

# AFPC

**Sample**

**2008-04**

**Grade 12-40-0-0-1**

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	2	11.65	0.20
Ammoniacal Nitrogen, Other		001.99	11	11.89	0.04
Method Group 001.XX PCT			12	11.89	0.11
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	4	11.93	0.07
Total Nitrogen, Salicylic	955.04d	010.12	1	11.82	0.00
Total Nitrogen, Combustion	993.13	010.60	27	11.87	0.10
Total Nitrogen, Other		010.99	2	11.97	0.01
Method Group 010.XX PCT			33	11.87	0.12
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	1	40.64	0.00
Total Phosphate, Spectrometric	978.02	020.20	22	40.39	0.23
Total Phosphate, Alka. Quimociac	955.04d	020.30	1	40.95	0.00
Total Phosphate, Automated	970.03	020.40	1	40.52	0.00
Total Phosphate, Other	993.13	020.99	5	40.53	0.44
Method Group 020.XX PCT			25	40.43	0.30
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Gravimetric Quimociac	963.03C(a)	030.10	1	0.53	0.00
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	12	0.72	0.16
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.85	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	0.81	0.00
Insoluble Phosphate, Other		030.99	2	0.56	0.01
Method Group 030.XX PCT			17	0.72	0.22
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Spectrometric	960.02	040.20	12	39.59	0.21
Indirect Available Phosphate, Other		040.99	7	39.71	0.44
Method Group 040.XX PCT			18	39.61	0.36

**DIRECT AVAILABLE PHOSPHATE**

Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	8	39.53	0.80
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	38.74	0.25
Direct Available Phosphate, Automated	978.01	041.40	3	39.90	1.61
Direct Available Phosphate, ICP		041.50	5	39.56	0.73
Direct Available Phosphate, EDTA Extract	993.01	041.60	1	39.25	0.00
Method Group 041.XX PCT			18	39.43	1.15

**WATER SOLUBLE PHOSPHATE**

Water Soluble Phosphate, Gravimetric Quimociac	962.03	048.10	1	34.49	0.00
Water Soluble Phosphate, Spectrometric	970.01	048.20	15	34.74	0.23
Water Soluble Phosphate, Other		048.99	1	34.71	0.00
Method Group 048.XX PCT			14	34.71	0.22

**SOLUBLE POTASH AS K<sub>2</sub>O**

Soluble Potash, ICP(Oxalate)		050.50	3	0.13	0.01
Soluble Potash, ICP(Citrate)		050.51	1	0.16	0.00
Soluble Potash, Flame Photometric(Oxalate)	983.02B(a)	050.60	1	0.16	0.00
Soluble Potash, Other		050.99	8	0.12	0.00
Method Group 050.XX PCT			12	0.12	0.01

**FREE WATER**

Free Water, Vacuum Oven	965.08B	060.00	16	0.59	0.12
Free Water, Vacuum Desiccate	965.08A	060.10	2	0.64	0.05
Free Water, Other		060.99	2	0.86	0.02
Method Group 060.XX PCT			17	0.63	0.14

**ACID SOLUBLE CALCIUM AS CaO**

Acid Soluble Calcium, Atomic Absorption	945.04	101.00	1	0.46	0.00
Acid Soluble Calcium, ICP		101.30	20	0.41	0.03
Method Group 101.XX PCT			19	0.41	0.04

**ACID SOLUBLE MAGNESIUM AS MgO**

Acid Soluble Magnesium, Atomic Absorption	984.01	121.00	1	0.96	0.00
Acid Soluble Magnesium, ICP		121.30	22	0.89	0.04
Method Group 121.XX PCT			21	0.89	0.05

**SULFATE SULFUR (S)**

Sulfur, Gravimetric	980.02(a)	144.01	5	5.43	0.27
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Sulfur, Spectrometric		144.70	2	8.60	0.01
Sulfur, Other		144.99	14	5.27	1.58
Method Group 144.XX PCT			17	5.42	3.21
<b>TOTAL SULFUR (S)</b>					
Sulfur, Other		145.99	9	10.20	0.74
Method Group 145.XX PCT			8	10.20	0.94
<b>TOTAL ARSENIC</b>					
Total Arsenic, ICP	980.02(b)	151.02	5	8	0.6
Total Arsenic, Other		151.99	2	8	0.7
Method Group 151.XX PPM			6	8	1.2
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Other		165.99	6	291	178.2
Method Group 165.XX PPM			6	291	217.0
<b>TOTAL CADMIUM</b>					
Total Cadmium, Atomic Absorbtion		181.00	1	3	0.0
Total Cadmium, ICP		181.30	9	3	0.2
Total Cadmium, Other		181.99	1	3	0.0
Method Group 181.XX PPM			9	3	0.2
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			18	1.34	0.04
Water Soluble Chlorine, Other, %		190.99	1	1.34	0.00
Method Group 190.XX PCT			18	1.34	0.04
<b>TOTAL CHROMIUM</b>					
Total Chromium, Atomic Absorbtion		191.00	1	81	0.0
Total Chromium, ICP		191.30	11	65	3.7
Method Group 191.XX PPM			10	65	5.3
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, ICP		202.30	10	3	0.5
Acid Soluble Cobalt, Other		202.99	1	3	0.0
Method Group 202.XX PPM			10	3	0.5
<b>ACID SOLUBLE COPPER</b>					
Acid Soluble Copper, Atomic Absorption	975.01	221.00	3	2	0.2
Acid Soluble Copper, ICP		221.30	8	2	3.1

Acid Soluble Copper, Other		221.99	1	0	0.0
Method Group 221.XX PPM			9	1	2.9
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>					
Acid Soluble Iron, ICP		241.30	19	1.58	0.06
Acid Soluble Iron, Other		241.99	1	1.45	0.00
Method Group 241.XX PCT			21	1.57	0.10
<b>TOTAL LEAD</b>					
Total Lead, ICP		251.30	7	3	5.0
Total Lead, Other		251.99	1	2	0.0
Method Group 251.XX PPM			7	3	6.3
<b>ACID SOLUBLE MANGANESE</b>					
Acid Soluble Manganese, Atomic Absorption	972.02a	261.00	1	0	0.0
Acid Soluble Manganese, ICP	972.02a	261.30	8	278	13.8
Acid Soluble Manganese, Other		261.99	5	271	5.2
Method Group 261.XX PPM			14	271	14.5
<b>WATER SOLUBLE MANGANESE</b>					
Water Soluble Manganese, Other		271.99	1	265	0
Method Group 271.XX PCT			1	265	0.0
Total Mercury, ICP		281.30	1	2	0.00
<b>TOTAL MOLYBDENUM</b>					
Total Molybdenum, ICP		289.30	11	11	0.6
Total Molybdenum, Other		289.99	1	11	0.0
Method Group 289.XX PPM			11	11	0.6
<b>TOTAL NICKEL</b>					
Total Nickel, ICP		291.30	10	14	0.9
Total Nickel, Other		291.99	2	15	0.8
Method Group 291.XX PPM			11	14	1.1
<b>SODIUM AS Na<sub>2</sub>O</b>					
Sodium, Atomic Absorbtion	983.04	311.00	3	0.15	0.01
Sodium, Other		311.99	9	0.18	0.03
Method Group 311.XX PCT			11	0.17	0.03
<b>ACID SOLUBLE ZINC</b>					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	4	1.07	0.0

Acid Soluble Zinc, ICP	321.30	24	1.13	0.0
Acid Soluble Zinc, Other	321.99	2	1.15	0.0
Method Group 321.XX PPM		28	1.12	0.1
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<b>FLUORIDE</b>				
Water Soluble Zinc, Atomic Absorption	325.00	1	1.75	0.00
Volumetric	325.10	13	1.74	0.15
Distilled/Electrode	325.99	2	1.83	0.02
Method Group 325.XX PCT		14	1.76	0.09
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