

- Pass 1 Results for 81 Labs - - Pass 2 Results for 79 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	10	2.88	0.09	0.06	10	2.88	0.09	0.06
Ammoniacal Nitrogen, Other		001.99	6	2.87	0.08	0.05	5	2.88	0.04	0.01
Method Group 001.XX PCT			16	2.88	0.08	0.06	14	2.88	0.07	0.03
Nitrate Nitrogen, Jones Modified	930.02	002.20	2	3.40	0.23	0.02	2	3.40	0.23	0.02
Nitrate Nitrogen, Other		002.99	7	3.44	0.15	0.05	7	3.44	0.15	0.05
Method Group 002.XX PCT			9	3.43	0.17	0.04	9	3.43	0.17	0.04
Ammon & Nitrate N, Devarda	892.01	009.10	8	6.38	0.19	0.09	8	6.38	0.19	0.09
Total Nitrogen, Modified Comprehensive	978.02	010.11	4	6.35	0.29	0.05	4	6.35	0.29	0.05
Total Nitrogen, Salicylic	955.04D	010.12	3	6.23	0.10	0.03	3	6.23	0.10	0.03
Total Nitrogen, Combustion		010.60	49	6.35	0.19	0.07	48	6.34	0.19	0.07
Total Nitrogen, Other		010.99	4	6.36	0.33	0.14	3	6.24	0.24	0.01
Method Group 010.XX PCT			62	6.32	0.23	0.08	59	6.32	0.21	0.06
Total Phosphate, Grav Quimociac	962.02	020.10	3	6.45	0.13	0.14	3	6.45	0.13	0.14
Total Phosphate, Spectrometric	958.01	020.20	12	6.42	0.11	0.05	11	6.41	0.11	0.04
Total Phosphate, Automated	978.01	020.40	7	6.47	0.19	0.08	6	6.51	0.17	0.05
Total Phosphate, ICP		020.50	15	6.48	0.28	0.15	14	6.49	0.27	0.11
Total Phosphate, Other		020.99	2	6.74	0.26	0.00	2	6.74	0.26	0.00
Method Group 020.XX PCT			40	6.48	0.23	0.11	37	6.48	0.21	0.07
Insoluble Phosphate, Grav Quimociac	963.03C	030.10	1	0.03	0.00	0.00	1	0.03	0.00	0.00
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.04	0.01	0.01	1	0.04	0.01	0.01
Insoluble Phosphate, Automated	978.01	030.40	1	0.07	0.01	0.02	1	0.07	0.01	0.02
Insoluble Phosphate, ICP		030.50	2	0.02	0.03	0.02	2	0.02	0.03	0.02
Method Group 030.XX PCT			5	0.04	0.03	0.01	5	0.04	0.03	0.01
InDir Available Phosphate, Grav Quim	960.02	040.10	1	6.44	0.01	0.02	1	6.44	0.01	0.02
InDir Available Phosphate, Spectrometri	960.02	040.20	1	6.39	0.00	0.00	1	6.39	0.00	0.00
InDir Available Phosphate, Automated	960.02	040.40	1	6.30	0.03	0.04	1	6.30	0.03	0.04
InDir Available Phosphate, ICP		040.50	1	6.19	0.03	0.05	1	6.19	0.03	0.05
InDir Available Phosphate, Other		040.99	1	6.17	0.16	0.23	1	6.17	0.16	0.23
Method Group 040.XX PCT			5	6.30	0.13	0.07	4	6.33	0.10	0.03
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	10	6.40	0.04	0.04	10	6.40	0.04	0.04
Dir Available Phosphate, Spectrometric	960.03D	041.20	1	6.10	0.03	0.04	1	6.10	0.03	0.04
Dir Available Phosphate, Automated	978.01	041.40	4	6.21	0.17	0.18	4	6.21	0.17	0.18
Dir Available Phosphate, ICP		041.50	11	6.28	0.25	0.11	10	6.27	0.25	0.09
Dir Available Phosphate, EDTA Extract	993.01	041.60	7	6.41	0.12	0.05	7	6.41	0.12	0.05
Method Group 041.XX PCT			35	6.34	0.18	0.09	32	6.36	0.15	0.06
Water Soluble Phosphate, Spectrometric	970.01	048.20	3	5.24	0.04	0.04	3	5.24	0.04	0.04
Water Soluble Phosphate, ICP		048.50	1	5.28	0.22	0.31	1	5.28	0.22	0.31
Method Group 048.XX PCT			4	5.25	0.09	0.11	4	5.25	0.09	0.11
Soluble Potash, STPB Oxalate	958.02	050.00	12	18.20	0.26	0.15	11	18.18	0.23	0.09

- Pass 1 Results for 81 Labs - - Pass 2 Results for 79 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	6	18.36	0.83	0.21	5	18.42	0.89	0.11
Soluble Potash, AA (Citrate)		050.31	3	17.53	0.58	0.22	3	17.53	0.58	0.22
Soluble Potash, ICP (Oxalate)		050.50	10	18.29	0.52	0.42	9	18.32	0.49	0.32
Soluble Potash, ICP (Citrate)		050.51	10	18.10	0.58	0.16	10	18.10	0.58	0.16
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	3	18.42	0.34	0.04	3	18.42	0.34	0.04
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	7	18.41	0.37	0.16	7	18.41	0.37	0.16
Soluble Potash, Other		050.99	21	18.06	0.56	0.28	19	18.15	0.49	0.21
Method Group 050.XX PCT			72	18.17	0.54	0.23	67	18.21	0.52	0.17
Free Water, Vacuum Oven	965.08B	060.00	4	0.39	0.06	0.05	4	0.39	0.06	0.05
Method Group 060.XX PCT			4	0.39	0.06	0.05	4	0.39	0.06	0.05
Acid Soluble Calcium, AA	945.04	101.00	9	4.98	0.27	0.14	9	4.98	0.27	0.14
Acid Soluble Calcium, ICP		101.30	34	5.09	0.24	0.12	32	5.10	0.23	0.09
Acid Soluble Calcium, Other		101.99	2	4.33	0.15	0.15	2	4.33	0.15	0.15
Method Group 101.XX PCT			46	5.02	0.31	0.12	44	5.02	0.30	0.10
Acid Soluble Magnesium, AA	984.01	121.00	11	4.19	0.30	0.10	12	4.25	0.35	0.09
Acid Soluble Magnesium, ICP		121.30	38	4.20	0.20	0.08	37	4.21	0.20	0.07
Acid Soluble Magnesium, Other		121.99	2	4.26	0.31	0.35	2	4.26	0.31	0.35
Method Group 121.XX PCT			51	4.20	0.23	0.10	49	4.21	0.22	0.08
Water Soluble Magnesium, AA		131.00	3	3.28	0.21	0.05	3	3.28	0.21	0.05
Water Soluble Magnesium, ICP		131.30	1	4.25	0.02	0.03	1	4.25	0.02	0.03
Method Group 131.XX PCT			4	3.52	0.48	0.04	4	3.52	0.48	0.04
Sulfur, Gravimetric	980.02a	144.01	13	12.09	0.45	0.14	13	12.09	0.45	0.14
Sulfur, Gravimetric	980.02b	144.02	1	11.43	0.08	0.12	1	11.43	0.08	0.12
Sulfur, Spectrometric		144.70	1	12.66	0.16	0.22	1	12.66	0.16	0.22
Sulfur, Other		144.99	26	11.68	0.78	0.26	25	11.72	0.77	0.22
Method Group 144.XX PCT			41	11.83	0.71	0.22	40	11.85	0.70	0.19
Arsenic, Atomic Absorption		151.00	1	7.20	0.14	0.20	1	7.20	0.14	0.20
Arsenic, ICP		151.30	5	8.68	3.56	0.68	5	8.68	3.56	0.68
Arsenic, Other		151.99	2	5.18	1.12	0.27	2	5.18	1.12	0.27
Method Group 151.XX PPM			8	7.62	3.20	0.52	8	7.62	3.20	0.52
Acid Soluble Boron, Spectrometric	982.01	165.00	6	0.060	0.004	0.001	6	0.060	0.004	0.001
Acid Soluble Boron, Other		165.99	21	0.065	0.009	0.003	21	0.065	0.009	0.003
Method Group 165.XX PCT			27	0.064	0.008	0.003	25	0.064	0.008	0.002
Water Soluble Boron, Other		171.99	1	0.055	0.000	0.001	1	0.055	0.000	0.001
Cadmium, Atomic Absorption		181.00	2	3.92	0.32	0.12	2	3.92	0.32	0.12
Cadmium, ICP		181.30	10	3.68	0.43	0.18	10	3.68	0.43	0.18
Method Group 181.XX PPM			13	3.66	0.49	0.26	12	3.72	0.42	0.17
Water Soluble Chlorine, Titrimetric	928.02	190.00	7	1.11	0.13	0.05	7	1.11	0.13	0.05
Water Soluble Chlorine, Other		190.99	4	1.00	0.24	0.04	4	1.00	0.24	0.04

- Pass 1 Results for 81 Labs - - Pass 2 Results for 79 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
Method Group 190.XX PCT			11	1.07	0.18	0.05	11	1.07	0.18	0.05
Chromium, Atomic Absorption		191.00	1	67.71	5.64	7.98	1	67.71	5.64	7.98
Chromium, ICP		191.30	9	86.23	9.11	3.41	9	86.23	9.11	3.41
Chromium, Other		191.99	1	114.09	0.17	0.25	1	114.09	0.17	0.25
Method Group 191.XX PPM			11	87.08	13.21	3.54	11	87.08	13.21	3.54
Acid Soluble Cobalt, AA		202.00	2	35.75	22.84	1.50	2	35.75	22.84	1.50
Acid Soluble Cobalt, ICP	965.11	202.30	11	48.11	11.46	3.33	10	48.69	11.71	2.37
Method Group 202.XX PPM			13	46.21	13.92	3.04	12	46.53	14.34	2.22
Acid Soluble Copper, Atomic Absorption	975.01	221.00	2	0.0022	0.0005	0.0001	2	0.0022	0.0005	0.0001
Acid Soluble Copper, ICP		221.30	17	0.0023	0.0004	0.0002	15	0.0023	0.0003	0.0001
Acid Soluble Copper, Other		221.99	1	0.0022	0.0000	0.0000	1	0.0022	0.0000	0.0000
Method Group 221.XX PCT			20	0.0023	0.0004	0.0002	18	0.0023	0.0003	0.0001
Acid Soluble Iron, Atomic Absorption	980.01	241.00	7	0.70	0.05	0.02	7	0.70	0.05	0.02
Acid Soluble Iron, ICP		241.30	37	0.67	0.10	0.03	37	0.67	0.10	0.03
Acid Soluble Iron, Other		241.99	4	0.64	0.07	0.02	4	0.64	0.07	0.02
Method Group 241.XX PCT			48	0.67	0.10	0.03	47	0.68	0.09	0.03
Lead, Atomic Absorption		251.00	2	6.51	1.90	1.02	2	6.51	1.90	1.02
Lead, ICP		251.30	11	6.30	1.55	0.82	11	6.30	1.55	0.82
Method Group 251.XX PPM			13	6.33	1.57	0.85	13	6.33	1.57	0.85
Acid Soluble Manganese, AA	972.02a	261.00	7	0.419	0.040	0.013	7	0.419	0.040	0.013
Acid Soluble Manganese, AA	972.02b	261.11	1	0.373	0.003	0.004	1	0.373	0.003	0.004
Acid Soluble Manganese, ICP		261.30	30	0.379	0.034	0.016	29	0.376	0.030	0.016
Acid Soluble Manganese, ICP		261.31	1	0.389	0.012	0.017	1	0.389	0.012	0.017
Acid Soluble Manganese, Other		261.99	8	0.370	0.037	0.007	8	0.370	0.037	0.007
Method Group 261.XX PCT			47	0.383	0.037	0.014	46	0.384	0.037	0.013
Water Soluble Manganese, Other		271.99	1	0.029	0.001	0.001	1	0.029	0.001	0.001
Mercury, ICP		281.30	1	0.05	0.01	0.02	1	0.05	0.01	0.02
Mercury, Other		281.99	1	0.06	0.01	0.01	1	0.06	0.01	0.01
Method Group 281.XX PPM			2	0.05	0.01	0.02	2	0.05	0.01	0.02
Molybdenum, ICP		289.30	13	9.19	1.12	0.41	13	9.19	1.12	0.41
Method Group 289.XX PPM			13	9.19	1.12	0.41	13	9.19	1.12	0.41
Nickel, Atomic Absorption		291.00	1	32.70	0.56	0.79	1	32.70	0.56	0.79
Nickel, ICP		291.30	10	46.24	6.45	1.64	10	46.24	6.45	1.64
Method Group 291.XX PPM			12	42.43	11.21	1.43	12	42.43	11.21	1.43
Selenium, ICP		301.30	1	0.30	0.05	0.07	1	0.30	0.05	0.07
Selenium, Other		301.99	1	0.16	0.00	0.00	1	0.16	0.00	0.00
Method Group 301.XX PPM			2	0.23	0.08	0.03	2	0.23	0.08	0.03
Sodium, Flame Photometric	974.01	311.30	1	0.49	0.01	0.02	1	0.49	0.01	0.02
Sodium, Other		311.99	5	0.48	0.03	0.01	5	0.48	0.03	0.01

- Pass 1 Results for 81 Labs - - Pass 2 Results for 79 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
Method Group 311.XX PCT			6	0.48	0.02	0.01	6	0.48	0.02	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	10	0.152	0.008	0.005	10	0.152	0.008	0.005
Acid Soluble Zinc, ICP		321.30	35	0.149	0.013	0.008	33	0.149	0.012	0.007
Acid Soluble Zinc, Other		321.99	4	0.156	0.017	0.006	3	0.161	0.015	0.001
Method Group 321.XX PCT			50	0.151	0.013	0.007	48	0.151	0.013	0.006
Water Soluble Zinc, ICP		325.30	1	0.015	0.007	0.010	1	0.015	0.007	0.010
Water Soluble Zinc, Other		325.99	1	0.158	0.006	0.009	1	0.158	0.006	0.009
Method Group 325.XX PCT			2	0.086	0.082	0.010	2	0.086	0.082	0.010

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index			
Meth: 001.10 PCT														
Ammoniacal Nitrogen														
MgO Distillation														
200	3.89 s	11.54										Meth: 010.60 PCT		
444	3.05	2.01										Total Nitrogen		
258	2.94	.70										Combustion		
117	2.93	.63										035	6.23	- .63
456	2.89	.47										426	6.27	- .66
397	2.89	.09										037	6.22	- .68
Avg	2.88											360	6.23	- .74
481	2.88	- .12										042	6.20	- .76
232	2.83	- .66										292	6.18	- .89
169	2.81	- .94										232	6.17	- .92
309	2.85	- 1.18										325	6.20	- .93
090	2.78	- 1.27										351	6.16	- .97
Meth: 002.20 PCT														
Nitrate Nitrogen														
Jones Modified														
029	3.59	.87										368	6.14	- 1.08
Avg	3.40											371	6.10	- 1.29
200	3.20	- .87										451	6.05	- 1.64
Meth: 002.99 PCT														
Nitrate Nitrogen														
Other														
393	3.35 S	10.35										234	5.99	- 1.91
479	2.94	1.33										472	5.89	- 2.47
474	2.90	.44										482	5.78 s	- 3.06
096	2.89	.31										450	5.80 s	- 3.09
Avg	2.88											Meth: 010.99 PCT		
420	2.86	- .57										Total Nitrogen		
027	2.82	- 1.45										Other		
368	2.80 R	- 3.55										479	6.72 R	2.33
Meth: 001.11 PCT														
Total Nitrogen														
Modified Comprehensive														
368	3.77	2.18										137	6.44	.86
027	3.46	.15										300	6.33	.40
Avg	3.44											Avg	6.24	
397	3.42	- .17										030	5.94	- 1.26
393	3.41	- .18										255	2.79 S	- 14.67
481	3.36	- .51										072	2.68 S	- 15.16
232	3.36	- .53										Meth: 010.12 PCT		
258	3.29	- 1.07										Total Nitrogen		
Meth: 002.12 PCT														
Salicylic														
185	6.33	1.01										200	7.09 s	3.69
481	6.25	.28										043	6.82	2.42
Avg	6.23											479	6.72 R	2.30
368	3.77	2.07										072	6.72	1.90
029	3.59	1.01										470	6.64	1.52
027	3.46	.19										055	6.62	1.42
Avg	3.43											443	6.57 R	1.38
397	3.42	- .12										Meth: 010.10 PCT		
393	3.41	- .12										Total Nitrogen		
481	3.36	- .51										Combustion		
232	3.36	- .53										200	7.09 s	3.98
258	3.29	- 1.07										043	6.82	2.57
Meth: 002.10 PCT														
Total Nitrogen														
Combustion														
200	7.09 s	3.98										072	6.72	2.00
043	6.82	2.57										055	6.62	1.47
072	6.72	2.00										443	6.57 R	1.44
055	6.62	1.47										389	6.61	1.41
443	6.57 R	1.44										393	6.60	1.39
389	6.61	1.41										095	6.60	1.36
393	6.60	1.39										422	6.57	1.21
095	6.60	1.36										029	6.50	.87
422	6.57	1.21										007	6.50	.85
029	6.50	.87										157	6.49	.84
Avg	6.38											291	6.49	.77
090	6.33	- .31										009	6.45	.70
397	6.31	- .43										040	6.45	.64
258	6.23	- .97										483	6.45	.64
169	6.16	- 1.21										233	6.38	.47
Meth: 010.11 PCT														
Total Nitrogen														
Modified Comprehensive														
470	6.64	.96										096	6.42	.42
309	6.50	.48										102	6.35	.27
260	6.37	.26										377	6.38	.26
Avg	6.35											162	6.37	.23
211	5.91	- 1.51										402	6.37	.22
Meth: 010.12 PCT														
Total Nitrogen														
Salicylic														
185	6.33	1.01										354	6.37	.19
481	6.25	.28										406	6.35	.12
Avg	6.23											231	6.35	.07
368	3.77	2.07										Avg	6.34	
029	3.59	1.01										131	6.33	- .06
027	3.46	.19										106	6.31	- .27
Avg	3.43											405	6.29	- .33
397	3.42	- .12										136	6.28	- .34
393	3.41	- .12										247	6.31	- .36
481	3.36	- .51										324	6.29	- .38
232	3.36	- .53										041	6.29	- .38
258	3.29	- 1.07										177	6.27	- .43
Meth: 002.10 PCT														
Total Nitrogen														
Salicylic														
185	6.33	1.01										086	6.34	- .49
481	6.25	.28										420	6.26	- .50
Avg	6.23											390	6.26	- .52
368	3.77	2.07										Meth: 010.00 PCT		
029	3.59	1.01										Total Nitrogen		
027	3.46	.19										200	7.09 s	3.69
Avg	3.43											043	6.82	2.42
397	3.42	- .12										479	6.72 R	2.30
393	3.41	- .12										072	6.72	1.90
481	3.36	- .51										470	6.64	1.52
232	3.36	- .53										055	6.62	1.42
258	3.29	- 1.07										443	6.57 R	1.38

* 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.XX PCT														
<u>Total Nitrogen</u>														
389	6.61	1.37	035	6.23	-.47	231	6.50	.79	402	6.45	-.28	258	6.48	.08
393	6.60	1.35	037	6.22	-.53	258	6.48	.67	444	6.45	-.54	Avg	6.48	
095	6.60	1.32	426	6.27	-.54	481	6.44	.37	291	6.35	-.54	090	6.47	-.06
422	6.57	1.18	042	6.20	-.59	405	6.44	.31	393	6.29	-.78	474	6.44	-.20
029	6.50	.88	360	6.23	-.59	474	6.44	.22	426	6.22	-1.13	470	6.44	-.20
007	6.50	.86	292	6.18	-.71	Avg	6.41		255	6.19	-1.15	481	6.44	-.22
157	6.49	.85	232	6.17	-.73	232	6.41	-.18	482	6.15	-1.33	405	6.44	-.23
309	6.50	.84	325	6.20	-.76	292	6.35	-.54	432	6.27 R	-1.72	402	6.45	-.31
291	6.49	.79	351	6.16	-.78	479	6.33	-.74	Meth: 020.99 PCT					
009	6.45	.71	368	6.14	-.88	234	6.30	-1.05	<u>Total Phosphate</u>					
040	6.45	.67	254	6.11	-1.02	169	6.21	-1.82	Other					
483	6.45	.67	371	6.10	-1.07	309	5.32 s	-9.64	443	7.46 S	2.99	292	6.35	-.60
137	6.44	.57	451	6.05	-1.39	428	5.23 s	-10.50	137	6.97	.87	291	6.35	-.60
096	6.42	.48	234	5.99	-1.63	Meth: 020.40 PCT								
233	6.38	.47	030	5.94	-1.85	<u>Total Phosphate</u>								
086	6.34	.44	211	5.91	-1.99	Automated								
260	6.37	.44	472	5.89	-2.13	484	6.83	1.89	Avg	6.74		234	6.30	-.70
377	6.38	.32	482	5.78	-2.67	042	6.55	.39	322	6.52	-.87	393	6.29	-.89
162	6.37	.28	450	5.80 R	-2.70	035	6.52	.09	Meth: 020.XX PCT					
102	6.35	.28	484	5.57 s	-3.65	Avg	6.51		<u>Total Phosphate</u>					
402	6.37	.28	255	2.79 s	-17.10	247	6.41	-.55	443	7.46 s	4.89	169	6.21	-1.27
354	6.37	.25	072	2.68 s	-17.66	096	6.37	-.78	422	7.06	2.77	426	6.22	-1.35
406	6.35	.17	Meth: 020.10 PCT						450	6.97 s	2.66	255	6.19	-1.36
231	6.35	.15	<u>Total Phosphate</u>						137	6.97	2.34	482	6.15	-1.59
185	6.33	.11	090	6.47	.19	456	6.35	-.94	324	6.76 R	2.10	432	6.27 R	-2.12
300	6.33	.06	Avg	6.45		027	6.26 R	-1.59	483	6.89	1.95	309	5.32 s	-5.45
131	6.33	.04	470	6.44	-.11	Meth: 020.50 PCT						428	5.23 s	-5.91
Avg	6.32		041	6.44	-1.57	<u>Total Phosphate</u>						Meth: 030.10 PCT		
106	6.31	-.19	Meth: 020.20 PCT						422	7.06	2.13	Insoluble Phosphate		
405	6.29	-.21	<u>Total Phosphate</u>						483	6.89	1.48	Grav Quimociac		
136	6.28	-.22	Spectrometric						390	6.72	.85	090	0.03	.00
324	6.29	-.28	450	6.97 s	5.49	390	6.72	.43	371	6.49	.43	Meth: 030.20 PCT		
041	6.29	-.28	324	6.76 s	4.33	368	6.60	.43	042	6.55	.42	Insoluble Phosphate		
247	6.31	-.30	406	6.63	1.96	389	6.57	.32	451	6.52	.40	Spectrometric		
177	6.27	-.31	371	6.49 R	1.06	451	6.52	.29	035	6.52	.21	474	0.04	.71
481	6.25	-.36	371	6.48	.11	Avg	6.49		322	6.52	.20			
420	6.26	-.36							157	6.48	.19			
390	6.26	-.39							231	6.50	.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: 050.30 PCT																	
Soluble Potash																	
AA (Oxalate)			ICP (Citrate)			Other			Soluble Potash			Soluble Potash					
309	19.37	1.06	291	18.49	.66	450	18.48	.93	450	18.47	.76	258	18.37 R	.87			
185	19.15	.82	377	18.44	.58	451	18.47	.76	451	18.47	.76	470	18.63	.81			
234	18.43	.01	389	18.20	.38	177	18.49	.70	177	18.49	.70	450	18.48	.80			
Avg	18.42		Avg	18.10		402	18.43	.58	402	18.43	.58	169	18.60	.77			
040	18.20	-.28	023	18.05	-.20	232	18.33	.38	451	18.47	.62	095	18.55	.68			
157	18.05 R	-.58	043	18.09	-.35	131	18.24	.30	177	18.49	.55	451	18.47	.62			
351	16.98	-1.62	009	17.90	-.36	Avg	18.15		291	18.49	.54	072	17.91	-.59			
Meth: 050.31 PCT																	
Soluble Potash																	
AA (Citrate)			432	17.68	-.75	247	18.13	-.05	377	18.44	.45	157	18.05	-.74			
254	18.08	.96	393	16.76	-2.32	043	18.06	-.20	106	18.34	.45	055	17.74	-.91			
030	17.64	.22	Meth: 050.60 PCT														
Avg	17.53		Soluble Potash														
472	16.87	-1.24	AA (Citrate)														
Meth: 050.50 PCT																	
Soluble Potash																	
ICP (Oxalate)			443	20.26 S	5.43	360	17.95	-.52	324	18.30	.27	027	17.66	-1.15			
422	20.30 s	4.09	406	18.67	.75	042	17.65	-1.03	232	18.33	.25	157	17.70 R	-1.38			
292	18.99	1.37	169	18.60	.55	027	17.66	-1.10	131	18.24	.23	368	17.54	-1.40			
420	18.80	1.22	Avg	18.42		368	17.54	-1.37	131	18.32	.23	390	18.00 R	-1.42			
444	18.67	.74	200	17.99	-1.28	481	17.31	-1.78	029	18.24	.22	481	17.31	-1.79			
106	18.34	.40	Meth: 050.61 PCT														
Avg	18.32		Soluble Potash														
324	18.30	-.21	Flame (Citrate)														
354	18.15	-.36	041	19.18	2.12	482	17.45 R	-1.82	009	18.27	.16	482	17.45 R	-1.81			
426	18.19	-.41	095	18.55	.44	255	17.12 R	-2.33	Avg	18.21		255	17.12 R	-2.31			
055	17.74	-1.19	Avg	18.41		Meth: 050.99 PCT											
390	18.00 R	-1.58	131	18.32	-.25	Soluble Potash											
157	17.70	-1.63	035	18.34	-.35	484	23.38 s	10.09	354	18.15	-.15	Meth: 060.00 PCT					
Free Water																	
Vacuum Oven																	
096	0.47	1.58	029	18.24	-.55	422	20.30 s	4.07	055	18.14	-.15	Free Water					
456	0.40	.08	041	19.18	1.90	443	20.26 s	3.98	247	18.13	-.15	Avg					
Avg	0.39		037	18.13	-.79	309	19.37	2.25	057	18.16	-.16	474					
474	0.38	-.32	456	18.10	-.84	137	19.23	1.99	040	18.20	-.19	007					
Meth: 050.99 PCT																	
Soluble Potash																	
Other			292	18.99	1.51	474	18.95	1.45	254	18.08	-.25	Meth: 060.99 PCT					
484	23.38 s	10.80	420	18.80	1.33	420	18.80	1.33	426	18.19	-.29	Free Water					
137	19.23	2.22	007	18.76	1.11	007	18.76	1.11	043	18.06	-.29	Other					
483	18.67	.98	444	18.67	.91	444	18.67	.91	231	18.03	-.36	443					
Meth: 060.99 PCT																	
Free Water																	
Other																	
443	1.85 S	.00	406	18.67	.90	406	18.67	.90	405	18.02	-.36	1.85 S					
Meth: 060.99 PCT																	
Free Water																	
Other																	
443	1.85 S	.00															

* 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: 060.XX PCT														
Free Water														
443	1.85 s	23.83												
096	0.47	1.58												
456	0.40	.08												
Avg														
474	0.38	-.32												
007	0.34	-.94												
Meth: 101.00 PCT														
Acid Soluble Calcium														
177	5.33	1.29												
157	5.32	1.27												
028	5.23	.99												
043	5.01	.10												
Avg														
351	4.82	-.60												
481	4.80	-.71												
029	4.88	-.79												
055	4.87	-.83												
397	4.61	-1.44												
Meth: 101.30 PCT														
Acid Soluble Calcium														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														
422	7.49 s	10.42												
117	6.30 s	5.23												
482	5.56 s	3.92												
420	5.57	2.05												
041	5.53	1.91												
483	5.48	1.71												
231	5.36	1.12												
479	5.30	.95												
433	5.30	.87												
037	5.29	.84												
390	5.29	.81												
086	5.28	.80												
450	5.20	.65												
291	5.25	.64												
Meth: 101.30 PCT														
Acid Soluble Magnesi														
ICP														

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index			
Meth: 121.99 PCT																	
Acid Soluble Magnes																	
Other			481	4.15	-.24	Meth: 121.99 PCT									200	12.40	.82
137	4.37	.35	027	4.15	-.26	Water Soluble Magnes									360	12.16	.43
Avg	4.26		040	4.16	-.30	Sulfur									324	12.15	.43
042	4.15	-1.17	095	4.14	-.30	Other									157	12.10	.38
			102	4.12	-.38	Sulfur									102	12.10	.36
			450	4.15	-.47	Other									450	12.07	.34
Meth: 121.99 PCT																	
Acid Soluble Magnes																	
351	4.94 s	3.28	368	4.10	-.48	Meth: 144.99 PCT									389	12.05	.29
117	4.71	2.24	432	4.11	-.51	Sulfur									102	12.00	.24
200	4.61	1.85	157	4.07	-.68	Gravimetric									106	12.00	.24
177	4.61	1.82	426	4.08	-.72	041									029	12.02	.23
422	4.60	1.77	035	4.09	-.75	055									371	11.97	.17
483	4.53	1.45	324	4.03	-.79	043									040	11.95	.16
231	4.50	1.32	482	4.00	-.95	324									095	11.95	.14
354	4.45	1.12	009	4.02	-1.00	Avg									422	11.91	.08
137	4.37	.74	041	3.93	-1.29	029									177	11.90	.07
291	4.36	.67	232	3.91	-1.33	371									Avg	11.85	
157	4.21	.67	023	3.98 R	-1.36	102									027	11.82	
037	4.34	.61	090	3.88	-1.46	106									086	11.61	-.09
086	4.32	.58	042	4.15 R	-1.59	095									368	11.66	-.11
390	4.32	.52	255	3.82	-1.79	040									291	11.37	-.11
247	4.30	.42	309	3.70	-2.30	397									232	11.34	-.14
169	4.29	.41	029	3.68	-2.36	481									354	11.30	-.29
360	4.29	.39	474	3.38 s	-3.73	231									482	11.20	-.35
258	4.26	.36	479	2.81 s	-6.31	Meth: 144.02 PCT									472	11.03	-.40
420	4.27	.34	Sulfur												426	10.71	-.48
433	4.28	.34	Gravimetric												023	10.83 R	-.62
472	4.23	.28	292	11.43	.71	Meth: 144.70 PCT									292	11.43	-.62
043	4.26	.27	029	3.54	1.27	Sulfur									255	10.30	-.70
444	4.22	.21	Avg	3.28		Gravimetric									393	9.78	-.74
131	4.25	.18	309	3.17	-.58	Meth: 144.99 PCT									232	11.34	-.74
028	4.23	.15	484	3.13	-.74	Sulfur									351	9.52 s	-.91
106	4.24	.13	474	12.66	.71	Spectrometric									354	11.30	-.91
057	4.23	.13	Meth: 144.00 PCT												231	11.20	-.98
Avg	4.21		Water Soluble Magnes												482	11.20	-1.03
389	4.20	-.02	027	4.25	.71	ICP									472	11.03	-1.18
055	4.19	-.07	137	13.04	1.72	Meth: 144.99 PCT									426	10.71	-1.66
397	4.19	-.11	474	12.66	1.17	Sulfur									023	10.83 R	-1.74
						Other									255	10.30	-2.24
						Sulfur									393	9.78	-2.99
						Other									351	9.52 s	-3.37

* 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
Meth: 151.00 PPM											
Arsenic											
Atomic Absorption											
136	7.20	.71									
Meth: 151.30 PPM											
Arsenic											
ICP											
368	14.00	1.51									
450	10.45	.52									
Avg	8.68										
037	8.09	-.17									
095	6.73	-.55									
474	4.15	-1.27									
Meth: 151.99 PPM											
Arsenic											
Other											
086	6.14	.87									
Avg	5.18										
481	4.23	-.86									
Meth: 151.XX PPM											
Arsenic											
368	14.00	2.01									
450	10.45	.90									
037	8.09	.15									
Avg	7.62										
136	7.20	-.14									
095	6.73	-.28									
086	6.14	-.47									
481	4.23	-1.06									
474	4.15	-1.09									
Meth: 165.00 PCT											
Acid Soluble Boron											
Spectrometric											
023	0.064	.88									
095	0.063	.82									
029	0.063	.64									
Meth: 165.00 PCT											
Acid Soluble Boron											
Spectrometric											
444	0.116 s	9.11									
432	0.140 s	8.43									
043	0.085	2.27									
368	0.084	2.16									
255	0.078	1.47									
291	0.074	.97									
483	0.071	.76									
137	0.070	.58									
042	0.065	.56									
Avg	0.065										
090	0.063	-.26									
433	0.062	-.30									
426	0.063	-.38									
389	0.061	-.44									
258	0.061	-.51									
360	0.061	-.51									
231	0.060	-.53									
086	0.060	-.60									
422	0.061	-.62									
324	0.059	-.65									
106	0.059	-.70									
232	0.056	-.93									
009	0.056	-1.03									
354	0.055	-1.22									
482	0.050 s	-2.77									
Meth: 165.XX PCT											
Acid Soluble Boron											
Spectrometric											
444	0.116 s	9.80									
432	0.140 s	9.11									
043	0.085	2.52									
368	0.084	2.40									
255	0.078	1.66									
291	0.074	1.13									
483	0.071	.90									
137	0.070	.71									
042	0.065 R	.61									
Avg	0.064										
023	0.064	-.08									
095	0.063	-.09									
090	0.063	-.19									
029	0.063	-.19									
433	0.062	-.23									
426	0.063	-.35									
389	0.061	-.38									
258	0.061	-.45									
360	0.061	-.45									
231	0.060	-.48									
481	0.060	-.48									
086	0.060	-.55									
422	0.061	-.59									
324	0.059	-.60									
106	0.059	-.66									
055	0.058	-.79									
232	0.056	-.90									
009	0.056	-1.01									
354	0.055 R	-1.22									
200	0.053 X	-1.37									
482	0.050 s	-2.90									
Meth: 171.99 PCT											
Water Soluble Boron											
Other											
027	0.055	.71									
Meth: 181.00 PPM											
Cadmium											
Atomic Absorption											
481	4.19	.87									
Avg	3.92										
136	3.65	-.86									
Meth: 181.30 PPM											
Cadmium											
ICP											
482	4.64	2.20									
450	3.75	.60									
474	3.90	.50									
095	3.86	.43									
009	3.78	.34									
Avg	3.68										
102	3.57	-.27									
232	3.57	-.30									
368	3.40	-.80									
086	3.30	-.91									
035	3.06	-1.45									
247	2.98 s	-2.26									
Meth: 181.99 PPM											
Cadmium											
Other											
389	1.31	1.27									
300	1.08	.33									
Avg	1.00										
027	0.92	-.36									
368	0.69	-1.28									
Meth: 190.00 PCT											
Water Soluble Chlori											
Titrimetric											
055	1.99 s	6.79									
481	1.36	1.88									
043	1.16	.42									
057	1.12	.31									
029	1.14	.25									
Avg	1.11										
102	1.06	-.40									
444	1.02	-.78									
422	0.95	-1.37									
Meth: 190.99 PCT											
Water Soluble Chlori											
Other											
389	1.31	1.27									
300	1.08	.33									
Avg	1.00										
027	0.92	-.36									
368	0.69	-1.28									
Meth: 190.XX PCT											
Water Soluble Chlori											
Spectrometric											
055	1.99 s	5.00									
481	1.36	1.55									
389	1.31	1.30									
043	1.16	.51									
029	1.14	.38									
057	1.12	.34									
300	1.08	.04									
Avg	1.07										

* 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			
Meth: 190.XX PCT														
<u>Water Soluble Chlori</u>														
102	1.06	-.05										Meth: 241.00 PCT		
444	1.02	-.33										Acid Soluble Iron		
422	0.95	-.74										<u>Atomic Absorption</u>		
027	0.92	-.87										043	0.76	1.15
368	0.69	-2.12										351	0.75	.90
Meth: 191.00 PPM														
<u>Chromium</u>														
481	67.71	-1.50										029	0.72	.50
027	66.71	-1.55										258	0.70	.44
474	23.50 s	-4.81										177	0.71	.11
Meth: 221.99 PCT														
<u>Atomic Absorption</u>														
481	67.71	-.71										Avg	0.70	
Meth: 191.30 PPM														
<u>Chromium</u>														
450	95.50	1.03										397	0.65	-.94
009	94.15	.87										028	0.61	-1.74
035	93.40	.82										474	0.26 s	-8.85
368	90.25	.61										Meth: 221.30 PCT		
037	89.44	.35										Acid Soluble Copper		
Meth: 221.00 PCT														
<u>AA</u>														
136	55.50	.87										ICP		
Avg	35.75											157	0.7420 s	2154.14
474	16.00	-.86										422	0.0120 s	28.97
Meth: 202.30 PPM														
<u>Acid Soluble Cobalt</u>														
Avg	0.0022											324	0.0108 s	24.97
474	0.0018	-.87										402	0.0030	2.18
Meth: 221.30 PCT														
<u>ICP</u>														
009	60.10	.98										472	0.0030	2.18
450	60.00	.98										354	0.0025 R	1.63
422	60.00	.97										255	0.0025 R	1.63
057	58.21	.82										057	0.0026	.96
035	52.90	.36										043	0.0026	.88
086	51.64	.25										247	0.0024	.60
Avg	48.69											Avg	0.0023	
368	45.20	-.30										484	0.0022	-.15
482	42.35 R	-.77										368	0.0022	-.15
232	35.75	-1.12										106	0.0022	-.33
102	33.92	-1.27										095	0.0021	-.44
027	29.18	-1.68										232	0.0021	-.46
Meth: 202.XX PPM														
<u>Chromium</u>														
484	114.09	.71										450	0.0021	-.60
Meth: 191.XX PPM														
<u>Chromium</u>														
484	114.09	2.04										086	0.0022	-.62
450	95.50	.65										389	0.0020	-.73
009	94.15	.54										035	0.0020	-.73
035	93.40	.50										102	0.0020	-.73
368	90.25	.38										433	0.0020	-.73
Meth: 221.99 PCT														
<u>Atomic Absorption</u>														
484	114.09	.71										474	0.0018	-1.46
Meth: 221.30 PCT														
<u>Acid Soluble Copper</u>														
484	114.09	.71										Avg	0.67	

* 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: 241.30 PCT														
Acid Soluble Iron														
ICP			234	0.74	.75	157	0.38 A	-3.43	095	6.37	.02	035	0.377	.57
255	0.66	-.08	106	0.73	.60	474	0.26 s	-4.87	Avg	6.33		095	0.392	.53
444	0.66	-.11	029	0.72	.58	324	0.07 s	-6.98	368	6.30	-.07	106	0.390	.47
354	0.65	-.25	086	0.71	.58				474	5.15	-.77	389	0.390	.47
090	0.64	-.26	291	0.72	.57	Meth: 251.00 PPM			481	5.02	-.84	368	0.384	.46
482	0.66	-.45	479	0.70	.54	Lead			035	4.15	-1.59	360	0.384	.31
433	0.60	-.63	450	0.71	.50	Atomic Absorption			482	3.52	-1.87	291	0.385	.31
426	0.61	-.70	247	0.71	.46	136	8.00	.94				131	0.382	.20
232	0.58	-.82	095	0.71	.42	Avg	6.51		Meth: 261.00 PCT			Avg	0.376	
041	0.58	-.84	258	0.70	.41	481	5.02	-.78	Acid Soluble Manganese			090	0.374	-.15
389	0.57	-.94	177	0.71	.36				AA			402	0.367	-.31
472	0.52	-1.38	131	0.70	.34	Meth: 251.30 PPM			397	0.492	1.85	247	0.361	-.52
023	0.43	-2.29	102	0.70	.32	Lead			028	0.445	.78	086	0.362	-.82
037	0.42	-2.36	231	0.70	.31	ICP			351	0.426	.19	444	0.350	-.94
157	0.38	-2.77	368	0.69	.24	009	13.34 s	4.54	Avg	0.419		472	0.354	-.98
324	0.07 s	-5.73	027	0.68	.19	037	8.09	1.16	043	0.404	-.38	232	0.340	-1.22
Meth: 241.99 PCT														
Acid Soluble Iron														
Other			422	0.69	.12	247	8.02	1.12	258	0.400	-.60	023	0.345	-1.22
234	0.74	1.46	Avg	0.68		232	7.35	.80	177	0.392	-.66	422	0.339	-1.24
Avg	0.64		402	0.67	-.11	450	7.15	.56	029	0.371	-1.21	426	0.340	-1.33
042	0.64	-.14	255	0.66	-.19	086	6.65	.54	Meth: 261.11 PCT			482	0.345	-1.34
137	0.63	-.19	444	0.66	-.21	102	6.55	.18	Acid Soluble Manganese			433	0.310	-2.22
484	0.57	-1.15	035	0.67	-.23	368	6.30	.06	AA			450	0.161 s	-7.23
Meth: 241.31 PCT														
Acid Soluble Manganese														
ICP			397	0.65	-.26	095	6.37	.05	040	0.373	.71	324	0.389	.71
055	0.82	1.73	354	0.65	-.39	Avg	6.30		Meth: 261.30 PCT			ICP		
057	0.81	1.53	090	0.64	-.42	474	5.15	-.76	Acid Soluble Manganese			324	0.389	.71
390	0.77	1.26	042	0.64	-.47	035	4.15	-1.59	ICP					
432	0.78	1.21	137	0.63	-.53	482	3.52	-1.87	432	0.465 A	3.02			
483	0.77	1.15	482	0.66	-.57				055	0.440	2.17			
360	0.77	1.10	028	0.61	-.72	Meth: 251.30 PPM			354	0.410	1.19			
117	0.76	1.01	433	0.60	-.86	Lead			390	0.407	1.02			
043	0.76	.97	426	0.61	-.93	009	13.34 s	4.47	057	0.406	1.01			
351	0.75	.82	232	0.58	-1.08	136	8.00	1.24	102	0.405	.97			
009	0.74	.79	432	0.58	-1.11	037	8.09	1.12	009	0.389	.74			
Meth: 261.99 PCT														
Acid Soluble Manganese														
ICP			389	0.57	-1.23	247	8.02	1.09	041	0.398	.74			
055	0.82	1.73	484	0.57	-1.24	232	7.35	.77	117	0.389	.69			
057	0.81	1.53	472	0.52	-1.76	450	7.15	.53	Avg	0.370				
390	0.77	1.26	023	0.43	-2.85	086	6.65	.53	484	0.360	-.37			
432	0.78	1.21	037	0.42	-2.93	102	6.55	.16						
483	0.77	1.15												

* 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: 261.99 PCT																	
Acid Soluble Manganese																	
Other	0.371	-0.40	Meth: 281.99 PPM														
042	0.355	-0.42	Mercury														
474	0.325	-1.21	450	0.05	-1.03	Meth: 291.99 PPM											
027	0.314	-1.51	Molybdenum														
Meth: 261.99 PCT																	
Acid Soluble Manganese																	
397	0.492	2.91	450	11.45	2.11	Meth: 301.99 PPM											
432	0.465	2.21	057	9.87	.81	Selenium											
028	0.445	1.69	422	10.00	.72	ICP											
055	0.440	1.53	086	9.43	.58	095 0.30 -0.71											
351	0.426	1.13	247	9.75	.50	Meth: 301.99 PPM											
483	0.418	.92	009	9.54	.42	Selenium											
354	0.410	.75	037	9.26	.06	Other											
137	0.410	.69	Avg	9.19	-.20	086 0.16 .71											
390	0.407	.60	368	9.10	-.20	Meth: 311.99 PCT											
057	0.406	.59	035	8.67	-.47	Sodium											
258	0.400	.57	433	8.42	-.71	Flame Photometric											
102	0.405	.56	232	8.30	-.80	086 0.49 .71											
043	0.404	.54	102	6.79	-2.15	Meth: 311.99 PCT											
009	0.389	.50	474	3.40 s	-5.19	Selenium											
117	0.389	.46	Meth: 289.99 PPM														
041	0.398	.39	Molybdenum														
231	0.395	.32	484	16.60 s	.00	035 44.85 -.22											
037	0.396	.32	Other														
324	0.389	.26	484	16.60 s	.00	232 42.40 -.60											
177	0.392	.23	Meth: 289.99 PPM														
095	0.392	.21	Molybdenum														
106	0.390	.16	484	16.60 s	6.64	474 14.00 s -5.00											
389	0.390	.16	450	11.45	2.11	Meth: 291.99 PPM											
291	0.385	.09	057	9.87	.81	Nickel											
Avg	0.384		422	10.00	.72	009 53.98 1.03											
131	0.382	-.07	086	9.43	.58	474 0.51 1.11											
255	0.380	-.11	247	9.75	.50	102 0.51 1.05											
360	0.384	-.15	009	9.54	.42	Avg 0.48											
090	0.374	-.30	037	9.26	.06	057 0.47 -.46											
040	0.373	-.31	Avg	9.19	-.20	232 0.46 -.82											
368	0.384	-.31	368	9.10	-.20	009 0.45 -1.13											
* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits																	

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index			
Meth: 311.XX PCT														
<u>Sodium</u>														
422	0.74 s	10.37										Meth: 325.XX PCT		
474	0.51	1.16										<u>Water Soluble Zinc</u>		
102	0.51	1.09										450	0.158	.87
086	0.49	.45										Avg	0.086	
Avg	0.48											479	0.015	-.87
057	0.47	-.52												
232	0.46	-.94												
009	0.45	-1.27												
482	0.27 s	-9.72												
Meth: 321.00 PCT														
<u>Acid Soluble Zinc</u>														
397	0.181 s	3.53												
371	0.164	1.44												
040	0.159	.89												
481	0.155	.72												
028	0.157	.66												
177	0.154	.36												
Meth: 321.99 PCT														
<u>Acid Soluble Zinc</u>														
324	0.156	.72												
479	0.155	.66												
106	0.155	.66												
057	0.155	.55												
117	0.152	.49												
291	0.149	.33												
090	0.149	.25												
035	0.152	.23												
402	0.152	.23												
009	0.151	.23												
Avg	0.149													
131	0.149	-.12												
232	0.148	-.18												
102	0.147	-.22												
157	0.148	-.38												
422	0.145	-.45												
472	0.142	-.62												
292	0.140	-.71												
255	0.140	-.71												
389	0.140	-.83												
258	0.144	-.87												
023	0.146	-.92												
247	0.139	-.99												
200	0.138 X	-.99												
086	0.146 R	-1.13												
042	0.140	-1.15												
095	0.136	-1.19												
444	0.130	-1.62												
351	0.151	-.08												
029	0.149	-.62												
043	0.147	-.69												
258	0.144	-1.41												
200	0.138 X	-1.64												
Meth: 321.30 PCT														
<u>Acid Soluble Zinc</u>														
444	0.130	-1.53												
426	0.131	-1.56												
433	0.120	-2.35												
027	0.108 S	-3.38												
482	0.105 s	-3.78												
041	0.080 s	-5.67												
086	0.146 R	-1.13												
444	0.130	-1.53												
426	0.131	-1.56												
433	0.120	-2.35												
027	0.108 S	-3.38												
482	0.105 s	-3.78												
041	0.080 s	-5.67												
Meth: 321.99 PCT														
<u>Acid Soluble Zinc</u>														
351	0.151	.03												
055	0.160	1.23												
231	0.160	1.23												
360	0.158	1.06												
450	0.158	.81												
Meth: 321.99 PCT														
<u>Other</u>														
137	0.180	1.28												
Avg	0.161													
Meth: 321.99 PCT														
<u>Water Soluble Zinc</u>														
479	0.015	.71												
Meth: 325.30 PCT														
<u>Water Soluble Zinc</u>														
479	0.015	.71												

* 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	1.05	3.58	0.45	060.00	4	0.00	0.86	0.56
001.99	7	1.21	4.18	1.15	060.XX	5	4.76	10.68	0.56
001.XX	18	1.03	3.66	0.61	101.00	9	0.00	0.96	0.36
002.20	2	0.00	1.22	0.04	101.30	38	0.33	2.21	0.68
002.99	7	0.00	1.02	0.21	101.99	2	0.00	0.64	0.74
002.XX	9	0.00	1.01	0.17	101.XX	48	0.27	1.62	0.48
009.10	8	0.00	0.98	0.32	121.00	12	0.00	1.01	0.17
009.XX	8	0.00	0.98	0.32	121.30	40	0.31	1.59	0.30
010.11	4	0.00	1.07	0.13	121.99	2	0.00	0.50	0.79
010.12	4	1.62	3.36	0.54	121.XX	53	0.15	1.45	0.34
010.60	52	0.01	1.25	0.30	131.00	3	0.00	1.10	0.15
010.99	6	4.63	8.04	0.53	131.XX	4	0.00	1.08	0.06
010.XX	65	0.40	2.61	1.25	144.01	13	0.00	1.00	0.20
020.10	3	0.00	0.15	0.90	144.99	27	0.15	1.12	0.25
020.20	16	0.72	3.99	1.02	144.XX	41	0.12	1.13	0.24
020.40	7	0.20	1.08	0.34	151.30	5	0.00	1.05	0.13
020.50	15	0.06	0.98	0.45	151.99	2	0.00	1.21	0.13
020.99	3	0.92	1.81	0.69	151.XX	8	0.00	1.03	0.11
020.XX	44	0.10	1.73	0.55	165.00	6	0.000	1.032	0.171
030.50	2	0.00	1.10	0.38	165.99	24	0.517	2.264	1.556
030.XX	5	0.00	1.00	0.33	165.XX	30	0.420	2.213	1.487
040.XX	5	0.32	1.17	0.52	181.00	2	0.00	1.20	0.18
041.10	12	0.02	1.33	0.83	181.30	11	0.15	1.06	0.54
041.20	2	17.85	25.25	0.56	181.XX	14	0.61	2.06	0.50
041.40	5	0.54	1.40	0.93	190.00	8	0.85	2.58	0.21
041.50	11	0.04	0.96	0.31	190.99	4	0.00	1.07	0.11
041.60	7	0.00	0.98	0.32	190.XX	12	0.42	1.74	0.15
041.XX	31	0.12	1.55	0.70	191.30	10	0.69	2.37	0.23
048.20	3	0.00	0.85	0.60	191.XX	12	0.40	1.69	0.17
048.XX	4	0.00	0.35	0.89	202.00	2	0.00	1.22	0.05
050.00	12	0.07	0.98	0.58	202.30	11	0.05	0.98	0.20
050.30	6	0.07	0.96	0.17	202.XX	13	0.02	0.98	0.16
050.31	3	0.00	1.07	0.27	221.00	2	0.0000	1.2153	0.1074
050.50	11	0.31	1.50	0.62	221.30	20	110.32	480.64	13.093
050.51	10	0.00	1.01	0.19	221.XX	23	96.003	448.55	12.216
050.60	4	1.36	2.86	0.12	241.00	8	1.11	3.27	0.21
050.61	7	0.00	1.01	0.23	241.30	38	0.15	1.34	0.21
050.99	22	0.33	2.55	0.49	241.99	4	0.00	1.04	0.25
050.XX	69	0.22	1.71	0.39	241.XX	50	0.31	1.59	0.23

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
251.00	2	0.00	1.11	0.37					
251.30	12	0.38	1.59	0.35					
251.XX	14	0.32	1.50	0.36					
261.00	7	0.000	1.013	0.222					
261.30	31	- 0.137	1.685	0.366					
261.99	8	0.000	1.026	0.127					
261.XX	48	- 0.148	1.298	0.260					
281.XX	2	0.000	0.443	0.807					
289.30	14	- 0.37	1.67	0.28					
289.XX	15	0.10	2.42	0.27					
291.30	11	- 0.45	1.79	0.17					
291.XX	12	0.00	1.02	0.09					
301.XX	2	0.00	1.16	0.28					
311.99	7	0.27	5.10	1.69					
311.XX	8	0.24	5.12	1.72					
321.00	11	0.321	1.373	0.426					
321.30	39	0.495	5.071	1.097					
321.99	5	- 1.052	1.845	0.343					
321.XX	54	0.311	4.140	0.996					