

# AFPC

**Sample**

**2009-12**

**Grade**

**10-50-0**

	AOAC Ref.	Method #	# of Labs.	Grand Median	Std Dev
<b>AMMONIACAL NITROGEN</b>					
Ammoniacal Nitrogen, MgO distillation	920.03	001.10	2	9.98	0.04
Ammoniacal Nitrogen, Other		001.99	11	9.95	0.05
Method Group 001.XX PCT			13	9.95	0.07
<b>NITRATE NITROGEN</b>					
Nitrate Nitrogen, Other		002.99	1		0.00
Method Group 002.XX PCT			1	0.00	0.00
<b>AMMON &amp; NITRATE N</b>					
Ammon & Nitrate N, Other		009.99	1	9.57	0.00
Method Group 009.XX PCT			1	9.57	0.00
<b>TOTAL NITROGEN</b>					
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	10.02	0.10
Total Nitrogen, Salicylic	955.04d	010.12	1	10.70	0.00
Total Nitrogen, Combustion	993.13	010.60	24	9.99	0.15
Total Nitrogen, Other		010.99	2	10.04	0.03
Method Group 010.XX PCT			30	9.99	0.18
<b>TOTAL PHOSPHATE</b>					
Total Phosphate, Gravimetric Quimociac		020.10	3	49.77	1.49
Total Phosphate, Spectrometric	978.02	020.20	19	49.54	0.20
Total Phosphate, ICP	970.03	020.40	1	50.15	0.00
Total Phosphate, Other	993.13	020.99	2	50.57	0.05
Method Group 020.XX PCT			25	49.56	0.41
<b>INSOLUBLE PHOSPHATE</b>					
Insoluble Phosphate, Spectrometric	963.03C(b)	030.20	14	0.10	0.04
Insoluble Phosphate, Alka. Quimociac	963.03C(c)	030.30	1	0.45	0.00
Insoluble Phosphate, Other		030.99	2	0.14	0.06
Method Group 030.XX PCT			17	0.11	0.06

**INDIRECT AVAILABLE PHOSPHATE**

AFPC Check Sample  
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Indirect Available Phosphate, Spectrometric	960.02	040.20	15	49.47	0.23
Indirect Available Phosphate, Automated	960.02	040.40	1	49.70	0.00
Method Group 040.XX PCT			16	49.54	0.29
<b>DIRECT AVAILABLE PHOSPHATE</b>					
Direct Available Phosphate, Gravimetric Quimociac	960.03E	041.10	5	49.91	0.28
Direct Available Phosphate, Spectrometric	960.03D	041.20	1	49.27	0.00
Direct Available Phosphate, Automated	978.01	041.40	6	49.56	0.31
Direct Available Phosphate, ICP		041.50	5	49.22	0.10
Direct Available Phosphate, EDTA Extract	993.01	041.60	3	49.20	1.91
Direct Available Phosphate, Other		041.99	1	50.28	0.00
Method Group 041.XX PCT			21	49.66	0.56
<b>WATER SOLUBLE PHOSPHATE</b>					
Water Soluble Phosphate, Spectrometric	970.01	048.20	15	44.69	0.55
Water Soluble Phosphate, Other		048.99	2	45.77	0.85
Method Group 048.XX PCT			17	44.69	0.70
<b>SOLUBLE POTASH AS K<sub>2</sub>O</b>					
Soluble Potash, ICP(Oxalate)		050.50	3	0.24	0.00
Soluble Potash, Flame Photometric(Oxalate)	983.02B(a)	050.60	1	0.20	0.00
Soluble Potash, Other		050.99	5	0.24	0.03
Method Group 050.XX PCT			9	0.24	0.01
<b>FREE WATER</b>					
Free Water, Vacuum Oven	965.08B	060.00	14	0.96	0.13
Free Water, Vacuum Desiccate	965.08A	060.10	4	1.19	0.49
Free Water, Other		060.99	1	1.75	0.00
Method Group 060.XX PCT			19	0.97	0.18
<b>ACID SOLUBLE CALCIUM AS CaO</b>					
Acid Soluble Calcium, ICP		101.30	18	1.74	0.10
Method Group 101.XX PCT			18	1.74	0.12
<b>ACID SOLUBLE MAGNESIUM AS MgO</b>					
Acid Soluble Magnesium, ICP		121.30	17	1.53	0.07
Method Group 121.XX PCT			17	1.53	0.08
<b>SULFATE SULFUR (S)</b>					
Sulfur, Gravimetric	980.02(a)	144.01	4	2.06	0.06

Sulfur, Spectrometric		144.70	2	2.01	0.00
Sulfur, Other		144.99	7	2.02	0.62
Method Group 144.XX PCT			13	2.03	0.06
<b>TOTAL SULFUR (S)</b>					
Sulfur, Other		145.99	4	2.11	0.45
Method Group 145.XX PCT			4	2.11	0.55
<b>TOTAL ARSENIC</b>					
Total Arsenic, ICP	980.02(b)	151.02	5	13	1.2
Method Group 151.XX PPM			5	13	1.4
<b>ACID SOLUBLE BORON</b>					
Acid Soluble Boron, Other		165.99	3	41	58.5
Method Group 165.XX PPM			3	41	71.2
<b>TOTAL CADMIUM</b>					
Total Cadmium, ICP		181.30	9	4	0.4
Total Cadmium, Other		181.99	1	5	0.0
Method Group 181.XX PPM			10	4	0.7
<b>ALUMINUM AS Al<sub>2</sub>O<sub>3</sub></b>					
ICP, %			15	2.48	0.06
Water Soluble Chlorine, Other, %		190.99	2	2.68	0.16
Method Group 190.XX PCT			17	2.48	0.08
<b>TOTAL CHROMIUM</b>					
Total Chromium, ICP		191.30	10	82	5.1
Total Chromium, Other		191.99	1	88	0.0
Method Group 191.XX PPM			11	83	6.7
<b>ACID SOLUBLE COBALT</b>					
Acid Soluble Cobalt, ICP		202.30	9	3	0.1
Acid Soluble Cobalt, Other		202.99	1	3	0.0
Method Group 202.XX PPM			10	3	0.1
<b>ACID SOLUBLE COPPER</b>					
Acid Soluble Copper, Atomic Absorption	975.01	221.00	1	2	0.0
Acid Soluble Copper, ICP		221.30	8	1	0.9
Acid Soluble Copper, Other		221.99	1	0	0.0
Method Group 221.XX PPM			9	1	1.0

**ACID SOLUBLE IRON AS Fe<sub>2</sub>O<sub>3</sub>**

Acid Soluble Iron, ICP	241.30	18	1.98	0.05
Method Group 241.XX PCT		19	1.99	0.07

**TOTAL LEAD**

Total Lead, ICP	251.30	5	7	1.1
Total Lead, Other	251.99	2	6	0.7
Method Group 251.XX PPM		7	7	1.7

**ACID SOLUBLE MANGANESE**

Acid Soluble Manganese, ICP	972.02a 261.30	6	318	39.1
Acid Soluble Manganese, Other	261.99	6	355	19.7
Method Group 261.XX PPM		12	337	37.1

**TOTAL MOLYBDENUM**

Total Molybdenum, ICP	289.30	10	13	1.2
Total Molybdenum, Other	289.99	1	14	0.0
Method Group 289.XX PPM		11	13	1.3

**TOTAL NICKEL**

Total Nickel, ICP	291.30	9	14	0.1
Total Nickel, Other	291.99	1	17	0.0
Method Group 291.XX PPM		10	14	0.4

**TOTAL SELENIUM**

Total Selenium, ICP	301.30	2	2	1.0
Method Group 301.XX PPM		2	2	1.2

**SODIUM AS Na<sub>2</sub>O**

Sodium, Atomic Absorbtion	983.04 311.00	2	0.49	0.01
Sodium, Other	311.99	7	0.41	0.02
Method Group 311.XX PCT		9	0.42	0.06

**ACID SOLUBLE ZINC**

Acid Soluble Zinc, Atomic Absorption	975.02 321.00	1	94.0	0.0
Acid Soluble Zinc, ICP	321.30	9	56.3	6.2
Acid Soluble Zinc, Other	321.99	2	61.3	0.2
Method Group 321.XX PPM		12	58.3	7.9

**FLUORIDE**

Volumetric	325.10	10	3.04	0.33
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Electrode	AFPC	325.30	1	1.42	0.00
Distilled/Electrode		325.99	2	3.31	0.03
Method Group 325.XX PCT			13	3.14	0.42

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