

- Pass 1 Results for 79 Labs - - Pass 2 Results for 78 Labs -

Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Ammoniacal Nitrogen, MgO Distillation	920.03	001.10	9	14.78	0.29	0.13	8	14.82	0.26	0.07
Ammoniacal Nitrogen, Other		001.99	7	14.87	0.18	0.08	7	14.87	0.18	0.08
Method Group 001.XX PCT			17	14.85	0.28	0.14	15	14.84	0.22	0.08
Nitrate Nitrogen, Jones Modified	930.02	002.20	2	1.18	0.08	0.07	2	1.18	0.08	0.07
Nitrate Nitrogen, Other		002.99	4	1.10	0.08	0.01	4	1.10	0.08	0.01
Method Group 002.XX PCT			6	1.12	0.08	0.03	5	1.10	0.07	0.01
Ammon & Nitrate N, Devarda	892.01	009.10	6	15.94	0.68	0.11	6	15.94	0.68	0.11
Ammon & Nitrate N, Other		009.99	1	15.63	0.05	0.07	1	15.63	0.05	0.07
Method Group 009.XX PCT			7	15.90	0.64	0.10	7	15.90	0.64	0.10
Total Nitrogen, Modified Comprehensive	978.02	010.11	6	16.02	0.20	0.05	5	16.06	0.20	0.02
Total Nitrogen, Salicylic	955.04D	010.12	5	16.20	0.21	0.05	5	16.20	0.21	0.05
Total Nitrogen, Combustion		010.60	52	16.24	0.22	0.08	50	16.24	0.21	0.07
Total Nitrogen, Other		010.99	4	16.06	0.13	0.04	4	16.06	0.13	0.04
Method Group 010.XX PCT			67	16.21	0.23	0.08	63	16.20	0.21	0.06
Total Phosphate, Grav Quimociac	962.02	020.10	4	3.61	0.08	0.08	4	3.61	0.08	0.08
Total Phosphate, Spectrometric	958.01	020.20	19	3.71	0.18	0.08	17	3.69	0.16	0.04
Total Phosphate, Automated	978.01	020.40	4	3.67	0.10	0.06	4	3.67	0.10	0.06
Total Phosphate, ICP		020.50	7	3.69	0.23	0.08	6	3.68	0.24	0.04
Total Phosphate, Other		020.99	4	3.77	0.26	0.14	4	3.77	0.26	0.14
Method Group 020.XX PCT			38	3.70	0.18	0.08	35	3.69	0.18	0.06
Insoluble Phosphate, Grav Quimociac	963.03C	030.10	2	0.03	0.01	0.00	2	0.03	0.01	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	0.11	0.11	0.01	2	0.11	0.11	0.01
Insoluble Phosphate, ICP		030.50	1	0.00	0.00	0.00	1	0.00	0.00	0.00
Method Group 030.XX PCT			5	0.06	0.08	0.00	4	0.07	0.09	0.00
InDir Available Phosphate, Grav Quim	960.02	040.10	1	3.62	0.06	0.08	1	3.62	0.06	0.08
InDir Available Phosphate, Automated	960.02	040.40	3	3.61	0.08	0.08	3	3.61	0.08	0.08
InDir Available Phosphate, ICP		040.50	1	3.42	0.01	0.01	1	3.42	0.01	0.01
Method Group 040.XX PCT			5	3.57	0.10	0.06	5	3.57	0.10	0.06
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	17	3.64	0.10	0.05	16	3.63	0.09	0.04
Dir Available Phosphate, Spectrometric	960.03D	041.20	2	3.56	0.27	0.01	2	3.56	0.27	0.01
Dir Available Phosphate, Automated	978.01	041.40	4	3.57	0.10	0.09	3	3.58	0.05	0.02
Dir Available Phosphate, ICP		041.50	10	3.56	0.07	0.04	9	3.55	0.07	0.02
Dir Available Phosphate, EDTA Extract	993.01	041.60	9	3.65	0.08	0.04	8	3.64	0.08	0.02
Method Group 041.XX PCT			42	3.61	0.11	0.05	39	3.61	0.10	0.03
Water Soluble Phosphate, Grav Quimociac	962.03	048.10	1	2.70	0.25	0.36	1	2.70	0.25	0.36
Water Soluble Phosphate, Spectrometric	970.01	048.20	2	2.98	0.13	0.10	2	2.98	0.13	0.10
Method Group 048.XX PCT			3	2.88	0.21	0.19	3	2.88	0.21	0.19
Soluble Potash, STPB Oxalate	958.02	050.00	14	7.80	0.17	0.08	14	7.80	0.17	0.08
Soluble Potash, STPB Citrate	969.04	050.10	1	7.80	0.24	0.34	1	7.80	0.24	0.34

- Pass 1 Results for 79 Labs - - Pass 2 Results for 78 Labs -

Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Soluble Potash, AA (Oxalate)		050.30	12	7.58	0.39	0.09	12	7.58	0.39	0.09
Soluble Potash, AA (Citrate)		050.31	1	8.64	0.04	0.05	1	8.64	0.04	0.05
Soluble Potash, ICP (Oxalate)		050.50	6	7.86	0.40	0.07	6	7.86	0.40	0.07
Soluble Potash, ICP (Citrate)		050.51	8	7.77	0.24	0.11	8	7.77	0.24	0.11
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	7	7.91	0.38	0.03	7	7.91	0.38	0.03
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	7	7.75	0.19	0.10	6	7.74	0.18	0.06
Soluble Potash, Other		050.99	16	7.63	0.35	0.09	15	7.65	0.36	0.07
Method Group 050.XX PCT			72	7.75	0.34	0.09	67	7.76	0.32	0.07
Free Water, Vacuum Oven	965.08B	060.00	4	0.34	0.06	0.05	4	0.34	0.06	0.05
Acid Soluble Calcium, ICP		101.30	17	0.44	0.03	0.01	16	0.43	0.03	0.01
Method Group 101.XX PCT			18	0.44	0.05	0.01	16	0.43	0.03	0.01
Acid Soluble Magnesium, AA	984.01	121.00	13	1.07	0.06	0.01	12	1.08	0.06	0.01
Acid Soluble Magnesium, ICP		121.30	29	1.08	0.07	0.02	27	1.08	0.06	0.02
Acid Soluble Magnesium, Titrimetric ...	964.01	121.70	1	1.29	0.00	0.00	1	1.29	0.00	0.00
Acid Soluble Magnesium, Other		121.99	1	1.05	0.07	0.10	1	1.05	0.07	0.10
Method Group 121.XX PCT			44	1.08	0.07	0.02	41	1.09	0.07	0.02
Water Soluble Magnesium, AA		131.00	1	1.04	0.08	0.11	1	1.04	0.08	0.11
Water Soluble Magnesium, ICP		131.30	2	0.94	0.07	0.08	2	0.94	0.07	0.08
Method Group 131.XX PCT			3	0.97	0.08	0.09	3	0.97	0.08	0.09
Sulfur, Gravimetric	980.02a	144.01	18	17.09	0.40	0.12	18	17.09	0.40	0.12
Sulfur, Gravimetric	980.02b	144.02	2	16.28	0.72	0.06	2	16.28	0.72	0.06
Sulfur, Spectrometric		144.70	1	15.18	0.02	0.03	1	15.18	0.02	0.03
Sulfur, Other		144.99	18	16.72	0.48	0.13	17	16.75	0.46	0.09
Method Group 144.XX PCT			39	16.83	0.57	0.12	38	16.85	0.56	0.10
Arsenic, Atomic Absorption		151.00	1	0.76	0.04	0.05	1	0.76	0.04	0.05
Arsenic, ICP		151.30	4	0.64	0.40	0.38	4	0.64	0.40	0.38
Arsenic, Other		151.99	1	0.76	0.08	0.11	1	0.76	0.08	0.11
Method Group 151.XX PPM			6	0.68	0.32	0.28	5	0.71	0.26	0.14
Acid Soluble Boron, Spectrometric	982.01	165.00	9	0.044	0.007	0.003	8	0.044	0.008	0.002
Acid Soluble Boron, Other		165.99	17	0.038	0.008	0.001	16	0.038	0.008	0.001
Method Group 165.XX PCT			27	0.041	0.009	0.002	25	0.040	0.008	0.001
Water Soluble Boron, Spectrometric	982.01	171.10	1	0.040	0.000	0.000	1	0.040	0.000	0.000
Water Soluble Boron, Other		171.99	1	0.041	0.000	0.000	1	0.041	0.000	0.000
Method Group 171.XX PCT			2	0.041	0.001	0.000	2	0.041	0.001	0.000
Cadmium, Atomic Absorption		181.00	2	2.08	1.08	0.15	2	2.08	1.08	0.15
Cadmium, ICP		181.30	11	1.63	0.69	0.25	10	1.64	0.70	0.18
Cadmium, Other		181.99	1	1.75	0.01	0.01	1	1.75	0.01	0.01
Method Group 181.XX PPM			14	1.70	0.72	0.22	13	1.72	0.73	0.16
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	9	4.76	0.25	0.07	8	4.72	0.23	0.04

- Pass 1 Results for 79 Labs - - Pass 2 Results for 78 Labs -

Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Water Soluble Chlorine, Other		190.99	4	5.00	0.47	0.06	5	5.22	0.62	0.05
Method Group 190.XX PCT			13	4.84	0.34	0.07	12	4.82	0.35	0.05
Chromium, ICP		191.30	12	82.44	9.00	1.40	12	82.44	9.00	1.40
Chromium, Other		191.99	1	99.90	2.97	4.20	1	99.90	2.97	4.20
Method Group 191.XX PPM			13	83.78	9.87	1.61	13	83.78	9.87	1.61
Acid Soluble Cobalt, AA		202.00	1	2.55	0.07	0.10	1	2.55	0.07	0.10
Acid Soluble Cobalt, ICP	965.11	202.30	10	15.08	5.79	0.84	10	15.08	5.79	0.84
Acid Soluble Cobalt, Other		202.99	1	22.50	1.27	1.80	1	22.50	1.27	1.80
Method Group 202.XX PPM			12	14.66	6.78	0.86	12	14.66	6.78	0.86
Acid Soluble Copper, Atomic Absorption	975.01	221.00	2	0.0011	0.0003	0.0001	2	0.0011	0.0003	0.0001
Acid Soluble Copper, ICP		221.30	12	0.0010	0.0007	0.0001	10	0.0008	0.0002	0.0000
Acid Soluble Copper, Other		221.99	3	0.0023	0.0015	0.0007	3	0.0023	0.0015	0.0007
Method Group 221.XX PCT			18	0.0014	0.0012	0.0002	16	0.0011	0.0006	0.0001
Acid Soluble Iron, Atomic Absorption	980.01	241.00	11	2.59	0.17	0.08	10	2.57	0.17	0.06
Acid Soluble Iron, ICP		241.30	26	2.64	0.31	0.10	23	2.63	0.30	0.06
Acid Soluble Iron, Other		241.99	3	2.59	0.38	0.11	3	2.59	0.38	0.11
Method Group 241.XX PCT			40	2.62	0.28	0.10	36	2.63	0.24	0.07
Lead, Atomic Absorption		251.00	2	3.45	1.77	0.70	2	3.45	1.77	0.70
Lead, ICP		251.30	7	2.85	2.22	0.59	7	2.85	2.22	0.59
Lead, Other		251.99	1	0.68	0.06	0.08	1	0.68	0.06	0.08
Method Group 251.XX PPM			10	2.75	2.10	0.56	10	2.75	2.10	0.56
Acid Soluble Manganese, AA	972.02a	261.00	9	0.360	0.029	0.010	9	0.360	0.029	0.010
Acid Soluble Manganese, AA	972.02b	261.11	1	0.386	0.030	0.043	1	0.386	0.030	0.043
Acid Soluble Manganese, ICP	972.02a	261.30	22	0.367	0.021	0.008	21	0.367	0.021	0.007
Acid Soluble Manganese, ICP	972.02b	261.31	2	0.369	0.022	0.004	2	0.369	0.022	0.004
Acid Soluble Manganese, Other		261.99	6	0.367	0.024	0.019	6	0.367	0.024	0.019
Method Group 261.XX PCT			40	0.366	0.023	0.011	39	0.365	0.023	0.010
Molybdenum, ICP		289.30	10	5.95	1.73	0.42	9	5.72	1.64	0.24
Molybdenum, Other		289.99	1	6.82	0.14	0.20	1	6.82	0.14	0.20
Method Group 289.XX PPM			11	6.03	1.67	0.40	10	5.83	1.59	0.24
Nickel, Atomic Absorption		291.00	1	44.00	1.41	2.00	1	44.00	1.41	2.00
Nickel, ICP		291.30	9	38.96	2.88	1.41	9	38.96	2.88	1.41
Method Group 291.XX PPM			10	39.46	3.16	1.47	10	39.46	3.16	1.47
Selenium, ICP		301.30	2	6.72	4.48	1.20	2	6.72	4.48	1.20
Selenium, Other		301.99	1	0.53	0.06	0.09	1	0.53	0.06	0.09
Method Group 301.XX PPM			3	4.66	4.71	0.83	3	4.66	4.71	0.83
Sodium, Other		311.99	6	0.24	0.05	0.00	5	0.22	0.01	0.00
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	9	0.398	0.012	0.006	9	0.398	0.012	0.006
Acid Soluble Zinc, ICP		321.30	28	0.412	0.032	0.008	26	0.414	0.032	0.006

- Pass 1 Results for 79 Labs - - Pass 2 Results for 78 Labs -

Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Acid Soluble Zinc, Other		321.99	4	0.417	0.016	0.003	4	0.417	0.016	0.003
Method Group 321.XX PCT			41	0.410	0.028	0.007	37	0.410	0.028	0.005
Water Soluble Zinc, Atomic Absorption .		325.00	1	0.480	0.000	0.000	1	0.480	0.000	0.000

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.10 PCT			Meth: 001.XX PCT			Meth: 002.XX PCT			Meth: 010.11 PCT			Meth: 010.60 PCT		
<u>Ammoniacal Nitrogen</u>			<u>Ammoniacal Nitrogen</u>			<u>Nitrate Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
<u>MgO Distillation</u>			<u>Ammoniacal Nitrogen</u>			<u>Nitrate Nitrogen</u>			<u>Modified Comprehensi</u>			<u>Combustion</u>		
292	16.57 s	6.81	394	14.85	.27	393	1.01	-1.38	309	15.73	-1.65	096	16.30	.25
444	15.15	1.29	255	14.89	.24	Meth: 009.10 PCT			Meth: 010.12 PCT			409	16.26	.24
415	15.08	1.01	Avg	14.84		Ammon & Nitrate N			Total Nitrogen			007	16.25	.23
232	14.99	.65	351	14.83	-.08	<u>Devarda</u>			<u>Salicylic</u>			232	16.29	.20
090	14.93	.41	027	14.65	-.90	090	16.58	.93	137	16.54	1.65	037	16.25	.16
351	14.83	.07	393	14.62	-1.02	200	16.56	.90	397	16.25	.29	024	16.28	.15
Avg	14.82		324	14.60	-1.19	444	16.16	.32	Avg	16.20		307	16.25	.14
324	14.60	-.96	029	14.58	-1.20	169	15.99 X	.07	415	16.17	-.13	086	16.27	.14
029	14.58	-.97	309	14.43	-1.87	Avg	15.94		416	16.06	-.65	041	16.26	.09
309	14.43	-1.54	234	14.46 R	-2.25	309	15.74	-.31	185	15.97	-1.12	Avg	16.24	
234	14.46 R	-1.89	230	13.70 s	-5.32	030	14.65	-1.90	Meth: 010.60 PCT			231	16.23	-.11
230	13.70 s	-4.54	Meth: 002.20 PCT			Meth: 009.99 PCT			Total Nitrogen			025	16.22	-.15
Meth: 001.99 PCT			Nitrate Nitrogen			Ammon & Nitrate N			Combustion			247	16.23	-.20
<u>Ammoniacal Nitrogen</u>			<u>Jones Modified</u>			<u>Other</u>			428			009	16.20	-.24
230			230	8.65 S	91.41	393	15.63	.71	255	17.70 s	6.80	361	16.17	-.37
<u>Other</u>			029	1.24	.98	Meth: 009.XX PCT			028	16.74	2.39	022	16.24	-.44
397	15.37 s	3.20	Avg	1.18		<u>Ammon & Nitrate N</u>			255	16.67	1.97	351	16.15	-.46
096	15.14	1.48	351	1.12	-.74	090	16.58	1.06	028	16.65	1.91	095	16.24	-.51
405	14.98	.64	Meth: 002.99 PCT			043	16.51 R	1.58	390	16.51 R	1.58	102	16.14	-.54
409	14.96	.63	Nitrate Nitrogen			027	16.57	1.50	043	16.51 R	1.58	055	16.12	-.61
255	14.89	.19	<u>Other</u>			394	16.53	1.34	027	16.57	1.50	023	16.08	-.77
Avg	14.87		232	1.20	1.30	177	16.45	.94	394	16.53	1.34	106	16.10	-.82
394	14.85	-.34	027	1.13	.40	406	16.45	.94	177	16.45	.94	234	16.04	-.97
027	14.65	-1.21	Avg	1.10		057	16.42	.85	406	16.45	.94	426	16.04	-.98
393	14.62	-1.37	394	1.06	-.52	450	16.42	.85	057	16.42	.85	451	16.05 X	-1.12
Meth: 001.XX PCT			393	1.01	-1.17	029	15.74	-.26	450	16.43	.85	262	16.00	-1.14
<u>Ammoniacal Nitrogen</u>			Meth: 002.XX PCT			030	14.65	-1.97	029	16.41	.81	325	15.90	-1.67
292	16.57 s	7.76	Nitrate Nitrogen			Meth: 010.11 PCT			157	16.36	.55	360	15.93 R	-1.69
397	15.37 R	2.72	<u>Other</u>			Total Nitrogen			296	16.36	.54	444	15.83	-1.95
444	15.15	1.39	230	8.65 s	109.27	<u>Modified Comprehensi</u>			049	16.25	.51	369	15.82	-2.00
096	15.14	1.32	029	1.24 R	2.11	405	16.30	1.23	040	16.34	.42	393	15.81	-2.03
415	15.08	1.08	232	1.20	1.38	211	16.16	.50	425	16.33	.41	230	15.80	-2.07
232	14.99	.66	351	1.12	.37	Avg	16.06		136	16.33	.40	114	15.20 s	-4.89
405	14.98	.62	027	1.13	.37	029	16.06	-.08	162	16.32	.36	324	15.10 s	-5.35
409	14.96	.60	Avg	1.10		322	16.04	-.09	233	16.31	.29			
090	14.93	.38	394	1.06	-.65	073	15.84 R	-1.21	131	16.30	.27			
									377	16.27	.26			

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 010.99 PCT			Meth: 010.XX PCT			Meth: 010.XX PCT			Meth: 020.20 PCT			Meth: 020.XX PCT		
Total Nitrogen			Total Nitrogen			Total Nitrogen			Total Phosphate			Total Phosphate		
<u>Other</u>									<u>Spectrometric</u>					
354	16.25	1.39	409	16.26	.36	393	15.81	-1.86	169	3.59 X	-.63	041	6.95 s	18.37
Avg	16.06		024	16.28	.35	230	15.80	-1.91	200	3.56	-.82	444	4.37 s	3.86
422	16.05	-.21	086	16.27	.34	309	15.73	-2.24	420	3.23	-2.82	422	4.13	2.53
255	16.05	-.28	007	16.25	.33	114	15.20 s	-4.77				426	4.11	2.41
402	15.90	-1.20	041	16.26	.28	324	15.10 s	-5.24				428	3.98	1.66
420	14.79 S	-9.54	307	16.25	.27	420	14.79 s	-6.70	Meth: 020.40 PCT			030	3.90 R	1.65
			037	16.25	.26				Total Phosphate			450	3.87 R	1.54
			397	16.25	.26	Meth: 020.10 PCT			<u>Automated</u>			406	3.88	1.08
Meth: 010.XX PCT			247	16.23	.23	Total Phosphate			096	3.80	1.28	444	3.77 R	1.07
Total Nitrogen			354	16.25	.21	<u>Grav Quimociac</u>			394	3.68	.12	425	3.85	.97
428	17.70 s	7.11	231	16.23	.13	041	6.95 S	44.00	Avg	3.67		114	3.81	.84
255	16.74 R	2.62	025	16.22	.09	444	4.37 S	10.00	247	3.63	-.46	369	3.80	.65
028	16.67	2.20	Avg	16.20		095	3.66	.92	409	3.59	-1.28	096	3.80	.63
390	16.65	2.13	009	16.20	-.08	090	3.65	.72				415	3.78	.52
043	16.51 R	1.76	415	16.17	-.16	405	3.63	.35	Meth: 020.50 PCT			390	3.76	.42
027	16.57	1.72	361	16.17	-.19	Avg	3.61		Total Phosphate			432	3.72	.39
137	16.54	1.61	211	16.16	-.23	157	3.52	-1.42	<u>ICP</u>			292	3.75	.37
394	16.53	1.56	351	16.15	-.28				426	4.11	1.81	234	3.70	.19
177	16.45	1.16	102	16.14	-.38	Meth: 020.20 PCT			444	3.77 R	.80	309	3.71	.15
406	16.45	1.15	055	16.12	-.43	Total Phosphate			390	3.76	.33	451	3.71 X	.12
450	16.43	1.06	023	16.08	-.59	<u>Spectrometric</u>			432	3.72	.30	Avg	3.69	
057	16.42	1.05	416	16.06	-.68	428	3.98	1.80	Avg	3.68		394	3.68	-.06
029	16.41	1.01	106	16.10	-.68	030	3.90 R	1.80	361	3.59	-.38	416	3.66	-.17
157	16.36	.75	029	16.06	-.70	450	3.87 R	1.67	393	3.49	-.82	324	3.65	-.21
296	16.36	.75	255	16.05	-.75	406	3.88	1.17	255	3.42	-1.10	090	3.65	-.30
040	16.34	.63	422	16.05	-.75	425	3.85	1.05				247	3.63	-.31
425	16.33	.61	322	16.04	-.78	369	3.80	.70	Meth: 020.99 PCT			405	3.63	-.33
136	16.33	.60	234	16.04	-.79	415	3.78	.55	Total Phosphate			232	3.63	-.33
049	16.25	.57	426	16.04	-.80	292	3.75	.39	<u>Other</u>			095	3.66	-.35
162	16.32	.56	262	16.00	-.96	234	3.70	.20	422	4.13	1.41	231	3.62	-.44
095	16.24	.55	451	16.05 R	-.98	309	3.71	.15	114	3.81	.35	177	3.61	-.46
233	16.31	.49	185	15.97	-1.14	451	3.71 X	.12	Avg	3.77		402	3.60	-.48
022	16.24	.48	402	15.90	-1.43	Avg	3.69		402	3.60	-.65	361	3.59	-.54
131	16.30	.47	325	15.90	-1.51	416	3.66	-.20	007	3.54	-.98	169	3.59 X	-.57
405	16.30	.46	360	15.93 R	-1.55	324	3.65	-.24				409	3.59	-.74
096	16.30	.44	444	15.83	-1.79	232	3.63	-.37				200	3.56	-.74
377	16.27	.40	073	15.84	-1.80	231	3.62	-.49				157	3.52	-.99
232	16.29	.40	369	15.82	-1.84	177	3.61	-.52				007	3.54	-1.03

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index			
<u>Meth: 020.XX PCT</u>			<u>Meth: 040.40 PCT</u>			<u>Meth: 041.10 PCT</u>			<u>Meth: 041.60 PCT</u>			<u>Meth: 041.XX PCT</u>					
<u>Total Phosphate</u>			<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>					
393	3.49	-1.13	<u>Automated</u>			<u>Grav Quimociac</u>			<u>EDTA Extract</u>			073	3.62	.24			
255	3.42	-1.50	394	3.68	.81	040	3.57	-.66	028	3.94 S	3.66	296	3.63	.24			
420	3.23	-2.57	Avg	3.61		049	3.53	-1.11	397	3.84	2.44	405	3.61	.20			
Meth: 030.10 PCT			096	3.59	-.39	131	3.51	-1.31	037	3.67 R	1.03	027	3.62	.14			
<u>Insoluble Phosphate</u>			409	3.58	-1.30	102	3.47	-1.76	043	3.65	.08	009	3.62	.14			
<u>Grav Quimociac</u>			Meth: 040.50 PCT			Meth: 041.20 PCT			Avg			024	3.62	.11			
090	0.03	.87	<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			296			3.63	-.16	351	3.61	.07	
Avg	0.03		<u>ICP</u>			<u>Spectrometric</u>			024			3.62	-.35	Avg	3.61		
405	0.02	-.87	255	3.42	-.71	055	3.79	.87	073	3.62	-.38	296	3.61	-.05	025	3.61	-.15
Meth: 030.40 PCT			Meth: 040.XX PCT			Avg			351			3.61	-.46	009	3.59	-.15	
<u>Insoluble Phosphate</u>			<u>InDir Available Phos</u>			262			106			3.57	-.91	361	3.58	-.30	
<u>Automated</u>			394	3.68	.98	Meth: 041.40 PCT			Meth: 041.99 PCT			086	3.58	-.34	0106	3.57	-.36
096	0.21	.87	409	3.58	.92	<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			040	3.57	-.40	040	3.57	-.40
Avg	0.11		090	3.62	.59	<u>Automated</u>			<u>Other</u>			043	3.57	-.40	023	3.60	-.65
409	0.02	-.87	096	3.59	.18	027			230			3.19 S	.00	049	3.53	-.84	
Meth: 030.50 PCT			Avg	3.57		025			Meth: 041.XX PCT			360	3.53	-.87	049	3.53	-.84
<u>Insoluble Phosphate</u>			255	3.42	-1.52	Avg			<u>Dir Available Phosph</u>			131	3.51	-.95	360	3.53	-.87
<u>ICP</u>			Meth: 041.10 PCT			131			Meth: 041.50 PCT			022	4.04 s	4.30	131	3.51	-.99
255	0.00	.00	<u>Dir Available Phosph</u>			029			<u>Dir Available Phosph</u>			028	3.94 s	3.32	131	3.51	-1.00
Meth: 030.XX PCT			<u>Grav Quimociac</u>			Meth: 041.50 PCT			397			3.84	2.34	354	3.48	-1.25	
<u>Insoluble Phosphate</u>			322	4.04 s	4.42	<u>Dir Available Phosph</u>			137			3.84	2.27	102	3.47	-1.43	
096	0.21	1.61	137	3.84	2.23	<u>ICP</u>			022			3.78 R	2.21	393	3.45	-1.54	
Avg	0.07		022	3.78 R	2.22	022			055			3.79	1.83	029	3.55 R	-1.67	
090	0.03	-.39	185	3.75	1.42	377			185			3.75	1.51	262	3.33	-2.72	
405	0.02	-.50	211	3.70	.73	023			037			3.67 R	1.02	230	3.19 s	-4.13	
409	0.02 R	-.56	057	3.67	.72	009			211			3.70	.89	Meth: 048.10 PCT			
255	0.00	-.71	055	3.66	.42	361			057			3.67	.80	<u>Water Soluble Phosph</u>			
Meth: 040.10 PCT			029	3.67	.41	043			029			3.67	.59	<u>Grav Quimociac</u>			
<u>InDir Available Phos</u>			233	3.65	.33	Avg			055			3.66	.57	405		2.70	-.71
<u>Grav Quim</u>			136	3.63	.22	360			022			3.66	.55	Meth: 048.20 PCT			
090	3.62	.71	Avg	3.63		325			233			3.65	.48	<u>Water Soluble Phosph</u>			
Meth: 040.10 PCT			009	3.62	-.07	354			043			3.65	.44	<u>Spectrometric</u>			
<u>InDir Available Phos</u>			296	3.61	-.24	393			377			3.64	.39	420		3.08	.83
<u>Grav Quim</u>			405	3.61	-.28	Avg			136			3.63	.31				
<u>Grav Quim</u>			086	3.58	-.57	360			057			3.62	.26				
<u>Grav Quim</u>						325											

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 048.20 PCT			Meth: 050.30 PCT			Meth: 050.51 PCT			Meth: 050.99 PCT			Meth: 050.XX PCT		
<u>Water Soluble Phosph Spectrometric</u>			<u>Soluble Potash AA (Oxalate)</u>			<u>Soluble Potash ICP (Citrate)</u>			<u>Soluble Potash Other</u>			<u>Soluble Potash</u>		
Avg	2.98		369	8.13	1.41	043	7.84	.36	360	7.86	.59	009	7.87	.53
096	2.87	-.90	073	8.05	1.21	Avg	7.77		131	7.80	.42	354	7.89	.45
			040	7.79	.56	377	7.74	-.15	177	7.79	.39	007	7.82	.44
Meth: 048.XX PCT			451	7.78 X	.51	022	7.67	-.42	027	7.79	.38	022	7.78	.41
<u>Water Soluble Phosph</u>			234	7.75	.44	361	7.60	-.73	Avg	7.65		233	7.89	.38
420	3.08	.96	137	7.74	.41	393	7.39	-1.62	247	7.65	-.10	049	7.88	.36
Avg	2.88		136	7.67	.23				325	7.62	-.10	055	7.88	.35
096	2.87	-.29	Avg	7.58		Meth: 050.60 PCT			402	7.56	-.34	360	7.86	.32
405	2.70	-1.22	351	7.50	-.20	<u>Soluble Potash</u>			390	7.43	-.63	043	7.84	.28
			262	7.37	-.56	<u>Flame (Oxalate)</u>			394	7.38	-.77	292	7.84	.26
Meth: 050.00 PCT			185	7.30	-.75	415	8.60	1.83	260	7.39 R	-.92	040	7.79	.24
<u>Soluble Potash</u>			397	7.21	-.94	406	8.11	.53	255	7.29	-1.03	043	7.82	.18
<u>STPB Oxalate</u>			425	6.68	-2.29	169	8.07	.42	232	7.27	-1.07	131	7.80	.12
102	9.66 s	10.91				Avg	7.91		405	6.96	-1.95	451	7.78 X	.12
090	8.10	1.72	Meth: 050.31 PCT			055	7.88	-.11	Meth: 050.XX PCT			024	7.80	.11
095	8.07	1.53	<u>Soluble Potash</u>			131	7.73	-.48	<u>Soluble Potash</u>			177	7.79	.09
009	7.87	.87	<u>AA (Citrate)</u>			309	7.53	-1.03	102	9.66 s	5.97	027	7.79	.07
416	7.95	.85	095	8.64	.71	200	7.47	-1.18	432	8.96 s	3.89	057	7.78	.06
233	7.89	.48	Meth: 050.50 PCT			Meth: 050.61 PCT			095	8.64	2.73	Avg	7.76	
049	7.88	.44	<u>Soluble Potash</u>			<u>Soluble Potash</u>			426	8.61	2.66	137	7.74	-.08
043	7.82	.16	<u>ICP (Oxalate)</u>			<u>Flame (Citrate)</u>			415	8.60	2.62	377	7.74	-.10
Avg	7.80		426	8.61	1.86	025	8.04	1.65	422	8.39	1.95	131	7.73	-.12
211	7.73	-.46	106	7.99	.30	030	7.80 R	1.15	023	8.15	1.24	211	7.73	-.12
057	7.73	-.49	Avg	7.86		024	7.80	.31	369	8.13	1.16	234	7.75	-.12
022	7.78	-.77	292	7.84	-.10	057	7.78	.21	114	8.12	1.12	057	7.73	-.14
029	7.65	-.94	324	7.72	-.41	Avg	7.74		406	8.11	1.09	037	7.74	-.17
231	7.61	-1.15	420	7.67	-.48	037	7.74	-.25	090	8.10	1.05	324	7.72	-.28
041	7.61	-1.17	444	7.37	-1.24	028	7.62	-.74	090	8.10	1.05	022	7.67	-.29
055	7.62	-1.29	Meth: 050.51 PCT			029	7.48	-1.42	169	8.07	.96	420	7.67	-.29
230	5.70 s	-12.41	<u>Soluble Potash</u>			Meth: 050.99 PCT			095	8.07	.95	136	7.67	-.31
Meth: 050.10 PCT			<u>ICP (Citrate)</u>			<u>Soluble Potash</u>			073	8.05	.92	029	7.65	-.38
<u>Soluble Potash</u>			432	8.96 s	5.18	<u>Other</u>			025	8.04	.87	247	7.65	-.39
<u>STPB Citrate</u>			023	8.15	1.63	422	8.39	2.07	009	7.96 R	.78	325	7.62	-.46
444	7.80	.71	009	7.96	1.02	114	8.12	1.33	106	7.99	.69	028	7.62	-.49
Avg	7.80		007	7.82	.58	354	7.89	.69	030	7.80 R	.64	231	7.61	-.49
322	5.89 S	-7.95							416	7.95	.59	041	7.61	-.50
									444	7.80 R	.54	361	7.60	-.53
												055	7.62	-.59

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 050.XX PCT			Meth: 101.30 PCT			Meth: 101.XX PCT			Meth: 121.30 PCT			Meth: 121.99 PCT		
<u>Soluble Potash</u>			Acid Soluble Calcium			<u>Acid Soluble Calcium</u>			Acid Soluble Magnesi			Acid Soluble Magnesi		
402	7.56	-.69	ICP			433	0.44	.19	ICP					
309	7.53	-.75	106	0.45	.33	307	0.44	.17	354	1.14	1.08	114	1.05	.71
351	7.50	-.82	065	0.44	.28	102	0.44	.10	444	1.09 R	.87	Avg	1.05	
029	7.48	-.88	131	0.44	.20	Avg	0.43		131	1.13	.82			
200	7.47	-.92	433	0.44	.19	394	0.43	-.13	023	1.13	.80	Meth: 121.XX PCT		
390	7.43	-1.05	307	0.44	.17	247	0.43	-.31	037	1.10	.23	<u>Acid Soluble Magnesi</u>		
393	7.39	-1.19	102	0.44	.10	027	0.42	-.46	420	1.09	.10	042	2.21 s	17.19
394	7.38	-1.21	Avg	0.43		232	0.41	-.70	394	1.09	.10	422	1.59 s	7.69
444	7.37	-1.25	394	0.43	-.13	022	0.40	-.99	Avg	1.08		432	1.34 s	3.95
262	7.37	-1.26	247	0.43	-.31	292	0.34	-2.71	057	1.08	-.08	415	1.29	3.19
260	7.39 R	-1.33	027	0.42	-.46	Meth: 121.00 PCT			409	1.08	-.29	390	1.24	2.28
185	7.30	-1.48	232	0.41	-.70	Acid Soluble Magnesi			360	1.08	-.29	200	1.20	1.75
255	7.29	-1.50	022	0.40	-.99	<u>AA</u>			247	1.07	-.31	231	1.17	1.24
232	7.27	-1.55	292	0.34	-2.71	200	1.20	2.14	102	1.06	-.34	027	1.16	1.16
397	7.21	-1.74	Meth: 101.70 PCT			177	1.13	.85	233	1.07	-.38	307	1.15	1.08
405	6.96	-2.53	Acid Soluble Calcium			028	1.12	.77	292	1.05	-.65	426	1.15	.91
425	6.68 A	-3.39	<u>Titrimetric</u>			309	1.11	.50	106	1.05	-.65	354	1.14	.91
322	5.89 s	-5.87	415	0.78 S	.00	029	1.09	.37	009	1.04	-.72	444	1.09 R	.76
230	5.70 s	-6.51				Avg	1.08		022	1.04	-.73	131	1.13	.68
Meth: 060.00 PCT			Meth: 101.99 PCT			095	1.07	-.09	324	1.04	-.75	023	1.13	.66
Free Water			Acid Soluble Calcium			043	1.07	-.21	255	1.02	-1.10	177	1.13	.62
<u>Vacuum Oven</u>			Other			137	1.06	-.29	065	1.02	-1.10	028	1.12	.55
096	0.36	1.14	422	1.29 S	.00	351	1.05	-.49	433	1.01	-1.20	309	1.11	.31
416	0.38	.54	Meth: 101.XX PCT			397	1.05	-.55	232	1.01	-1.30	029	1.09	.25
405	0.37	.48	<u>Acid Soluble Calcium</u>			296	1.05 R	-.69	405	1.01	-1.34	037	1.10	.17
Avg	0.34		422	1.29 s	24.37	262	1.00	-1.32	230	0.87 A	-3.71	Avg	1.09	
007	0.26	-1.29	415	0.78 s	10.02	055	0.98	-1.68	393	0.80 s	-4.88	420	1.09	-.08
Meth: 101.30 PCT			393	0.56 R	3.76	Meth: 121.30 PCT			Meth: 121.70 PCT			394	1.09	-.08
Acid Soluble Calcium			390	0.50	1.86	Acid Soluble Magnesi			Acid Soluble Magnesi			057	1.08	-.11
<u>ICP</u>			096	0.49	1.45	<u>ICP</u>			<u>Titrimetric</u>			095	1.07	-.21
393	0.56 s	3.76	057	0.46 R	.81	432	1.34 s	4.52	415	1.29	.71	409	1.08	-.28
390	0.50	1.86	420	0.46	.59	390	1.24	2.63				360	1.08	-.28
096	0.49	1.45	009	0.45	.34	231	1.17	1.45	Meth: 121.99 PCT			043	1.07	-.28
057	0.46 R	.81	106	0.45	.33	027	1.16	1.36	Acid Soluble Magnesi			247	1.07	-.32
420	0.46	.59	065	0.44	.28	307	1.15	1.27	<u>Other</u>			102	1.06	-.34
009	0.45	.34	131	0.44	.20	426	1.15	1.08	042	2.21 S	16.47	233	1.07	-.37
									422	1.59 S	7.64	137	1.06	-.38
												351	1.05	-.56

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 121.XX PCT			Meth: 144.01 PCT			Meth: 144.99 PCT			Meth: 144.XX PCT			Meth: 151.30 PPM		
<u>Acid Soluble Magnesi</u>			<u>Sulfur</u>			<u>Sulfur</u>			<u>Sulfur</u>			<u>Arsenic</u>		
397	1.05	-.61	<u>Gravimetric</u>			<u>Other</u>			037	17.04	.35	<u>ICP</u>		
292	1.05	-.61	043	17.90	2.00	136	17.29	1.16	351	17.01	.30	Avg	0.64	
106	1.05	-.61	262	17.55	1.14	037	17.04	.63	394	16.99	.29	102	0.31	-.95
009	1.04	-.68	324	17.40	.76	351	17.01	.57	177	17.00	.28	450	0.50	-1.30
022	1.04	-.69	057	17.36	.72	394	16.99	.54	095	16.94	.17	Meth: 151.99 PPM		
296	1.05	-.70	200	17.36	.66	177	17.00	.54	027	16.92	.13	<u>Arsenic</u>		
324	1.04	-.70	296	17.25	.58	027	16.92	.37	073	16.90	.11	<u>Other</u>		
114	1.05 R	-.93	233	17.29	.49	360	16.88	.30	360	16.88	.11	409	0.76	.71
065	1.02	-1.01	029	17.26	.42	230	16.85	.24	230	16.85	.09	Meth: 151.XX PPM		
255	1.02	-1.01	397	17.19	.36	354	16.86	.24	354	16.86	.04	<u>Arsenic</u>		
433	1.01	-1.10	055	17.21	.28	Avg	16.75		Avg	16.85		405	1.00	1.13
232	1.01	-1.19	102	17.13	.10	131	16.53	-.48	114	16.77	-.30	230	0.73	.28
405	1.01	-1.22	Avg	17.09		247	16.48	-.59	137	16.64	-.37	409	0.76	.28
262	1.00	-1.30	028	17.05	-.16	409	16.38	-.85	131	16.53	-.56	136	0.76	.20
055	0.98	-1.61	095	16.94	-.38	232	16.25	-1.10	444	16.52	-.58	Avg	0.71	
230	0.87 A	-3.32	114	16.77	-.89	361	16.21	-1.18	247	16.48	-.65	102	0.31	-1.74
393	0.80 s	-4.35	137	16.64	-1.13	023	16.14	-1.31	450	16.46	-.73	450	0.50 R	-2.13
Meth: 131.00 PCT			444	16.52	-1.43	009	16.09	-1.46	106	16.43	-.75	Meth: 165.00 PCT		
<u>Water Soluble Magnes</u>			450	16.46	-1.62	086	16.20 R	-1.47	409	16.38	-.86	<u>Acid Soluble Boron</u>		
<u>AA</u>			106	16.43	-1.67	255	14.83 s	-4.15	232	16.25	-1.07	<u>Spectrometric</u>		
029	1.04	-.71	Meth: 144.02 PCT			Meth: 144.XX PCT			361	16.21	-1.14	262	0.115 s	9.50
Meth: 131.30 PCT			<u>Sulfur</u>			<u>Sulfur</u>			023	16.14	-1.25	397	0.060	2.16
<u>Water Soluble Magnes</u>			<u>Gravimetric</u>			<u>Sulfur</u>			086	16.20 R	-1.35	137	0.050	.81
<u>ICP</u>			073	16.90	.87	390	18.95 s	3.75	009	16.09	-1.37	200	0.045 R	.68
027	0.97	.41	Avg	16.28		043	17.90	1.87	292	15.65	-2.13	028	0.045	.10
Avg	0.94		292	15.65	-.87	307	17.86	1.81	393	15.18	-2.97	Avg	0.044	
432	0.91	-1.16	Meth: 144.70 PCT			Meth: 151.00 PPM			255	14.83 s	-3.59	029	0.042	-.37
Meth: 131.XX PCT			<u>Sulfur</u>			<u>Arsenic</u>			Meth: 151.30 PPM			029		
<u>Water Soluble Magnes</u>			<u>Spectrometric</u>			<u>Atomic Absorption</u>			<u>Arsenic</u>			296		
029	1.04	1.02	393	15.18	-.71	136	17.29	.78	136	0.76	.71	055	0.040	-.63
Avg	0.97		Meth: 144.99 PCT			296			Meth: 151.30 PPM			023		
027	0.97	-.03	<u>Sulfur</u>			029			<u>Arsenic</u>			057		
432	0.91	-1.21	<u>Other</u>			029			<u>ICP</u>					
			390	18.95 s	4.77	397	17.19	.64	405	1.00	.91			
			307	17.86	2.40	055	17.21	.64	230	0.73	.29			
						102	17.13	.51						
						028	17.05	.37						

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 165.99 PCT			Meth: 165.XX PCT			Meth: 181.30 PPM			Meth: 190.00 PCT			Meth: 190.XX PCT		
<u>Acid Soluble Boron</u>			<u>Acid Soluble Boron</u>			<u>Cadmium</u>			<u>Water Soluble Chlori</u>			<u>Water Soluble Chlori</u>		
<u>Other</u>			<u>Avg</u>			<u>ICP</u>			<u>Titrimetric</u>			230 4.43 -1.11		
432	0.065 s	3.34	296	0.040	-.02	324	5.05 s	4.86	043	5.23	2.15	Meth: 191.30 PPM		
354	0.059	2.55	324	0.040	-.02	247	3.20	2.26	444	5.07 R	1.62	Chromium		
405	0.045	.78	106	0.040	-.02	009	2.55	1.30	029	4.90	.75	<u>ICP</u>		
360	0.045	.78	055	0.040	-.20	<u>Avg</u>			<u>Avg</u>			390 99.30 1.88		
394	0.043	.54	023	0.039	-.21	102	1.64	-.02	102	4.68	-.17	009 89.95 .84		
444	0.042 R	.45	057	0.037	-.38	444	1.61	-.06	028	4.68	-.23	450 89.00 .76		
433	0.041	.39	231	0.037	-.38	232	1.55	-.25	057	4.67	-.24	065 86.13 .42		
409	0.041	.33	393	0.034	-.81	230	1.36	-.41	296	4.63	-.43	106 86.00 .40		
255	0.041	.29	422	0.034	-.81	096	1.40	-.45	055	4.58	-.65	247 84.50 .24		
106	0.040	.23	232	0.032	-.98	106	1.50 R	-.74	230	4.43	-1.25	Avg 82.44		
324	0.040	.23	230	0.031	-1.18	065	1.10	-.78	Meth: 190.99 PCT			037 82.20 -.07		
Avg	0.038		009	0.026	-1.77	450	1.03	-.90	<u>Water Soluble Chlori</u>			102 81.38 -.14		
231	0.037	-.14	043	0.025	-1.85	405	1.00	-.92	<u>Other</u>			232 80.30 -.25		
393	0.034	-.57	Meth: 171.10 PCT			Meth: 181.99 PPM			422 6.09 S 1.40			324 74.25 -.91		
422	0.034	-.57	<u>Water Soluble Boron</u>			<u>Cadmium</u>			234 5.73 .84			444 71.75 -1.19		
232	0.032	-.73	<u>Spectrometric</u>			<u>Other</u>			Avg 5.00			405 64.50 -1.99		
230	0.031	-.94	296	0.040	.00	409	1.75	-.71	009 4.96 -.43			027 32.67 s -5.53		
009	0.026	-1.53	Meth: 171.99 PCT			Meth: 181.XX PPM			394 4.68 -.87			230 31.75 s -5.63		
043	0.025	-1.61	<u>Water Soluble Boron</u>			<u>Cadmium</u>			397 4.64 -.95			Meth: 191.99 PPM		
Meth: 165.XX PCT			027 0.041 .00			324 5.05 s 4.55			Meth: 190.XX PCT			Chromium		
<u>Acid Soluble Boron</u>			Meth: 171.XX PCT			247 3.20 2.07			<u>Water Soluble Chlori</u>			<u>Other</u>		
262	0.115 s	9.17	<u>Water Soluble Boron</u>			200 3.00 1.75			422 6.09 s 3.63			409 99.90 -.71		
432	0.065 R	3.10	<u>Other</u>			009 2.55 1.14			234 5.73 2.64			Meth: 191.XX PPM		
397	0.060	2.44	027 0.041 .87			409 1.75 .04			043 5.23 1.18			Chromium		
354	0.059	2.30	Avg 0.041			Avg 1.72			444 5.07 R .85			009 99.90 1.65		
137	0.050	1.21	296 0.040 -.87			102 1.64 -.10			009 4.96 .40			390 99.30 1.57		
200	0.045 R	.85	Meth: 181.00 PPM			444 1.61 -.15			029 4.90 .24			009 89.95 .63		
028	0.045	.54	<u>Cadmium</u>			232 1.55 -.31			Avg 4.82			450 89.00 .57		
405	0.045	.54	<u>Atomic Absorption</u>			230 1.36 -.49			394 4.68 -.39			065 86.13 .25		
360	0.045	.54	200 3.00 .86			096 1.40 -.51			028 4.68 -.40			106 86.00 .22		
029	0.042	.33	Avg 2.08			106 1.50 R -.74			057 4.67 -.42			247 84.50 .09		
394	0.043	.29	136 1.15 -.87			136 1.15 -.80			397 4.64 -.54			Avg 83.78		
444	0.042	.25	Meth: 181.00 PPM			065 1.10 -.85			296 4.63 -.55			037 82.20 -.17		
433	0.041	.14	<u>Cadmium</u>			450 1.03 -.96			055 4.58 -.70			102 81.38 -.26		
409	0.041	.10	<u>Atomic Absorption</u>			405 1.00 -.98								
255	0.041	.08	200 3.00 .86											

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
<u>Meth: 191.XX PPM Chromium</u>			<u>Meth: 202.XX PPM Acid Soluble Cobalt</u>			<u>Meth: 221.99 PCT Acid Soluble Copper Other</u>			<u>Meth: 241.00 PCT Acid Soluble Iron Atomic Absorption</u>			<u>Meth: 241.30 PCT Acid Soluble Iron ICP</u>		
232	80.30	-.36	065	17.26	.38	422	0.0040	1.29	351	2.55	-.23	292	1.39 S	-4.09
324	74.25	-.97	Avg	14.66		Avg	0.0023		177	2.53	-.26	023	1.22 s	-4.65
444	71.75	-1.22	247	13.00	-.24	402	0.0020	-.21	296	2.57	-.30	247	0.67 s	-6.48
405	64.50	-1.95	232	13.00	-.24	409	0.0010	-.90	262	2.51	-.57	<u>Meth: 241.99 PCT Acid Soluble Iron Other</u>		
027	32.67 s	-5.18	106	12.50	-.33	<u>Meth: 221.XX PCT Acid Soluble Copper</u>			028	2.44	-.82	422	3.04	1.17
230	31.75 s	-5.27	324	11.30	-.50	405	0.0119 s	17.36	029	2.27	-1.81	Avg	2.59	
<u>Meth: 202.00 PPM Acid Soluble Cobalt AA</u>			102	11.39	-.51	255	0.0045 R	5.57	<u>Meth: 241.30 PCT Acid Soluble Iron ICP</u>			234	2.54	-.29
136	2.55	.71	230	4.97	-1.43	422	0.0040 R	4.98	432	3.13 R	1.80	402	2.20	-1.02
<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.00 PCT Acid Soluble Copper Atomic Absorption</u>			354	0.0030	3.12	114	3.00	1.24	042	0.23 S	-6.15
405	23.00	1.38	043	0.0013	.90	402	0.0020	1.52	390	2.97	1.17	<u>Meth: 241.XX PCT Acid Soluble Iron</u>		
057	22.55	1.29	Avg	0.0011		043	0.0013	.43	354	2.96	1.14	432	3.13 R	2.23
009	21.85	1.18	095	0.0008	-.83	Avg	0.0011		106	2.96	1.10	422	3.04	1.69
065	17.26	.38	<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>			444	0.0010	-.08	324	2.87	.82	114	3.00	1.52
Avg	15.08		405	0.0119 s	50.31	230	0.0010	-.08	360	2.83	.71	390	2.97	1.43
232	13.00	-.36	255	0.0045 s	16.97	409	0.0010	-.18	096	2.79	.56	354	2.96	1.39
247	13.00	-.36	354	0.0030 A	10.03	450	0.0009	-.24	027	2.79	.55	106	2.96	1.35
106	12.50	-.45	324	0.0010 R	1.01	324	0.0010	-.29	233	2.74	.44	324	2.87	.99
324	11.30	-.66	230	0.0010	.98	057	0.0009	-.32	426	2.76	.43	137	2.85	.90
102	11.39	-.66	444	0.0010	.98	095	0.0008	-.40	255	2.74	.42	360	2.83	.85
230	4.97	-1.75	450	0.0009	.52	232	0.0008	-.40	009	2.73	.37	055	2.76	.78
<u>Meth: 202.99 PPM Acid Soluble Cobalt Other</u>			057	0.0009	.34	433	0.0008	-.43	131	2.71	.28	096	2.79	.66
409	22.50	.71	232	0.0008	.07	065	0.0008	-.44	057	2.67	.16	027	2.79	.65
<u>Meth: 202.XX PPM Acid Soluble Cobalt</u>			433	0.0008	.07	247	0.0008	-.46	409	2.66	.12	095	2.77	.57
405	23.00	1.24	Avg	0.0008		102	0.0008	-.49	Avg	2.63		233	2.74	.52
409	22.50	1.16	065	0.0008	-.05	009	0.0002	-1.36	232	2.47	-.53	233	2.74	.52
057	22.55	1.16	102	0.0008	-.27	<u>Meth: 241.00 PCT Acid Soluble Iron Atomic Absorption</u>			433	2.44	-.60	426	2.76	.51
009	21.85	1.07	247	0.0008	-.34	137	2.85	1.68	307	2.62 R	-.72	255	2.74	.49
			009	0.0002	-2.64	055	2.76 R	1.41	065	2.40	-.76	009	2.73	.43
						095	2.77	1.20	394	2.36	-.88	397	2.70	.37
						397	2.70	.84	102	2.42 R	-.97	131	2.71	.31
						Avg	2.57		231	2.32	-1.03	057	2.67	.17
						043	2.54	-.23	444	2.27	-1.19	409	2.66	.11
									405	2.16	-1.56	Avg	2.63	
									230	1.80	-2.75			

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 241.XX PCT			Meth: 251.30 PPM			Meth: 261.00 PCT			Meth: 261.31 PCT			Meth: 261.XX PCT		
<u>Acid Soluble Iron</u>			<u>Lead</u>			<u>Acid Soluble Manganese</u>			<u>Acid Soluble Manganese</u>			<u>Acid Soluble Manganese</u>		
296	2.57	-.34	ICP			AA			ICP			042	0.370	.33
351	2.55	-.36	444	2.34	-.23	095	0.036 s	-11.26	324	0.389	.87	057	0.373	.33
043	2.54	-.41	450	2.50	-.27				Avg	0.369		106	0.370	.20
177	2.53	-.43	230	0.72	-.96	Meth: 261.11 PCT			394	0.350	-.86	Avg 0.365		
234	2.54	-.57	102	0.61	-1.01	<u>Acid Soluble Manganese</u>			Meth: 261.99 PCT			433 0.365 -.05		
262	2.51	-.60	Meth: 251.99 PPM			AA			Acid Soluble Manganese			028 0.363 -.14		
232	2.47	-.71	<u>Lead</u>			029 0.386 .71			<u>Other</u>			351 0.358 -.35		
433	2.44	-.79	<u>Other</u>			Meth: 261.30 PCT			409 0.403 1.62			394 0.350 -.66		
028	2.44	-.82	409	0.68	.71	<u>Acid Soluble Manganese</u>			402 0.383 .67			255 0.353 -.72		
307	2.62 R	-.90	Meth: 251.XX PPM			ICP			042 0.370 .29			232 0.351 -.72		
065	2.40	-.99	<u>Lead</u>			432 0.485 s 6.43			Avg 0.367			022 0.350 -.79		
394	2.36	-1.15	247 7.40 2.21			114 0.400 1.59			255 0.353 -.74			177 0.346 -.84		
102	2.42 R	-1.24	136 4.90 1.07			354 0.391 1.14			422 0.348 -.95			065 0.347 -.86		
231	2.32	-1.33	405 3.50 .43			027 0.385 .86			037 0.346 -.95			023 0.345 -.89		
029	2.27	-1.50	065 2.86 X .33			390 0.383 .78			Meth: 261.XX PCT			262 0.345 -.91		
444	2.27	-1.54	Avg 2.75			360 0.382 .75			<u>Acid Soluble Manganese</u>			444 0.344 -.93		
402	2.20	-1.81	444 2.34 -.20			096 0.375 R .74			432 0.485 s 5.88			037 0.346 -.93		
405	2.16	-1.99	450 2.50 -.27			426 0.380 .64			397 0.414 2.11			422 0.348 -.94		
230	1.80 A	-3.49	200 2.00 -.36			102 0.379 .60			409 0.403 1.73			296 0.338 -1.23		
292	1.39 s	-5.17	230 0.72 -.97			131 0.377 .56			114 0.400 1.49			230 0.333 -1.43		
023	1.22 s	-5.88	409 0.68 -.98			233 0.370 .54			029 0.386 R 1.29			292 0.320 -1.96		
247	0.67 s	-8.17	102 0.61 -1.02			231 0.374 .36			354 0.391 1.09			137 0.315 -2.27		
042	0.23 s	-10.00	Meth: 251.00 PPM			057 0.373 .31			324 0.389 1.01			095 0.036 s -14.24		
Meth: 251.00 PPM			Meth: 261.00 PCT			106 0.370 .16			027 0.385 .83			Meth: 289.30 PPM		
<u>Lead</u>			<u>Acid Soluble Manganese</u>			Avg 0.367			043 0.385 .83			<u>Molybdenum</u>		
<u>Atomic Absorption</u>			AA			433 0.365 -.09			009 0.382 .82			<u>ICP</u>		
136	4.90	.91	397 0.414 1.89			232 0.351 -.84			390 0.383 .76			106 8.00 R 1.52		
Avg	3.45		043 0.385 .86			022 0.350 -.92			402 0.383 .75			324 7.50 1.09		
200	2.00	-.82	055 0.375 .56			065 0.347 -1.00			360 0.382 .73			247 7.05 .81		
Meth: 251.30 PPM			028 0.363 .11			023 0.345 -1.04			096 0.375 .70			057 7.00 .79		
<u>Lead</u>			Avg 0.360			444 0.344 -1.08			426 0.380 .63			232 6.55 .53		
<u>ICP</u>			351 0.358 -.13			230 0.333 -1.63			102 0.379 .60			065 6.12 .25		
247	7.40	2.05	177 0.346 -.48			292 0.320 -2.22			131 0.377 .56			Avg 5.72		
405	3.50	.37	262 0.345 -.54						233 0.370 .51			102 5.69 -.10		
065	2.86 X	.31	296 0.338 -.81						055 0.375 .47			433 5.38 -.21		
Avg	2.85		137 0.315 -1.64						231 0.374 .37			009 3.95 -1.08		
												230 2.26 -2.11		

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 289.99 PPM			Meth: 291.XX PPM			Meth: 311.99 PCT			Meth: 321.30 PCT			Meth: 321.XX PCT		
Molybdenum			Nickel			Sodium			Acid Soluble Zinc			Acid Soluble Zinc		
<u>Other</u>			<u>Other</u>			<u>Other</u>			<u>ICP</u>			<u>ICP</u>		
409	6.82	-.71	136	44.00	1.47	Avg	0.22		Avg	0.414		102	0.437	.95
			444	42.72	1.24	009	0.22	-.24	027	0.414	-.11	324	0.428	.61
			450	42.00	.87	232	0.20	-1.74	393	0.410	-.11	307	0.422 R	.59
Meth: 289.XX PPM			247 41.25 .57			Meth: 321.00 PCT			255 0.408 -.21			233 0.411 R .53		
Molybdenum			009 40.00 .42			Acid Soluble Zinc			096 0.407 -.40			023 0.424 .49		
106	8.00 R	1.50	Avg 39.46			<u>Atomic Absorption</u>			409 0.400 -.43			360 0.422 .42		
324	7.50	1.06	065	38.88	-.20	029	0.460 s	6.66	233	0.411 R	-.47	402	0.420	.33
247	7.05	.77	106	37.50	-.64	055	0.410	1.28	231	0.398	-.52	037	0.419	.31
057	7.00	.75	102	37.14	-.75	351	0.412	1.11	292	0.390	-.74	009	0.417	.25
409	6.82	.63	037	37.07	-.77	177	0.409	.86	433	0.381	-1.04	027	0.414	.17
232	6.55	.48	232	34.05	-1.72	028	0.409	.85	022	0.380	-1.06	351	0.412	.06
065	6.12	.19	Meth: 301.30 PPM			043 0.396 -.21			444 0.374 R -1.31			Avg 0.410		
Avg	5.83		Selenium			065 0.352 -1.94			232 0.357 -1.77			393 0.410		
102	5.69	-.14	<u>ICP</u>			397 0.396 -.52			230 0.350 -2.03			028 0.409		
433	5.38	-.29	232	10.55	.86	095 0.387 -.96			405 0.135 s -8.77			042 0.410		
009	3.95	-1.18	Avg	6.72		262 0.385 -1.20			Meth: 321.99 PCT			177 0.409		
230	2.26	-2.25	065	2.89 X	-.87	296 0.384 -1.22			Acid Soluble Zinc			255 0.408		
Meth: 291.00 PPM			Meth: 301.99 PPM			Meth: 321.30 PCT			Meth: 321.99 PCT			055 0.410		
Nickel			Selenium			Acid Soluble Zinc			Acid Soluble Zinc			409 0.400		
<u>Atomic Absorption</u>			<u>Other</u>			<u>ICP</u>			<u>Other</u>			422 0.400		
136	44.00	.71	409	0.53	.71	432	0.585 s	5.42	114	0.440	1.43	096	0.407 R	-.41
Meth: 291.30 PPM			Meth: 301.XX PPM			394 0.470 1.78			402 0.420 .17			231 0.398		
Nickel			Selenium			106 0.465 1.63			Avg 0.417			043 0.396		
<u>ICP</u>			<u>Other</u>			426 0.448 1.10			042 0.410 -.51			397 0.396		
444	42.72	1.50	232	10.55	1.25	390	0.446	1.01	422	0.400	-1.08	292	0.390	-.72
450	42.00	1.11	Avg	4.66		426	0.448	1.10	Meth: 321.XX PCT			095 0.387		
247	41.25	.80	065	2.89 X	-.40	390	0.446	1.01	Acid Soluble Zinc			262 0.385		
009	40.00	.55	409	0.53	-.87	354	0.446	1.01	0432 0.585 s 6.21			296 0.384		
Avg	38.96		Meth: 311.99 PCT			057 0.439 .80			029 0.460 s 2.52			433 0.381		
065	38.88	-.08	Sodium			102 0.437 .74			394 0.470 2.12			022 0.380		
106	37.50	-.53	<u>Other</u>			307 0.422 .45			106 0.465 1.95			444 0.374 R		
102	37.14	-.64	422	0.35 R	10.12	324	0.428	.44	426	0.448	1.35	232	0.357	-1.87
037	37.07	-.68	292	0.23	.92	131	0.426	.43	390	0.446	1.25	065	0.352	-2.06
232	34.05	-1.70	102	0.23	.59	023	0.424	.33	354	0.446	1.25	230	0.350	-2.17
			057	0.22	.48	360	0.422	.27	114	0.440	1.05	405	0.135 s	-9.74
						037	0.419	.17	057	0.439	1.02			
						009	0.417	.13						

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>
Meth:	325.00	PCT									
Water Soluble Zinc											
<u>Atomic Absorption</u>											
137	0.480	.00									

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
001.10	11	0.09	2.74	0.53	050.99	16	- 0.05	0.99	0.18
001.99	8	0.34	1.34	0.63	050.XX	67	- 0.11	1.72	0.30
001.XX	19	0.17	2.46	0.58	060.00	4	0.00	0.86	0.56
002.20	3	30.47	52.77	1.04	060.XX	4	0.00	0.86	0.56
002.99	4	0.00	1.08	0.07	101.30	18	0.25	1.30	0.18
002.XX	7	15.89	41.19	0.81	101.XX	20	1.94	5.84	0.19
009.10	6	0.00	1.04	0.10	121.00	13	- 0.04	0.98	0.18
009.XX	7	0.00	1.03	0.11	121.30	31	- 0.13	1.65	0.29
010.11	6	- 0.19	1.05	0.20	121.99	3	8.02	8.22	0.73
010.12	5	0.00	1.05	0.14	121.XX	48	0.43	3.02	0.30
010.60	55	- 0.07	1.66	0.30	131.30	2	0.00	0.57	0.77
010.99	5	- 1.90	4.36	0.28	131.XX	3	0.00	0.76	0.67
010.XX	69	- 0.13	1.75	0.35	144.01	18	0.00	0.99	0.20
020.10	6	9.00	17.62	0.49	144.02	2	0.00	1.22	0.04
020.20	19	0.13	1.02	0.42	144.99	20	- 0.03	1.74	0.25
020.40	4	0.00	0.93	0.48	144.XX	41	- 0.02	1.28	0.17
020.50	7	0.05	0.96	0.30	151.30	4	0.00	0.74	0.68
020.99	4	0.00	1.02	0.30	151.XX	6	- 0.14	0.93	0.87
020.XX	39	0.58	3.10	0.44	165.00	10	0.961	3.124	0.329
030.10	2	0.00	1.22	0.00	165.99	18	0.205	1.228	0.160
030.40	2	0.00	1.22	0.03	165.XX	28	0.456	2.034	0.221
030.XX	5	- 0.11	0.97	0.02	171.XX	2	0.000	1.225	0.000
040.40	3	0.00	0.70	0.71	181.00	2	0.00	1.22	0.10
040.XX	5	0.00	0.93	0.45	181.30	12	0.39	1.68	0.27
041.10	18	0.34	1.42	0.45	181.XX	15	0.28	1.51	0.24
041.20	2	0.00	1.22	0.03	190.00	9	0.17	1.08	0.23
041.40	4	- 0.13	0.93	1.48	190.99	5	0.00	1.06	0.06
041.50	10	0.06	0.96	0.36	190.XX	14	0.31	1.35	0.14
041.60	10	0.39	1.44	0.44	191.30	14	- 0.80	2.23	0.10
041.XX	37	0.09	1.48	0.42	191.XX	15	- 0.70	2.07	0.10
048.20	2	0.00	1.10	0.38	202.30	10	0.00	1.02	0.10
048.XX	3	0.00	0.91	0.53	202.XX	12	0.00	1.02	0.09
050.00	16	- 0.09	4.33	0.54	221.00	2	0.0000	1.1785	0.2357
050.10	2	- 3.97	5.62	0.50	221.30	14	5.5645	13.841	0.6535
050.30	12	0.00	1.01	0.14	221.99	3	0.0000	1.0169	0.3793
050.50	6	0.00	1.04	0.12	221.XX	19	1.4519	4.2765	0.4191
050.51	9	0.55	1.89	0.57	241.00	11	0.10	1.01	0.34
050.60	7	0.00	1.04	0.05	241.30	29	- 0.49	1.88	0.25
050.61	7	0.05	0.95	0.45	241.99	4	- 1.54	3.20	0.14

Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
241.XX	44	- 0.72	2.44	0.29					
251.00	2	0.00	1.16	0.28					
251.30	7	0.00	1.02	0.17					
251.XX	10	0.00	1.01	0.18					
261.00	10	- 1.126	3.683	0.211					
261.30	23	0.262	1.501	0.699					
261.31	2	0.000	1.215	0.110					
261.99	6	0.000	0.938	0.428					
261.XX	42	- 0.194	2.537	0.534					
289.30	10	0.14	1.06	0.21					
289.XX	11	0.12	1.05	0.21					
291.30	9	0.00	0.97	0.32					
291.XX	10	0.00	0.98	0.30					
301.30	2	0.00	1.21	0.13					
301.XX	3	0.00	1.11	0.10					
311.99	6	1.68	4.23	0.32					
311.XX	6	1.68	4.23	0.32					
321.00	10	0.511	1.850	1.396					
321.30	30	- 0.156	2.133	0.195					
321.99	4	0.000	1.074	0.097					
321.XX	44	- 0.062	2.011	0.335					