

- Pass 1 Results for 77 Labs - - Pass 2 Results for 77 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	4.26	0.13	0.05	9	4.26	0.13	0.05
Ammoniacal Nitrogen, Other		001.99	10	4.20	0.15	0.03	9	4.17	0.14	0.02
Method Group 001.XX PCT			19	4.23	0.14	0.04	19	4.23	0.14	0.04
Nitrate Nitrogen, Jones Modified	930.02	002.20	2	4.49	0.27	0.09	2	4.49	0.27	0.09
Nitrate Nitrogen, Other		002.99	5	3.79	1.03	0.19	4	3.72	1.14	0.03
Method Group 002.XX PCT			7	3.99	0.93	0.16	6	3.98	0.99	0.05
Ammon & Nitrate N, Devarda	892.01	009.10	4	8.36	0.15	0.06	4	8.36	0.15	0.06
Ammon & Nitrate N, Other		009.99	1	8.25	0.06	0.08	1	8.25	0.06	0.08
Method Group 009.XX PCT			5	8.34	0.14	0.06	5	8.34	0.14	0.06
Total Nitrogen, Modified Comprehensive	978.02	010.11	5	8.10	0.34	0.05	5	8.10	0.34	0.05
Total Nitrogen, Salicylic	955.04D	010.12	2	7.87	0.05	0.02	2	7.87	0.05	0.02
Total Nitrogen, Raney	970.03	010.16	1	8.16	0.07	0.10	1	8.16	0.07	0.10
Total Nitrogen, Combustion		010.60	51	8.31	0.19	0.07	50	8.30	0.18	0.07
Total Nitrogen, Other		010.99	1	8.27	0.18	0.26	1	8.27	0.18	0.26
Method Group 010.XX PCT			60	8.27	0.22	0.07	58	8.27	0.22	0.06
Total Phosphate, Grav Quimociac	962.02	020.10	6	7.80	0.26	0.07	6	7.80	0.26	0.07
Total Phosphate, Spectrometric	958.01	020.20	14	7.95	0.14	0.07	14	7.95	0.14	0.07
Total Phosphate, Automated	978.01	020.40	4	7.88	0.12	0.03	4	7.88	0.12	0.03
Total Phosphate, ICP		020.50	11	8.01	0.29	0.11	11	8.01	0.29	0.11
Total Phosphate, Other		020.99	2	8.24	0.12	0.08	2	8.24	0.12	0.08
Method Group 020.XX PCT			38	7.97	0.25	0.09	34	7.95	0.18	0.06
Insoluble Phosphate, Grav Quimociac	963.03C	030.10	1	0.06	0.00	0.00	1	0.06	0.00	0.00
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.10	0.01	0.01	1	0.10	0.01	0.01
Insoluble Phosphate, Automated	978.01	030.40	1	0.07	0.00	0.00	1	0.07	0.00	0.00
Insoluble Phosphate, ICP		030.50	1	0.06	0.00	0.00	1	0.06	0.00	0.00
Insoluble Phosphate, Other		030.99	1	0.04	0.00	0.00	1	0.04	0.00	0.00
Method Group 030.XX PCT			5	0.06	0.02	0.00	4	0.06	0.01	0.00
InDir Available Phosphate, Grav Quim	960.02	040.10	2	7.85	0.12	0.02	2	7.85	0.12	0.02
InDir Available Phosphate, Spectrometri	960.02	040.20	1	7.88	0.02	0.03	1	7.88	0.02	0.03
InDir Available Phosphate, Automated	960.02	040.40	1	7.65	0.01	0.02	1	7.65	0.01	0.02
InDir Available Phosphate, ICP		040.50	2	7.71	0.37	0.04	2	7.71	0.37	0.04
Method Group 040.XX PCT			6	7.78	0.22	0.03	6	7.78	0.22	0.03
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	9	7.83	0.10	0.08	8	7.83	0.08	0.04
Dir Available Phosphate, Spectrometric	960.03D	041.20	3	7.91	0.12	0.05	3	7.91	0.12	0.05
Dir Available Phosphate, Automated	978.01	041.40	3	7.89	0.10	0.03	3	7.89	0.10	0.03
Dir Available Phosphate, ICP		041.50	9	7.82	0.17	0.05	8	7.82	0.18	0.03
Dir Available Phosphate, EDTA Extract	993.01	041.60	9	7.85	0.11	0.04	9	7.85	0.11	0.04
Dir Available Phosphate, Other		041.99	1	7.79	0.01	0.02	1	7.79	0.01	0.02
Method Group 041.XX PCT			35	7.85	0.14	0.05	33	7.85	0.13	0.04

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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 Phosphate, Spectrometric	970.01	048.20	2	6.16	0.14	0.07	2	6.16	0.14	0.07
Soluble Potash, STPB Oxalate	958.02	050.00	17	24.19	0.33	0.11	15	24.19	0.33	0.06
Soluble Potash, AA (Oxalate)		050.30	7	24.10	0.53	0.28	7	24.10	0.53	0.28
Soluble Potash, AA (Citrate)		050.31	1	23.71	0.05	0.07	1	23.71	0.05	0.07
Soluble Potash, ICP (Oxalate)		050.50	7	24.46	0.87	0.38	9	24.46	1.28	0.40
Soluble Potash, ICP (Citrate)		050.51	9	24.35	0.43	0.12	9	24.35	0.43	0.12
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	4	24.40	1.07	0.75	4	24.40	1.07	0.75
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	9	24.34	0.40	0.11	8	24.43	0.31	0.08
Soluble Potash, Other		050.99	12	24.05	0.74	0.13	13	23.90	0.90	0.12
Method Group 050.XX PCT			66	24.23	0.60	0.20	59	24.25	0.49	0.13
Free Water, Vacuum Oven	965.08B	060.00	6	0.63	0.19	0.06	5	0.61	0.20	0.03
Free Water, Other		060.99	1	3.06	0.06	0.09	1	3.06	0.06	0.09
Method Group 060.XX PCT			7	0.97	0.90	0.06	6	1.02	0.97	0.04
Acid Soluble Calcium, AA	945.04	101.00	8	1.17	0.09	0.02	8	1.17	0.09	0.02
Acid Soluble Calcium, ICP		101.30	32	1.17	0.09	0.03	29	1.17	0.08	0.02
Acid Soluble Calcium, Other		101.99	2	1.05	0.05	0.01	2	1.05	0.05	0.01
Method Group 101.XX PCT			42	1.17	0.09	0.03	39	1.16	0.08	0.02
Acid Soluble Magnesium, AA	984.01	121.00	13	2.50	0.12	0.06	12	2.50	0.12	0.05
Acid Soluble Magnesium, ICP		121.30	34	2.54	0.16	0.05	32	2.54	0.16	0.04
Acid Soluble Magnesium, Other		121.99	2	2.43	0.17	0.04	2	2.43	0.17	0.04
Method Group 121.XX PCT			49	2.52	0.15	0.05	46	2.53	0.15	0.04
Water Soluble Magnesium, AA		131.00	2	2.30	0.17	0.06	2	2.30	0.17	0.06
Water Soluble Magnesium, ICP		131.30	5	2.52	0.40	0.06	4	2.63	0.36	0.02
Method Group 131.XX PCT			7	2.46	0.35	0.06	6	2.52	0.34	0.03
Sulfur, Gravimetric	980.02a	144.01	18	9.78	0.21	0.10	18	9.78	0.21	0.10
Sulfur, Gravimetric	980.02b	144.02	2	10.60	0.08	0.04	2	10.60	0.08	0.04
Sulfur, Other		144.99	22	9.50	0.44	0.14	21	9.48	0.44	0.11
Method Group 144.XX PCT			42	9.67	0.43	0.12	40	9.68	0.43	0.10
Arsenic, Atomic Absorption		151.00	1	1.50	0.14	0.20	1	1.50	0.14	0.20
Arsenic, ICP		151.30	5	1.78	0.39	0.08	4	1.69	0.39	0.03
Arsenic, Other		151.99	2	1.74	0.27	0.02	2	1.74	0.27	0.02
Method Group 151.XX PPM			8	1.73	0.34	0.08	7	1.68	0.33	0.05
Acid Soluble Boron, Spectrometric	982.01	165.00	10	0.046	0.008	0.003	10	0.046	0.008	0.003
Acid Soluble Boron, Other		165.99	20	0.046	0.007	0.003	18	0.046	0.007	0.002
Method Group 165.XX PCT			30	0.046	0.007	0.003	28	0.046	0.007	0.002
Water Soluble Boron, Other		171.99	1	0.045	0.000	0.000	1	0.045	0.000	0.000
Cadmium, Atomic Absorption		181.00	3	1.55	0.34	0.30	3	1.55	0.34	0.30
Cadmium, ICP		181.30	9	1.62	0.30	0.06	8	1.55	0.21	0.03
Cadmium, Other		181.99	1	1.55	0.04	0.05	1	1.55	0.04	0.05

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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 181.XX PPM			13	1.60	0.30	0.11	12	1.58	0.28	0.07
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	12	3.74	0.16	0.04	11	3.74	0.16	0.03
Water Soluble Chlorine, Other .....		190.99	4	3.85	0.11	0.02	4	3.85	0.11	0.02
Method Group 190.XX PCT			16	3.77	0.15	0.04	15	3.77	0.16	0.03
Chromium, Atomic Absorption .....		191.00	1	94.00	0.00	0.00	1	94.00	0.00	0.00
Chromium, ICP .....		191.30	11	81.09	11.36	3.64	10	80.60	11.51	2.33
Chromium, Other .....		191.99	1	45.51	2.66	3.76	1	45.51	2.66	3.76
Method Group 191.XX PPM			13	79.35	14.84	3.37	12	78.79	15.13	2.26
Acid Soluble Cobalt, AA .....		202.00	2	40.75	15.90	1.50	2	40.75	15.90	1.50
Acid Soluble Cobalt, ICP .....	965.11	202.30	10	26.40	10.78	1.53	10	26.40	10.78	1.53
Acid Soluble Cobalt, Other .....		202.99	1	13.12	0.99	1.40	1	13.12	0.99	1.40
Method Group 202.XX PPM			13	27.58	12.82	1.51	13	27.58	12.82	1.51
Acid Soluble Copper, Atomic Absorption	975.01	221.00	2	0.007	0.0008	0.0001	2	0.007	0.0008	0.0001
Acid Soluble Copper, ICP .....		221.30	12	0.0012	0.0013	0.0003	11	0.0009	0.0004	0.0001
Acid Soluble Copper, Other .....		221.99	2	0.0009	0.0001	0.0001	2	0.0009	0.0001	0.0001
Method Group 221.XX PCT			16	0.0011	0.0011	0.0002	15	0.0009	0.0004	0.0001
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	11	0.26	0.01	0.01	10	0.26	0.01	0.01
Acid Soluble Iron, ICP .....		241.30	31	0.27	0.03	0.01	30	0.27	0.03	0.01
Acid Soluble Iron, Other .....		241.99	1	0.29	0.01	0.01	1	0.29	0.01	0.01
Method Group 241.XX PCT			43	0.27	0.02	0.01	40	0.27	0.02	0.01
Lead, ICP .....		251.30	5	1.69	0.45	0.26	5	1.69	0.45	0.26
Lead, Other .....		251.99	1	1.51	0.07	0.10	1	1.51	0.07	0.10
Method Group 251.XX PPM			6	1.66	0.41	0.24	6	1.66	0.41	0.24
Acid Soluble Manganese, AA .....	972.02a	261.00	9	0.255	0.028	0.019	8	0.256	0.027	0.013
Acid Soluble Manganese, AA .....	972.02b	261.11	1	0.261	0.001	0.002	1	0.261	0.001	0.002
Acid Soluble Manganese, ICP .....	972.02a	261.30	28	0.273	0.029	0.012	26	0.271	0.028	0.009
Acid Soluble Manganese, ICP .....	972.02b	261.31	2	0.268	0.012	0.017	2	0.268	0.012	0.017
Acid Soluble Manganese, Other .....		261.99	4	0.275	0.044	0.029	4	0.275	0.044	0.029
Method Group 261.XX PCT			44	0.269	0.030	0.015	41	0.268	0.028	0.011
Water Soluble Manganese, Atomic Abs	972.03	271.00	1	0.026	0.001	0.001	1	0.026	0.001	0.001
Water Soluble Manganese, ICP .....	972.03	271.30	3	0.103	0.095	0.015	3	0.103	0.095	0.015
Method Group 271.XX PCT			4	0.084	0.088	0.011	4	0.084	0.088	0.011
Mercury, Atomic Absorption .....		281.00	1	0.01	0.00	0.00	1	0.01	0.00	0.00
Molybdenum, ICP .....		289.30	10	6.92	0.87	0.28	9	6.78	0.78	0.19
Molybdenum, Other .....		289.99	3	5.15	2.63	0.15	3	5.15	2.63	0.15
Method Group 289.XX PPM			13	6.51	1.59	0.25	12	6.37	1.57	0.18
Nickel, Atomic Absorption .....		291.00	2	43.25	4.99	1.50	2	43.25	4.99	1.50
Nickel, ICP .....		291.30	11	34.95	4.65	1.66	11	34.95	4.65	1.66
Nickel, Other .....		291.99	1	16.96	1.05	1.48	1	16.96	1.05	1.48

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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 291.XX PPM			14	34.85	7.33	1.63	14	34.85	7.33	1.63
Selenium, ICP		301.30	2	1.51	0.25	0.21	2	1.51	0.25	0.21
Selenium, Other		301.99	2	0.87	0.50	0.04	2	0.87	0.50	0.04
Method Group 301.XX PPM			4	1.19	0.50	0.13	3	1.03	0.46	0.03
Sodium, Other		311.99	7	1.26	0.05	0.03	7	1.26	0.05	0.03
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	13	0.167	0.010	0.004	12	0.167	0.010	0.003
Acid Soluble Zinc, ICP		321.30	34	0.172	0.016	0.007	31	0.171	0.016	0.005
Acid Soluble Zinc, Other		321.99	2	0.185	0.023	0.005	2	0.185	0.023	0.005
Method Group 321.XX PCT			50	0.171	0.016	0.006	45	0.169	0.013	0.004
Water Soluble Zinc, ICP		325.30	1	0.167	0.006	0.009	1	0.167	0.006	0.009
Water Soluble Zinc, Other		325.99	2	0.243	0.133	0.045	2	0.243	0.133	0.045
Method Group 325.XX PCT			3	0.217	0.110	0.033	3	0.217	0.110	0.033

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.10 PCT														
Ammoniacal Nitrogen														
MgO Distillation	456	4.29	456	4.29	.45									
257	8.45 s	31.06	220	4.25	.45									
405	4.53	1.99	096	4.29	.45									
258	4.37	.92	371	4.28	.38									
456	4.29	.24	105	4.28	.38									
Avg	4.26		397	4.27	.29									
090	4.26	-.05	090	4.26	.21									
232	4.22	-.33	419	4.25	.14									
029	4.21	-.43	255	4.24	.11									
220	4.25	-.45	Avg	4.23										
230	4.19	-.51	232	4.22	-.08									
117	4.03	-1.70	029	4.21	-.23									
Meth: 001.99 PCT														
Ammoniacal Nitrogen														
Other	022	8.55 s	31.05	4.19	-.25									
422	7.99 S	27.08	027	4.09	-.94									
220	4.39 R	1.56	117	4.03	-1.36									
096	4.29	.80	368	3.98	-1.71									
371	4.28	.75	234	3.91	-2.19									
105	4.28	.75												
397	4.27	.65												
419	4.25	.50												
255	4.24	.46												
Avg	4.17													
027	4.09	-.60												
368	3.98	-1.40												
234	3.91	-1.88												
Meth: 001.11 PCT														
Ammoniacal Nitrogen														
022	8.55 s	29.93												
257	8.45 s	29.23												
422	7.99 s	26.05												
405	4.53	2.09												
220	4.39	1.19												
258	4.37	1.06												
Meth: 002.20 PCT														
Nitrate Nitrogen														
Jones Modified	230	4.72	.88											
230	4.72	.88												
Avg	4.49													
029	4.26	-.86												
Meth: 002.99 PCT														
Nitrate Nitrogen														
Other	257	4.53	.71											
232	4.40	.59												
368	4.03 R	.46												
027	4.07	.30												
Avg	3.72													
234	1.91	-1.60												
Meth: 002.10 PCT														
Nitrate Nitrogen														
Other	258	8.58	1.75											
090	8.36	.35												
Avg	8.34													
397	8.27	-.55												
105	8.25	-.71												
416	8.25 X	-.73												
Meth: 009.99 PCT														
Ammon & Nitrate N														
Other	105	8.25	.71											
105	8.25	.71												
Meth: 009.10 PCT														
Ammon & Nitrate N														
Devarda	258	8.58	1.51											
258	8.58	1.51												
Avg	8.36													
090	8.36	-.31												
397	8.27	-.67												
416	8.25 X	-.83												
Meth: 010.10 PCT														
Total Nitrogen														
Raney	233	8.28	-.14											
390	8.27	-.18												
232	8.28	-.21												
177	8.29	-.23												
234	8.26	-.29												
136	8.25	-.32												
028	8.23	-.43												
035	8.23	-.52												
361	8.18	-.71												
368	8.16	-.81												
443	8.15	-.88												
262	8.15	-.88												
023	8.12	-1.03												
360	8.08	-1.25												
451	8.07	-1.33												
024	8.07	-1.34												
423	8.06	-1.37												
389	8.05	-1.41												
131	8.04	-1.46												
041	8.02	-1.57												
426	8.03	-1.62												
042	8.00	-1.74												
255	8.37	.52												

\* 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																			
Total Nitrogen																			
Other			177	8.29	.21										Meth: 020.10 PCT				
105	8.27	.71	325	8.31	.19										Total Phosphate	258	8.13	1.08	
Avg	8.27		027	8.30	.14										ICP	157	8.29	S	2.50
030	7.21	S -6.66	232	8.28	.12										Total Phosphate	451	8.60	S	2.07
Meth: 010.XX PCT																			
Total Nitrogen																			
390	8.27	.07	022	7.85	.28										ICP	426	8.13	S	.56
233	8.28	.05	105	7.85	.21										Total Phosphate	423	8.16	S	.55
Avg	8.27		Avg	7.80											ICP	361	8.16	S	.51
136	8.25	-.11	117	7.78	-.10										Total Phosphate	422	8.08	S	.26
234	8.26	-.14	262	7.29	-2.01										ICP	Avg	8.01	S	
028	8.23	-.20										Meth: 020.20 PCT	247	7.98	S	-.11			
035	8.23	-.32										Total Phosphate	389	7.93	S	-.30			
029	8.20	-.40										Spectrometric	368	7.89	S	-.46			
361	8.18	-.44										Total Phosphate	390	8.00	S	-.55			
368	8.16	-.53										ICP	432	7.73	S	-.98			
419	8.16	-.55										Total Phosphate	255	7.45	S	-1.92			
443	8.15	-.59										ICP	330	7.20	S	-2.79			
262	8.15	-.59										Total Phosphate	402	2.26	S	-19.73			
023	8.12	-.71										ICP	405	8.04	S	.67			
360	8.08	-.89										Total Phosphate	234	7.96	S	.30			
451	8.07	-.97										Other	220	7.97	S	.15			
024	8.07	-.98										Total Phosphate	443	8.70	S	4.14			
423	8.06	-.99										ICP	007	8.34	S	.83			
389	8.05	-1.03										Total Phosphate	Avg	8.24	S				
131	8.04	-1.07										ICP	455	8.15	S	-.90			
041	8.02	-1.16										Total Phosphate	363	7.83	S	-.71			
426	8.03	-1.22										ICP	416	7.86	S	-.69			
042	8.00	-1.31										Total Phosphate	363	7.83	S	-.71			
185	7.91	-1.64										ICP	117	7.78	S	-.96			
455	7.82	-2.04										Total Phosphate	432	7.73	S	-1.30			
460	7.79	-2.19										ICP	041	15.59	S	43.45			
260	7.67	-2.74										Total Phosphate	443	8.70	S	4.39			
030	7.21	S -5.60										ICP	157	8.29	S	4.28			
114	1.60	S -30.55										Total Phosphate	451	8.60	S	3.75			
Automated																			
456	8.04	1.25										ICP	324	8.47	S	3.23			
105	7.90	.16										Total Phosphate	007	8.34	S	2.22			
Avg	7.88											ICP	423	8.16	S	1.23			
035	7.88	-.25										Total Phosphate	426	8.13	S	1.19			
096	7.72	-1.36										ICP	361	8.16	S	1.17			
041	15.59	S 30.33										Total Phosphate	231	8.15	S	1.17			
042	0.74	S -59.17										ICP	455	8.15	S	1.17			

\* 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: 030.10 PCT			Meth: 040.20 PCT			Meth: 041.10 PCT			Meth: 041.60 PCT		
Insoluble Phosphate			InDir Available Phos			Dir Available Phosph			Dir Available Phosph		
Grav Quimociac			Spectrometri			Grav Quimociac			EDTA Extract		
090	0.06	.00	220	7.88	.71	185	7.79 R	-2.67	034	8.07	2.02
						055	7.53 s	-4.45	397	7.90	.55
Meth: 030.20 PCT			Meth: 040.40 PCT			Meth: 041.20 PCT			073	7.87	.49
Insoluble Phosphate			InDir Available Phos			Dir Available Phosph			233	7.88	.34
Spectrometric			Automated			Spectrometric			296	7.87	.20
220	0.10	.71	096	7.65	-.71	055	8.02	1.02	043	7.87	.20
						363	7.94	.25	Avg	7.85	
Meth: 030.40 PCT			Meth: 040.50 PCT			Avg	7.91		106	7.73	-1.02
Insoluble Phosphate			InDir Available Phos			419	7.76	-1.19	177	7.73	-1.05
Automated			ICP			030	6.85 S	-11.40	024	7.71	-1.24
096	0.07	.00	423	8.04	.87	Meth: 041.40 PCT			105	7.56 s	-3.53
			Avg	7.71		Dir Available Phosph			057	7.45 s	-3.67
Meth: 030.50 PCT			255	7.39	-.87	Automated			Meth: 041.99 PCT		
Insoluble Phosphate						Dir Available Phosph			Dir Available Phosph		
ICP			Meth: 040.XX PCT			027	8.00	1.15	Other		
255	0.06	.00	InDir Available Phos			Avg	7.89		105	7.79	.71
			423	8.04	1.17	029	7.88	-.14	Avg	7.79	
Meth: 030.99 PCT			090	7.95	.79	131	7.79	-1.08	230	7.25 S	-39.12
Insoluble Phosphate			220	7.88	.45	Meth: 041.50 PCT			Meth: 041.XX PCT		
Other			Avg	7.78		Dir Available Phosph			Dir Available Phosph		
247	0.04	.00	300	7.75	-.11	ICP			009	8.17	2.41
			096	7.65	-.57	009	8.17	2.00	254	8.15	2.26
Meth: 030.XX PCT			255	7.39	-1.72	360	7.99	.96	034	8.07	1.66
Insoluble Phosphate						Avg	7.82		055	8.02	1.31
220	0.10 R	3.31	Meth: 041.10 PCT			361	7.81	-.08	027	8.00	1.14
096	0.07	1.12	Dir Available Phosph			291	7.82	-.09	360	7.99	1.03
090	0.06	.26	Grav Quimociac			377	7.76	-.36	057	7.96	.76
255	0.06	.09	254	8.15 s	4.03	023	7.80 R	-.52	363	7.94	.61
Avg	0.06		057	7.96	1.55	043	7.72	-.57	Avg	6.16	
247	0.04	-1.47	009	7.89	1.14	325	7.71	-.65	096	6.05	-.84
			105	7.90	.97	354	7.59	-1.31	Meth: 048.20 PCT		
Meth: 040.10 PCT			Avg	7.83		Meth: 050.00 PCT			Water Soluble Phosph		
InDir Available Phos			040	7.81	-.26	Dir Available Phosph			Spectrometric		
Grav Quim			260	7.81	-.65	ICP			363	6.28	.89
090	7.95	.87	102	7.77	-.76	009	7.89	.59	Avg	6.16	
Avg	7.85		131	7.77	-.83	040	7.83	-.65	096	6.05	-.84
300	7.75	-.86	177	7.75	-1.04	040	7.81	-.26	Meth: 050.00 PCT		
						260	7.81	-.65	Soluble Potash		
						102	7.77	-.76	STPB Oxalate		
						131	7.77	-.83	257	24.90	2.15
						177	7.75	-1.04			

\* 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: 050.00 PCT																	
Soluble Potash																	
STPB Oxalate																	
022	24.45 R	1.09													360	24.16	-.27
114	24.53	1.01													041	24.13	-.27
057	24.44	.74													055	24.12	-.28
102	24.37	.69													232	24.09	-.34
231	24.40	.62													090	24.08	-.36
220	24.33	.42													043	24.07	-.38
009	24.32	.40													389	24.05	-.43
247	24.25	.17													455	24.05	-.43
Avg	24.19														043	24.05	-.44
055	24.12	-.23													460	23.95	-.63
090	24.08	-.34													043	23.95	-.65
043	24.07	-.37													377	23.96	-.67
233	23.86	-1.02													055	24.22 R	-.68
258	23.90 R	-1.11													361	23.91	-.71
397	23.81	-1.16													233	23.86	-.82
296	23.78	-1.24													073	23.88	-.83
416	23.64	-1.69													258	23.90	-.86
230	20.75 s	-10.42													423	23.84	-.86
Meth: 050.30 PCT																	
Soluble Potash																	
AA (Oxalate)																	
234	24.81	1.34													397	23.81	-.92
262	24.38	.81													296	23.78	-.98
136	24.35	.48													254	23.71	-1.13
040	24.20	.19													416	23.64	-1.28
Avg	24.10														029	23.61	-1.38
043	23.95	-.33													368	23.56	-1.44
073	23.88	-.50													419	23.27	-2.04
185	23.15	-1.85													325	23.20	-2.18
Meth: 050.31 PCT																	
Soluble Potash																	
AA (Citrate)																	
254	23.71	.71													030	23.56 R	-2.20
Meth: 050.50 PCT																	
Soluble Potash																	
ICP (Oxalate)																	
451	26.58 S	1.65													390	23.20 R	-2.32
106	25.39	.73													185	23.15	-2.33
354	25.18	.57													042	23.25 s	-2.99
324	24.75	.35													426	22.37 s	-3.96
292	24.78	.25													371	22.31 A	-4.00
422	24.62	.21													255	21.99 s	-4.67
Avg	24.46														230	20.75 s	-7.21
419	23.27	-.93													402	3.86 s	-41.99
390	23.20	-1.03															
426	22.37 S	-1.66															
Meth: 050.51 PCT																	
Soluble Potash																	
ICP (Citrate)																	
009	24.93	1.39													034	24.17	-.20
432	24.81	1.06													035	24.15	-.21
291	24.72	.86													034	24.14	-.25
007	24.69	.82													405	29.39 s	10.57
Avg	24.35														451	26.58 s	4.79
023	24.27	-.20															
043	24.05	-.73															
377	23.96	-.97															
361	23.91	-1.03															
423	23.84	-1.21															
Meth: 050.60 PCT																	
Soluble Potash																	
Flame (Oxalate)																	
443	25.88	1.41															
Avg	24.40																
055	24.22	-.35															
460	23.95	-.43															
030	23.56	-1.09															
Meth: 050.61 PCT																	
Soluble Potash																	
Flame (Citrate)																	
028	24.91	1.56															
057	24.84	1.36															
024	24.58	.49															
Avg	24.43																
456	24.40	-.33															
131	24.28	-.49															
035	24.15	-.90															
034	24.14	-.94															
041	24.13	-.97															
029	23.61 R	-2.71															
Meth: 050.99 PCT																	
Soluble Potash																	
Other																	
405	29.39 s	6.08															
157	24.81 S	1.90															
260	25.04	1.27															
177	24.83	1.03															
330	24.60	.79															
027	24.59	.77															
024	24.58	.67															
022	24.45	.65															
114	24.53	.56															
102	24.37	.37															
057	24.44	.37															
456	24.40	.36															
231	24.40	.30															
136	24.35	.22															
220	24.33	.16															
009	24.32	.14															
023	24.27	.05															
131	24.28	.05															
Avg	24.25																
247	24.25	-.04															
040	24.20	-.13															
131	24.17	-.20															
035	24.15	-.21															
034	24.14	-.25															

\* 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: 060.00 PCT														
Free Water			Meth: 101.00 PCT											
Vacuum Oven			Acid Soluble Calcium											
416	0.96	1.78	AA			ICP			423	1.19	.26			
363	0.71 R	.72	397	0.48 s	-7.41	022	1.04	-1.78	419	1.19	.26			
096	0.63	.19	Meth: 101.30 PCT											
Avg	0.61		Acid Soluble Calcium											
247	0.54	-.36	ICP			114	1.04 R	-1.96	262	1.17	.18			
007	0.49	-.64	422	1.96 s	10.46	041	1.02	-2.08	363	1.17	.14			
456	0.44	-.87	432	1.57 s	5.28	Meth: 101.99 PCT								
Meth: 060.99 PCT														
Free Water			Acid Soluble Calcium											
Other			117	1.37 R	2.79	460	1.09	.88	Avg	1.16				
443	3.06	.71	330	1.30	1.70	Avg	1.05		230	1.15	-.24			
Meth: 060.XX PCT														
Free Water			Acid Soluble Calcium											
443	3.06	2.10	035	1.29	1.61	432	1.57 s	4.92	232	1.15	-.26			
Avg	1.02		231	1.27	1.24	042	1.00	-.86	027	1.14	-.40			
416	0.96	-.06	Meth: 101.XX PCT											
363	0.71 R	-.34	Acid Soluble Calcium											
096	0.63	-.41	057	1.26	1.15	422	1.96 s	9.66	291	1.09	-.97			
247	0.54	-.49	096	1.20 R	.88	432	1.57 s	4.92	354	1.07	-1.17			
007	0.49	-.55	106	1.24	.84	055	1.39 s	3.20	255	1.07	-1.21			
456	0.44	-.60	361	1.24	.84	117	1.37 R	2.64	022	1.04	-1.54			
Meth: 101.00 PCT														
Acid Soluble Calcium			Acid Soluble Calcium											
AA			090	1.23	.78	330	1.30	1.65	114	1.04 R	-1.71			
055	1.39 S	2.81	390	1.23	.73	035	1.29	1.56	041	1.02	-1.82			
220	1.29	1.32	368	1.21	.73	220	1.29	1.53	042	1.00	-2.00			
177	1.22	.52	037	1.22	.65	231	1.27	1.22	029	0.97	-2.36			
296	1.22	.52	360	1.21	.50	057	1.26	1.14	397	0.48 s	-8.35			
105	1.21	.41	247	1.21	.44	106	1.24	.86	Meth: 121.00 PCT					
028	1.17	.32	131	1.20	.40	361	1.24	.86	Acid Soluble Magnesi					
Avg	1.17		009	1.20	.35	096	1.20 R	.85	AA					
262	1.17	-.16	423	1.19	.19	090	1.23	.80	220	2.62	1.07			
043	1.11	-.66	419	1.19	.19	390	1.23	.76	028	2.63	1.07			
029	0.97	-2.12	Avg	1.17		368	1.21	.74	177	2.61	.89			
* 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: 144.XX PCT											
<u>Sulfur</u>											
389	9.57	-.24									
073	9.57	-.27									
037	9.58	-.30									
361	9.54	-.32									
027	9.51	-.39									
114	9.49	-.44									
419	9.41	-.62									
106	9.39	-.74									
023	9.36	-.75									
009	9.35	-.80									
390	9.40 R	-.84									
368	9.23	-1.05									
131	9.21	-1.10									
422	9.02	-1.52									
363	8.92	-1.76									
090	8.85	-1.93									
255	8.80	-2.05									
096	7.30 s	-5.53									
Meth: 151.00 PPM											
<u>Arsenic</u>											
258	0.059	1.57									
028	0.055	1.04									
428	0.052	.75									
397	0.050	.70									
029	0.049	.37									
Avg	0.046										
023	0.045	-.23									
055	0.041	-.66									
220	0.039	-.80									
057	0.038	-.90									
257	0.032	-1.68									
Meth: 165.99 PCT											
<u>Acid Soluble Boron</u>											
232	0.444 s	55.42									
422	0.300 s	35.41									
432	0.090 s	6.75									
354	0.074 s	3.97									
258	0.059	1.83									
368	0.057 R	1.72									
028	0.055	1.21									
255	0.054	1.14									
117	0.054	1.10									
324	0.052	1.08									
360	0.053	.94									
428	0.052	.87									
354	0.074 S	4.37									
Meth: 151.99 PPM											
<u>Arsenic</u>											
232	0.444 s	61.17									
422	0.300 s	39.08									
432	0.090 s	7.45									
354	0.074 S	4.37									
231	1.97	.87									
Meth: 151.99 PCT											
<u>Acid Soluble Boron</u>											
232	0.444 s	55.42									
422	0.300 s	35.41									
432	0.090 s	6.75									
354	0.074 s	3.97									
258	0.059	1.83									
368	0.057 R	1.72									
028	0.055	1.21									
255	0.054	1.14									
117	0.054	1.10									
324	0.052	1.08									
360	0.053	.94									
428	0.052	.87									
397	0.050	.81									
Meth: 165.99 PCT											
<u>Acid Soluble Boron</u>											
232	0.444 s	55.42									
422	0.300 s	35.41									
432	0.090 s	6.75									
354	0.074 s	3.97									
258	0.059	1.83									
368	0.057 R	1.72									
028	0.055	1.21									
255	0.054	1.14									
117	0.054	1.10									
324	0.052	1.08									
360	0.053	.94									
428	0.052	.87									
397	0.050	.81									
Meth: 151.30 PPM											
<u>Arsenic</u>											
232	2.13 R	1.17									
405	2.00	.79									
230	1.97	.72									
096	1.70	.02									
Avg	1.69										
102	1.10	-1.54									
Meth: 181.30 PPM											
<u>Cadmium</u>											
096	2.25	2.45									
363	1.90 R	1.57									
405	2.00	1.50									
009	1.66	.29									
Avg	1.58										
231	1.55	-.14									
232	1.56	-.14									
247	1.52	-.20									
419	1.50	-.27									
102	1.46	-.41									
136	1.45	-.48									
230	1.40	-.65									
220	1.30	-1.04									
035	1.28	-1.05									
Meth: 181.99 PPM											
<u>Cadmium</u>											
096	2.25	2.45									
363	1.90 R	1.57									
405	2.00	1.50									
009	1.66	.29									
Avg	1.58										
231	1.55	-.14									
232	1.56	-.14									
247	1.52	-.20									
419	1.50	-.27									
102	1.46	-.41									
136	1.45	-.48									
230	1.40	-.65									
220	1.30	-1.04									
035	1.28	-1.05									
Meth: 190.00 PCT											
<u>Water Soluble Chlori</u>											
422	3.98	1.45									

\* 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: 190.00 PCT											
Water Soluble Chlori											
043	3.77 R	- .45									
105	3.91	1.02									
057	3.85	.65									
028	3.84	.58									
043	3.77 R	.47									
029	3.79	.36									
220	3.75	.31									
055	3.79	.31									
Meth: 191.00 PPM											
Chromium											
027	65.21	-.90									
037	65.25	-.90									
231	45.51	-2.20									
Meth: 191.30 PPM											
Chromium											
009	97.35	1.46									
096	95.00	1.26									
035	86.05 R	.87									
247	89.06	.75									
232	86.00	.48									
405	82.50	.17									
Avg	80.60										
102	79.43	-.12									
230	78.70	-.19									
419	67.50	-1.15									
027	65.21	-1.34									
037	65.25	-1.34									
Meth: 191.99 PPM											
Chromium											
231	45.51	-.71									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 190.99 PCT											
Water Soluble Chlori											
Other											
397	4.03	1.59									
Avg	3.85										
360	3.82	-.35									
460	3.79	-.58									
009	3.78	-.71									
368	3.25 s	-6.43									
Meth: 190.00 PCT											
Water Soluble Chlori											
043	3.77 R	- .45									
102	3.68	-.59									
258	3.62	-.99									
023	3.53	-1.51									
257	3.42	-2.24									
368	3.25 s	-4.10									
Meth: 191.00 PPM											
Chromium											
027	65.21	-.90									
037	65.25	-.90									
231	45.51	-2.20									
Meth: 202.00 PPM											
Acid Soluble Cobalt											
AA											
136	54.50	.87									
Avg	40.75										
220	27.00	-.87									
Meth: 202.30 PPM											
Acid Soluble Cobalt											
ICP											
009	49.15	2.11									
057	41.46	1.40									
233	29.77	.32									
Avg	26.40										
230	25.55	-.12									
037	22.97	-.33									
232	23.00	-.33									
247	20.65	-.57									
102	20.07	-.59									
419	18.05	-.77									
027	13.30	-1.22									
Meth: 202.99 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 190.00 PCT											
Water Soluble Chlori											
043	3.77 R	- .45									
102	3.68	-.59									
258	3.62	-.99									
023	3.53	-1.51									
257	3.42	-2.24									
368	3.25 s	-4.10									
Meth: 191.00 PPM											
Chromium											
027	65.21	-.90									
037	65.25	-.90									
231	45.51	-2.20									
Meth: 202.00 PPM											
Acid Soluble Cobalt											
AA											
136	54.50	.87									
Avg	40.75										
220	27.00	-.87									
Meth: 202.30 PPM											
Acid Soluble Cobalt											
ICP											
009	49.15	2.11									
057	41.46	1.40									
233	29.77	.32									
Avg	26.40										
230	25.55	-.12									
037	22.97	-.33									
232	23.00	-.33									
247	20.65	-.57									
102	20.07	-.59									
419	18.05	-.77									
027	13.30	-1.22									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.00	1.01									
Meth: 191.00 PPM											
Chromium											
009	97.35	1.23									
096	95.00	1.08									
220	94.										

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 241.00 PCT														
Acid Soluble Iron														
Atomic Absorption														
055	0.29	1.81	423	0.26	-0.30	389	0.28	.30	136	11.50 S	.00	AA		
397	0.27 R	1.56	090	0.26	-0.30	247	0.28	.30	Avg	1.69		Avg	0.256	
363	0.28	1.06	096	0.26	-0.37	363	0.28	.30	Meth: 251.30 PPM			296	0.229	-1.00
043	0.27	.69	419	0.26	-0.37	360	0.28	.26	Lead			177	0.227	-1.12
262	0.27	.44	035	0.26	-0.59	390	0.27	.24	ICP			397	0.223	-1.24
Avg	0.26		232	0.25	-0.66	117	0.27	.21	419	2.40	1.66	105	0.249 R	-1.39
029	0.26	-.58	023	0.25	-0.74	043	0.27	.09	Avg	1.69		257	0.165 S	-3.40
073	0.26	-.59	433	0.25	-0.76	Avg	0.27		027	1.62	-.16	Meth: 261.11 PCT		
028	0.26	-.59	291	0.24	-1.06	131	0.26	-.03	230	1.43	-.58	Acid Soluble Manganese		
220	0.26	-.70	426	0.25 R	-1.12	262	0.27	-.34	102	1.32	-.83	AA		
296	0.25	-.77	027	0.24	-1.29	368	0.26	-.35	232	1.68	-.84	029	0.261	.71
177	0.24	-1.52	230	0.23	-1.36	423	0.26	-.38	Meth: 251.99 PPM					
105	0.16 s	-8.26	042	0.20	-2.74	090	0.26	-.39	Lead					
Meth: 241.30 PCT														
Acid Soluble Iron														
ICP														
432	0.38 s	3.80	114	0.19 s	-2.93	419	0.26	-.48	Meth: 261.30 PCT					
422	0.33	2.20	041	0.19 s	-3.10	096	0.26	-.48	Acid Soluble Manganese					
354	0.33	2.01	Other											
402	0.32	1.63	028	0.26	-.53	028	0.26	-.53	231	1.51	.71	ICP		
057	0.29	.94	029	0.26	-.58	029	0.26	-.58	Meth: 251.11 PCT					
255	0.29	.78	073	0.26	-.71	073	0.26	-.71	Acid Soluble Manganese					
361	0.29	.72	220	0.26	-.74	220	0.26	-.74	AA					
106	0.29	.72	035	0.26	-.75	035	0.26	-.75	029					
324	0.29	.61	296	0.25	-.79	296	0.25	-.79	Meth: 261.00 PCT					
102	0.28	.33	232	0.25	-.83	232	0.25	-.83	Acid Soluble Manganese					
009	0.28	.31	023	0.25	-.94	023	0.25	-.94	ICP					
389	0.28	.25	433	0.25	-.96	433	0.25	-.96	029					
247	0.28	.25	177	0.24	-1.25	177	0.24	-1.25	Meth: 261.30 PCT					
360	0.28	.22	354	0.33	2.51	291	0.24	-1.34	Acid Soluble Manganese					
390	0.27	.20	402	0.32	2.03	426	0.25 R	-1.42	AA					
117	0.27	.17	057	0.29	1.16	027	0.24	-1.63	Avg					
Avg	0.27		255	0.29	.97	230	0.23	-1.72	258					
231	0.27	-.01	361	0.29	.88	042	0.20 A	-3.44	028					
131	0.26	-.25	106	0.29	.88	114	0.19 s	-3.69	262					
368	0.26	-.27	397	0.27 R	.82	041	0.19 s	-3.90	220					
* 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: 301.30 PPM Selenium														
ICP			Meth: 321.00 PCT			Meth: 321.30 PCT			Meth: 321.99 PCT					
232	1.66	1.05	Acid Soluble Zinc			ICP			Acid Soluble Zinc					
Avg	1.51		Atomic Absorption			Avg	0.171		232	0.178 R	1.37			
230	1.35	-.63	055	0.180	1.29	292	0.170	-.07	090	0.187	1.37			
Meth: 301.99 PPM Selenium														
Other			177	0.175	.74	422	0.170	-.07	057	0.181 R	1.34			
231	1.31	.87	028	0.172	.56	255	0.169	-.23	428	0.185 X	1.21			
Avg	0.87		073	0.171	.35	117	0.168	-.24	009	0.184	1.12			
296	0.44	-.86	296	0.168	.15	231	0.165	-.50	354	0.183	1.08			
Meth: 311.99 PCT Sodium														
Other			Avg	0.167	-.47	114	0.165	-.50	360	0.180	.84			
363	1.49 S	4.36	029	0.163	-.48	041	0.160	-.71	055	0.180	.81			
422	1.34	1.49	105	0.164	-.48	035	0.160	-.74	324	0.179	.72			
423	1.29	.50	220	0.165	-.57	022	0.157	-.93	037	0.179	.69			
102	1.27	.41	262	0.160	-.77	096	0.155	-.102	102	0.178	.64			
057	1.27	.23	397	0.161 R	-.91	291	0.155	-.106	177	0.175	.40			
Avg	1.26	-.06	043	0.159	-.93	433	0.155	-.106	423	0.174	.36			
232	1.26	-.63	371	0.150	-1.80	363	0.155	-.107	028	0.172	.30			
009	1.23	-.63	257	0.130 S	-3.99	419	0.155	-.107	230	0.172	.21			
035	1.18	-1.85	Meth: 321.30 PCT Acid Soluble Zinc											
Meth: 321.00 PCT Acid Soluble Zinc														
Meth: 321.00 PCT			Meth: 321.30 PCT			Meth: 321.99 PCT			Meth: 321.99 PCT					
Acid Soluble Zinc			ICP			ICP			Acid Soluble Zinc					
232	1.66 R	1.43	402	0.220	3.11	402	0.220	3.11	232	0.178 R	1.37			
230	1.35	.69	368	0.198 S	2.69	368	0.198 S	2.69	090	0.187	1.37			
231	1.31	.61	390	0.191 R	1.79	390	0.191 R	1.79	057	0.181 R	1.34			
Avg	1.03		106	0.195	1.55	106	0.195	1.55	422	0.185 X	1.17			
296	0.44	-1.29	361	0.190	1.20	361	0.190	1.20	255	0.169	1.21			
Meth: 301.99 PPM Selenium														
Other			232	0.178 R	1.10	232	0.178 R	1.10	220	0.165	1.29			
232	1.66 R	1.43	389	0.188	1.05	389	0.188	1.05	105	0.164	1.29			
230	1.35	.69	057	0.181 R	1.05	057	0.181 R	1.05	029	0.163	1.29			
231	1.31	.61	090	0.187	1.04	090	0.187	1.04	114	0.165	1.29			
Avg	1.03		009	0.184	.83	009	0.184	.83	231	0.165	1.29			
296	0.44	-1.29	354	0.183	.80	354	0.183	.80	220	0.165	1.29			
Meth: 311.99 PCT Sodium														
Other			360	0.180	.60	360	0.180	.60	262	0.160	1.29			
363	1.49 S	4.36	324	0.179	.50	324	0.179	.50	041	0.160	1.29			
422	1.34	1.49	037	0.179	.47	037	0.179	.47	035	0.160	1.29			
423	1.29	.50	102	0.178	.43	102	0.178	.43	397	0.161	1.29			
102	1.27	.41	423	0.174	.19	423	0.174	.19	043	0.159	1.29			
057	1.27	.23	131	0.172	.10	131	0.172	.10	022	0.157	1.29			
Avg	1.26	-.06	230	0.172	.08	230	0.172	.08	096	0.155	1.29			
232	1.26	-.06	428	0.185 X	1.83	428	0.185 X	1.83	291	0.155	1.29			
009	1.23	-.63	Meth: 321.00 PCT Acid Soluble Zinc											
035	1.18	-1.85	Meth: 321.30 PCT Acid Soluble Zinc											
Meth: 321.00 PCT Acid Soluble Zinc														
Meth: 321.00 PCT			Meth: 321.30 PCT			Meth: 321.99 PCT			Meth: 321.99 PCT					
Acid Soluble Zinc			Atomic Absorption			Atomic Absorption			Atomic Soluble Zinc					
258	0.355 S	19.63	055	0.180	1.29	055	0.180	1.29	258	0.355	1.29			
428	0.185 X	1.83	177	0.175	.74	177	0.175	.74	Avg	0.217	1.29			
Meth: 321.99 PCT Sodium														
Other			028	0.172	.56	028	0.172	.56	426	0.167	1.29			
363	1.49 S	4.36	073	0.171	.35	073	0.171	.35	Avg	0.243	1.29			
422	1.34	1.49	296	0.168	.15	296	0.168	.15	257	0.130 X	1.29			
423	1.29	.50	Avg	0.167	-.47	Avg	0.167	-.47	257	0.130 A	1.29			
102	1.27	.41	029	0.163	-.47	029	0.163	-.47	042	0.100 S	1.29			
057	1.27	.23	105	0.164	-.48	105	0.164	-.48	432	0.095 S	1.29			
Avg	1.26	-.06	220	0.165	-.57	220	0.165	-.57	Meth: 325.30 PCT Water Soluble Zinc					
232	1.26	-.06	262	0.160	-.77	262	0.160	-.77	ICP					
009	1.23	-.63	397	0.161 R	-.91	397	0.161 R	-.91	426	0.167	.71			
035	1.18	-1.85	043	0.159	-.93	043	0.159	-.93	Meth: 325.99 PCT Water Soluble Zinc					
Meth: 321.00 PCT Acid Soluble Zinc														
Meth: 321.00 PCT			Meth: 321.30 PCT			Meth: 321.99 PCT			Meth: 325.99 PCT					
Acid Soluble Zinc			ICP			ICP			Water Soluble Zinc					
258	0.355 S	19.63	402	0.220	3.11	402	0.220	3.11	258	0.355	1.29			
428	0.185 X	1.83	368	0.198 S	2.69	368	0.198 S	2.69	Avg	0.243	1.29			
Meth: 321.99 PCT Sodium														
Other			390	0.191 R	1.79	390	0.191 R	1.79	257	0.130 X	1.29			
363	1.49 S	4.36	106	0.195	1.55	106	0.195	1.55	Meth: 325.30 PCT Water Soluble Zinc					
422	1.34	1.49	361	0.190	1.20	361	0.190	1.20	ICP					
423	1.29	.50	232	0.178 R	1.10	232	0.178 R	1.10	426	0.167	.71			
102	1.27	.41	389	0.188	1.05	389	0.188	1.05	Meth: 325.99 PCT Water Soluble Zinc					
057	1.27	.23	057	0.181 R	1.05	057	0.181 R	1.05	Meth:					
Avg	1.26	-.06	090	0.187	1.04	090	0.187	1.04	Water					
232	1.26	-.06	009	0.184	.83	009	0.184	.83	Soluble					
009	1.23	-.63	354	0.183	.80	354	0.183	.80	Zinc					
035	1.18	-1.85	360	0.180	.60	360	0.180	.60	258	0.355	1.29			
Meth: 321.00 PCT Acid Soluble Zinc														
Meth: 321.00 PCT			324	0.179	.50	324	0.179	.50	Avg	0.217	1.29			
Acid Soluble Zinc			037	0.179	.47	037	0.179	.47	426	0.167	1.29			
258	0.355 S	19.63	102	0.178	.43	102	0.178	.43	257	0.130 X	1.29			
428	0.185 X	1.83	423	0.174	.19	423	0.174	.19	Meth: 325.30 PCT Water Soluble Zinc					
Meth: 321.99 PCT Sodium														
Other			131	0.172	.10	131	0.172	.10	Meth:					
363	1.49 S	4.36	230	0.172	.08	230	0.172	.08	Water					
422	1.34	1.49	247	0.172	.02	247	0.172	.02	Soluble					
423	1.29	.50	Meth: 325.99 PCT Water Soluble Zinc											
102	1.27	.41	Meth: 325.99 PCT Water Soluble Zinc											
057	1.27	.23	Meth: 325.99 PCT Water Soluble Zinc											
Avg	1.26	-.06	Meth: 325.99 PCT Water Soluble Zinc											
232	1.26	-.06	Meth: 325.99 PCT Water Soluble Zinc											
009	1.23	-.63	Meth: 325.99 PCT Water Soluble Zinc											
035	1.18	-1.85	Meth: 325.99 PCT Water Soluble Zinc											

\* 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	10	3.11	9.87	0.24	050.XX	68	-	0.69	5.53
001.99	12	4.97	11.33	0.20	060.00	6	0.08	0.96	0.23
001.XX	21	4.03	10.26	0.21	060.XX	7	-	0.05	0.05
002.20	2	0.00	1.20	0.17	101.00	10	-	0.51	0.51
002.99	5	0.05	0.94	0.17	101.30	34	0.50	2.25	0.32
002.XX	7	0.01	0.96	0.17	101.99	2	0.00	1.21	0.13
009.10	4	0.00	1.05	0.21	101.XX	46	0.22	2.30	0.37
009.XX	5	0.00	1.03	0.24	121.00	13	-	0.05	0.36
010.11	6	3.20	7.89	0.10	121.30	36	0.20	2.17	0.23
010.12	2	0.00	1.13	0.33	121.99	2	0.00	1.21	0.13
010.60	52	0.13	1.23	0.27	121.XX	51	0.14	1.99	0.25
010.99	2	2.89	4.09	2.39	131.00	2	0.00	1.19	0.21
010.XX	61	0.49	4.13	0.42	131.30	5	0.30	1.15	0.14
020.10	7	4.33	11.50	0.21	131.XX	7	0.18	1.07	0.14
020.20	15	0.25	1.35	0.53	144.01	18	0.00	0.97	0.30
020.40	5	11.83	26.48	0.15	144.02	2	0.00	1.17	0.26
020.50	14	1.54	5.37	0.67	144.99	24	0.02	1.71	0.39
020.99	3	1.25	2.31	1.03	144.XX	44	-	0.03	0.31
020.XX	43	0.57	10.59	0.71	151.30	5	0.22	1.06	0.17
030.XX	5	0.66	1.74	0.19	151.99	2	0.00	1.22	0.05
040.10	2	0.00	1.21	0.12	151.XX	8	0.17	1.07	0.19
040.50	2	0.00	1.22	0.06	165.00	10	0.000	0.990	0.260
040.XX	6	0.00	1.05	0.07	165.99	24	4.706	14.475	0.794
041.10	11	0.03	1.91	1.13	165.XX	34	3.010	11.141	0.627
041.20	4	2.14	4.36	3.78	181.00	3	0.00	0.91	0.54
041.40	3	0.00	1.10	0.16	181.30	9	0.38	1.48	0.25
041.50	9	0.01	0.96	0.20	181.XX	13	0.09	1.01	0.35
041.60	11	0.57	1.56	0.77	190.00	12	0.02	0.97	0.18
041.99	2	19.27	27.25	4.78	190.99	5	1.09	2.60	1.53
041.XX	32	0.53	1.75	1.43	190.XX	17	-	0.20	0.61
048.20	2	0.00	1.17	0.26	191.30	11	0.04	0.98	0.24
048.XX	2	0.00	1.17	0.26	191.XX	13	0.04	0.98	0.17
050.00	18	0.58	2.63	0.27	202.00	2	0.00	1.22	0.05
050.30	7	0.00	0.98	0.33	202.30	10	0.00	1.02	0.09
050.50	9	0.00	1.01	0.19	202.XX	13	0.00	1.02	0.07
050.51	9	0.00	1.01	0.18	221.00	3	52.029	90.121	0.3717
050.60	4	0.00	0.96	0.43	221.30	14	13.893	33.371	1.8547
050.61	9	0.29	1.30	0.26	221.99	2	0.0000	0.9631	0.5350
050.99	17	0.93	5.75	0.49	221.XX	19	24.510	68.858	1.4891

## 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
241.00	12	- 0.63	2.56	0.54					
241.30	34	- 0.09	1.37	0.21					
241.XX	47	- 0.27	1.65	0.28					
251.30	5	0.00	0.95	0.43					
251.XX	7	3.42	9.10	0.61					
261.00	11	0.597	3.450	0.519					
261.30	29	2.864	15.181	0.348					
261.31	2	0.000	0.520	0.784					
261.99	4	0.000	0.956	0.435					
261.XX	47	1.862	11.895	0.414					
271.30	3	0.000	1.110	0.111					
271.XX	4	0.000	1.073	0.104					
289.30	11	1.21	3.57	0.31					
289.99	3	0.00	1.12	0.03					
289.XX	14	0.51	1.85	0.14					
291.00	2	0.00	1.20	0.16					
291.30	11	0.00	1.00	0.22					
291.XX	14	0.00	1.01	0.13					
301.30	2	0.00	0.88	0.60					
301.99	2	0.00	1.22	0.06					
301.XX	4	0.34	1.14	0.23					
311.99	8	0.54	1.78	0.36					
311.XX	8	0.54	1.78	0.36					
321.00	15	0.985	5.238	0.998					
321.30	37	- 0.143	1.469	0.553					
321.99	2	0.000	1.206	0.151					
321.XX	53	0.184	2.538	0.682					
325.99	2	0.000	1.194	0.193					
325.XX	2	0.229	1.440	0.233					