000
31	0.16	0.000
61	0.16	0.000
Median	0.16	0.000
24	0.15	0.385
Std Dev	0.14	1.000
275	0.14	1.155
275	0.13	1.926
330	0.11	3.466

050.XX Soluble Potash		
Lab	%K ₂ O	Total Method

111	0.18	-2.276
23	0.17	-1.366
23	0.17	-1.366
43	0.17	-1.034
Std Dev	0.17	-1.000
43	0.16	-0.892
61	0.16	-0.455
24	0.16	0.000
31	0.16	0.000
61	0.16	0.000
107	0.16	0.000
Median	0.16	0.000
24	0.15	0.455
Std Dev	0.14	1.000
275	0.14	1.366
275	0.13	2.276
330	0.11	4.098

060.00 Free Water		
Lab	Vacuum Oven	
31	1.11	-1.465
79	1.00	-1.008
Std Dev	1.00	-1.000
24	0.96	-0.841
24	0.88	-0.509
111	0.86	-0.405
34	0.78	-0.093
Median	0.76	0.000
23	0.74	0.093
23	0.73	0.114
61	0.60	0.654
Std Dev	0.52	1.000
43	0.51	1.028
61	0.51	1.049
43	0.49	1.111

060.99 Free Water		
Lab	Other	
47	6.75	-17.716
Std Dev	1.46	-1.000
14	1.29	-0.451
14	1.19	-0.119
Median	1.15	0.000
330	1.11	0.119

Std Dev	0.83	1.000
275	0.75	1.257
275	0.65	1.573

060.XX Free Water		
Lab	Total Method	
47	6.75	-19.272
14	1.29	-1.535
14	1.19	-1.194
Std Dev	1.13	-1.000
330	1.11	-0.950
31	1.11	-0.950
79	1.00	-0.593
24	0.96	-0.463
24	0.88	-0.203
111	0.86	-0.122
Median	0.82	0.000
34	0.78	0.122
275	0.75	0.219
23	0.74	0.268
23	0.73	0.284
275	0.65	0.544
61	0.60	0.707
43	0.51	0.999
Std Dev	0.51	1.000
61	0.51	1.015
43	0.49	1.064

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
330	0.39	-1.281
24	0.39	-1.084
Std Dev	0.38	-1.000
23	0.38	-0.887
24	0.38	-0.887
111	0.38	-0.887
34	0.37	-0.493
23	0.36	-0.099
Median	0.36	0.000
61	0.36	0.099
61	0.35	0.296
31	0.35	0.335
14	0.35	0.493
43	0.34	0.535

43	0.34	0.725
Std Dev	0.33	1.000
14	0.23	5.025

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
330	0.39	-1.281
24	0.39	-1.084
Std Dev	0.38	-1.000
23	0.38	-0.887
24	0.38	-0.887
111	0.38	-0.887
34	0.37	-0.493
23	0.36	-0.099
Median	0.36	0.000
61	0.36	0.099
61	0.35	0.296
31	0.35	0.335
14	0.35	0.493
43	0.34	0.535
43	0.34	0.725
Std Dev	0.33	1.000
14	0.23	5.025

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
24	1.59	-2.064
34	1.54	-1.509
23	1.51	-1.140
24	1.51	-1.140
23	1.50	-1.017
Std Dev	1.50	-1.000
61	1.42	-0.031
Median	1.42	0.000
31	1.42	0.031
61	1.41	0.092
14	1.41	0.154
14	1.39	0.339
43	1.38	0.524
43	1.37	0.585

121.99 Acid Soluble Magnesium		
Lab	%MgO	Other
111	1.45	-1.340

AFPC Check Sample 09
-2018

Std Dev	1.44	-1.000
Median	1.40	0.000
Std Dev	1.36	1.000
330	1.35	1.340

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
24	1.59	-1.973
34	1.54	-1.443
23	1.51	-1.090
24	1.51	-1.090
Std Dev	1.50	-1.000
23	1.50	-0.972
111	1.45	-0.383
61	1.42	-0.029
Median	1.42	0.000
31	1.42	0.029
61	1.41	0.088
14	1.41	0.147
14	1.39	0.324
43	1.38	0.501
43	1.37	0.560
330	1.35	0.795

144..01 Sulfate Sulfur (S)		
Lab		Gravimetric
47	9.80	-1.340
Std Dev	8.84	-1.000
Median	6.01	0.000
Std Dev	3.19	1.000
79	2.23	1.340

144.99 Sulfate Sulfur (S)		
Lab		Other
330	2.51	-4.264
Std Dev	2.24	-1.000
34	2.20	-0.548
23	2.20	-0.487
23	2.16	0.000
24	2.16	0.000
24	2.16	0.000
Median	2.16	0.000
14	2.13	0.305
14	2.08	0.975

Std Dev	2.07	1.000
61	2.06	1.218
61	2.06	1.218
31	1.99	2.010

144.XX Sulfate Sulfur (S)		
Lab		Total Method
47	9.80	-81.954
330	2.51	-3.752
Std Dev	2.25	-1.000
79	2.23	-0.750
34	2.20	-0.482
23	2.20	-0.429
23	2.16	0.000
24	2.16	0.000
24	2.16	0.000
Median	2.16	0.000
14	2.13	0.268
14	2.08	0.858
Std Dev	2.06	1.000
61	2.06	1.072
61	2.06	1.072
31	1.99	1.769

145.99 Total Sulfur (S)		
Lab		Other
111	2.26	-2.233
Std Dev	2.22	-1.000
43	2.19	0.000
Median	2.19	0.000
43	2.17	0.447

145.XX Total Sulfur (S)		
Lab		Total Method
111	2.26	-2.233
Std Dev	2.22	-1.000
43	2.19	0.000
Median	2.19	0.000
43	2.17	0.447

151.30 Total Arsenic		
Lab		ICP
330	9.81	-4.992
Std Dev	3.90	-1.000

43	3.40	-0.665
43	3.30	-0.598
Median	2.42	0.000
335	1.53	0.598
24	1.35	0.723
31	1.10	0.888

151.XX Total Arsenic		
Lab		Total Method
330	9.81	-4.992
Std Dev	3.90	-1.000
43	3.40	-0.665
43	3.30	-0.598
Median	2.42	0.000
335	1.53	0.598
24	1.35	0.723
31	1.10	0.888

165.99 Acid Soluble Boron		
Lab	PPM	Other
24	82.50	-1.340
Std Dev	80.85	-1.000
Median	76.00	0.000
Std Dev	71.15	1.000
330	69.50	1.340

165.XX, ppm Acid Soluble Boron		
Lab	PPM	Total Method
24	82.50	-1.340
Std Dev	80.85	-1.000
Median	76.00	0.000
Std Dev	71.15	1.000
330	69.50	1.340

171.99 Water Soluble Boron		
Lab	PPM	Other
330	55.50	0.000
Median	55.50	0.000

171.XX Water Soluble Boron		
Lab	PPM	Total Method
330	55.50	0.000
Median	55.50	0.000

181.00 Total Cadmium		
Lab		Atomic Absorbtion
330	30.35	0.000
Median	30.35	0.000

181.30 Total Cadmium		
Lab	PPM	ICP
31	35.35	-0.698
61	35.00	-0.480
61	35.00	-0.480
43	34.44	-0.131
43	34.23	0.000
Median	34.23	0.000
275	34.20	0.019
275	32.85	0.860
Std Dev	32.63	1.000
335	32.03	1.374
111	24.00	6.376

181.99 Total Cadmium		
Lab		Other
24	38.40	0.000
Median	38.40	0.000

181.XX Total Cadmium		
Lab	PPM	Total Method
24	38.40	-2.181
Std Dev	36.14	-1.000
31	35.35	-0.586
61	35.00	-0.403
61	35.00	-0.403
43	34.44	-0.110
43	34.23	0.000
Median	34.23	0.000
275	34.20	0.016
275	32.85	0.722
Std Dev	32.32	1.000
335	32.03	1.153
330	30.35	2.029
111	24.00	5.350

190.00 Aluminum		
Lab	%Al ₂ O ₃	ICP
275	0.52	-1.117

AFPC Check Sample 09
-2018

Std Dev	0.52	-1.000
14	0.51	-0.670
14	0.51	-0.670
43	0.51	-0.670
43	0.51	-0.447
23	0.50	-0.223
34	0.50	-0.223
Median	0.50	0.000
23	0.49	0.223
24	0.49	0.223
275	0.49	0.223
111	0.48	0.893
Std Dev	0.47	1.000
61	0.46	1.563
24	0.46	1.787
61	0.45	2.010

190.99 Lab	%Al ₂ O ₃	Aluminum Atomic Absorption
31	0.48	-1.340
Std Dev	0.47	-1.000
Median	0.45	0.000
Std Dev	0.43	1.000
330	0.42	1.340

190.XX Lab	%Al ₂ O ₃	Aluminum Total Method
275	0.52	-1.149
Std Dev	0.52	-1.000
14	0.51	-0.766
14	0.51	-0.766
43	0.51	-0.766
43	0.51	-0.574
23	0.50	-0.383
34	0.50	-0.383
23	0.49	0.000
24	0.49	0.000
275	0.49	0.000
Median	0.49	0.000
31	0.48	0.574
111	0.48	0.574
Std Dev	0.46	1.000
61	0.46	1.149
24	0.46	1.340

61	0.45	1.531
330	0.42	2.680

191.00 Lab	Total Chromium Atomic Absorption
330	181.50 0.000
Median	181.50 0.000

191.30 Lab	Total Chromium ICP
335	223.12 -1.276
Std Dev	221.90 -1.000
111	220.50 -0.681
31	218.30 -0.182
43	217.50 0.000
Median	217.50 0.000
43	215.50 0.454
Std Dev	213.10 1.000
61	211.50 1.363
61	208.00 2.158

191.99 Lab	Total Chromium Other
24	240.50 0.000
Median	240.50 0.000

191.XX Lab	Total Chromium Total Method
24	240.50 -3.424
Std Dev	224.22 -1.000
335	223.12 -0.837
111	220.50 -0.447
31	218.30 -0.119
43	217.50 0.000
Median	217.50 0.000
43	215.50 0.298
61	211.50 0.893
Std Dev	210.78 1.000
61	208.00 1.414
330	181.50 5.360

202.30 Lab	Acid Soluble Cobalt ICP
61	

202.99 Lab	Acid Soluble Cobalt Other
24	1.20 0.000
Median	1.20 0.000

202.XX Lab	PPM	Acid Soluble Cobalt Total Method
61	2.35	-0.815
43	2.00	-0.054
43	2.00	-0.054
Median	1.98	0.000
61	1.95	0.054
Std Dev	1.52	1.000
24	1.20	1.696
335	0.71	2.751

221.30 Lab	PPM	Acid Soluble Copper ICP
43	1.00	-0.596
43	1.00	-0.596
Median	0.90	0.000
61	0.80	0.596
Std Dev	0.73	1.000
61	0.70	1.191

221.99 Lab	Acid Soluble Copper Other
24	0.50 0.000
Median	0.50 0.000

221.XX Lab	PPM	Acid Soluble Copper Total Method
43	1.00	-0.893
43	1.00	-0.893
61	0.80	0.000
Median	0.80	0.000
61	0.70	0.447
Std Dev	0.58	1.000
24	0.50	1.331

241.30 Lab	%Fe ₂ O ₃	Acid Soluble Iron ICP
14	1.77	-23.673
14	1.76	-23.450

275	0.83	-2.680
275	0.79	-1.787
Std Dev	0.75	-1.000
23	0.73	-0.447
34	0.73	-0.447
24	0.72	-0.112
23	0.71	0.000
111	0.71	0.000
Median	0.71	0.000
24	0.71	0.112
43	0.70	0.223
43	0.70	0.223
Std Dev	0.67	1.000
31	0.66	1.117
61	0.66	1.228
61	0.65	1.340

241.99 Lab	%Fe ₂ O ₃	Acid Soluble Iron Other
330	0.61	0.000
Median	0.61	0.000

241.XX Lab	%Fe ₂ O ₃	Acid Soluble Iron Total Method
14	1.77	-25.825
14	1.76	-25.582
275	0.83	-2.924
275	0.79	-1.949
Std Dev	0.75	-1.000
23	0.73	-0.487
34	0.73	-0.487
24	0.72	-0.122
23	0.71	0.000
111	0.71	0.000
Median	0.71	0.000
24	0.71	0.122
43	0.70	0.244
43	0.70	0.244
Std Dev	0.67	1.000
31	0.66	1.218
61	0.66	1.340
61	0.65	1.462
330	0.61	2.436

AFPC Check Sample 09
-2018

251.00 Total Lead		
Lab	Atomic Absorbion	
330	<3,7	0.000
Median	0.00	0.000

251.30 Total Lead		
Lab	PPM	ICP
335	7.29	-6.577
61	2.45	-1.626
Std Dev	1.84	-1.000
61	1.35	-0.501
275	0.86	0.000
Median	0.86	0.000
275	0.78	0.082
43	0.40	0.471
43	0.35	0.522

251.99 Total Lead		
Lab	Other	
24	0.52	0.000
Median	0.52	0.000

251.XX Total Lead		
Lab	PPM	Total Method
330	<3,7	0.000
335	7.29	-7.639
61	2.45	-1.924
Std Dev	1.67	-1.000
61	1.35	-0.626
275	0.86	-0.047
Median	0.82	0.000
275	0.78	0.047
24	0.52	0.354
43	0.40	0.496
43	0.35	0.555

261.30 Acid Soluble Manganese		
Lab	ICP	
31	55.95	-1.141
Std Dev	55.40	-1.000
111	51.50	0.000
Median	51.50	0.000
Std Dev	47.60	1.000
330	45.50	1.539

261.99 Acid Soluble Manganese		
Lab	PPM	Other
43	60.00	-1.228
43	60.00	-1.228
Std Dev	58.98	-1.000
61	54.50	0.000
Median	54.50	0.000
61	54.00	0.112
24	52.00	0.558

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
43	60.00	-1.514
43	60.00	-1.514
Std Dev	58.05	-1.000
31	55.95	-0.448
61	54.50	-0.066
Median	54.25	0.000
61	54.00	0.066
24	52.00	0.593
111	51.50	0.724
Std Dev	50.45	1.000
330	45.50	2.305

281.30 Total Mercury		
Lab	PPM	ICP
24	0.47	-1.340
Std Dev	0.41	-1.000
Median	0.24	0.000
Std Dev	0.07	1.000
335	0.02	1.340

281.99 Total Mercury		
Lab	PPM	Other
330	0.02	0.000
Median	0.02	0.000

281.XX Total Mercury		
Lab	PPM	Total Method
24	0.47	-2.662
Std Dev	0.19	-1.000
330	0.02	0.000
Median	0.02	0.000

335 0.02 0.018

289.30 Total Molybdenum		
Lab	PPM	ICP
330		

289.99 Total Molybdenum		
Lab	PPM	Other
24	5.10	0.000
Median	5.10	0.000

289.XX Total Molybdenum		
Lab	PPM	Total Method
330	6.05	-2.012
24	5.10	-1.211
Std Dev	4.84	-1.000
43	4.10	-0.377
43	4.00	-0.293
Median	3.65	0.000
61	3.30	0.293
61	2.90	0.629
Std Dev	2.46	1.000
31	2.30	1.132
111	1.50	1.802

291.30 Total Nickel		
Lab	ICP	
335		

291.99 Total Nickel		
Lab	PPM	Other
24	18.75	0.000
Median	18.75	0.000

291.XX Total Nickel		
Lab	PPM	Total Method
24	18.75	-18.392
Std Dev	17.10	-1.000
335	17.01	-0.105
43	17.00	0.000
43	17.00	0.000
61	17.00	0.000
61	17.00	0.000
Median	17.00	0.000
Std Dev	16.90	1.000
330	16.50	5.255

31 11.05 62.533

301.30 Total Selenium		
Lab	PPM	ICP
330	0.97	-1.521

301.30 Total Selenium		
Lab	PPM	ICP
330	0.97	-1.521
Std Dev	0.78	-1.000
24	0.43	0.000
Median	0.43	0.000
Std Dev	0.07	1.000
335	0.01	1.159

301.XX Total Selenium		
Lab	PPM	Total Method
330	0.97	-1.521
Std Dev	0.78	-1.000
24	0.43	0.000
Median	0.43	0.000
Std Dev	0.07	1.000
335	0.01	1.159

311.00 Sodium		
Lab	%Na ₂ O	Atomic Absorbion
330	0.22	0.000
Median	0.22	0.000

311.99 Sodium		
Lab	%Na ₂ O	Other
111	0.22	-0.999
275	0.22	-0.999
23	0.22	-0.666
23	0.21	-0.333
275	0.21	-0.333
24	0.21	0.000
31	0.21	0.000
Median	0.21	0.000
24	0.20	0.333
43	0.19	0.899
61	0.19	0.999
Std Dev	0.19	1.000
43	0.19	1.165
61	0.19	1.332

311.XX Sodium		
Lab	%Na ₂ O	Total Method

AFPC Check Sample 09
-2018

111	0.22	-0.855
275	0.22	-0.855
330	0.22	-0.855
23	0.22	-0.570
23	0.21	-0.285
275	0.21	-0.285
24	0.21	0.000
31	0.21	0.000
Median	0.21	0.000
24	0.20	0.285
43	0.19	0.770
61	0.19	0.855
43	0.19	0.998
Std Dev	0.19	1.000
61	0.19	1.140

321.30 Acid Soluble Zinc		
Lab	PPM	ICP
111	498.00	-3.325
31	451.50	-1.257
Std Dev	445.73	-1.000
61	426.50	-0.145
Median	423.25	0.000
61	420.00	0.145
24	413.50	0.434
Std Dev	400.77	1.000
47	1.00	18.782

321.99 Acid Soluble Zinc		
Lab		Other
43	443.50	-0.233
43	440.50	0.000
Median	440.50	0.000
Std Dev	427.63	1.000
330	409.00	2.447

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method
111	498.00	-3.194
31	451.50	-1.117
Std Dev	448.89	-1.000
43	443.50	-0.759
43	440.50	-0.625
61	426.50	0.000

Median	426.50	0.000
61	420.00	0.290
24	413.50	0.581
330	409.00	0.782
Std Dev	404.11	1.000
47	1.00	19.006

325.10 Fluoride		
Lab	%	Electrode
79	1.44	-1.021
23	1.42	-0.766
23	1.41	-0.574
24	1.37	-0.128
24	1.36	0.000
Median	1.36	0.000
14	1.31	0.702
14	1.30	0.766
31	1.29	0.893
111	0.51	10.848

325.99 Fluoride		
Lab	%	Other
61	1.40	0.000
330	1.40	0.000
Median	1.40	0.000
61	1.38	2.680

325.XX Fluoride		
Lab	%	Total Method
79	1.44	-0.929
23	1.42	-0.643
23	1.41	-0.429
61	1.40	-0.286
330	1.40	-0.286
61	1.38	-0.071
Median	1.38	0.000
24	1.37	0.071
24	1.36	0.214
14	1.31	1.001
14	1.30	1.072
31	1.29	1.215
111	0.51	12.364