

- 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

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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
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	4.101	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

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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 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	972.02a	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	Lab	Average*	Index
Meth: 001.10 PCT			Meth: 001.XX PCT			Meth: 010.11 PCT			Meth: 010.60 PCT			Meth: 010.60 PCT		
<u>Ammoniacal Nitrogen</u>			<u>Ammoniacal Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
<u>MgO Distillation</u>			<u>Modified Comprehensi</u>			<u>Combustion</u>			<u>Combustion</u>			<u>Combustion</u>		
230	7.55 S	3.86	029	6.23	-.40	114	16.11	1.98	102	16.16	.65	262	15.90	-1.13
169	6.97	1.71	444	6.21	-.44	220	15.97 R	.99	232	16.15	.60	117	15.88	-1.15
371	6.67	.69	096	6.21	-.45	211	16.02	.93	037	16.13	.54	360	15.87	-1.21
415	6.62	.50	231	6.18	-.52	105	15.95	.23	443	16.08	.49	423	15.84	-1.35
309	6.50	.17	397	6.25 R	-.55	Avg 15.93			409	16.13	.47	022	15.90 R	-1.53
Avg	6.48		409	6.12	-.71	309	15.92	-.34	406	16.13	.42	421	15.80	-1.55
029	6.23	-.90	420	6.07	-.83	029	15.89	-.65	231	16.12	.42	023	15.78	-1.68
444	6.21	-.95	200	6.07	-.84	090	15.88	-.69	390	16.13	.40	292	15.77	-1.73
231	6.18	-1.06	027	5.94	-1.18	416	15.87	-.76	025	16.13	.38	426	15.74	-1.92
Meth: 001.99 PCT			Meth: 005.00 PCT			Meth: 010.12 PCT			Meth: 010.99 PCT			Meth: 010.99 PCT		
<u>Ammoniacal Nitrogen</u>			<u>Nitrogen From Urea</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
<u>Other</u>			<u>Urease (as N)</u>			<u>Salicylic</u>			<u>Other</u>			<u>Other</u>		
193	7.35 s	9.51	231	9.75	1.22	415	16.12	1.21	372	16.07	.21	354	16.81 S	7.97
397	6.25 R	1.44	Avg	9.71		Avg	15.95		136	16.07	.13	420	15.94	.97
372	6.33	1.39	372	9.67	-.09	397	15.88	-.51	233	16.07	.08	Avg	15.86	
234	6.25	.88	Meth: 005.99 PCT			Meth: 010.60 PCT			Meth: 010.60 PCT			Meth: 010.60 PCT		
255	6.24	.70	<u>Nitrogen From Urea</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
096	6.21	.43	<u>Other</u>			<u>Combustion</u>			<u>Combustion</u>			<u>Combustion</u>		
Avg	6.15		234	10.25	1.21	450	16.70 s	3.83	024	16.06	-.12	402	15.77	-.75
409	6.12	-.46	Avg	9.88		361	16.68 s	3.67	377	16.04	-.18	428	15.35 S	-4.37
200	6.07	-.71	200	9.75	-.44	096	16.48	2.45	234	16.05	-.25	Meth: 010.XX PCT		
420	6.07	-.76	397	9.64	-.92	325	16.35	1.92	041	16.05	-.30	<u>Total Nitrogen</u>		
027	5.94	-1.68	Meth: 005.XX PCT			Meth: 010.11 PCT			009	16.04	-.32	354	16.81 s	4.66
Meth: 001.XX PCT			<u>Nitrogen From Urea</u>			<u>Total Nitrogen</u>			027	16.01	-.34	450	16.70 s	4.01
<u>Ammoniacal Nitrogen</u>			<u>Other</u>			<u>Combustion</u>			070	16.06	-.36	361	16.68 s	3.85
230	7.55 s	3.30	234	10.25	1.53	096	16.48	2.45	351	16.02	-.39	096	16.48	2.63
193	7.35	2.67	Avg	9.82		055	16.35	1.73	028	16.02	-.48	322	16.40	2.19
169	6.97	1.63	200	9.75	-.31	330	16.35	1.73	073	16.00	-.55	325	16.35 R	2.08
371	6.67	.83	372	9.67	-.55	035	16.34	1.67	453	15.97	-.59	330	16.35	1.90
415	6.62	.69	397	9.64	-.87	034	16.22 R	1.47	393	16.02	-.63	055	16.35	1.90
309	6.50	.36	231	9.75 R	-1.98	057	16.26	1.25	040	15.96	-.67	035	16.34	1.84
Avg	6.37		Meth: 010.11 PCT			Meth: 010.60 PCT			324	16.00	-.70	034	16.22 R	1.58
372	6.33	-.12	<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			042	16.00	-.70	057	16.26	1.40
234	6.25	-.36	<u>Modified Comprehensi</u>			<u>Combustion</u>			451	15.96 X	-.70	157	16.27	1.39
255	6.24	-.36	322	16.40 s	5.23	442	16.19	.80	106	15.95	-.73	177	16.27	1.37
						247	16.18	.76	043	15.88	-1.11			

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 010.XX PCT			Meth: 010.XX PCT			Meth: 020.10 PCT			Meth: 020.40 PCT			Meth: 020.XX PCT		
<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>		
425	16.24	1.29	451	15.96 X	-.58	<u>Grav Quimociac</u>			<u>Automated</u>			220	16.62	1.04
442	16.19	.95	393	16.02	-.58	114	16.19	-.35	Avg	16.24		105	16.61	1.03
247	16.18	.91	106	15.95	-.59	117	16.25	-.46	247	16.22	-.65	453	16.59	1.00
102	16.16	.80	220	15.97	-.62	157	16.15	-.75	409	16.10	-.88	232	16.54	.84
232	16.15	.74	042	16.00	-.64	444	15.85	-1.71	024	16.11	-1.05	105	16.46	.77
037	16.13	.66	324	16.00	-.64	Meth: 020.20 PCT			042	15.70 s	-4.45	426	16.50	.72
409	16.13	.61	309	15.92	-.74	<u>Total Phosphate</u>			Meth: 020.50 PCT			416	16.50	.72
406	16.13	.57	420	15.94	-.75	<u>Spectrometric</u>			<u>Total Phosphate</u>			090	16.47	.64
390	16.13	.56	029	15.89	-.93	220	16.62	1.29	<u>ICP</u>			292	16.47	.64
231	16.12	.56	397	15.88	-.93	232	16.54	1.06	361	16.86	1.00	415	16.41	.50
443	16.08	.55	043	15.88	-.96	416	16.50	.93	330	16.80	.91	234	16.36	.48
025	16.13	.54	090	15.88	-.97	292	16.47	.84	423	16.79	.88	041	16.37	.42
415	16.12	.49	262	15.90	-1.01	415	16.41	.69	421	16.65	.67	442	16.38	.41
114	16.11	.45	117	15.88	-1.01	234	16.36	.64	393	16.63	.60	406	16.35	.33
049	16.10	.40	416	15.87	-1.03	442	16.38	.59	453	16.59	.52	262	16.30	.33
369	16.10	.39	360	15.87	-1.08	406	16.35	.50	426	16.50	.32	372	16.35	.33
070	16.06	.39	185	15.86	-1.17	372	16.35	.50	Avg	16.33		117	16.25	.31
007	16.10	.38	371	15.84	-1.17	262	16.30	.46	390	16.05	-.59	096	16.29	.21
029	16.07	.37	423	15.84	-1.20	309	16.20	.06	255	15.69	-1.20	428	16.29	.20
291	16.07	.32	421	15.80	-1.41	Avg	16.18		444	15.69	-1.24	035	16.25	.13
041	16.05	.31	022	15.90 R	-1.45	231	16.15	-.17	432	15.35	-1.84	Avg	16.23	
009	16.04	.30	023	15.78	-1.53	371	16.08	-.35	Meth: 020.99 PCT			309	16.20	-.08
372	16.08	.29	292	15.77	-1.59	451	16.17 X	-.40	<u>Total Phosphate</u>			114	16.19	-.15
131	16.07	.27	402	15.77	-1.60	450	15.96	-.68	<u>Other</u>			231	16.15	-.25
234	16.05	.25	426	15.74	-1.78	425	15.95	-.69	428	16.29	.23	247	16.22	-.29
136	16.07	.24	255	15.73	-1.83	324	15.80	-1.13	Avg	16.24		409	16.10	-.37
233	16.07	.21	230	15.55 s	-3.27	369	15.85 R	-1.37	402	16.20	-1.20	451	16.17 X	-.40
024	16.06	.19	073	15.48 s	-3.86	169	15.72 R	-1.59	443	14.42 S	-7.11	371	16.08	-.44
377	16.04	.12	428	15.35 s	-4.20	420	15.50	-2.07	Meth: 020.XX PCT			024	16.11	-.46
Avg	16.04		444	15.28 s	-4.55	193	15.40	-2.32	<u>Total Phosphate</u>			157	16.15	-.46
211	16.02	-.13	Meth: 020.10 PCT			Meth: 020.40 PCT			<u>Automated</u>			390	16.05	-.63
027	16.01	-.19	<u>Total Phosphate</u>			<u>Total Phosphate</u>			361			16.86	1.69	
351	16.02	-.31	<u>Grav Quimociac</u>			<u>Automated</u>			330			16.80	1.56	
028	16.02	-.43	105	16.61	1.35	105	16.46	1.71	423			16.79	1.52	
453	15.97	-.45	090	16.47	.78	096	16.29	.45	421			16.65	1.20	
073	16.00	-.46	041	16.37	.48	035	16.25	.28	393			16.63	1.10	
105	15.95	-.52	Avg	16.27								255	15.69	-1.46
040	15.96	-.53												

* 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: 020.XX PCT			Meth: 040.10 PCT			Meth: 041.10 PCT			Meth: 041.50 PCT			Meth: 041.XX PCT		
<u>Total Phosphate</u>			InDir Available Phos			Dir Available Phosph			Dir Available Phosph			<u>Dir Available Phosph</u>		
444	15.69	-1.53	<u>Grav Quim</u>			<u>Grav Quimociac</u>			<u>ICP</u>			360	16.54	1.98
169	15.72	-1.56	090	16.39	-.71	233	16.16	.84	325	16.35	.90	106	16.54	1.94
042	15.70 R	-1.96	Meth: 040.20 PCT			322	16.22	.61	393	16.35	.70	105	16.28 R	1.68
420	15.50	-2.01	InDir Available Phos			086	16.22	.60	043	16.33	.62	009	16.42	1.53
193	15.40	-2.23	<u>Spectrometri</u>			105	16.20	.58	361	16.20	.11	025	16.25 R	1.32
432	15.35	-2.37	372	16.23	-.71	211	16.22	.56	Avg	16.17		325	16.35	1.28
443	14.42 s	-4.95	Avg			296	16.16	.55	377	16.08	-.35	393	16.35	1.07
Meth: 030.10 PCT			Meth: 040.40 PCT			136	16.08	-.51	291	15.92	-.96	055	16.26	.99
Insoluble Phosphate			InDir Available Phos			029	16.05	-.79	354	15.91	-1.05	009	16.33	.97
<u>Grav Quimociac</u>			<u>Automated</u>			131	16.03	-.87	007	15.95	-1.26	043	16.33	.97
090	0.08	-.71	096	16.14	.90	177	16.02	-.91	023	15.81	-1.36	070	16.33	.95
Meth: 030.40 PCT			Avg	16.03		040	15.96	-1.36	Meth: 041.60 PCT			351	16.30	.84
Insoluble Phosphate			409	15.92	-.83	049	15.97	-1.61	Dir Available Phosph			028	16.28	.75
<u>Automated</u>			Meth: 040.50 PCT			185	16.02 R	-1.81	<u>EDTA Extract</u>			055	16.26	.64
409	0.17	.78	InDir Available Phos			102	15.70 s	-3.64	106	16.54	1.71	220	16.25	.64
Avg	0.16		<u>ICP</u>			Meth: 041.20 PCT			105	16.28 R	1.61	233	16.16	.55
096	0.16	-.94	423	15.91	.92	Dir Available Phosph			070	16.33	.70	105	16.19	.49
Meth: 030.50 PCT			Avg	15.75		<u>Spectrometric</u>			351	16.30	.60	322	16.22	.46
Insoluble Phosphate			255	15.59	-.81	055	16.26	.83	028	16.28	.51	086	16.22	.45
<u>ICP</u>			Meth: 040.XX PCT			Avg	16.15		043	16.20	.22	211	16.22	.43
255	0.10	.71	InDir Available Phos			231	16.04	-.90	Avg	16.18		105	16.20	.42
Meth: 030.99 PCT			090	16.39	1.32	Meth: 041.40 PCT			037	16.15	-.24	043	16.20	.41
Insoluble Phosphate			372	16.23	.72	Dir Available Phosph			034	16.14	-.30	296	16.16	.37
<u>Other</u>			096	16.14	.44	<u>Automated</u>			073	16.12	-.35	361	16.20	.34
247	0.11	.00	Avg	16.03		025	16.25	1.31	296	16.12	-.35	034	16.14	.25
Meth: 030.XX PCT			409	15.92	-.41	029	15.87	.19	073	15.97	-1.13	037	16.15	.23
Insoluble Phosphate			423	15.91	-.59	131	15.88	.11	397	16.00 R	-1.68	Avg	16.12	
409	0.17	1.29	255	15.59	-1.59	Avg	15.83		177	15.78	-1.96	296	16.12	-.17
096	0.16	.90	Meth: 041.10 PCT			027	15.34	-1.32	Meth: 041.99 PCT			136	16.08	-.25
Avg	0.12		Dir Available Phosph			Meth: 041.50 PCT			Dir Available Phosph			377	16.08	-.25
247	0.11	-.30	<u>Grav Quimociac</u>			Dir Available Phosph			<u>Other</u>			029	16.05	-.43
255	0.10	-.67	055	16.26	1.51	ICP			105	16.19	1.16	231	16.04	-.47
090	0.08	-1.23	009	16.33	1.43	360	16.54	1.43	Avg	15.97		131	16.03	-.47
			220	16.25	.91	009	16.42	1.09	200	15.88	-.48	177	16.02	-.49
									230	15.85	-.96	040	15.96	-.77
												073	15.97	-.89
												049	15.97	-.95
												291	15.92	-1.00

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index						
Meth: 041.XX PCT			Meth: 050.00 PCT			Meth: 050.30 PCT			Meth: 050.60 PCT			Meth: 050.99 PCT								
<u>Dir Available Phosph</u>			Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash								
185	16.02	-1.09	<u>STPB Oxalate</u>			<u>AA (Oxalate)</u>			<u>Flame (Oxalate)</u>			<u>Other</u>								
354	15.91	-1.12	090	17.05 s	4.15	073	16.29	-.65	105	16.45	.39	390	16.10	-.81						
131	15.88	-1.17	055	16.62	1.37	086	15.84	-.97	Avg	16.21		262	16.00	-.95						
200	15.88	-1.17	416	16.66	1.16	157	15.25	-2.01	055	15.85	-.55	027	15.78	-1.17						
029	15.87	-1.25	220	16.66	1.13	Meth: 050.50 PCT			200	15.48	-1.13	042	16.05 R	-1.33						
007	15.95 R	-1.43	114	16.56	.74	Soluble Potash			Meth: 050.61 PCT			Meth: 050.XX PCT								
230	15.85	-1.47	022	16.55	.50	<u>ICP (Oxalate)</u>			Soluble Potash			<u>Soluble Potash</u>								
023	15.81	-1.48	Avg	16.51		324	17.00	1.62	<u>Flame (Citrate)</u>			309			18.81 s	5.56				
397	16.00 R	-1.53	211	16.49	-.18	292	16.66	.62	028	17.62	2.33	450			18.20 s	4.97				
177	15.78	-1.67	043	16.47	-.34	426	16.57	.31	025	17.10	.99	443			18.26 s	4.27				
102	15.70	-2.20	372	16.39	-.91	Avg	16.46		037	16.93 R	.66	428			17.99 s	3.63				
027	15.34 A	-3.69	009	16.46	-1.04	420	16.29	-.53	024	16.80	.16	028			17.62	2.75				
Meth: 048.20 PCT			049	16.42	-1.20	106	16.22	-.74	Avg	16.74		369			17.41	2.35				
Water Soluble Phosph			231	16.34	-1.31	354	16.05	-1.25	041	16.61	-.37	025			17.10	1.55				
<u>Spectrometric</u>			102	16.25 R	-2.70	Meth: 050.51 PCT			131			16.51	-.61	406			17.09	1.50		
096	14.41	.74	230	16.20 s	-3.86	Soluble Potash			034			16.50	-.64	090			17.05	1.42		
372	14.19	.54	Meth: 050.10 PCT			<u>ICP (Citrate)</u>			035			16.49	-.68	131			17.02	1.38		
Avg	13.62		Soluble Potash			007			16.94	1.75	029			16.48	-.70	040			17.00	1.38
420	12.26	-1.29	<u>STPB Citrate</u>			023			16.84	1.35	Meth: 050.99 PCT			177			17.02	1.35		
Meth: 048.99 PCT			444	16.37	1.20	361			16.61	.42	Soluble Potash			324			17.00	1.30		
Water Soluble Phosph			Avg	16.13		423			16.57	.38	Other			037			16.93	1.20		
<u>Other</u>			322	16.03	-.46	377			16.56	.22	450			18.20 s	4.81	007			16.94	1.16
247	16.32	.87	117	15.99	-.92	Avg			16.51		428			17.99 S	3.62	023			16.84	.93
Avg	15.20		Meth: 050.30 PCT			043			16.43	-.36	131			17.02	1.54	024			16.80	.82
409	14.08	-.87	Soluble Potash			009			16.34	-.85	177			17.02	1.51	325			16.65	.60
Meth: 048.XX PCT			<u>AA (Oxalate)</u>			453			16.33	-.88	432			16.69	.80	432			16.69	.58
Water Soluble Phosph			369	17.41	2.01	291			16.30	-.89	325			16.65	.78	055			16.62	.52
247	16.32	1.52	040	17.00	1.25	444			16.20	-1.36	330			16.50	.58	292			16.66	.52
096	14.41	.12	185	16.55	.46	393			16.31 R	-1.39	105			16.46	.56	105			16.46	.52
Avg	14.25		234	16.38	.13	Meth: 050.60 PCT			232			16.45	.30	416			16.66	.50		
372	14.19	-.04	442	16.41	.12	Soluble Potash			421			16.35	.13	220			16.66	.49		
409	14.08	-.13	Avg	16.35		<u>Flame (Oxalate)</u>			Avg			16.32		330			16.50	.49		
420	12.26	-1.47	351	16.29	-.16	309			18.81 S	3.95	402			16.25	-.18	185			16.55	.43
Meth: 048.99 PCT			397	16.25	-.20	443			18.26 S	3.11	360			16.16	-.36	361			16.61	.39
Water Soluble Phosph			136	16.19	-.29	406			17.09	1.32	247			16.00	-.74	041			16.61	.38
<u>Other</u>			451	16.30 X	-.34	Meth: 050.99 PCT			Meth: 050.99 PCT			Meth: 050.99 PCT			423			16.57	.33	
Water Soluble Phosph			Meth: 050.99 PCT			Soluble Potash			Soluble Potash			Soluble Potash			Other					
<u>Other</u>			Water Soluble Phosph			<u>AA (Oxalate)</u>			<u>Flame (Oxalate)</u>			<u>Other</u>			<u>Other</u>					

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index		
Meth: 050.XX PCT			Meth: 050.XX PCT			Meth: 101.00 PCT			Meth: 101.30 PCT			Meth: 101.XX PCT				
<u>Soluble Potash</u>			<u>Soluble Potash</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>				
114	16.56	.32	354	16.05	-.93	AA			ICP			421	5.30	.29		
009	16.46	.29	322	16.03	-.98	086	4.92	-.86	022	4.90	-1.38	043	5.32	.26		
426	16.57	.28	390	16.10	-1.08	262	4.70	-1.53	065	4.86	-1.55	131	5.28	.26		
377	16.56	.27	247	16.00	-1.08	055	4.64	-1.88	042	4.78	-1.85	023	5.29	.17		
022	16.55	.27	230	16.20 R	-1.10	193	3.60 s	-5.06	114	2.77 s	-9.58	360	5.28	.15		
105	16.56	.27	117	15.99	-1.13							029	5.27	.10		
131	16.51	.15	262	16.00	-1.26	Meth: 101.30 PCT			Meth: 101.70 PCT			106	5.28	.10		
034	16.50	.15	055	15.85	-1.40	<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>			Avg	5.26			
035	16.49	.12	086	15.84	-1.47	<u>ICP</u>			<u>Titrimetric</u>			397	5.23 X	-.10		
232	16.45	.12	027	15.78	-1.57	117	7.09 s	7.05	415	5.52	.71	300	5.22 X	-.17		
029	16.48	.11	042	16.05 R	-1.59	393	5.84 R	2.41	Avg	5.52		102	5.19	-.27		
211	16.49	.09	200	15.48	-2.30	432	5.79	2.05	372	1.35 S	5367.28	351	5.19	-.37		
043	16.47	.05	255	15.40	-2.51	361	5.66	1.55				105	5.18	-.60		
Avg	16.45		157	15.25	-2.82	423	5.60	1.30	Meth: 101.99 PCT			433	5.09	-.66		
043	16.43	-.08				453	5.57	1.21	<u>Acid Soluble Calcium</u>			057	5.11	-.69		
442	16.41	-.10	Meth: 060.00 PCT			420	5.56	1.17	<u>Other</u>			390	5.12	-.72		
372	16.39	-.13	<u>Free Water</u>			330	5.55	1.14	409			5.42	.71	450	5.20	-.75
234	16.38	-.21	<u>Vacuum Oven</u>			231	5.39	.61	Meth: 101.XX PCT			255	5.06	-.80		
421	16.35	-.25	096	1.89	1.30	324	5.39	.52	<u>Acid Soluble Calcium</u>			040	5.05	-.81		
231	16.34	-.26	105	1.72	.47	037	5.38	.45	117	7.09 s	7.09	232	5.02	-.91		
444	16.37	-.26	Avg	1.63		247	5.35	.35	393	5.84 R	2.43	028	5.10 R	-1.14		
105	16.45	-.27	416	1.47	-.84	009	5.34	.34	432	5.79	2.07	444	4.96	-1.19		
049	16.42	-.31	007	1.45	-.93	421	5.30	.29	220	5.69	1.66	027	4.93	-1.26		
420	16.29	-.37				131	5.28	.26	361	5.66	1.57	086	4.92	-1.36		
291	16.30	-.37	Meth: 101.00 PCT			023	5.29	.17	423	5.60	1.32	022	4.90	-1.38		
009	16.34	-.38	<u>Acid Soluble Calcium</u>			360	5.28	.15	453	5.57	1.22	065	4.86	-1.56		
453	16.33	-.39	<u>AA</u>			106	5.28	.09	420	5.56	1.19	042	4.78	-1.86		
351	16.29	-.40	220	5.69	1.69	Avg	5.26		330	5.55	1.16	262	4.70	-2.18		
402	16.25	-.47	296	5.47	1.00	300	5.22 X	-.17	415	5.52	1.04	055	4.64 R	-2.57		
397	16.25	-.48	177	5.38	.71	102	5.19	-.28	296	5.47	.85	193	3.60 s	-6.40		
106	16.22	-.53	043	5.32	.51	433	5.09	-.66	409	5.42	.70	114	2.77 s	-9.63		
451	16.30 X	-.54	105	5.18	.44	057	5.11	-.69	231	5.39	.62	372	1.35 s	-15.10		
136	16.19	-.61	029	5.27	.35	390	5.12	-.73	324	5.39	.53					
444	16.20	-.65	351	5.19	.24	450	5.20 R	-.75	177	5.38	.49	Meth: 121.00 PCT				
360	16.16	-.68	397	5.23 X	.22	255	5.06	-.80	037	5.38	.46	<u>Acid Soluble Magnesi</u>				
393	16.31	-.73	Avg	5.16		232	5.02	-.91	247	5.35	.36	<u>AA</u>				
102	16.25	-.73	040	5.05	-.39	444	4.96	-1.19	009	5.34	.35	034	5.98 s	232.84		
073	16.29 R	-.90	028	5.10	-.83	027	4.93	-1.26				200	1.07 s	24.35		

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 121.00 PCT			Meth: 121.30 PCT			Meth: 121.XX PCT			Meth: 121.XX PCT			Meth: 144.70 PCT		
Acid Soluble Magnesi			Acid Soluble Magnesi			Acid Soluble Magnesi			Acid Soluble Magnesi			Sulfur		
<u>AA</u>			<u>ICP</u>			<u>ICP</u>			<u>AA</u>			<u>Spectrometric</u>		
177	0.53	1.53	255	0.50	-.16	423	0.56	1.80	057	0.47	-1.12	393	0.66	.71
193	0.53	1.19	426	0.50	-.17	042	0.56	1.62	262	0.46	-1.29			
105	0.51	.92	390	0.50	-.26	027	0.54	.96	029	0.45	-1.61			
086	0.51	.70	421	0.50	-.30	177	0.53	.90	393	0.44 R	-1.98	Meth: 144.99 PCT		
397	0.51	.68	360	0.49	-.32	453	0.53	.85	022	0.41	-2.78	Sulfur		
028	0.51	.58	102	0.49	-.34	193	0.53	.67	309	0.34 s	-5.04	<u>Other</u>		
040	0.50	.21	065	0.50	-.36	234	0.52	.58				255	10.56 s	206.93
Avg	0.50		009	0.49	-.42	023	0.52	.56	Meth: 131.00 PCT			096	0.72	1.63
043	0.50	-.24	450	0.49	-.56	105	0.51	.55	Water Soluble Magnes			102	0.68	.82
296	0.49	-.28	106	0.48	-.82	231	0.52	.38	<u>AA</u>			009	0.67	.69
351	0.49	-.31	232	0.47	-.94	420	0.51	.38	220	0.15	.00	423	0.65	.21
220	0.49	-.53	324	0.47	-.94	397	0.51	.36	Meth: 131.30 PCT			Avg	0.64	
055	0.49	-.57	433	0.47	-.97	086	0.51	.36	Water Soluble Magnes			421	0.63	-.27
262	0.46	-1.59	057	0.47	-1.05	131	0.51	.28	<u>ICP</u>			247	0.61	-.59
029	0.45	-2.04	393	0.44 R	-1.81	028	0.51	.27	117	0.16	.71	390	0.59	-1.00
309	0.34 s	-6.93	022	0.41	-2.53	426	0.50	.18				232	0.57	-1.49
						037	0.51	.16	Meth: 131.70 PCT			450	0.61 R	-1.52
						409	0.51	.16	Water Soluble Magnes			Meth: 144.XX PCT		
						Avg	0.50		<u>Titrimetric</u>			<u>Sulfur</u>		
						300	0.50 X	-.10	372	0.81	-.71	255	10.56 s	196.09
						255	0.50	-.15				096	0.72	1.50
						040	0.50	-.17	Meth: 131.XX PCT			393	0.66	1.06
						390	0.50	-.24	<u>Water Soluble Magnes</u>			102	0.68	.74
						043	0.50	-.29	372	0.81	1.27	292	0.68	.69
						360	0.49	-.29	Avg	0.37		009	0.67	.61
						421	0.50	-.31	220	0.15	-.64	423	0.65	.16
						102	0.49	-.32	117	0.16	-.69	Avg	0.64	
						296	0.49	-.34				421	0.63	-.29
						065	0.50	-.36	Meth: 144.01 PCT			247	0.61	-.60
						351	0.49	-.38	Sulfur			390	0.59	-.99
						009	0.49	-.41	<u>Gravimetric</u>			232	0.57	-1.46
						220	0.49	-.49	105	0.54	-.71	450	0.61	-1.46
						055	0.49	-.56				105	0.54 R	-2.81
						450	0.49	-.56	Meth: 144.02 PCT					
						106	0.48	-.86	Sulfur					
						114	0.47	-.99	<u>Gravimetric</u>					
						232	0.47	-.99	292	0.68	.71			
						324	0.47	-.99						
						433	0.47	-1.02						

* 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: 151.00 PPM			Meth: 165.99 PCT			Meth: 181.XX PPM			Meth: 191.99 PPM			Meth: 202.30 PPM		
Arsenic			Acid Soluble Boron			Cadmium			Chromium			Acid Soluble Cobalt		
<u>Atomic Absorption</u>			<u>Other</u>			009 1.05 .55			<u>Other</u>			<u>ICP</u>		
220 4.65 .98			409 16.350 R 707.71			444 1.08 .43			231 63.86 1.00			102 2.83 -.43		
Avg 4.23			421 0.047 1.31			372 1.06 .16			Avg 62.93			057 2.75 -.57		
136 3.80 -.74			Avg 0.018			Avg 1.05			409 62.00 -.70			393 2.68 -.71		
Meth: 151.30 PPM			423 0.003 -.62			450 1.00 -.50			Meth: 191.XX PPM			232 2.55 -.98		
Arsenic			433 0.003 -.63			247 1.00 -.50			<u>Chromium</u>			296 2.50 -1.39		
<u>ICP</u>			Meth: 181.00 PPM			102 0.97 -.86			372 75.03 2.49			450 3.00 R -1.87		
372 135.80 s 208.70			Cadmium			409 0.93 -1.28			450 62.00 R .92			Meth: 202.99 PPM		
450 5.00 1.43			<u>Atomic Absorption</u>			136 0.90 R -2.73			231 63.86 .82			Acid Soluble Cobalt		
065 4.39 R .80			136 0.90 .71			065 0.61 s -4.86			409 62.00 .53			<u>Other</u>		
247 4.25 .25			Meth: 181.30 PPM			Meth: 190.99 PCT			220 61.00 .41			231 2.97 1.13		
Avg 4.10			Cadmium			Water Soluble Chlori			009 58.55 .31			Avg 2.92		
102 3.61 -.77			<u>ICP</u>			<u>Other</u>			065 58.86 .28			409 2.87 -.47		
393 3.54 -.90			393 4.13 s 66.82			Avg 12.71 -.71			Avg 58.44			Meth: 202.XX PPM		
Meth: 151.99 PPM			296 1.20 R 4.30			Meth: 191.00 PPM			037 58.34 -.09			Acid Soluble Cobalt		
Arsenic			009 1.05 1.19			Chromium			247 57.50 -.16			136 11.75 s 17.72		
<u>Other</u>			444 1.08 1.19			<u>Atomic Absorption</u>			390 57.75 -.25			372 4.15 2.27		
231 5.07 .87			372 1.06 .74			220 61.00 .71			096 55.50 -.45			065 3.52 1.00		
Avg 4.12			Avg 1.03			Meth: 191.30 PPM			102 53.77 -.70			009 3.30 .68		
409 3.17 -.86			450 1.00 -.54			Chromium			444 49.05 -1.41			037 3.32 .60		
Meth: 151.XX PPM			247 1.00 -.54			<u>ICP</u>			232 48.50 -1.49			Avg 3.03		
Arsenic			102 0.97 -1.24			372 75.03 2.47			393 0.28 s -8.72			247 2.95 -.19		
<u>ICP</u>			065 0.61 s -8.95			450 62.00 R .95			Meth: 202.00 PPM			231 2.97 -.27		
372 135.80 s 190.27			Meth: 181.99 PPM			065 58.86 .34			Acid Soluble Cobalt			409 2.87 -.34		
231 5.07 1.32			Cadmium			009 58.55 .33			<u>AA</u>			102 2.83 -.42		
450 5.00 1.21			<u>Other</u>			390 57.75 .22			136 11.75 S .00			057 2.75 -.58		
220 4.65 .96			231 1.13 .89			037 58.34 .17			Meth: 202.30 PPM			393 2.68 -.72		
065 4.39 .68			Avg 1.03			247 57.50 .08			Acid Soluble Cobalt			232 2.55 -1.02		
247 4.25 .14			409 0.93 -.84			Avg 57.28			<u>ICP</u>			296 2.50 -1.48		
Avg 4.16			Meth: 181.XX PPM			096 55.50 -.26			372 4.15 2.04			450 3.00 R -2.03		
136 3.80 -.60			Cadmium			102 53.77 -.49			065 3.52 .88			Meth: 221.00 PCT		
102 3.61 -.80			393 4.13 s 34.37			444 49.05 -1.15			009 3.30 .59			Acid Soluble Copper		
393 3.54 -.91			296 1.20 2.03			232 48.50 -1.22			037 3.32 .51			<u>Atomic Absorption</u>		
409 3.17 -1.44			231 1.13 .98			393 0.28 s -7.92			Avg 3.05			086 0.0011 s 3.28		
									247 2.95 -.22			043 0.0008 1.40		

* 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: 221.00 PCT			Meth: 221.XX PCT			Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 241.XX PCT		
Acid Soluble Copper			Acid Soluble Copper			Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron		
<u>Atomic Absorption</u>			<u>Atomic Absorption</u>			<u>ICP</u>			<u>Atomic Absorption</u>			<u>Atomic Absorption</u>		
442	0.0005	.27	442	0.0005	.18	432	0.81 s	4.28	262	0.59	-1.05	450	0.58	-1.06
Avg	0.0004		Avg	0.0004		117	0.74	2.61	450	0.58	-1.06	444	0.58	-1.19
220	0.0003	-.54	231	0.0004	-.07	330	0.70	1.59	065	0.72 R	2.41	029	0.57	-1.49
105	0.0002	-1.08	450	0.0004	-.26	106	0.67	.79	330	0.70	1.74	442	0.54	-2.19
			220	0.0003	-.34	057	0.66	.76	055	0.66	.91	232	0.53	-2.30
			065	0.0003	-.38	231	0.65	.64	106	0.67	.90	433	0.52	-2.63
			009	0.0003	-.40	324	0.66	.56	057	0.66	.87	428	0.40 s	-5.52
Meth: 221.30 PCT			Meth: 241.00 PCT			Meth: 241.99 PCT			Meth: 251.00 PPM			Meth: 251.30 PPM		
Acid Soluble Copper			Acid Soluble Iron			Acid Soluble Copper			Lead			Lead		
<u>ICP</u>			<u>Atomic Absorption</u>			<u>Other</u>			<u>Atomic Absorption</u>			<u>Atomic Absorption</u>		
372	0.0015 s	20.23	055	0.66	1.11	402	0.0015 S	4.51	136	14.65	.71	372	12.89	1.87
037	0.0006 R	7.76	043	0.66	1.02	428	0.0010	1.23	Avg	3.66		Avg	3.66	
450	0.0004	1.69	351	0.65	.75	Avg	0.0005		296	2.80	-.18	296	2.80	-.18
065	0.0003	.51	177	0.65	.65	231	0.0004	-.28	450	2.50 R	-.38	444	1.30	-.48
009	0.0003	.46	220	0.64	.53	409	0.0001	-.95	444	1.30	-.48	393	0.99 X	-.54
247	0.0003	.23	040	0.63	.48				065	0.34 X	-.67	065	0.34 X	-.67
Avg	0.0003		105	0.64	.47	Meth: 221.99 PCT			Meth: 251.99 PPM			Meth: 251.99 PPM		
057	0.0003	-.14	397	0.63	.36	Acid Soluble Copper			Lead			Lead		
232	0.0002	-.63	028	0.62	.07	<u>Other</u>			<u>Other</u>			<u>Other</u>		
102	0.0003	-.86	Avg	0.62		231	0.0004	-.28	231	1.34	1.13	231	1.34	1.13
433	0.0002	-1.73	086	0.61	-.79	409	0.0001	-.95	Avg	1.28		Avg	1.28	
			262	0.59	-.97				409	1.22	-.47	409	1.22	-.47
			029	0.57	-1.44	Meth: 221.99 PCT			Meth: 251.99 PPM			Meth: 251.99 PPM		
			442	0.54	-2.18	Acid Soluble Iron			Lead			Lead		
			<u>Atomic Absorption</u>			<u>Other</u>			<u>Atomic Absorption</u>			<u>Atomic Absorption</u>		
			402	0.0015 s	5.20	402	0.0015 s	5.20	136	14.65	1.82	136	14.65	1.82
			372	0.0015	2.96	372	0.0015	2.96	372	12.89	1.50	372	12.89	1.50
			086	0.0011 R	2.15	086	0.0011 R	2.15	Avg	4.44		Avg	4.44	
			428	0.0010	1.62	428	0.0010	1.62						
			037	0.0006 R	1.01	037	0.0006 R	1.01						
			043	0.0008	.92	043	0.0008	.92						

* 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: 251.XX PPM			Meth: 261.99 PCT			Meth: 289.30 PPM			Meth: 291.00 PPM			Meth: 291.XX PPM		
<u>Lead</u>			<u>Acid Soluble Manganese</u>			<u>Molybdenum</u>			<u>Nickel</u>			<u>Nickel</u>		
296	2.80	-.29	<u>Other</u>			<u>ICP</u>			<u>Atomic Absorption</u>			037	10.60	-.13
450	2.50 R	-.44	402	0.014	.87	372	7.12 s	6.74	136	14.55	.91	065	10.13	-.46
231	1.34	-.55	Avg	0.013		450	3.50	1.74	Avg	11.55		102	9.97	-.56
444	1.30	-.56	409	0.013	-.87	247	3.00	.88	220	8.55	-.82	232	9.05	-1.17
409	1.22	-.57	Meth: 261.XX PCT			065	2.89	.72	Meth: 291.30 PPM			296	8.75	-1.37
393	0.99 X	-.61	<u>Acid Soluble Manganese</u>			057	2.70	.54	<u>Nickel</u>			220	8.55	-1.51
065	0.34 X	-.73	042	0.633 s	472.87	Avg			<u>ICP</u>			Meth: 301.30 PPM		
Meth: 261.00 PCT			423	0.014	1.43	009	2.25	-.28	444	13.00	1.87	<u>Selenium</u>		
<u>Acid Soluble Manganese</u>			402	0.014	1.25	433	2.10	-.41	247	11.95	.94	<u>ICP</u>		
<u>AA</u>			086	0.014	1.07	232	2.15	-.48	450	11.00	.77	372	0.00	.00
086	0.014	.89	065	0.013	.88	102	2.29	-.90	009	11.45	.70	450	0.00	.00
Avg	0.013		009	0.013	.65	296	1.50	-1.32	372	10.91	.17	Avg	0.00	
105	0.013	-.84	247	0.013	.50	393	1.44 X	-1.36	Avg	10.68		Meth: 301.99 PPM		
262	0.000 S	-16.40	409	0.013	.42	Meth: 289.99 PPM			037	10.60	-.11	<u>Selenium</u>		
Meth: 261.30 PCT			444	0.013 R	.40	<u>Molybdenum</u>			065	10.13	-.46	Meth: 301.99 PPM		
<u>Acid Soluble Manganese</u>			105	0.013	.31	<u>Other</u>			102	9.97	-.57	<u>Other</u>		
<u>ICP</u>			096	0.012	.14	231	3.57	.84	232	9.05	-1.21	231	1.64	.87
042	0.633 s	466.47	Avg	0.012		Avg	3.28		296	8.75	-1.43	Avg	1.19	
423	0.014	1.64	131	0.012	-.16	409	2.99	-.89	Meth: 291.99 PPM			220	0.73	-.86
065	0.013	1.10	102	0.012	-.27	Meth: 289.XX PPM			<u>Nickel</u>			Meth: 301.XX PPM		
009	0.013	.88	057	0.012	-.43	<u>Molybdenum</u>			<u>Other</u>			<u>Selenium</u>		
247	0.013	.72	232	0.011	-.69	372	7.12 s	6.24	231	12.34	.97	231	1.64 R	3.72
444	0.013 R	.51	433	0.011	-1.34	450	3.50	1.48	Avg	12.09		220	0.73	1.29
096	0.012	.33	106	0.010	-1.80	231	3.57	1.41	409	11.85	-.75	Avg	0.24	
131	0.012	.24	027	0.010	-1.80	247	3.00	.64	Meth: 291.XX PPM			450	0.00	-.65
Avg	0.012		262	0.000 s	-9.42	409	2.99	.63	<u>Nickel</u>			372	0.00	-.65
102	0.012	-.03	Meth: 281.30 PPM			065	2.89	.48	136	14.55 R	2.82	Meth: 311.99 PCT		
057	0.012	-.20	<u>Mercury</u>			057	2.70	.36	444	13.00	1.72	<u>Sodium</u>		
232	0.011	-.45	<u>ICP</u>			Avg	2.53		231	12.34	1.12	<u>Other</u>		
433	0.011	-1.09	450	0.50	1.17	009	2.25	-.43	247	11.95	.84	423	0.71	1.00
106	0.010	-1.54	Avg	0.39		433	2.10	-.59	409	11.85	.77	009	0.70	.71
027	0.010	-1.54	444	0.27	-.35	232	2.15	-.62	450	11.00	.72	102	0.68	.43
						102	2.29	-.91	009	11.45	.62	Avg	0.67	
						296	1.50	-1.46	372	10.91	.12	232	0.64	-.55
						393	1.44 X	-1.50	Avg	10.73		057	0.60	-1.58

* 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			Meth: 321.99 PCT								
Sodium			Acid Soluble Zinc								
<u>Other</u>			<u>Other</u>								
086	0.49 s	-7.58	402	0.006 S	8.41						
			231	0.003	.87						
			Avg	0.003							
			428	0.002	-.87						
Meth: 321.00 PCT			Meth: 321.XX PCT								
Acid Soluble Zinc			<u>Acid Soluble Zinc</u>								
<u>Atomic Absorption</u>			330			0.100 s 202.92					
086	0.007 s	13.06	086	0.007 s	10.07						
043	0.003	1.01	402	0.006 s	7.28						
296	0.003	.98	423	0.004	2.44						
Avg	0.003		409	0.004	1.78						
220	0.003	-.14	324	0.003 R	1.25						
442	0.002	-1.09	231	0.003	.93						
105	0.002	-1.15	009	0.003	.85						
262	0.000 S	-6.81	043	0.003 R	.69						
Meth: 321.30 PCT			296			0.003 .60					
Acid Soluble Zinc			037			0.003 .41					
<u>ICP</u>			Avg			0.003					
330	0.100 s	186.07	065	0.003	-.04						
423	0.004	2.22	450	0.003	-.24						
409	0.004	1.61	220	0.003	-.24						
324	0.003 R	1.13	247	0.003	-.24						
009	0.003	.76	057	0.003	-.28						
037	0.003	.36	433	0.002	-.50						
Avg	0.003		428	0.002	-.53						
065	0.003	-.05	393	0.002	-.74						
450	0.003	-.23	232	0.002	-.74						
247	0.003	-.24	105	0.002 R	-.99						
057	0.003	-.28	442	0.002	-1.03						
433	0.002	-.48	027	0.002	-1.19						
393	0.002	-.70	102	0.002	-1.37						
232	0.002	-.70	292	0.000 s	-5.53						
027	0.002	-1.11	262	0.000 s	-5.53						
102	0.002	-1.27	372	0.000 s	-5.53						
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					