

- Pass 1 Results for 87 Labs - - Pass 2 Results for 87 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	7	6.48	0.28	0.05	7	6.48	0.28	0.05
Ammoniacal Nitrogen, Other		001.99	9	6.16	0.13	0.08	8	6.15	0.13	0.05
Method Group 001.XX PCT			17	6.36	0.36	0.06	16	6.37	0.36	0.05
Nitrogen From Urea, Urease (as N)	959.03	005.00	2	9.71	0.45	0.56	2	9.71	0.45	0.56
Nitrogen From Urea, Other		005.99	3	9.88	0.31	0.16	3	9.88	0.31	0.16
Method Group 005.XX PCT			5	9.81	0.36	0.32	4	9.82	0.28	0.12
Total Nitrogen, Modified Comprehensive	978.02	010.11	9	15.94	0.09	0.05	8	15.93	0.09	0.03
Total Nitrogen, Salicylic	955.04D	010.12	3	15.95	0.14	0.06	3	15.95	0.14	0.06
Total Nitrogen, Combustion		010.60	58	16.06	0.17	0.10	56	16.06	0.17	0.09
Total Nitrogen, Other		010.99	2	15.86	0.12	0.11	2	15.86	0.12	0.11
Method Group 010.XX PCT			73	16.04	0.17	0.09	70	16.04	0.17	0.08
Total Phosphate, Grav Quimociac	962.02	020.10	7	16.27	0.25	0.15	7	16.27	0.25	0.15
Total Phosphate, Spectrometric	958.01	020.20	21	16.14	0.35	0.13	19	16.18	0.34	0.09
Total Phosphate, Automated	978.01	020.40	6	16.24	0.16	0.18	6	16.24	0.16	0.18
Total Phosphate, ICP		020.50	11	16.33	0.53	0.17	11	16.33	0.53	0.17
Total Phosphate, Other		020.99	2	16.24	0.26	0.35	2	16.24	0.26	0.35
Method Group 020.XX PCT			48	16.21	0.38	0.18	45	16.23	0.37	0.14
Insoluble Phosphate, Grav Quimociac	963.03C	030.10	1	0.08	0.01	0.01	1	0.08	0.01	0.01
Insoluble Phosphate, Automated	978.01	030.40	2	0.16	0.01	0.01	2	0.16	0.01	0.01
Insoluble Phosphate, ICP		030.50	1	0.10	0.00	0.00	1	0.10	0.00	0.00
Insoluble Phosphate, Other		030.99	1	0.11	0.00	0.00	1	0.11	0.00	0.00
Method Group 030.XX PCT			5	0.12	0.04	0.00	5	0.12	0.04	0.00
InDir Available Phosphate, Grav Quim	960.02	040.10	1	16.39	0.01	0.02	1	16.39	0.01	0.02
InDir Available Phosphate, Spectrometri	960.02	040.20	1	16.23	0.04	0.05	1	16.23	0.04	0.05
InDir Available Phosphate, Automated	960.02	040.40	2	16.03	0.13	0.09	2	16.03	0.13	0.09
InDir Available Phosphate, ICP		040.50	2	15.75	0.20	0.16	2	15.75	0.20	0.16
Method Group 040.XX PCT			6	16.03	0.28	0.09	6	16.03	0.28	0.09
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	16	16.13	0.14	0.12	15	16.14	0.13	0.10
Dir Available Phosphate, Spectrometric	960.03D	041.20	2	16.15	0.13	0.04	2	16.15	0.13	0.04
Dir Available Phosphate, Automated	978.01	041.40	4	15.83	0.37	0.17	4	15.83	0.37	0.17
Dir Available Phosphate, ICP		041.50	11	16.17	0.26	0.16	11	16.17	0.26	0.16
Dir Available Phosphate, EDTA Extract	993.01	041.60	12	16.17	0.24	0.18	10	16.18	0.21	0.09
Dir Available Phosphate, Other		041.99	3	15.97	0.20	0.17	3	15.97	0.20	0.17
Method Group 041.XX PCT			49	16.11	0.25	0.15	44	16.12	0.21	0.12
Water Soluble Phosphate, Spectrometric	970.01	048.20	3	13.62	1.06	0.09	3	13.62	1.06	0.09
Water Soluble Phosphate, Other		048.99	2	15.20	1.29	0.10	2	15.20	1.29	0.10
Method Group 048.XX PCT			5	14.25	1.36	0.09	5	14.25	1.36	0.09
Soluble Potash, STPB Oxalate	958.02	050.00	12	16.49	0.16	0.14	11	16.51	0.13	0.11
Soluble Potash, STPB Citrate	969.04	050.10	3	16.13	0.21	0.14	3	16.13	0.21	0.14

- Pass 1 Results for 87 Labs - - Pass 2 Results for 87 Labs -

Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Soluble Potash, AA (Oxalate)		050.30	12	16.35	0.55	0.25	12	16.35	0.55	0.25
Soluble Potash, ICP (Oxalate)		050.50	6	16.46	0.33	0.05	6	16.46	0.33	0.05
Soluble Potash, ICP (Citrate)		050.51	11	16.49	0.26	0.15	10	16.51	0.25	0.11
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	4	16.21	0.66	0.13	4	16.21	0.66	0.13
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	10	16.76	0.37	0.09	9	16.74	0.38	0.07
Soluble Potash, Other		050.99	16	16.30	0.47	0.30	15	16.32	0.46	0.25
Method Group 050.XX PCT			76	16.44	0.43	0.19	73	16.45	0.43	0.16
Free Water, Vacuum Oven	965.08B	060.00	4	1.63	0.20	0.04	4	1.63	0.20	0.04
Acid Soluble Calcium, AA	945.04	101.00	13	5.16	0.31	0.16	13	5.16	0.31	0.16
Acid Soluble Calcium, ICP		101.30	30	5.27	0.28	0.10	28	5.26	0.26	0.08
Acid Soluble Calcium, Titrimetric	945.03	101.70	1	5.52	0.00	0.00	1	5.52	0.00	0.00
Acid Soluble Calcium, Other		101.99	1	5.42	0.12	0.17	1	5.42	0.12	0.17
Method Group 101.XX PCT			45	5.25	0.29	0.12	42	5.26	0.26	0.09
Acid Soluble Magnesium, AA	984.01	121.00	14	0.50	0.02	0.01	14	0.50	0.02	0.01
Acid Soluble Magnesium, ICP		121.30	30	0.51	0.05	0.01	28	0.51	0.04	0.01
Acid Soluble Magnesium, Other		121.99	1	0.52	0.01	0.02	1	0.52	0.01	0.02
Method Group 121.XX PCT			45	0.50	0.04	0.01	43	0.50	0.03	0.01
Water Soluble Magnesium, AA		131.00	1	0.15	0.00	0.00	1	0.15	0.00	0.00
Water Soluble Magnesium, ICP		131.30	1	0.16	0.13	0.19	1	0.16	0.13	0.19
Water Soluble Magnesium, Titrimetric		131.70	1	0.81	0.01	0.02	1	0.81	0.01	0.02
Method Group 131.XX PCT			3	0.37	0.34	0.07	3	0.37	0.34	0.07
Sulfur, Gravimetric	980.02a	144.01	1	0.54	0.13	0.19	1	0.54	0.13	0.19
Sulfur, Gravimetric	980.02b	144.02	1	0.68	0.01	0.01	1	0.68	0.01	0.01
Sulfur, Spectrometric		144.70	1	0.66	0.07	0.10	1	0.66	0.07	0.10
Sulfur, Other		144.99	9	0.63	0.05	0.03	8	0.64	0.05	0.02
Method Group 144.XX PCT			12	0.63	0.06	0.05	11	0.64	0.05	0.03
Arsenic, Atomic Absorption		151.00	2	4.23	0.63	0.65	2	4.23	0.63	0.65
Arsenic, ICP		151.30	5	4.16	0.60	0.21	4	4.10	0.63	0.06
Arsenic, Other		151.99	2	4.12	1.10	0.19	2	4.12	1.10	0.19
Method Group 151.XX PPM			9	4.16	0.69	0.30	9	4.16	0.69	0.30
Acid Soluble Boron, Other		165.99	4	4.10	7.563	0.179	3	0.018	0.023	0.006
Cadmium, Atomic Absorption		181.00	1	0.90	0.28	0.40	1	0.90	0.28	0.40
Cadmium, ICP		181.30	7	1.05	0.09	0.05	6	1.03	0.05	0.03
Cadmium, Other		181.99	2	1.03	0.12	0.03	2	1.03	0.12	0.03
Method Group 181.XX PPM			10	1.03	0.12	0.08	9	1.05	0.09	0.05
Water Soluble Chlorine, Other		190.99	1	12.71	0.03	0.04	1	12.71	0.03	0.04
Chromium, Atomic Absorption		191.00	1	61.00	1.41	2.00	1	61.00	1.41	2.00
Chromium, ICP		191.30	11	57.71	7.15	2.38	10	57.28	7.20	1.62
Chromium, Other		191.99	2	62.93	1.32	0.95	2	62.93	1.32	0.95

- Pass 1 Results for 87 Labs - - Pass 2 Results for 87 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 191.XX PPM			14	58.69	6.63	2.15	13	58.44	6.67	1.54
Acid Soluble Cobalt, ICP	965.11	202.30	11	3.05	0.60	0.39	10	3.05	0.54	0.23
Acid Soluble Cobalt, Other		202.99	2	2.92	0.11	0.12	2	2.92	0.11	0.12
Method Group 202.XX PPM			13	3.03	0.55	0.35	12	3.03	0.49	0.21
Acid Soluble Copper, Atomic Absorption	975.01	221.00	4	0.0004	0.0002	0.0001	4	0.0004	0.0002	0.0001
Acid Soluble Copper, ICP		221.30	9	0.0003	0.0002	0.0001	8	0.0003	0.0001	0.0000
Acid Soluble Copper, Other		221.99	3	0.0005	0.0004	0.0000	3	0.0005	0.0004	0.0000
Method Group 221.XX PCT			18	0.0005	0.0004	0.0001	16	0.0004	0.0004	0.0000
Acid Soluble Iron, Atomic Absorption	980.01	241.00	13	0.62	0.04	0.02	13	0.62	0.04	0.02
Acid Soluble Iron, ICP		241.30	27	0.64	0.04	0.01	27	0.63	0.04	0.01
Acid Soluble Iron, Other		241.99	2	0.62	0.02	0.01	2	0.62	0.02	0.01
Method Group 241.XX PCT			43	0.63	0.04	0.02	41	0.63	0.04	0.01
Lead, Atomic Absorption		251.00	1	14.65	0.78	1.10	1	14.65	0.78	1.10
Lead, ICP		251.30	6	3.47	4.53	0.70	5	3.66	4.94	0.24
Lead, Other		251.99	2	1.28	0.13	0.15	2	1.28	0.13	0.15
Method Group 251.XX PPM			9	4.22	5.35	0.62	8	4.44	5.62	0.32
Acid Soluble Manganese, AA	972.02a	261.00	2	0.013	0.001	0.001	2	0.013	0.001	0.001
Acid Soluble Manganese, ICP		261.30	13	0.012	0.001	0.000	12	0.012	0.001	0.000
Acid Soluble Manganese, Other		261.99	2	0.013	0.001	0.000	2	0.013	0.001	0.000
Method Group 261.XX PCT			17	0.012	0.001	0.000	16	0.012	0.001	0.000
Mercury, ICP		281.30	2	0.39	0.44	0.60	2	0.39	0.44	0.60
Molybdenum, ICP		289.30	10	2.38	0.70	0.44	10	2.38	0.70	0.44
Molybdenum, Other		289.99	2	3.28	0.35	0.11	2	3.28	0.35	0.11
Method Group 289.XX PPM			12	2.53	0.74	0.39	12	2.53	0.74	0.39
Nickel, Atomic Absorption		291.00	2	11.55	3.66	1.60	2	11.55	3.66	1.60
Nickel, ICP		291.30	10	10.68	1.36	0.73	10	10.68	1.36	0.73
Nickel, Other		291.99	2	12.09	0.33	0.26	2	12.09	0.33	0.26
Method Group 291.XX PPM			14	11.01	1.76	0.79	13	10.73	1.45	0.62
Selenium, ICP		301.30	2	0.00	0.00	0.00	2	0.00	0.00	0.00
Selenium, Other		301.99	2	1.19	0.53	0.08	2	1.19	0.53	0.08
Method Group 301.XX PPM			4	0.59	0.72	0.04	3	0.24	0.38	0.00
Sodium, Other		311.99	5	0.67	0.04	0.01	5	0.67	0.04	0.01
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	5	0.003	0.000	0.000	5	0.003	0.000	0.000
Acid Soluble Zinc, ICP		321.30	14	0.003	0.001	0.000	13	0.003	0.001	0.000
Acid Soluble Zinc, Other		321.99	2	0.003	0.000	0.000	2	0.003	0.000	0.000
Method Group 321.XX PCT			21	0.003	0.000	0.000	18	0.003	0.000	0.000

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.10 PCT											
Ammoniacal Nitrogen											
MgO Distillation											
230	7.55 S	3.86									
169	6.97	1.71									
371	6.67	.69									
415	6.62	.50									
309	6.50	.17									
Avg	6.48										
029	6.23	-.90									
444	6.21	-.95									
231	6.18	-1.06									
Meth: 001.99 PCT											
Ammoniacal Nitrogen											
Other											
193	7.35 s	9.51									
397	6.25 R	1.44									
372	6.33	1.39									
234	6.25	.88									
255	6.24	.70									
096	6.21	.43									
Avg	6.15										
409	6.12	-.46									
200	6.07	-.71									
420	6.07	-.76									
027	5.94	-1.68									
Meth: 005.00 PCT											
Nitrogen From Urea											
Urease (as N)											
231	9.75	1.22									
Avg	9.71										
372	9.67	-.09									
Meth: 005.99 PCT											
Nitrogen From Urea											
Other											
234	10.25	1.21									
Avg	9.88										
200	9.75	-.44									
397	9.64	-.92									
Meth: 005.XX PCT											
Nitrogen From Urea											
234	10.25	1.53									
Avg	9.82										
200	9.75	-.31									
372	9.67	-.55									
397	9.64	-.87									
231	9.75 R	-1.98									
309	6.50	.36									
Avg	6.37										
372	6.33	-.12									
234	6.25	-.36									
255	6.24	-.36									
Meth: 010.11 PCT											
Total Nitrogen											
Modified Comprehensi											
114	16.11	1.98									
220	15.97 R	.99									
211	16.02	.93									
105	15.95	.23									
Avg	15.93										
309	15.92	-.34									
029	15.89	-.65									
090	15.88	-.69									
416	15.87	-.76									
371	15.84	-1.03									
073	15.48 s	-6.22									
Meth: 010.12 PCT											
Total Nitrogen											
Salicylic											
415	16.12	1.21									
Avg	15.95										
397	15.88	-.51									
185	15.86	-.88									
Meth: 010.60 PCT											
Total Nitrogen											
Combustion											
450	16.70 s	3.83									
361	16.68 s	3.67									
096	16.48	2.45									
325	16.35	1.92									
055	16.35	1.73									
330	16.35	1.73									
035	16.34	1.67									
034	16.22 R	1.47									
057	16.26	1.25									
157	16.27	1.22									
177	16.27	1.20									
425	16.24	1.14									
442	16.19	.80									
247	16.18	.76									
Meth: 010.60 PCT											
Total Nitrogen											
Combustion											
009	16.04	-.32									
027	16.01	-.34									
070	16.06	-.36									
351	16.02	-.39									
028	16.02	-.48									
073	16.00	-.55									
453	15.97	-.59									
393	16.02	-.63									
040	15.96	-.67									
324	16.00	-.70									
042	16.00	-.70									
451	15.96 X	-.70									
106	15.95	-.73									
043	15.88	-1.11									
Meth: 010.99 PCT											
Total Nitrogen											
Other											
354	16.81 S	7.97									
420	15.94	.97									
Avg	15.86										
402	15.77	-.75									
428	15.35 S	-4.37									
Meth: 010.XX PCT											
Total Nitrogen											
354	16.81 s	4.66									
450	16.70 s	4.01									
361	16.68 s	3.85									
096	16.48	2.63									
322	16.40	2.19									
325	16.35 R	2.08									
330	16.35	1.90									
055	16.35	1.90									
035	16.34	1.84									
034	16.22 R	1.58									
057	16.26	1.40									
157	16.27	1.39									
177	16.27	1.37									

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index							
Meth: 010.XX PCT																					
Total Nitrogen																					
425	16.24	1.29	451	15.96	X	-0.58	Meth: 010.XX PCT														
442	16.19	.95	393	16.02	-0.58	Total Phosphate															
247	16.18	.91	106	15.95	-0.59	Automated															
102	16.16	.80	220	15.97	-0.62	Avg															
232	16.15	.74	042	16.00	-0.64	247															
037	16.13	.66	324	16.00	-0.64	409															
409	16.13	.61	309	15.92	-0.74	024															
406	16.13	.57	420	15.94	-0.75	042															
390	16.13	.56	029	15.89	-0.93	15.70 s															
231	16.12	.56	397	15.88	-0.93	-4.45															
443	16.08	.55	043	15.88	-0.96	Meth: 020.50 PCT															
025	16.13	.54	090	15.88	-0.97	Total Phosphate															
415	16.12	.49	262	15.90	-1.01	ICP															
114	16.11	.45	117	15.88	-1.01	361															
049	16.10	.40	416	15.87	-1.03	330															
369	16.10	.39	360	15.87	-1.08	423															
070	16.06	.39	185	15.86	-1.17	421															
007	16.10	.38	371	15.84	-1.17	406															
029	16.07	.37	423	15.84	-1.20	453															
291	16.07	.32	421	15.80	-1.41	426															
041	16.05	.31	022	15.90	R	-1.45	Avg														
009	16.04	.30	023	15.78	-1.53	231															
372	16.08	.29	292	15.77	-1.59	371															
131	16.07	.27	402	15.77	-1.60	451															
234	16.05	.25	426	15.74	-1.78	450															
136	16.07	.24	255	15.73	-1.83	425															
233	16.07	.21	230	15.55	s	-3.27	324														
024	16.06	.19	073	15.48	s	-3.86	369														
377	16.04	.12	428	15.35	s	-4.20	169														
Avg	16.04		444	15.28	s	-4.55	420														
211	16.02	-.13	Meth: 020.10 PCT																		
027	16.01	-.19	Total Phosphate																		
351	16.02	-.31	Grav Quimociac																		
028	16.02	-.43	105	16.61	1.35	105															
453	15.97	-.45	090	16.47	.78	096															
073	16.00	-.46	041	16.37	.48	035															
105	15.95	-.52	Avg	16.27		16.25															
040	15.96	-.53	Meth: 020.40 PCT																		
Total Phosphate																					
Automated																					
Avg																					
Total Phosphate																					
ICP																					
361																					
330																					
423																					
421																					
393																					
Meth: 020.99 PCT																					
Total Phosphate																					
Other																					
428																					
Avg																					
402																					
443																					
Meth: 020.XX PCT																					
Total Phosphate																					
Total Phosphate																					
Automated																					
361																					
330																					
423																					
421																					
393																					
Meth: 020.XX PCT																					
Total Phosphate																					
Total Phosphate																					
Automated																					
361																					
330																					
423																					
421																					
393																					
Meth: 020.XX PCT																					
Total Phosphate																					
Total Phosphate																					
Automated																					
361																					
330																					
423																					
421																					
393																					
Meth: 020.XX PCT																					
Total Phosphate																					
Total Phosphate																					
Automated																					
361																					
330																					
423																					
421																					
393																					

\* 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: 020.XX PCT														
Total Phosphate														
444	15.69	-1.53										360	16.54	1.98
169	15.72	-1.56										106	16.54	1.94
042	15.70 R	-1.96										105	16.28 R	1.68
420	15.50	-2.01										009	16.42	1.53
193	15.40	-2.23										025	16.25 R	1.32
432	15.35	-2.37										325	16.35	1.28
443	14.42 s	-4.95										393	16.35	1.07
Meth: 030.10 PCT														
Insoluble Phosphate														
Grav Quimociac														
090	0.08	-.71										055	16.26	.99
Meth: 040.40 PCT														
InDir Available Phos														
096	16.14	.90										009	16.33	.97
Avg	16.03											043	16.33	.97
409	15.92	-.83										070	16.33	.95
Meth: 040.50 PCT														
InDir Available Phos														
ICP														
423	15.91	.92										351	16.30	.84
Avg	15.75											028	16.28	.75
255	15.59	-.81										055	16.26	.64
Meth: 030.50 PCT														
Insoluble Phosphate														
Automated														
409	0.17	.78										220	16.25	.64
Avg	0.16											233	16.16	.55
096	0.16	-.94										105	16.19	.49
Meth: 041.50 PCT														
Dir Available Phosph														
ICP														
325	16.35	.90										322	16.22	.46
393	16.35	.70										086	16.22	.45
043	16.33	.62										211	16.22	.43
361	16.20	.11										105	16.20	.42
Avg	16.17											043	16.20	.41
377	16.08	-.35										296	16.16	.37
291	15.92	-.96										361	16.20	.34
354	15.91	-1.05										034	16.14	.25
007	15.95	-1.26										037	16.15	.23
023	15.81	-1.36										Avg	16.12	
Meth: 041.60 PCT														
Dir Available Phosph														
EDTA Extract														
106	16.54	1.71										296	16.12	-.17
105	16.28 R	1.61										136	16.08	-.25
070	16.33	.70										377	16.08	-.25
351	16.30	.60										029	16.05	-.43
028	16.28	.51										231	16.04	-.47
043	16.20	.22										131	16.03	-.47
Avg	16.18											177	16.02	-.49
037	16.15	-.24										040	15.96	-.77
034	16.14	-.30										073	15.97	-.89
296	16.12	-.35										049	15.97	-.95
073	15.97	-1.13										291	15.92	-1.00
397	16.00 R	-1.68												
177	15.78	-1.96												
Meth: 041.99 PCT														
Dir Available Phosph														
Other														
105	16.19	1.16										029	16.05	-.43
Avg	15.97											231	16.04	-.47
200	15.88	-.48										131	16.03	-.47
230	15.85	-.96										177	16.02	-.49
Meth: 041.10 PCT														
Dir Available Phosph														
Grav Quimociac														
233	16.16	.84										040	15.96	-.77
322	16.22	.61										073	15.97	-.89
086	16.22	.60										049	15.97	-.95
105	16.20	.58										230	15.85	-.96
211	16.22	.56										360	16.54	1.43
296	16.16	.55										009	16.42	1.09
Avg	16.14													
136	16.08	-.51												
029	16.05	-.79												
131	16.03	-.87												
177	16.02	-.91												
040	15.96	-1.36												
049	15.97	-1.61												
185	16.02 R	-1.81												
102	15.70 s	-3.64												
Meth: 041.20 PCT														
Dir Available Phosph														
Spectrometric														
055	16.26	.83												
Avg	16.15													
231	16.04	-.90												
Meth: 041.40 PCT														
Dir Available Phosph														
Automated														
025	16.25	1.31												
029	15.87	.19												
131	15.88	.11												
Avg	15.83													
027	15.34	-1.32												
Meth: 041.50 PCT														
Dir Available Phosph														
Grav Quimociac														
055	16.26	1.51												
009	16.33	1.43												
220	16.25	.91												

\* 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: 041.XX PCT											
<u>Dir Available Phosph</u>											
185	16.02	-1.09									
354	15.91	-1.12									
131	15.88	-1.17									
200	15.88	-1.17									
029	15.87	-1.25									
007	15.95 R	-1.43									
230	15.85	-1.47									
023	15.81	-1.48									
397	16.00 R	-1.53									
177	15.78	-1.67									
102	15.70	-2.20									
027	15.34 A	-3.69									
Meth: 048.20 PCT											
<u>Water Soluble Phosph</u>											
<u>Spectrometric</u>											
096	14.41	.74									
372	14.19	.54									
Avg	13.62										
420	12.26	-1.29									
Meth: 048.99 PCT											
<u>Water Soluble Phosph</u>											
<u>Other</u>											
247	16.32	.87									
Avg	15.20										
409	14.08	-.87									
Meth: 048.XX PCT											
<u>Water Soluble Phosph</u>											
247	16.32	1.52									
096	14.41	.12									
Avg	14.25										
372	14.19	-.04									
409	14.08	-.13									
420	12.26	-1.47									
Meth: 050.00 PCT											
<u>Soluble Potash</u>											
<u>STPB Oxalate</u>											
090	17.05 s	4.15									
055	16.62	1.37									
416	16.66	1.16									
220	16.66	1.13									
114	16.56	.74									
022	16.55	.50									
Avg	16.51										
211	16.49	-.18									
043	16.47	-.34									
372	16.39	-.91									
009	16.46	-1.04									
049	16.42	-1.20									
231	16.34	-1.31									
102	16.25 R	-2.70									
230	16.20 s	-3.86									
Meth: 050.10 PCT											
<u>Soluble Potash</u>											
<u>STPB Citrate</u>											
444	16.37	1.20									
Avg	16.13										
322	16.03	-.46									
117	15.99	-.92									
Meth: 050.30 PCT											
<u>Soluble Potash</u>											
<u>AA (Oxalate)</u>											
369	17.41	2.01									
040	17.00	1.25									
185	16.55	.46									
234	16.38	.13									
442	16.41	.12									
Avg	16.35										
351	16.29	-.16									
397	16.25	-.20									
136	16.19	-.29									
451	16.30 X	-.34									
Meth: 050.30 PCT											
<u>Soluble Potash</u>											
<u>AA (Oxalate)</u>											
073	16.29	-.65									
086	15.84	-.97									
157	15.25	-2.01									
Meth: 050.50 PCT											
<u>Soluble Potash</u>											
<u>ICP (Oxalate)</u>											
324	17.00	1.62									
292	16.66	.62									
426	16.57	.31									
Avg	16.46										
420	16.29	-.53									
106	16.22	-.74									
354	16.05	-1.25									
Meth: 050.51 PCT											
<u>Soluble Potash</u>											
<u>ICP (Citrate)</u>											
007	16.94	1.75									
023	16.84	1.35									
361	16.61	.42									
423	16.57	.38									
377	16.56	.22									
Avg	16.51										
043	16.43	-.36									
009	16.34	-.85									
453	16.33	-.88									
291	16.30	-.89									
444	16.20	-1.36									
393	16.31 R	-1.39									
Meth: 050.60 PCT											
<u>Soluble Potash</u>											
<u>Flame (Oxalate)</u>											
421	16.35	.13									
Avg	16.32										
309	18.81 S	3.95									
443	18.26 S	3.11									
406	17.09	1.32									
Meth: 050.60 PCT											
<u>Soluble Potash</u>											
<u>Flame (Citrate)</u>											
028	17.62	2.33									
025	17.10	.99									
037	16.93 R	.66									
024	16.80	.16									
Avg	16.74										
041	16.61	-.37									
105	16.56	-.47									
131	16.51	-.61									
034	16.50	-.64									
035	16.49	-.68									
029	16.48	-.70									
Meth: 050.99 PCT											
<u>Soluble Potash</u>											
<u>Other</u>											
450	18.20 s	4.81									
428	17.99 S	3.62									
131	17.02	1.54									
177	17.02	1.51									
432	16.69	.80									
325	16.65	.78									
055	16.62	.52									
292	16.66	.52									
105	16.46	.52									
416	16.66	.50									
220	16.66	.49									
330	16.50	.49									
185	16.55	.43									
361	16.61	.39									
041	16.61	.38									
423	16.57	.33									
Meth: 050.99 PCT											
<u>Soluble Potash</u>											
<u>Other</u>											
023	16.84	.93									
024	16.80	.82									
325	16.65	.60									
432	16.69	.58									
055	16.62	.52									
292	16.66	.52									
105	16.46	.52									
416	16.66	.50									
220	16.66	.49									
330	16.50	.49									
185	16.55	.43									
361	16.61	.39									
041	16.61	.38									
423	16.57	.33									

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index			
Meth: 050.XX PCT																	
<u>Soluble Potash</u>																	
114	16.56	.32	354	16.05	-.93	Meth: 101.00 PCT									421	5.30	.29
009	16.46	.29	322	16.03	-.98	Acid Soluble Calcium									043	5.32	.26
426	16.57	.28	390	16.10	-1.08	AA									131	5.28	.26
377	16.56	.27	247	16.00	-1.08	086									023	5.29	.17
022	16.55	.27	230	16.20 R	-1.10	262									360	5.28	.15
105	16.56	.27	117	15.99	-1.13	055									029	5.27	.10
131	16.51	.15	262	16.00	-1.26	193									106	5.28	.10
034	16.50	.15	055	15.85	-1.40	Meth: 101.30 PCT									Avg	5.26	
035	16.49	.12	086	15.84	-1.47	Acid Soluble Calcium									397	5.23 X	-.10
232	16.45	.12	027	15.78	-1.57	ICP									300	5.22 X	-.17
029	16.48	.11	042	16.05 R	-1.59	117									102	5.19	-.27
211	16.49	.09	200	15.48	-2.30	7.09 s									351	5.19	-.37
043	16.47	.05	255	15.40	-2.51	5.84 R									105	5.18	-.60
Avg	16.45		157	15.25	-2.82	2.05									433	5.09	-.66
043	16.43	-.08	Meth: 101.99 PCT												057	5.11	-.69
442	16.41	-.10	Acid Soluble Calcium												390	5.12	-.72
372	16.39	-.13	Free Water												450	5.20	-.75
234	16.38	-.21	Vacuum Oven												255	5.06	-.80
421	16.35	-.25	096	1.89	1.30	231									040	5.05	-.81
231	16.34	-.26	105	1.72	.47	324									232	5.02	-.91
444	16.37	-.26	Avg	1.63		037									028	5.10 R	-1.14
105	16.45	-.27	416	1.47	-.84	247									444	4.96	-1.19
049	16.42	-.31	007	1.45	-.93	009									027	4.93	-1.26
420	16.29	-.37	Meth: 101.00 PCT												086	4.92	-1.36
291	16.30	-.37	Acid Soluble Calcium												022	4.90	-1.38
009	16.34	-.38	AA												065	4.86	-1.56
453	16.33	-.39	220	5.69	1.69	106									042	4.78	-1.86
351	16.29	-.40	296	5.47	1.00	Avg									262	4.70	-2.18
402	16.25	-.47	177	5.38	.71	300									055	4.64 R	-2.57
397	16.25	-.48	043	5.32	.51	102									193	3.60 s	-6.40
106	16.22	-.53	105	5.18	.44	433									114	2.77 s	-9.63
451	16.30 X	-.54	105	5.18	.44	057									372	1.35 s	-15.10
136	16.19	-.61	029	5.27	.35	390									Meth: 121.00 PCT		
444	16.20	-.65	351	5.19	.24	450									Acid Soluble Magnesi		
360	16.16	-.68	397	5.23 X	.22	255									AA		
393	16.31	-.73	Avg	5.16		232											
102	16.25	-.73	040	5.05	-.39	444									034		
073	16.29 R	-.90	028	5.10	-.83	027									200		
* 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: 121.00 PCT											
Acid Soluble Magnesi											
AA			423	0.56	1.80	Meth: 121.11 PCT					
177	0.53	1.53	042	0.56	1.62	Acid Soluble Magnesi					
193	0.53	1.19	027	0.54	.96	057 0.47 -1.12					
105	0.51	.92	177	0.53	.90	262 0.46 -1.29					
086	0.51	.70	453	0.53	.85	029 0.45 -1.61					
397	0.51	.68	193	0.53	.67	393 0.44 R -1.98					
028	0.51	.58	234	0.52	.58	022 0.41 -2.78					
040	0.50	.21	023	0.52	.56	309 0.34 s -5.04					
Avg	0.50		105	0.51	.55	Meth: 131.00 PCT					
043	0.50	-.24	231	0.52	.38	Water Soluble Magnes					
296	0.49	-.28	420	0.51	.38	AA					
351	0.49	-.31	397	0.51	.36	220 0.15 .00					
220	0.49	-.53	086	0.51	.36	Meth: 131.30 PCT					
055	0.49	-.57	131	0.51	.28	Water Soluble Magnes					
262	0.46	-1.59	028	0.51	.27	ICP					
029	0.45	-2.04	426	0.50	.18	117 0.16 .71					
309	0.34 s	-6.93	037	0.51	.16	Meth: 131.70 PCT					
Meth: 121.70 PCT											
Acid Soluble Magnesi											
ICP			409	0.51	.16	Water Soluble Magnes					
372	2.67 s	57.17	Avg	0.50		Titrimetric					
330	0.90 s	10.44	300	0.50 X	-1.10	372 0.81 -.71					
114	0.65 A	3.71	255	0.50	-1.15	Meth: 131.11 PCT					
117	0.60	2.52	040	0.50	-1.17	Water Soluble Magnes					
432	0.58	1.84	390	0.50	-.24	Meth: 131.33 PCT					
423	0.56	1.54	043	0.50	-.29	Water Soluble Magnes					
042	0.56	1.38	360	0.49	-.29	372 0.81 1.27					
027	0.54	.79	421	0.50	-.31	Avg 0.37					
453	0.53	.70	102	0.49	-.32	220 0.15 -.64					
023	0.52	.44	296	0.49	-.34	117 0.16 -.69					
420	0.51	.29	065	0.49	-.36	Meth: 144.01 PCT					
231	0.52	.28	351	0.49	-.38	Sulfur					
131	0.51	.19	009	0.49	-.41	Gravimetric					
Avg	0.51		415	0.49	-.56	105 0.54 -.71					
409	0.51	-.13	450	0.49	-.56	Meth: 144.02 PCT					
037	0.51	-.13	106	0.48	-.86	Sulfur					
300	0.50 X	-.15	232	0.47	-.99	Gravimetric					
Meth: 144.70 PCT											
Sulfur											
Spectrometric			324	0.47	-.99	292 0.68					
393	0.66	.71	433	0.47	-1.02	.71					
Meth: 144.99 PCT											
Sulfur											
Other			Meth: 144.99 PCT								
255	10.56 s	206.93	Sulfur								
096	0.72	1.63	Other								
102	0.68	.82	255 10.56 s 206.93								
009	0.67	.69	096 0.72 1.63								
423	0.65	.21	102 0.68 .82								
Avg	0.64		009 0.67 .69								
421	0.63	-.27	423 0.65 .21								
247	0.61	-.59	Avg 0.64								
390	0.59	-1.00	421 0.63 -.27								
232	0.57	-1.49	247 0.61 -.59								
450	0.61 R	-1.52	390 0.59 -1.00								
Meth: 144.11 PCT											
Sulfur											
Titrimetric			Meth: 144.11 PCT								
255	10.56 s	196.09	Sulfur								
096	0.72	1.50	Titrimetric								
393	0.66	1.06	372 0.81 -.71								
102	0.68	.74	Meth: 131.11 PCT								
292	0.68	.69	Water Soluble Magnes								
009	0.67	.61	372 0.81 1.27								
423	0.65	.16	Avg 0.37								
Avg	0.64		220 0.15 -.64								
421	0.63	-.29	117 0.16 -.69								
247	0.61	-.60	Meth: 144.01 PCT								
390	0.59	-.99	Sulfur								
232	0.57	-1.46	Gravimetric								
450	0.61	-1.46	105 0.54 -.71								
105	0.54 R	-2.81	Meth: 144.02 PCT								
Meth: 144.02 PCT											
Sulfur											
Gravimetric			Sulfur								
292	0.68	.71	Gravimetric								
Meth: 144.02 PCT											
Sulfur											
Gravimetric			Gravimetric								
292	0.68	.71	292 0.68								

\* 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	Meth:	165.99	PCT	Meth:	181.00	PPM	Meth:	191.99	PPM
Arsenic			Acid Soluble Boron			Cadmium			Chromium		
Atomic Absorption			Other			Other			Other		
220	4.65	.98	409	16.350	R 707.71	009	1.05	.55	231	63.86	1.00
Avg	4.23		421	0.047	1.31	444	1.08	.43	Avg	62.93	
136	3.80	-.74	Avg	0.018		Avg	1.05	.16	409	62.00	-.70
Meth:	151.30	PPM	423	0.003	-.62	450	1.00	-.50	Meth:	191.00	PPM
Arsenic			433	0.003	-.63	247	1.00	-.50	Chromium		
ICP			Meth:	181.00	PPM	102	0.97	-.86	372	75.03	2.49
372	135.80	s 208.70	Cadmium			409	0.93	-1.28	450	62.00	R .92
450	5.00	1.43	Atomic Absorption			136	0.90	-2.73	231	63.86	.82
065	4.39	R .80	136	0.90	.71	065	0.61	-4.86	409	62.00	.53
247	4.25	.25	Meth:	181.30	PPM	Meth:	190.99	PCT	220	61.00	.41
Avg	4.10		Cadmium			Water Soluble Chlori			009	58.55	.31
102	3.61	-.77	ICP			Other			065	58.86	.28
393	3.54	-.90	393	4.13	s 66.82	009	12.71	-.71	Avg	58.44	
Meth:	151.99	PPM	296	1.20	R 4.30	Meth:	191.00	PPM	037	58.34	-.09
Arsenic			009	1.05	1.19	Chromium			247	57.50	-.16
Other			444	1.08	1.19	Atomic Absorption			390	57.75	-.25
231	5.07	.87	372	1.06	.74	220	61.00	.71	096	55.50	-.45
Avg	4.12		Avg	1.03		Meth:	191.30	PPM	102	53.77	-.70
409	3.17	-.86	450	1.00	-.54	Chromium			444	49.05	-1.41
Meth:	151.00	PPM	247	1.00	-.54	ICP			232	48.50	-1.49
Arsenic			102	0.97	-1.24	372	75.03	2.47	393	0.28	s -8.72
Atomic Absorption			065	0.61	s -8.95	450	62.00	R .95	Meth:	202.00	PPM
372	135.80	s 190.27	Meth:	181.99	PPM	065	58.86	.34	Acid Soluble Cobalt		
231	5.07	1.32	Cadmium			009	58.55	.33	AA		
450	5.00	1.21	Other			390	57.75	.22	136	11.75	S .00
220	4.65	.96	231	1.13	.89	037	58.34	.17	Meth:	202.30	PPM
065	4.39	.68	Avg	1.03		247	57.50	.08	Acid Soluble Cobalt		
247	4.25	.14	409	0.93	-.84	Avg	57.28		ICP		
Avg	4.16		Meth:	181.00	PPM	096	55.50	-.26	372	4.15	2.04
136	3.80	-.60	Cadmium			102	53.77	-.49	065	3.52	.88
102	3.61	-.80	393	3.54	-.91	444	49.05	-1.15	009	3.30	.59
393	3.54	-.91	296	1.20	2.03	232	48.50	-1.22	037	3.32	.51
409	3.17	-1.44	231	1.13	.98	393	0.28	s -7.92	Avg	3.05	
Meth:	202.30	PPM	Meth:	202.00	PPM	Meth:	202.00	PPM	Meth:	221.00	PCT
Acid Soluble Cobalt			Acid Soluble Cobalt			Acid Soluble Cobalt			Acid Soluble Copper		
ICP			AA			AA			Atomic Absorption		
102	2.83	-.43	136	11.75	S .00	136	11.75	S .00	086	0.0011	s 3.28
057	2.75	-.57	Meth:	202.30	PPM	Meth:	202.00	PPM	043	0.0008	1.40
393	2.68	-.71	Acid Soluble Cobalt			Acid Soluble Cobalt					
232	2.55	-.98	ICP			ICP					
296	2.50	-1.39	372	4.15	2.04	372	4.15	2.04			
450	3.00	R -1.87	065	3.52	.88	065	3.52	.88			
Meth:	202.99	PPM	009	3.30	.59	009	3.30	.59			
Acid Soluble Cobalt			037	3.32	.51	037	3.32	.51			
Other			Avg	3.05		Avg	3.05				
231	2.97	1.13	247	2.95	-.22	247	2.95	-.22			
Avg	2.92		Meth:	202.00	PPM	Meth:	202.00	PPM			
409	2.87	-.47	Acid Soluble Cobalt			Acid Soluble Cobalt					
Meth:	202.00	PPM	AA			AA					
Acid Soluble Cobalt			136	11.75	S .00	136	11.75	S .00			
ICP			Meth:	202.30	PPM	Meth:	202.30	PPM			
136	11.75	s 17.72	Acid Soluble Cobalt			Acid Soluble Cobalt					
372	4.15	2.27	ICP			ICP					
065	3.52	1.00	372	4.15	2.04	372	4.15	2.04			
009	3.30	.68	065	3.52	.88	065	3.52	.88			
037	3.32	.60	009	3.30	.59	009	3.30	.59			
Avg	3.03		232	48.50	-1.22	232	48.50	-1.22			
247	2.95	-.19	393	0.28	s -7.92	393	0.28	s -7.92			
231	2.97	-.27	Meth:	202.00	PPM	Meth:	202.00	PPM			
409	2.87	-.34	Acid Soluble Cobalt			Acid Soluble Cobalt					
102	2.83	-.42	AA			AA					
057	2.75	-.58	136	11.75	S .00	136	11.75	S .00			
393	2.68	-.72	Meth:	202.30	PPM	Meth:	202.30	PPM			
232	2.55	-1.02	Acid Soluble Cobalt			Acid Soluble Cobalt					
296	2.50	-1.48	ICP			ICP					
450	3.00	R -2.03	372	4.15	2.04	372	4.15	2.04			
Meth:	221.00	PCT	065	3.52	.88	065	3.52	.88			
Acid Soluble Copper			009	3.30	.59	009	3.30	.59			
Atomic Absorption			037	3.32	.51	037	3.32	.51			
086	0.0011	s 3.28	Avg	3.05		Avg	3.05				
043	0.0008	1.40	247	2.95	-.22	247	2.95	-.22			

\* 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: 221.00 PCT											
Acid Soluble Copper											
Atomic Absorption											
442	0.0005	.18									
Avg	0.0004										
231	0.0004	-.07									
450	0.0004	-.26									
220	0.0003	-.34									
105	0.0002	-1.08									
Meth: 221.30 PCT											
Acid Soluble Copper											
ICP											
372	0.0015 s	20.23									
037	0.0006 R	7.76									
450	0.0004	1.69									
065	0.0003	.51									
009	0.0003	.46									
247	0.0003	.23									
Avg	0.0003										
057	0.0003	-.14									
232	0.0002	-.63									
102	0.0003	-.86									
433	0.0002	-1.73									
Meth: 221.99 PCT											
Acid Soluble Copper											
Other											
402	0.0015 S	4.51									
428	0.0010	1.23									
Avg	0.0005										
231	0.0004	-.28									
409	0.0001	-.95									
Meth: 221.99 PCT											
Acid Soluble Copper											
402	0.0015 s	5.20									
372	0.0015	2.96									
086	0.0011 R	2.15									
428	0.0010	1.62									
037	0.0006 R	1.01									
043	0.0008	.92									
Meth: 221.00 PCT											
Acid Soluble Copper											
Atomic Absorption											
055	0.66	1.11									
043	0.66	1.02									
351	0.65	.75									
177	0.65	.65									
220	0.64	.53									
040	0.63	.48									
105	0.64	.47									
397	0.63	.36									
028	0.62	.07									
Avg	0.62										
086	0.61	-.79									
262	0.59	-.97									
029	0.57	-1.44									
442	0.54	-2.18									
Meth: 241.00 PCT											
Acid Soluble Iron											
Atomic Absorption											
055	0.66	1.11									
043	0.66	1.02									
351	0.65	.75									
177	0.65	.65									
220	0.64	.53									
040	0.63	.48									
105	0.64	.47									
397	0.63	.36									
028	0.62	.07									
Avg	0.62										
086	0.61	-.79									
262	0.59	-.97									
029	0.57	-1.44									
442	0.54	-2.18									
Meth: 241.30 PCT											
Acid Soluble Iron											
ICP											
402	0.64	.77									
Avg	0.62										
234	0.61	-.96									
428	0.40 S	-13.14									
220	0.14 S	-28.76									
Meth: 241.99 PCT											
Acid Soluble Iron											
Other											
402	0.62	.77									
Avg	0.62										
234	0.61	-.96									
428	0.40 S	-13.14									
220	0.14 S	-28.76									
Meth: 241.30 PCT											
Acid Soluble Iron											
ICP											
402	0.64	.77									
Avg	0.62										
234	0.61	-.96									
428	0.40 S	-13.14									
220	0.14 S	-28.76									
Meth: 241.99 PCT											
Acid Soluble Iron											
Other											
402	0.62	.77									
Avg	0.62										
234	0.61	-.96									
428	0.40 S	-13.14									
220	0.14 S	-28.76									
Meth: 241.00 PCT											
Acid Soluble Iron											
ICP											
065	0.72 R	2.23									
330	0.70	1.59									
106	0.67	.79									
057	0.66	.76									
231	0.65	.64									
324	0.66	.56									
390	0.65	.53									
453	0.65	.50									
114	0.64	.36									
009	0.64	.32									
423	0.64	.31									
102	0.64	.30									
426	0.64	.18									
023	0.64	.16									
096	0.64	.15									
360	0.63	.12									
Avg	0.64										
027	0.63	-.02									
131	0.63	-.11									
255	0.63	-.11									
409	0.63	-.18									
247	0.62	-.38									
296	0.61	-.61									
300	0.60 X	-.71									
450	0.58	-1.07									
444	0.58	-1.19									
232	0.53	-2.24									
433	0.52 s	-2.55									
Meth: 241.99 PCT											
Acid Soluble Iron											
Other											
402	0.64	.77									
Avg	0.62										
234	0.61	-.96									
428	0.40 S	-13.14									
220	0.14 S	-28.76									
Meth: 241.00 PCT											
Acid Soluble Iron											
ICP											
065	0.72 R	2.23									
330	0.70	1.59									
106	0.67	.79									
057	0.66	.76									
231	0.65	.64									
324	0.66	.56									
390	0.65	.53									
453	0.65	.50									
114	0.64	.36									
009	0.64	.32									
423	0.64	.31									
102	0.64	.30									
426	0.64	.18									
023	0.64	.16									
096	0.64	.15									
360	0.63	.12									
Avg	0.64										
027	0.63	-.02									
131	0.63	-.11									
255	0.63	-.11									
409	0.63	-.18									
247	0.62	-.38									
296	0.61	-.61									
300	0.60 X	-.71									
450	0.58	-1.07									
444	0.58	-1.19									
232	0.53	-2.24									
433	0.52 s	-2.55									
Meth: 251.00 PPM											
Lead											
ICP											
372	12.89	1.87									
Avg	3.66										
296	2.80	-.18									
450	2.50 R	-.38									
444	1.30	-.48									
393	0.99 X	-.54									
065	0.34 X	-.67									
Meth: 251.99 PPM											
Lead											
Other											
231	1.34	1.13									
Avg	1.28										
409	1.22	-.47									
Meth: 251.00 PPM											
Lead											
136	14.65	1.82									
372	12.89	1.50									
Avg	4.44										

\* 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: 251.XX PPM														
Lead			Meth: 261.99 PCT									Meth: 291.00 PPM		
296	2.80	-.29	Acid Soluble Manganese									Nickel		
450	2.50 R	-.44	Other									037		
231	1.34	-.55	402	0.014	.87	Meth: 289.30 PPM								
444	1.30	-.56	Avg	0.013		Molybdenum								
409	1.22	-.57	409	0.013	-.87	372	7.12 s	6.74	Atomic Absorption					
393	0.99 X	-.61	Meth: 261.XX PCT									136		
065	0.34 X	-.73	Acid Soluble Manganese									Avg		
Meth: 261.00 PCT														
Acid Soluble Manganese														
AA			086	0.014	1.07	102	2.29	-.90	220					
086	0.014	.89	065	0.013	.88	296	1.50	-1.32	8.55					
Avg	0.013		009	0.013	.65	393	1.44 X	-1.36	296					
105	0.013	-.84	247	0.013	.50	Meth: 291.30 PPM								
262	0.000 S	-16.40	409	0.013	.42	Nickel								
Meth: 261.30 PCT														
Acid Soluble Manganese														
ICP			444	0.013 R	.40	ICP								
042	0.633 s	466.47	105	0.013	.31	231	3.57	.84	444					
423	0.014	1.64	096	0.012	.14	Meth: 289.99 PPM								
065	0.013	1.10	Avg	0.012		Molybdenum								
009	0.013	.88	131	0.012	-.16	231	3.57	.84	102					
247	0.013	.72	102	0.012	-.27	Avg	3.28		232					
444	0.013 R	.51	057	0.012	-.43	409	2.99	-.89	296					
096	0.012	.33	232	0.011	-.69	Meth: 291.99 PPM								
131	0.012	.24	433	0.011	-1.34	Nickel								
Avg	0.012		106	0.010	-1.80	Other								
102	0.012	-.03	027	0.010	-1.80	372	7.12 s	6.24	231					
057	0.012	-.20	262	0.000 s	-9.42	450	3.50	1.48	220					
232	0.011	-.45	Meth: 281.30 PPM									Avg		
433	0.011	-1.09	Mercury									409		
106	0.010	-1.54	ICP			247	3.00	.64	296					
027	0.010	-1.54	450	0.50	1.17	409	2.99	.63	372					
Meth: 291.XX PPM														
Selenium														
231	1.64 R	3.72	065	2.89	.48	Meth: 301.30 PPM								
220	0.73	1.29	057	2.70	.36	Selenium								
Avg	0.24		Avg	2.53		ICP								
450	0.00	-.65	009	2.25	-.43	372								
372	0.00	-.65	433	2.10	-.59	Meth: 311.99 PCT								
Meth: 301.XX PPM														
Selenium														
231	1.64 R	3.72	232	2.15	-.62	Sodium								
220	0.73	1.29	102	2.29	-.91	Other								
Avg	0.24		296	1.50	-1.46	423								
450	0.00	-.65	393	1.44 X	-1.50	009								
372	0.00	-.65	Meth: 291.99 PPM									102		
Meth: 291.00 PPM														
Nickel														
231	12.34	.97	Meth: 289.99 PPM									Avg		
220	0.73	1.29	Molybdenum									220		
Avg	0.24		Other									220		
450	0.00	-.65	231	3.57	.84	Meth: 289.30 PPM								
372	0.00	-.65	Avg	3.28		Molybdenum								
Meth: 291.30 PPM														
Nickel														
231	12.34	.97	Meth: 281.30 PPM									231		
220	0.73	1.29	Mercury									220		
Avg	0.24		ICP			ICP								
450	0.00	-.65	450	0.50	1.17	444								
372	0.00	-.65	Avg	0.39	-.35	444								

\* 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: 311.99 PCT  
 Sodium  
 Other  
 086 0.49 s -7.58

Meth: 321.00 PCT  
 Acid Soluble Zinc  
Atomic Absorption  
 086 0.007 s 13.06  
 043 0.003 1.01  
 296 0.003 .98  
 Avg 0.003  
 220 0.003 -.14  
 442 0.002 -1.09  
 105 0.002 -1.15  
 262 0.000 S -6.81

Meth: 321.99 PCT  
 Acid Soluble Zinc  
 Other  
 402 0.006 S 8.41  
 231 0.003 .87  
 Avg 0.003  
 428 0.002 -.87

Meth: 321.XX PCT  
Acid Soluble Zinc  
 330 0.100 s 202.92  
 086 0.007 s 10.07  
 402 0.006 s 7.28  
 423 0.004 2.44  
 409 0.004 1.78  
 324 0.003 R 1.25  
 231 0.003 .93  
 009 0.003 .85  
 043 0.003 R .69  
 296 0.003 .60  
 037 0.003 .41  
 Avg 0.003  
 065 0.003 -.04  
 450 0.003 -.24  
 220 0.003 -.24  
 247 0.003 -.24  
 057 0.003 -.28  
 433 0.002 -.50  
 428 0.002 -.53  
 393 0.002 -.74  
 232 0.002 -.74  
 105 0.002 R -.99  
 442 0.002 -1.03  
 027 0.002 -1.19  
 102 0.002 -1.37  
 292 0.000 s -5.53  
 262 0.000 s -5.53  
 372 0.000 s -5.53

Meth: 321.30 PCT  
 Acid Soluble Zinc  
 ICP  
 330 0.100 s 186.07  
 423 0.004 2.22  
 409 0.004 1.61  
 324 0.003 R 1.13  
 009 0.003 .76  
 037 0.003 .36  
 Avg 0.003  
 065 0.003 -.05  
 450 0.003 -.23  
 247 0.003 -.24  
 057 0.003 -.28  
 433 0.002 -.48  
 393 0.002 -.70  
 232 0.002 -.70  
 027 0.002 -1.11  
 102 0.002 -1.27  
 292 0.000 s -5.10  
 372 0.000 s -5.10

\* 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	8	0.47	1.63	0.35	050.99	18	0.39	1.53	0.73
001.99	10	1.03	3.12	0.45	050.XX	73	0.22	1.40	0.48
001.XX	18	0.16	1.22	0.21	060.00	4	0.00	1.07	0.11
005.00	2	0.00	0.13	0.86	060.XX	4	0.00	1.07	0.11
005.99	3	0.00	1.05	0.31	101.00	14	- 0.36	1.63	0.36
005.XX	5	- 0.05	0.89	0.92	101.30	32	- 0.02	2.36	0.29
010.11	11	- 0.06	2.45	1.15	101.70	2	- 2683.	3795.2	9.10
010.12	3	0.00	1.05	0.32	101.XX	49	- 0.51	3.06	0.33
010.60	62	- 0.01	1.34	0.42	121.00	17	14.72	56.55	0.69
010.99	4	0.94	5.11	0.74	121.30	32	2.17	10.27	0.20
010.XX	78	0.02	1.48	0.47	121.XX	51	5.10	24.52	0.33
020.10	7	0.00	0.97	0.36	131.XX	3	0.00	1.10	0.16
020.20	21	- 0.11	1.01	0.32	144.99	10	20.62	65.47	0.61
020.40	7	- 0.46	1.43	1.28	144.XX	13	14.92	54.44	0.78
020.50	11	0.00	1.01	0.19	151.00	2	0.00	0.95	0.55
020.99	3	- 2.34	4.06	0.94	151.30	6	34.86	85.17	0.27
020.XX	47	- 0.15	1.19	0.37	151.99	2	0.00	1.22	0.10
030.40	2	0.00	1.11	0.37	151.XX	10	19.03	60.18	0.30
030.XX	5	0.00	1.06	0.09	165.99	4	176.88	353.77	7.584
040.40	2	0.00	1.13	0.33	165.XX	4	176.88	353.77	7.584
040.50	2	0.00	1.08	0.40	181.30	9	6.79	22.58	2.90
040.XX	6	0.00	1.03	0.20	181.99	2	0.00	1.19	0.21
041.10	17	- 0.25	1.15	0.71	181.XX	12	2.30	10.14	1.45
041.20	2	0.00	1.18	0.24	191.30	12	- 0.61	2.49	0.24
041.40	4	0.00	1.00	0.35	191.99	2	0.00	0.99	0.51
041.50	11	0.00	0.93	0.41	191.XX	15	- 0.55	2.45	0.24
041.60	12	- 0.03	0.95	0.65	202.30	11	- 0.01	0.91	0.65
041.99	3	0.00	0.93	0.50	202.99	2	0.00	0.65	0.73
041.XX	40	- 0.11	1.08	0.54	202.XX	14	1.26	4.82	0.64
048.20	3	0.00	1.12	0.06	221.00	5	0.5848	1.5855	0.7098
048.99	2	0.00	1.22	0.04	221.30	10	2.6020	6.5059	1.6789
048.XX	5	0.00	1.06	0.04	221.99	4	0.6210	1.5414	1.8812
050.00	14	- 0.01	1.60	1.08	221.XX	19	0.2872	1.2213	1.0189
050.10	3	0.00	0.99	0.43	241.00	13	0.00	0.95	0.35
050.30	12	0.00	0.97	0.30	241.30	29	0.21	1.26	0.23
050.50	6	0.00	1.04	0.12	241.99	4	- 10.47	13.69	0.34
050.51	11	- 0.08	0.96	0.43	241.XX	45	- 0.12	1.69	0.95
050.60	6	1.18	2.02	0.11	251.30	6	- 0.04	0.95	0.13
050.61	10	0.05	0.98	0.17	251.99	2	0.00	0.66	0.73

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.XX	9	- 0.04	0.97	0.10					
261.00	3	- 5.468	9.499	0.395					
261.30	14	33.341	124.65	1.713					
261.99	2	0.000	1.225	0.000					
261.XX	19	24.396	108.61	1.494					
281.30	2	0.00	0.37	0.83					
281.XX	2	0.00	0.37	0.83					
289.30	11	0.61	2.21	0.40					
289.99	2	0.00	1.19	0.20					
289.XX	13	0.48	1.95	0.36					
291.00	2	0.00	1.16	0.28					
291.30	10	0.00	0.95	0.37					
291.99	2	0.00	1.04	0.46					
291.XX	14	0.19	1.17	0.40					
301.30	2	0.00	0.00	0.00					
301.99	2	0.00	1.22	0.10					
301.XX	4	0.93	2.07	0.10					
311.99	6	- 0.71	1.98	2.56					
311.XX	6	- 0.71	1.98	2.56					
321.00	7	0.807	5.769	1.570					
321.30	17	10.394	45.311	0.202					
321.99	3	2.681	4.723	1.429					
321.XX	26	7.834	39.915	0.778					