

# AFPC

**Sample**

**2009-04**

**Grade**

**10-40-0-10-1**

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	3	11.32	0.27
Ammoniacal Nitrogen, Other		001.99	12	11.92	0.10
Method Group 001.XX PCT			15	11.90	0.11
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	11.83	0.02
Total Nitrogen, Salicylic	955.04d	010.12	1	11.81	0.00
Total Nitrogen, Combustion	993.13	010.60	23	11.88	0.11
Total Nitrogen, Other		010.99	4	11.93	0.12
Method Group 010.XX PCT			31	11.86	0.13
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	3	41.66	0.20
Total Phosphate, Spectrometric	978.02	020.20	23	41.60	0.24
Total Phosphate, ICP	970.03	020.40	3	42.94	0.42
Method Group 020.XX PCT			29	41.64	0.26
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Gravimetric Quimociac	963.03C(a)	030.10	1	0.06	0.00
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	13	0.20	0.14
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.19	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.19	0.00
Insoluble Phosphate, Other		030.99	3	0.28	0.13
Method Group 030.XX PCT			19	0.20	0.14
<b>INDIRECT AVAILABLE PHOSPHATE</b>					
Indirect Available Phosphate, Gravimetric Quimociac	960.02	040.10	1	41.61	0.00
Indirect Available Phosphate, Spectrometric	960.02	040.20	14	41.43	0.20
Indirect Available Phosphate, Other		040.99	2	41.30	0.18
Method Group 040.XX PCT			17	41.43	0.27

**DIRECT AVAILABLE PHOSPHATE**

Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	6	41.44	0.24
Direct Available Phosphate, Spectrometric	960.03D	041.20	2	40.62	0.29
Direct Available Phosphate, Automated	978.01	041.40	2	41.61	0.05
Direct Available Phosphate, ICP		041.50	4	41.24	0.35
Direct Available Phosphate, EDTA Extract	993.01	041.60	4	41.36	0.37
Method Group 041.XX PCT			18	41.34	0.49

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**WATER SOLUBLE PHOSPHATE**

Water Soluble Phosphate, Gravimetric Quimociac	962.03	048.10	1	36.71	0.00
Water Soluble Phosphate, Spectrometric	970.01	048.20	17	36.51	0.22
Water Soluble Phosphate, Other		048.99	1	36.57	0.00
Method Group 048.XX PCT			19	36.57	0.26

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

Soluble Potash, ICP(Oxalate)		050.50	3	0.12	0.00
Soluble Potash, Other		050.99	8	0.11	0.01
Method Group 050.XX PCT			11	0.11	0.01

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**FREE WATER**

Free Water, Vacuum Oven	965.08B	060.00	19	1.02	0.17
Free Water, Vacuum Desiccate	965.08A	060.10	3	0.81	0.10
Method Group 060.XX PCT			22	0.99	0.17

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**ACID SOLUBLE CALCIUM AS CaO**

Acid Soluble Calcium, ICP		101.30	20	0.30	0.02
Method Group 101.XX PCT			20	0.30	0.02

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**ACID SOLUBLE MAGNESIUM AS MgO**

Acid Soluble Magnesium, ICP		121.30	20	0.61	0.04
Method Group 121.XX PCT			20	0.61	0.05

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**SULFATE SULFUR (S)**

Sulfur, Gravimetric	980.02(a)	144.01	6	5.10	0.15
Sulfur, Other		144.99	16	4.94	0.21
Method Group 144.XX PCT			22	5.01	0.27

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**TOTAL SULFUR (S)**

Sulfur, Other		145.99	13	9.95	0.39
Method Group 145.XX PCT			13	9.95	0.47

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**TOTAL ARSENIC**

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Total Arsenic, ICP	980.02(b)	151.02	5	8	1.1
Method Group 151.XX PPM			5	8	1.4
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Other		165.99	1	36	0.0
Method Group 165.XX PPM			1	36	0.0
<b>TOTAL CADMIUM</b>					
Total Cadmium, ICP		181.30	9	4	0.4
Total Cadmium, Other		181.99	1	4	0.0
Method Group 181.XX PPM			10	4	0.4
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			18	1.40	0.06
Water Soluble Chlorine, Other, %		190.99	1	1.36	0.00
Method Group 190.XX PCT			19	1.40	0.07
<b>TOTAL CHROMIUM</b>					
Total Chromium, ICP		191.30	10	67	6.0
Total Chromium, Other		191.99	1	65	0.0
Method Group 191.XX PPM			11	65	6.8
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, ICP		202.30	9	3	0.3
Acid Soluble Cobalt, Other		202.99	1	3	0.0
Method Group 202.XX PPM			10	3	0.4
<b>ACID SOLUBLE COPPER</b>					
Acid Soluble Copper, Atomic Absorption	975.01	221.00	1	1	0.0
Acid Soluble Copper, ICP		221.30	8	3	1.5
Method Group 221.XX PPM			8	3	1.8
<b>ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub></b>					
Acid Soluble Iron, ICP		241.30	20	1.38	0.05
Method Group 241.XX PCT			21	1.38	0.05
<b>TOTAL LEAD</b>					
Total Lead, ICP		251.30	7	1	0.7
Total Lead, Other		251.99	1	1	0.0
Method Group 251.XX PPM			8	1	0.7

**ACID SOLUBLE MANGANESE**

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Acid Soluble Manganese, ICP	972.02a	261.30	5	272	4.6
Acid Soluble Manganese, Other		261.99	7	262	21.8
Method Group 261.XX PPM			12	266	25.1
<b>TOTAL MOLYBDENUM</b>					
Total Molybdenum, ICP		289.30	9	12	1.4
Total Molybdenum, Other		289.99	1	13	0.0
Method Group 289.XX PPM			10	13	1.6
<b>TOTAL NICKEL</b>					
Total Nickel, ICP		291.30	9	15	1.1
Total Nickel, Other		291.99	1	16	0.0
Method Group 291.XX PPM			10	15	2.0
<b>TOTAL SELENIUM</b>					
Total Selenium, ICP		301.30	2	1	0.3
Method Group 301.XX PPM			2	1	0.4
<b>SODIUM AS Na<sub>2</sub>O</b>					
Sodium, Atomic Absorbtion	983.04	311.00	4	0.28	0.04
Sodium, Other		311.99	7	0.16	0.03
Method Group 311.XX PCT			11	0.17	0.08
<b>ACID SOLUBLE ZINC</b>					
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	6	1.0	0.0
Acid Soluble Zinc, ICP		321.30	19	1.0	0.1
Acid Soluble Zinc, Other		321.99	1	1.0	0.0
Method Group 321.XX PPM			26	1.0	0.1
<b>FLUORIDE</b>					
Volumetric		325.10	14	1.57	0.10
Electrode	AFPC	325.30	1	1.39	0.00
Distilled/Electrode		325.99	2	1.52	0.04
Method Group 325.XX PCT			17	1.57	0.14