

Sample	2021-10		Grade	MAP+S	
	AOAC Ref.	Method #		# of Labs.	Grand Median
AMMONIACAL NITROGEN					
Ammoniacal Nitrogen, Other		001.99	5	12.93	0.11
Method Group 001.XX PCT			5	12.93	0.13
TOTAL NITROGEN					
Total Nitrogen, Combustion	993.13	010.60	2	13.03	0.01
Method Group 010.XX PCT			2	13.03	0.01
TOTAL PHOSPHATE					
Total Phosphate, Spectrometric	978.02	020.20	6	34.48	0.08
Method Group 020.XX PCT			6	34.48	0.10
INSOLUBLE PHOSPHATE					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	6	0.19	0.05
Method Group 030.XX PCT			6	0.19	0.06
INDIRECT AVAILABLE PHOSPHATE					
Indirect Available Phosphate, Spectrometric	960.02	040.20	5	34.40	0.15
Indirect Available Phosphate, Other		040.99	1	34.23	0.00
Method Group 040.XX PCT			6	34.31	0.17
DIRECT AVAILABLE PHOSPHATE					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	2	33.64	0.01
Method Group 041.XX PCT			2	33.64	0.01
WATER SOLUBLE PHOSPHATE					
Water Soluble Phosphate, Spectrometric	970.01	048.20	6	30.14	0.33
Method Group 048.XX PCT			6	30.14	0.40
SOLUBLE POTASH AS K₂O					
Soluble Potash, Other		050.99	2	0.13	0.00
Method Group 050.XX PCT			2	0.13	0.00
FREE WATER					
Free Water, Vacuum Oven	965.08B	060.00	6	0.53	0.19
Method Group 060.XX PCT			6	0.53	0.24
ACID SOLUBLE CALCIUM AS CaO					
Acid Soluble Calcium, ICP		101.30	4	0.26	0.02
Method Group 101.XX PCT			4	0.26	0.03
ACID SOLUBLE MAGNESIUM AS MgO					
Acid Soluble Magnesium, ICP		121.30	4	0.71	0.02
Method Group 121.XX PCT			4	0.71	0.02
SULFATE SULFUR (S)					
Sulfur, Gravimetric	980.02(a)	144.01	3	7.66	0.07
Sulfur, Other		144.99	1	7.50	0.00
Method Group 144.XX PCT			4	7.58	0.15
TOTAL SULFUR (S)					
Sulfur, Other		145.99	1	15.07	0.0
Method Group 145.XX PCT			1	15.07	0.0
TOTAL ARSENIC					
Total Arsenic, ICP	980.02(b)	151.02	1	4.0	0.0
Method Group 151.XX PPM			1	4.0	0.0
TOTAL CADMIUM					
Total Cadmium, ICP		181.30	3	4.5	2.1
Method Group 181.XX PPM			3	4.5	2.5
ALUMINUM AS Al₂O₃					
ICP, %			4	1.09	0.01
Method Group 190.XX PCT			4	1.09	0.01
TOTAL CHROMIUM					
Total Chromium, ICP		191.30	3	67	2.3
Method Group 191.XX PPM			3	67	2.8
ACID SOLUBLE COBALT					
Acid Soluble Cobalt, ICP		202.30	3	3	1.8
Method Group 202.XX PPM			3	3	2.2
ACID SOLUBLE COPPER					

Method Group 221.XX PPM			3	5.5	4.1
ACID SOLUBLE IRON AS Fe₂O₃					
Acid Soluble Iron, ICP	241.30		4	1.36	0.03
Method Group 241.XX PCT			4	1.36	0.04
TOTAL LEAD					
Total Lead, ICP	251.30		3	3.5	2.5
Method Group 251.XX PPM			3	3.5	3.1
ACID SOLUBLE MANGANESE					
Acid Soluble Manganese, ICP	972.02a 261.30		3	227	3.3
Method Group 261.XX PPM			3	227	4.0
TOTAL MOLYBDENUM					
Total Molybdenum, ICP	289.30		3	17	4.4
Method Group 289.XX PPM			3	17	5.3
TOTAL NICKEL					
Total Nickel, ICP	291.30		3	22.5	3.9
Method Group 291.XX PPM			3	22.5	4.8
SODIUM AS Na₂O					
Sodium, Other	311.99		2	0.16	0.00
Method Group 311.XX PCT			2	0.16	0.00
ACID SOLUBLE ZINC					
Acid Soluble Zinc, ICP	321.30		3	90.0	5.3
Method Group 321.XX %			3	90.0	6.5
FLUORIDE					
Volumetric	325.10		4	1.58	0.06
Distilled/Electrode	325.99		2	1.66	0.00
Method Group 325.XX PCT			6	1.60	0.06

001.99 Ammoniacal Nitrogen		
Lab		Other
34	12.99	-0.554
61	12.95	-0.185
61	12.93	0.000
Median	12.93	0.000
Std Dev	12.82	1.000
79	12.80	1.155
79	12.72	1.894

001.XX Ammoniacal Nitrogen		
Lab		Total Method
34	12.99	-0.554
61	12.95	-0.185
61	12.93	0.000
Median	12.93	0.000
Std Dev	12.82	1.000
79	12.80	1.155
79	12.72	1.894

010.60 Total Nitrogen		
Lab		Combustion
79	13.04	-1.340
Std Dev	13.04	-1.000
Median	13.03	0.000
Std Dev	13.01	1.000
79	13.01	1.340

010.XX Total Nitrogen		
Lab		Total Method
79	13.04	-1.340
Std Dev	13.04	-1.000
Median	13.03	0.000
Std Dev	13.01	1.000
79	13.01	1.340

020.20 Total Phosphate		
Lab		Spectrometric
16	34.79	-3.603
Std Dev	34.57	-1.000
79	34.55	-0.804
79	34.52	-0.447
Median	34.48	0.000
61	34.45	0.447

34	34.43	0.685
Std Dev	34.40	1.000
61	34.28	2.472

020.XX Total Phosphate		
Lab		Total Method
16	34.79	-3.603
Std Dev	34.57	-1.000
79	34.55	-0.804
79	34.52	-0.447
Median	34.48	0.000
61	34.45	0.447
34	34.43	0.685
Std Dev	34.40	1.000
61	34.28	2.472

030.20 Insoluble Phosphate		
Lab		Spectrometric
16	0.23	-0.710
61	0.22	-0.517
34	0.20	-0.141
Median	0.19	0.000
61	0.19	0.141
Std Dev	0.14	1.000
79	0.13	1.175
79	0.12	1.364

030.XX Insoluble Phosphate		
Lab		Total Method
16	0.23	-0.710
61	0.22	-0.517
34	0.20	-0.141
Median	0.19	0.000
61	0.19	0.141
Std Dev	0.14	1.000
79	0.13	1.175
79	0.12	1.364

040.20 Indirect Available Phosphate		
Lab		Spectrometric
16	34.55	-1.063
Std Dev	34.55	-1.000
79	34.42	-0.137
79	34.40	0.000

Median	34.40	0.000
Std Dev	34.25	1.000
61	34.23	1.203
61	34.14	1.787

040.99 Indirect Available Phosphate		
Lab		Other
34	34.23	0.000
Median	34.23	0.000

040.XX Indirect Available Phosphate		
Lab		Total Method
16	34.55	-1.709
Std Dev	34.45	-1.000
79	34.42	-0.758
79	34.40	-0.617
Median	34.31	0.000
34	34.23	0.617
61	34.23	0.617
Std Dev	34.17	1.000
61	34.14	1.217

041.10 Direct Available Phosphate		
Lab		Gravimetric Quimociac
79	33.65	-1.340
Std Dev	33.65	-1.000
Median	33.64	0.000
Std Dev	33.62	1.000
79	33.62	1.340

041.XX Direct Available Phosphate		
Lab		Total Method
79	33.65	-1.340
Std Dev	33.65	-1.000
Median	33.64	0.000
Std Dev	33.62	1.000
79	33.62	1.340

048.20 Water Soluble Phosphate		
Lab		Spectrometric
16	30.46	-0.981
61	30.40	-0.785
34	30.19	-0.166
Median	30.14	0.000

61	30.08	0.166
79	29.84	0.891
79	29.84	0.891

048.XX Water Soluble Phosphate		
Lab		Total Method
16	30.46	-0.981
61	30.40	-0.785
34	30.19	-0.166
Median	30.14	0.000
61	30.08	0.166
79	29.84	0.891
79	29.84	0.891

050.99 Soluble Potash		
Lab	%K ₂ O	Other
61	0.13	-1.340
Std Dev	0.13	-1.000
Median	0.13	0.000
Std Dev	0.13	1.000
61	0.13	1.340

050.XX Soluble Potash		
Lab	%K ₂ O	Total Method
61	0.13	-1.340
Std Dev	0.13	-1.000
Median	0.13	0.000
Std Dev	0.13	1.000
61	0.13	1.340

060.00 Free Water		
Lab		Vacuum Oven
79	0.68	-0.761
79	0.66	-0.658
16	0.65	-0.600
Median	0.53	0.000
61	0.42	0.600
61	0.39	0.729
Std Dev	0.34	1.000
34	0.14	2.012

060.XX Free Water		
Lab		Total Method
79	0.68	-0.761

79	0.66	-0.658
16	0.65	-0.600
Median	0.53	0.000
61	0.42	0.600
61	0.39	0.729
Std Dev	0.34	1.000
34	0.14	2.012

101.30 Acid Soluble Calcium		
Lab	%CaO	ICP
34	0.28	-0.857
61	0.27	-0.637
Median	0.26	0.000
16	0.24	0.637
61	0.24	0.683

101.XX Acid Soluble Calcium		
Lab	%CaO	Total Method
34	0.28	-0.857
61	0.27	-0.637
Median	0.26	0.000
16	0.24	0.637
61	0.24	0.683

121.30 Acid Soluble Magnesium		
Lab	%MgO	ICP
34	0.73	-0.967
61	0.72	-0.414
Median	0.71	0.000
61	0.71	0.414
Std Dev	0.69	1.000
16	0.68	1.907

121.XX Acid Soluble Magnesium		
Lab	%MgO	Total Method
34	0.73	-0.967
61	0.72	-0.414
Median	0.71	0.000
61	0.71	0.414
Std Dev	0.69	1.000
16	0.68	1.907

144..01 Sulfate Sulfur (S)		
Lab	Gravimetric	
61	8.85	-2.109
Std Dev	6.56	-1.000
61	4.50	0.000

79	7.68	-0.306
79	7.66	0.000
Median	7.66	0.000
Std Dev	7.59	1.000
16	7.51	2.374

144.99 Sulfate Sulfur (S)		
Lab	Other	
34	7.50	0.000
Median	7.50	0.000

144.XX Sulfate Sulfur (S)		
Lab	Total Method	
79	7.68	-0.804
79	7.66	-0.639
Median	7.58	0.000
16	7.51	0.639
34	7.50	0.722

145.99 Total Sulfur (S)		
Lab	Other	
34	15.07	0.000
Median	15.07	0.000

145.XX Total Sulfur (S)		
Lab	Total Method	
34	15.07	0.000
Median	15.07	0.000

151.30 Total Arsenic		
Lab	ICP	
61	4.00	0.000
Median	4.00	0.000

151.XX Total Arsenic		
Lab	Total Method	
61	4.00	0.000
Median	4.00	0.000

181.30 Total Cadmium		
Lab	PPM	ICP
61	8.85	-2.109
Std Dev	6.56	-1.000
61	4.50	0.000

Median	4.50	0.000
16	3.32	0.571

181.XX Total Cadmium		
Lab	PPM	Total Method
61	8.85	-2.109
Std Dev	6.56	-1.000
61	4.50	0.000
Median	4.50	0.000
16	3.32	0.571

190.00 Aluminum		
Lab	%Al ₂ O ₃	ICP
34	1.11	-2.352
Std Dev	1.10	-1.000
61	1.10	-0.164
Median	1.09	0.000
16	1.09	0.164
Std Dev	1.09	1.000
61	1.08	2.024

190.XX Aluminum		
Lab	%Al ₂ O ₃	Total Method
34	1.11	-2.352
Std Dev	1.10	-1.000
61	1.10	-0.164
Median	1.09	0.000
16	1.09	0.164
Std Dev	1.09	1.000
61	1.08	2.024

191.30 Total Chromium		
Lab	ICP	
61	68.50	-0.646
61	67.00	0.000
Median	67.00	0.000
Std Dev	64.68	1.000
16	62.28	2.034

191.XX Total Chromium		
Lab	PPM	Total Method
61	68.50	-0.646
61	67.00	0.000
Median	67.00	0.000

Std Dev	64.68	1.000
16	62.28	2.034

202.30 Acid Soluble Cobalt		
Lab	PPM	ICP
61	7.10	-2.082
Std Dev	5.18	-1.000
16	3.41	0.000
Median	3.41	0.000
61	2.35	0.598

202.XX Acid Soluble Cobalt		
Lab	PPM	Total Method
61	7.10	-2.082
Std Dev	5.18	-1.000
16	3.41	0.000
Median	3.41	0.000
61	2.35	0.598

221.30 Acid Soluble Copper		
Lab	PPM	ICP
61	9.00	-1.042
Std Dev	8.86	-1.000
61	5.50	0.000
Median	5.50	0.000
Std Dev	2.14	1.000
16	0.00	1.638

221.XX Acid Soluble Copper		
Lab	PPM	Total Method
61	9.00	-1.042
Std Dev	8.86	-1.000
61	5.50	0.000
Median	5.50	0.000
Std Dev	2.14	1.000
16	0.00	1.638

241.30 Acid Soluble Iron		
Lab	%Fe ₂ O ₃	ICP
34	1.38	-0.867
61	1.37	-0.520
Median	1.36	0.000
61	1.34	0.520
Std Dev	1.33	1.000
16	1.32	1.370

241.XX Acid Soluble Iron		
Lab	%Fe ₂ O ₃	Total Method
34	1.38	-0.867

61	1.37	-0.520
Median	1.36	0.000
61	1.34	0.520
Std Dev	1.33	1.000
16	1.32	1.370

251.30 Total Lead		
Lab	PPM	ICP
61	7.50	-1.597
Std Dev	6.00	-1.000
61	3.50	0.000
Median	3.50	0.000
Std Dev	1.00	1.000
16	0.79	1.083

251.XX Total Lead		
Lab	PPM	Total Method
61	7.50	-1.597
Std Dev	6.00	-1.000
61	3.50	0.000
Median	3.50	0.000
Std Dev	1.00	1.000
16	0.79	1.083

261.30 Acid Soluble Manganese		
Lab	PPM	ICP
61	228.00	-0.459
61	226.50	0.000
Median	226.50	0.000
Std Dev	223.24	1.000
16	219.25	2.221

261.XX Acid Soluble Manganese		
Lab	PPM	Total Method
61	228.00	-0.459
61	226.50	0.000
Median	226.50	0.000
Std Dev	223.24	1.000
16	219.25	2.221

289.30 Total Molybdenum		
Lab	PPM	ICP
61	1.37	-0.520
Median	1.36	0.000
61	1.34	0.520
Std Dev	1.33	1.000
16	1.32	1.370

289.XX Total Molybdenum		
Lab	PPM	Total Method
61	21.50	-1.147
Std Dev	20.86	-1.000
61	16.50	0.000
Median	16.50	0.000
Std Dev	12.14	1.000
16	9.82	1.533

291.30 Total Nickel		
Lab	PPM	ICP
61	25.50	-0.768
61	22.50	0.000
Median	22.50	0.000
Std Dev	18.59	1.000
16	15.03	1.912

291.XX Total Nickel		
Lab	PPM	Total Method
61	25.50	-0.768
61	22.50	0.000
Median	22.50	0.000
Std Dev	18.59	1.000
16	15.03	1.912

311.99 Sodium		
Lab	%Na ₂ O	Other
61	0.16	0.000
61	0.16	0.000
Median	0.16	0.000

311.XX Sodium		
Lab	%Na ₂ O	Total Method
61	0.16	0.000
61	0.16	0.000
Median	0.16	0.000

321.30 Acid Soluble Zinc		
Lab	PPM	ICP
61	90.00	0.000
61	90.00	0.000
Median	90.00	0.000
Std Dev	84.66	1.000
16	75.70	2.680

321.XX Acid Soluble Zinc		
Lab	PPM	Total Method
61	90.00	0.000
61	90.00	0.000

Median	90.00	0.000
Std Dev	84.66	1.000
16	75.70	2.680

325.10 Fluoride		
Lab	%	Electrode
79	1.60	-0.364
79	1.59	-0.202
Median	1.58	0.000
34	1.57	0.202
16	1.34	3.782

325.99 Fluoride		
Lab	%	Other
61	1.66	-1.340
Median	1.66	0.000
61	1.65	1.340

325.XX Fluoride		
Lab	%	Total Method
61	1.66	-1.315
61	1.65	-1.112
79	1.60	-0.101
Median	1.60	0.000
79	1.59	0.101
34	1.57	0.607
16	1.34	5.082