

AFPC

Sample

2019-02

Grade

18-46-0

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	1	17.23	0.00
Ammoniacal Nitrogen, Other		001.99	8	17.19	0.05
Method Group 001.XX PCT			9	17.19	0.05
NITROGEN FROM UREA					
Nitrogen from Urea, Other		005.99	1	0.03	0.00
Method Group 005.XX PCT			1	0.03	0.00
AMMON & NITRATE N					
Ammon & Nitrate N, Other		009.99	2	17.15	0.01
Method Group 009.XX PCT			2	17.15	0.01
TOTAL NITROGEN					
Total Nitrogen, Modified Comprehensive	978.02	010.11	1	17.85	0.00
Total Nitrogen, Combustion	993.13	010.60	17	17.78	0.11
Total Nitrogen, Other		010.99	8	17.76	0.14
Method Group 010.XX PCT			26	17.78	0.16
TOTAL PHOSPHATE					
Total Phosphate, Gravimetric Quimociac		020.10	1	47.25	0.00
Total Phosphate, Spectrometric	978.02	020.20	17	47.01	0.15
Total Phosphate, ICP	970.03	020.40	2	44.73	0.84
Total Phosphate, Other	993.13	020.99	1	46.72	0.00
Method Group 020.XX PCT			21	46.99	0.27
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	8	0.33	0.06
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.13	0.00
Insoluble Phosphate, Automated	978.01	030.40	3	0.24	0.02
Method Group 030.XX PCT			12	0.30	0.09
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	11	46.74	0.21
Indirect Available Phosphate, Other		040.99	2	46.57	0.33
Method Group 040.XX PCT			13	46.74	0.28
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	1	47.15	0.00
Direct Available Phosphate, Spectrometric	960.03D	041.20	1	46.55	0.00
Direct Available Phosphate, ICP		041.50	1	46.79	0.00
Direct Available Phosphate, EDTA Extract	993.01	041.60	3	46.72	0.46
Direct Available Phosphate, Other		041.99	3	46.66	0.79
Method Group 041.XX PCT			9	46.72	0.55
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	14	42.04	0.29
Water Soluble Phosphate, Other		048.99	1	42.11	0.00
Method Group 048.XX PCT			15	42.11	0.33
SOLUBLE POTASH AS K₂O					
Soluble Potash, ICP(Oxalate)		050.50	2	0.14	0.07
Soluble Potash, ICP(Citrate)		050.51	1	0.25	0.00
Soluble Potash, Other		050.99	6	0.24	0.01
Method Group 050.XX PCT			9	0.24	0.01
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	10	1.87	0.11
Free Water, Vacuum Desiccate	965.08A	060.10	2	1.47	0.03
Free Water, Other		060.99	6	1.64	0.22
Method Group 060.XX PCT			18	1.77	0.25
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	13	0.17	0.03
Method Group 101.XX PCT			13	0.17	0.03

ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	2	1.30	0.00
Acid Soluble Magnesium, ICP		121.30	12	1.47	0.05
Acid Soluble Magnesium, Other		121.99	1	1.52	0.00
Method Group 121.XX PCT			15	1.47	0.08
WATER SOLUBLE MAGNESIUM					
Water Soluble Magnesium, Other		131.99	1	0.06	0.00
Method Group 131.XX PCT			1	0.06	0.00
SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	2	2.02	0.04
Sulfur, Other		144.99	14	1.89	0.09
Method Group 144.XX PCT			16	1.90	0.12
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	5	8.5	0.7
Total Arsenic, Other		151.99	5	9.8	1.8
Method Group 151.XX PPM			10	8.7	2.0
ACID SOLUBLE BORON					
Acid Soluble Boron, Other		165.99	2	78	4.6
Method Group 165.XX PPM			2	78	5.6
WATER SOLUBLE BORON					
Water Soluble Boron, Other		171.99	1	18	0.0
Method Group 171.XX PPM			1	18	0.0
TOTAL CADMIUM					
Total Cadmium, Atomic Absorption		181.00	1	30	0.0
Total Cadmium, ICP		181.30	7	30.7	2.2
Total Cadmium, Other		181.99	2	31.9	1.7
Method Group 181.XX PPM			10	30.4	2.3
ALUMINUM AS Al₂O₃					
ICP, %			13	1.18	0.05
Water Soluble Chlorine, Other, %		190.99	2	1.18	0.01
Method Group 190.XX PCT			15	1.18	0.05
TOTAL CHROMIUM					
Total Chromium, Atomic Absorption		191.00	1	214	0.0
Total Chromium, ICP		191.30	6	215	6.1
Total Chromium, Other		191.99	1	230	0.0
Method Group 191.XX PPM			8	215	5.0
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	7	1	0.7
Acid Soluble Cobalt, Other		202.99	1	1	0.0
Method Group 202.XX PPM			8	1	0.5
ACID SOLUBLE COPPER					
Acid Soluble Copper, Other		221.99	1	0.9	0.0
Method Group 221.XX PPM			7	0.0	0.1
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP		241.30	14	1.08	0.02
Acid Soluble Iron, Other		241.99	1	1.07	0.00
Method Group 241.XX PCT			15	1.08	0.03
TOTAL LEAD					
Total Lead, Atomic Absorption		251.00	1	2	0.0
Total Lead, ICP		251.30	8	1.2	8.7
Total Lead, Other		251.99	1		0.0
Method Group 251.XX PPM			10	1.2	8.4
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a	261.30	2	129	0.4
Acid Soluble Manganese, Other		261.99	5	129	2.1
Method Group 261.XX PPM			7	129	1.7
TOTAL MERCURY					
Total Mercury, ICP		281.30	2	0.00	0.00
Total Mercury, Other		281.99	1	0	0.00

Method Group 281.XX PPM			3	0.01	0.01
TOTAL MOLYBDENUM					
Total Molybdenum, ICP	289.30		6	3	1.9
Total Molybdenum, Other	289.99		1	6	0.0
Method Group 289.XX PPM			7	4	2.2
TOTAL NICKEL					
Total Nickel, ICP	291.30		7	14.5	6.4
Total Nickel, icp	291.99		1	12.6	0.0
Method Group 291.XX PPM			8	13.6	5.8
TOTAL SELENIUM					
Total Selenium, ICP	301.30		6	0.3	0.2
Method Group 301.XX PPM			6	0.3	0.3
SODIUM AS Na₂O					
Sodium, Atomic Absorbtion	983.04	311.00	1	0.20	0.00
Sodium, Other		311.99	7	0.54	0.04
Method Group 311.XX PCT			8	0.54	0.06
ACID SOLUBLE ZINC					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	2	75.0	3.7
Acid Soluble Zinc, ICP		321.30	6	78.5	2.2
Acid Soluble Zinc, Other		321.99	1	84.0	0.0
Method Group 321.XX %			9	79.0	3.3
FLUORIDE					
Volumetric	325.10		11	0.58	0.05
Distilled/Electrode	325.99		3	0.60	0.01
Method Group 325.XX PCT			14	0.58	0.06

001.10 Ammoniacal Nitrogen		
Lab	MgO distillation	
31	17.23	0.000
Median	17.23	0.000

001.99 Ammoniacal Nitrogen		
Lab	Other	
335	18.61	-29.848
79	17.29	-2.102
Std Dev	17.23	-1.000
24	17.20	-0.210
24	17.19	-0.105
Median	17.19	0.000
34	17.18	0.105
140	17.18	0.210
Std Dev	17.14	1.000
330	17.09	1.997
38	16.92	5.675

001.XX Ammoniacal Nitrogen		
Lab	Total Method	
335	18.61	-34.475
79	17.29	-2.315
Std Dev	17.23	-1.000
31	17.23	-0.975
24	17.20	-0.122
24	17.19	0.000
Median	17.19	0.000
34	17.18	0.244
140	17.18	0.365
Std Dev	17.15	1.000
330	17.09	2.436
38	16.92	6.700

005.99 Nitrogen from Urea		
Lab	Other	
335	0.03	0.000
Median	0.03	0.000

005.XX Nitrogen from Urea		
Lab	Total Method	
335	0.03	0.000
Median	0.03	0.000

009.99 Ammon & Nitrate N		
Lab	Other	
32	17.17	-1.340
Std Dev	17.16	-1.000
Median	17.15	0.000
Std Dev	17.14	1.000
32	17.14	1.340

009.XX Ammon & Nitrate N		
Lab	Total Method	
32	17.17	-1.340
Std Dev	17.16	-1.000
Median	17.15	0.000
Std Dev	17.14	1.000
32	17.14	1.340

010.11 Total Nitrogen		
Lab	Modified Comprehensive	
219	17.85	0.000
Median	17.85	0.000

010.60 Total Nitrogen		
Lab	Combustion	
38	18.05	-2.412
Std Dev	17.89	-1.000
110	17.89	-0.983
219	17.87	-0.759
24	17.86	-0.715
103	17.85	-0.581
31	17.84	-0.558
24	17.82	-0.357
140	17.80	-0.134
14	17.78	0.000
Median	17.78	0.000
14	17.75	0.268
66	17.74	0.357
77	17.70	0.715
61	17.70	0.759
Std Dev	17.67	1.000
61	17.66	1.072
47	17.66	1.117
137	17.65	1.206
79	17.46	2.859

010.99 Total Nitrogen		
Lab	Other	
335	18.61	-5.882
275	17.91	-1.044
Std Dev	17.90	-1.000
23	17.83	-0.487
275	17.78	-0.139
Median	17.76	0.000
23	17.74	0.139
32	17.66	0.696
32	17.65	0.766
Std Dev	17.62	1.000
330	17.26	3.481

010.XX Total Nitrogen		
Lab	Total Method	
335	18.61	-6.272
38	18.05	-2.053
Std Dev	17.91	-1.000
275	17.91	-0.988
110	17.89	-0.836
219	17.87	-0.646
24	17.86	-0.608
103	17.85	-0.494
219	17.85	-0.494
31	17.84	-0.475
23	17.83	-0.380
24	17.82	-0.304
140	17.80	-0.114
14	17.78	0.000
275	17.78	0.000
Median	17.78	0.000
14	17.75	0.228
66	17.74	0.304
23	17.74	0.304
77	17.70	0.608
61	17.70	0.646
32	17.66	0.912
61	17.66	0.912
47	17.66	0.950
32	17.65	0.988
Std Dev	17.65	1.000
137	17.65	1.026
79	17.46	2.433

330 17.26 3.953

020.10 Total Phosphate		
Lab	Gravimetric Quimociac	
241	47.25	0.000
Median	47.25	0.000

020.20 Total Phosphate		
Lab	Spectrometric	
24	47.23	-1.508
34	47.23	-1.508
32	47.17	-1.106
Std Dev	47.15	-1.000
32	47.15	-0.972
140	47.14	-0.871
23	47.11	-0.670
24	47.05	-0.302
31	47.05	-0.268
275	47.01	0.000
Median	47.01	0.000
23	46.99	0.100
275	46.95	0.402
61	46.94	0.469
335	46.94	0.469
14	46.90	0.737
Std Dev	46.86	1.000
61	46.84	1.139
79	46.81	1.340
14	46.60	2.713

020.40 Total Phosphate		
Lab	Automated	
137	45.86	-1.340
Std Dev	45.57	-1.000
Median	44.73	0.000
Std Dev	43.89	1.000
110	43.60	1.340

020.99 Total Phosphate		
Lab	Other	
330	46.72	0.000
Median	46.72	0.000

020.XX Total Phosphate		
Lab	Total Method	
241	47.25	-1.161
24	47.23	-1.072
34	47.23	-1.072
Std Dev	47.21	-1.000
32	47.17	-0.804
32	47.15	-0.715
140	47.14	-0.648
23	47.11	-0.514
24	47.05	-0.268
31	47.05	-0.246
275	47.01	-0.067
23	46.99	0.000
Median	46.99	0.000
275	46.95	0.201
61	46.94	0.246
335	46.94	0.246
14	46.90	0.424
61	46.84	0.692
79	46.81	0.826
Std Dev	46.77	1.000
330	46.72	1.228
14	46.60	1.742
137	45.86	5.070
110	43.60	15.142

030.20 Insoluble Phosphate		
Lab	Spectrometric	
23	0.50	-2.944
79	0.39	-1.010
Std Dev	0.38	-1.000
23	0.38	-0.923
61	0.35	-0.308
Median	0.33	0.000
24	0.31	0.308
61	0.31	0.308
140	0.29	0.659
Std Dev	0.27	1.000
24	0.26	1.186

030.30 Insoluble Phosphate		
Lab	Alka. Quimociac	
31	0.13	0.000

Median	0.13	0.000
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030.40 Insoluble Phosphate		
Lab	Automated	
32	0.28	-2.144
Std Dev	0.26	-1.000
34	0.24	0.000
Median	0.24	0.000
32	0.23	0.536

030.XX Insoluble Phosphate		
Lab	Total Method	
23	0.50	-2.646
79	0.39	-1.153
23	0.38	-1.086
Std Dev	0.37	-1.000
61	0.35	-0.611
24	0.31	-0.136
61	0.31	-0.136
Median	0.30	0.000
140	0.29	0.136
32	0.28	0.271
24	0.26	0.543
34	0.24	0.814
32	0.23	0.950
Std Dev	0.23	1.000
31	0.13	2.375

040.20 Indirect Available Phosphate		
Lab	Spectrometric	
24	46.97	-1.081
Std Dev	46.95	-1.000
32	46.94	-0.940
31	46.92	-0.846
32	46.87	-0.611
140	46.85	-0.494
24	46.74	0.000
Median	46.74	0.000
61	46.63	0.517
23	46.61	0.611
23	46.61	0.611
Std Dev	46.53	1.000
61	46.49	1.175
79	46.42	1.505

040.99 Indirect Available Phosphate		
Lab	Other	
34	47.02	-1.340
Std Dev	46.90	-1.000
Median	46.57	0.000
Std Dev	46.24	1.000
38	46.13	1.340

040.XX Indirect Available Phosphate		
Lab	Total Method	
34	47.02	-1.189
Std Dev	46.97	-1.000
24	46.97	-0.994
32	46.94	-0.865
31	46.92	-0.778
32	46.87	-0.562
140	46.85	-0.454
24	46.74	0.000
Median	46.74	0.000
61	46.63	0.475
23	46.61	0.562
23	46.61	0.562
Std Dev	46.51	1.000
61	46.49	1.081
79	46.42	1.383
38	46.13	2.658

041.10 Direct Available Phosphate		
Lab	Gravimetric Quimociac	
47	47.15	0.000
Median	47.15	0.000

041.20 Direct Available Phosphate		
Lab	Spectrometric	
47	46.55	0.000
Median	46.55	0.000

041.50 Direct Available Phosphate		
Lab	ICP	
66	46.79	0.000
Median	46.79	0.000

041.60 Direct Available Phosphate		
Lab	EDTA Extract	
77	47.75	-2.274
Std Dev	47.17	-1.000
219	46.72	0.000
Median	46.72	0.000
103	46.53	0.406

041.99 Direct Available Phosphate		
Lab	Other	
219	47.17	-0.646
79	46.66	0.000
Median	46.66	0.000
Std Dev	45.87	1.000
137	45.05	2.034

041.XX Direct Available Phosphate		
Lab	Total Method	
77	47.75	-2.311
219	47.17	-1.005
Std Dev	47.16	-1.000
47	47.15	-0.971
66	46.79	-0.167
219	46.72	0.000
Median	46.72	0.000
79	46.66	0.134
47	46.55	0.369
103	46.53	0.413
Std Dev	46.27	1.000
137	45.05	3.719

048.20 Water Soluble Phosphate		
Lab	Spectrometric	
14	42.42	-1.309
14	42.35	-1.082
32	42.33	-1.013
Std Dev	42.33	-1.000
32	42.32	-0.960
23	42.25	-0.733
23	42.13	-0.297
140	42.11	-0.227
Median	42.04	0.000
61	41.98	0.227
330	41.94	0.367

24	41.93	0.384
24	41.91	0.454
61	41.90	0.489
79	41.80	0.856
Std Dev	41.75	1.000
31	41.68	1.275

048.99 Water Soluble Phosphate		
Lab	Other	
34	42.11	0.000
Median	42.11	0.000

048.XX Water Soluble Phosphate		
Lab	Total Method	
14	42.42	-1.146
Std Dev	42.38	-1.000
14	42.35	-0.906
32	42.33	-0.832
32	42.32	-0.776
23	42.25	-0.536
23	42.13	-0.074
34	42.11	0.000
140	42.11	0.000
Median	42.11	0.000
61	41.98	0.481
330	41.94	0.628
24	41.93	0.647
24	41.91	0.721
61	41.90	0.758
Std Dev	41.83	1.000
79	41.80	1.146
31	41.68	1.590

050.50 %K ₂ O Soluble Potash		
Lab	ICP(Oxalate)	
23	0.24	-1.340
Std Dev	0.21	-1.000
Median	0.14	0.000
Std Dev	0.07	1.000
23	0.04	1.340

050.51 %K ₂ O Soluble Potash		
Lab	ICP(Citrate)	
137	0.25	0.000

Median	0.25	0.000
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050.99 Soluble Potash		
Lab	%K ₂ O	Other
330	0.80	-100.053
24	0.25	-1.787
Std Dev	0.25	-1.000
24	0.24	0.000
61	0.24	0.000
61	0.24	0.000
Median	0.24	0.000
Std Dev	0.23	1.000
31	0.23	1.340

050.XX Soluble Potash		
Lab	%K ₂ O	Total Method
330	0.80	-75.040
24	0.25	-1.340
137	0.25	-1.340
Std Dev	0.25	-1.000
23	0.24	0.000
24	0.24	0.000
61	0.24	0.000
61	0.24	0.000
Median	0.24	0.000
Std Dev	0.23	1.000
31	0.23	1.005
23	0.04	26.800

060.00 Free Water		
Lab	Vacuum Oven	
23	2.03	-1.439
Std Dev	1.98	-1.000
23	1.91	-0.384
24	1.90	-0.297
140	1.90	-0.297
31	1.88	-0.143
Median	1.87	0.000
24	1.85	0.143
32	1.80	0.582
Std Dev	1.75	1.000
34	1.73	1.197
32	1.72	1.329
79	1.61	2.252

060.10 Free Water		
Lab	Vacuum Desiccator	
61	1.52	-1.340
Std Dev	1.50	-1.000
Median	1.47	0.000
Std Dev	1.44	1.000
61	1.43	1.340

060.99 Free Water		
Lab	Other	
47	7.85	-28.317
330	2.01	-1.676
Std Dev	1.86	-1.000
14	1.65	-0.011
Median	1.64	0.000
14	1.64	0.011
275	1.62	0.103
275	1.44	0.924

060.XX Free Water		
Lab	Total Method	
47	7.85	-29.651
23	2.03	-1.291
330	2.01	-1.194
Std Dev	1.97	-1.000
23	1.91	-0.707
24	1.90	-0.658
140	1.90	-0.658
31	1.88	-0.573
24	1.85	-0.414
32	1.80	-0.171
Median	1.77	0.000
34	1.73	0.171
32	1.72	0.244
14	1.65	0.585
14	1.64	0.609
275	1.62	0.707
79	1.61	0.755
Std Dev	1.56	1.000
61	1.52	1.218
275	1.44	1.584
61	1.43	1.657

101.30 Acid Soluble Calcium			
Lab	%CaO	ICP	
14	0.23	-2.386	
330	0.21	-1.468	
Std Dev	0.19	-1.000	
61	0.19	-0.918	
61	0.18	-0.551	
32	0.17	-0.184	
24	0.17	0.000	
32	0.17	0.000	
Median	0.17	0.000	
23	0.16	0.184	
24	0.16	0.184	
31	0.14	0.789	
23	0.14	0.918	
34	0.14	0.918	
Std Dev	0.14	1.000	
14	0.13	1.468	

101.XX Acid Soluble Calcium			
Lab	%CaO	Total Method	
14	0.23	-2.386	
330	0.21	-1.468	
Std Dev	0.19	-1.000	
61	0.19	-0.918	
61	0.18	-0.551	
32	0.17	-0.184	
24	0.17	0.000	
32	0.17	0.000	
Median	0.17	0.000	
23	0.16	0.184	
24	0.16	0.184	
31	0.14	0.789	
23	0.14	0.918	
34	0.14	0.918	
Std Dev	0.14	1.000	
14	0.13	1.468	

121.00 Acid Soluble Magnesium			
Lab	%MgO	Atomic Absorption	
275	1.31	-1.340	
Std Dev	1.30	-1.000	
Median	1.30	0.000	
Std Dev	1.30	1.000	

275	1.30	1.340
121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
34	1.52	-0.987
23	1.50	-0.611
24	1.50	-0.517
32	1.49	-0.423
32	1.49	-0.329
23	1.47	-0.047
Median	1.47	0.000
24	1.47	0.047
31	1.44	0.470
14	1.42	0.893
14	1.42	0.893
Std Dev	1.41	1.000
61	1.38	1.646
61	1.38	1.740

121.99 Acid Soluble Magnesium		
Lab	%MgO	Other
330	1.52	0.000
Median	1.52	0.000

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
34	1.52	-0.797
330	1.52	-0.724
23	1.50	-0.507
24	1.50	-0.435
32	1.49	-0.362
32	1.49	-0.290
23	1.47	-0.072
24	1.47	0.000
Median	1.47	0.000
31	1.44	0.326
14	1.42	0.652
14	1.42	0.652
Std Dev	1.40	1.000
61	1.38	1.231
61	1.38	1.304
275	1.31	2.318
275	1.30	2.463

144..01 Sulfate Sulfur (S)		
Lab		Gravimetric
241	2.07	-1.340
Std Dev	2.05	-1.000
Median	2.02	0.000
Std Dev	1.98	1.000
79	1.97	1.340

144.99 Sulfate Sulfur (S)		
Lab		Other
330	5.16	-36.487
241	2.07	-1.926
Std Dev	1.98	-1.000
32	1.97	-0.865
34	1.96	-0.754
32	1.94	-0.530
24	1.91	-0.140
23	1.90	-0.084
Median	1.89	0.000
23	1.89	0.084
24	1.87	0.251
14	1.84	0.642
14	1.84	0.642
Std Dev	1.80	1.000
61	1.79	1.200
31	1.78	1.228
61	1.76	1.480

144.XX Sulfate Sulfur (S)		
Lab		Total Method
330	5.16	-33.258
241	2.07	-1.659
241	2.07	-1.659
Std Dev	2.00	-1.000
32	1.97	-0.689
79	1.97	-0.638
34	1.96	-0.587
32	1.94	-0.383
24	1.91	-0.026
Median	1.90	0.000
23	1.90	0.026
23	1.89	0.179
24	1.87	0.332
14	1.84	0.689

14	1.84	0.689
Std Dev	1.80	1.000
61	1.79	1.200
31	1.78	1.225
61	1.76	1.455

151.30 Total Arsenic		
Lab		ICP
330	11.50	-4.074
Std Dev	9.21	-1.000
61	9.00	-0.724
24	8.46	0.000
Median	8.46	0.000
335	8.00	0.616
Std Dev	7.71	1.000
31	5.93	3.397

151.99 Total Arsenic		
Lab		Other
275	10.39	-0.343
275	10.30	-0.296
140	9.77	0.000
Median	9.77	0.000
Std Dev	7.98	1.000
18	7.90	1.044
18	7.70	1.156

151.XX Total Arsenic		
Lab		Total Method
330	11.50	-1.655
Std Dev	10.40	-1.000
275	10.39	-0.989
275	10.30	-0.938
140	9.77	-0.621
61	9.00	-0.161
Median	8.73	0.000
24	8.46	0.161
335	8.00	0.436
18	7.90	0.496
18	7.70	0.615
Std Dev	7.06	1.000
31	5.93	1.676

165.99 Acid Soluble Boron		
Lab	PPM	Other
24	84.45	-1.340
Std Dev	82.88	-1.000
Median	78.25	0.000
Std Dev	73.62	1.000
330	72.05	1.340

165.XX, ppm Acid Soluble Boron		
Lab	PPM	Total Method
24	84.45	-1.340
Std Dev	82.88	-1.000
Median	78.25	0.000
Std Dev	73.62	1.000
330	72.05	1.340

171.99 Water Soluble Boron		
Lab	PPM	Other
330	18.27	0.000
Median	18.27	0.000

171.XX Water Soluble Boron		
Lab	PPM	Total Method
330	18.27	0.000
Median	18.27	0.000

181.00 Total Cadmium		
Lab		Atomic Absorbion
330	30.00	0.000
Median	30.00	0.000

181.30 Total Cadmium		
Lab	PPM	ICP
31	32.58	-0.863
61	32.00	-0.598
61	31.00	-0.138
18	30.70	0.000
Median	30.70	0.000
335	29.05	0.761
Std Dev	28.53	1.000
275	28.13	1.182
275	26.67	1.856

181.99	Total Cadmium	
Lab	Other	
24	34.10	-1.340
Std Dev	33.54	-1.000
Median	31.88	0.000
Std Dev	30.21	1.000
18	29.65	1.340

181.XX	Total Cadmium	
Lab	PPM	Total Method
24	34.10	-1.968
31	32.58	-1.167
Std Dev	32.26	-1.000
61	32.00	-0.866
61	31.00	-0.341
18	30.70	-0.184
Median	30.35	0.000
330	30.00	0.184
18	29.65	0.367
335	29.05	0.685
Std Dev	28.44	1.000
275	28.13	1.165
275	26.67	1.934

190.00	Aluminum	
Lab	%Al ₂ O ₃	ICP
275	1.29	-2.165
275	1.24	-1.134
Std Dev	1.23	-1.000
14	1.22	-0.825
14	1.21	-0.618
24	1.20	-0.412
23	1.19	-0.103
34	1.18	0.000
Median	1.18	0.000
24	1.18	0.103
23	1.17	0.206
32	1.15	0.722
32	1.15	0.722
Std Dev	1.13	1.000
61	1.13	1.031
61	1.13	1.134

190.99	Aluminum	
Lab	%Al ₂ O ₃	Atomic Absorption
330	1.19	-1.340
Std Dev	1.19	-1.000
Median	1.18	0.000
Std Dev	1.17	1.000
31	1.16	1.340

190.XX	Aluminum	
Lab	%Al ₂ O ₃	Total Method
275	1.29	-2.745
275	1.24	-1.438
14	1.22	-1.046
Std Dev	1.22	-1.000
14	1.21	-0.784
24	1.20	-0.523
330	1.19	-0.261
23	1.19	-0.131
34	1.18	0.000
Median	1.18	0.000
24	1.18	0.131
23	1.17	0.261
31	1.16	0.458
32	1.15	0.915
32	1.15	0.915
Std Dev	1.14	1.000
61	1.13	1.307
61	1.13	1.438

191.00	Total Chromium	
Lab	Atomic Absorption	
330	214.00	0.000
Median	214.00	0.000

191.30	Total Chromium	
Lab	ICP	
31	219.38	-0.758
61	217.00	-0.371
61	215.50	-0.126
Median	214.73	0.000
18	213.95	0.126
Std Dev	208.59	1.000
18	206.55	1.332
335	171.24	7.084

191.99	Total Chromium	
Lab	PPM	Other
24	229.50	0.000
Median	229.50	0.000

191.XX	Total Chromium	
Lab	PPM	Total Method
24	229.50	-3.598
31	219.38	-1.128
Std Dev	218.85	-1.000
61	217.00	-0.549
61	215.50	-0.183
Median	214.75	0.000
330	214.00	0.183
18	213.95	0.195
Std Dev	210.65	1.000
18	206.55	2.000
335	171.24	10.613

202.30	Acid Soluble Cobalt	
Lab	PPM	ICP
335		

202.99	Acid Soluble Cobalt	
Lab	Other	
24	1.21	0.000
Median	1.21	0.000

202.XX	Acid Soluble Cobalt	
Lab	PPM	Total Method
335	1.79	-1.189
Std Dev	1.70	-1.000
61	1.50	-0.553
18	1.30	-0.106
18	1.30	-0.106
Median	1.25	0.000
24	1.21	0.106
61	1.00	0.564
Std Dev	0.80	1.000
31	0.00	2.797
330	0.00	2.797

221.00	Acid Soluble Copper	
Lab	Atomic Absorption	

330	0.00	0.000
Median	0.00	0.000

221.30	Acid Soluble Copper	
Lab	PPM	ICP
18	0.27	-1.366
18	0.26	-1.340
Std Dev	0.19	-1.000
31	0.00	0.000
61	0.00	0.000
61	0.00	0.000
Median	0.00	0.000

221.99	Acid Soluble Copper	
Lab	Other	
24	0.00	0.000
Median	0.00	0.000

221.XX	Acid Soluble Copper	
Lab	PPM	Total Method
18	0.27	-2.732
18	0.26	-2.680
Std Dev	0.10	-1.000
24	0.00	0.000
31	0.00	0.000
61	0.00	0.000
61	0.00	0.000
330	0.00	0.000
Median	0.00	0.000

241.30	Acid Soluble Iron	
Lab	%Fe ₂ O ₃	ICP
14	1.68	-25.621
275	1.24	-6.754
275	1.22	-5.682
Std Dev	1.11	-1.000
34	1.10	-0.750
23	1.10	-0.536
23	1.09	-0.322
32	1.09	-0.107
Median	1.08	0.000
24	1.08	0.107
24	1.08	0.322
32	1.08	0.322

14	1.07	0.750
Std Dev	1.06	1.000
31	1.05	1.394
61	1.04	1.822
61	1.03	2.251

241.99	Acid Soluble Iron	
Lab	%Fe ₂ O ₃	Other
330	1.07	0.000
Median	1.07	0.000

241.XX	Acid Soluble Iron	
Lab	%Fe ₂ O ₃	Total Method
14	1.68	-28.973
275	1.24	-7.726
275	1.22	-6.519
Std Dev	1.10	-1.000
34	1.10	-0.966
23	1.10	-0.724
23	1.09	-0.483
32	1.09	-0.241
24	1.08	0.000
Median	1.08	0.000
24	1.08	0.241
32	1.08	0.241
330	1.07	0.266
14	1.07	0.724
Std Dev	1.06	1.000
31	1.05	1.449
61	1.04	1.932
61	1.03	2.414

251.00	Total Lead	
Lab	Atomic Absorbion	
330	2.00	0.000
Median	2.00	0.000

251.30	Total Lead	
Lab	PPM	ICP
335	24.75	-2.709
18	11.75	-1.217
18	11.65	-1.205
Std Dev	9.86	-1.000
275	1.20	-0.006

Median	1.15	0.000
275	1.10	0.006
31	0.00	0.132
61	0.00	0.132
61	0.00	0.132

251.99	Total Lead	
Lab	Other	
24	0.00	0.000
Median	0.00	0.000

251.XX	Total Lead	
Lab	PPM	Total Method
335	24.75	-3.424
18	11.75	-1.538
18	11.65	-1.523
Std Dev	8.04	-1.000
330	2.00	-0.123
275	1.20	-0.007
Median	1.15	0.000
275	1.10	0.007
24	0.00	0.167
31	0.00	0.167
61	0.00	0.167
61	0.00	0.167

261.30	Acid Soluble Manganese	
Lab	ICP	
330	130.00	-1.340
Std Dev	129.86	-1.000
Median	129.46	0.000
Std Dev	129.06	1.000
31	128.93	1.340

261.99	Acid Soluble Manganese	
Lab	PPM	Other
61	129.50	-0.487
24	129.00	-0.244
61	128.50	0.000
Median	128.50	0.000
Std Dev	126.45	1.000
18	126.25	1.096
18	121.60	3.362

261.XX	Acid Soluble Manganese	
Lab	PPM	Total Method
330	130.00	-0.768
61	129.50	-0.411
24	129.00	-0.054
31	128.93	0.000
Median	128.93	0.000
61	128.50	0.304
Std Dev	127.53	1.000
18	126.25	1.912
18	121.60	5.235

281.30	Total Mercury	
Lab	PPM	ICP
335	0.01	-1.340
Std Dev	0.01	-1.000
Median	0.01	0.000
Std Dev	0.00	1.000
24	0.00	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
330	0.02	-1.449
Std Dev	0.02	-1.000
335	0.01	0.000
Median	0.01	0.000
Std Dev	0.00	1.000
24	0.00	1.231

289.30	Total Molybdenum	
Lab	PPM	ICP
18		

289.99	Total Molybdenum	
Lab	PPM	Other
24	5.51	0.000
Median	5.51	0.000

289.XX	Total Molybdenum	
Lab	PPM	Total Method

24	5.51	-0.755
18	4.55	-0.222
31	4.28	-0.069
18	4.15	0.000
Median	4.15	0.000
61	2.50	0.916
Std Dev	2.35	1.000
61	1.50	1.472
330	0.00	2.305

291.30	Total Nickel	
Lab	ICP	
18		

291.99	Total Nickel	
Lab	PPM	Other
24	12.60	0.000
Median	12.60	0.000

291.XX	Total Nickel	
Lab	PPM	Total Method
18	24.65	-2.333
18	24.55	-2.312
Std Dev	18.31	-1.000
31	16.15	-0.547
330	14.50	-0.200
Median	13.55	0.000
24	12.60	0.200
61	12.00	0.326
61	11.50	0.431
335	9.97	0.753

301.30	Total Selenium	
Lab	PPM	ICP
330	3.00	-11.000
Std Dev	0.57	-1.000
18	0.45	-0.514
18	0.40	-0.308
Median	0.33	0.000
140	0.25	0.308
Std Dev	0.08	1.000
24	0.07	1.067
335	0.01	1.295

301.XX Total Selenium		
Lab	PPM	Total Mthd
330	3.00	-11.000
Std Dev	0.57	-1.000
18	0.45	-0.514
18	0.40	-0.308
Median	0.33	0.000
140	0.25	0.308
Std Dev	0.08	1.000
24	0.07	1.067
335	0.01	1.295

311.00 Sodium		
Lab	%Na ₂ O	Atomic Absorbtion
330	0.20	0.000
Median	0.20	0.000

311.99 Sodium		
Lab	%Na ₂ O	Other
23	0.60	-1.369
24	0.60	-1.254
24	0.60	-1.254
Std Dev	0.58	-1.000
61	0.54	0.000
61	0.54	0.000
Median	0.54	0.000
31	0.53	0.171
23	0.53	0.228

311.XX Sodium		
Lab	%Na ₂ O	Total Method
23	0.60	-1.274
24	0.60	-1.168
24	0.60	-1.168
Std Dev	0.59	-1.000
61	0.54	0.000
61	0.54	0.000
Median	0.54	0.000
31	0.53	0.159
23	0.53	0.212
Std Dev	0.49	1.000
330	0.20	7.217

321.00 Acid Soluble Zinc		
Lab	PPM	Atomic Absorption
275	80.00	-1.340
Std Dev	78.73	-1.000
Median	75.00	0.000
Std Dev	71.27	1.000
275	70.00	1.340

321.30 Acid Soluble Zinc		
Lab	PPM	ICP
31	100.73	-10.064
61	81.50	-1.368
Std Dev	80.69	-1.000
61	79.00	-0.237
Median	78.48	0.000
18	77.95	0.237
24	77.90	0.260
18	76.75	0.780

321.99 Acid Soluble Zinc		
Lab	PPM	Other
330	84.00	0.000
Median	84.00	0.000

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method
31	100.73	-8.087
330	84.00	-1.861
Std Dev	81.69	-1.000
61	81.50	-0.931
275	80.00	-0.372
61	79.00	0.000
Median	79.00	0.000
18	77.95	0.391
24	77.90	0.409
18	76.75	0.838
Std Dev	76.31	1.000
275	70.00	3.350

325.10 Fluoride		
Lab	%	Electrode
32	0.63	-1.038
32	0.62	-0.849
79	0.62	-0.849

23	0.60	-0.472
23	0.58	-0.094
24	0.58	0.000
Median	0.58	0.000
24	0.56	0.283
34	0.54	0.661
14	0.54	0.698
31	0.54	0.755
14	0.52	1.038

325.99 Fluoride		
Lab	%	Other
61	0.61	-1.005
61	0.60	0.000
Median	0.60	0.000
330	0.57	1.675

325.XX Fluoride		
Lab	%	Total Method
32	0.63	-1.126
32	0.62	-0.911
79	0.62	-0.911
61	0.61	-0.697
23	0.60	-0.482
61	0.60	-0.375
23	0.58	-0.054
Median	0.58	0.000
24	0.58	0.054
330	0.57	0.161
24	0.56	0.375
34	0.54	0.804
14	0.54	0.847
31	0.54	0.911
14	0.52	1.233