

- Pass 1 Results for 74 Labs - - Pass 2 Results for 73 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	8.67	0.34	0.09	7	8.67	0.34	0.09
Ammoniacal Nitrogen, Other		001.99	9	8.52	0.21	0.04	8	8.52	0.22	0.03
Method Group 001.XX PCT			16	8.59	0.28	0.07	16	8.59	0.28	0.07
Nitrate Nitrogen, Robertson	930.01	002.10	1	0.00	0.00	0.00	1	0.00	0.00	0.00
Water Insoluble Nitrogen, Meth I	945.01	003.10	1	0.26	0.02	0.03	1	0.26	0.02	0.03
Nitrogen From Urea, Urease (as N)	959.03	005.00	1	8.43	0.00	0.00	1	8.43	0.00	0.00
Ammon & Nitrate N, Devarda	892.01	009.10	5	8.79	0.46	0.13	5	8.79	0.46	0.13
Total Nitrogen, Modified Comprehensive	978.02	010.11	3	8.60	0.12	0.02	3	8.60	0.12	0.02
Total Nitrogen, Salicylic	955.04D	010.12	5	8.81	0.15	0.07	5	8.81	0.15	0.07
Total Nitrogen, Combustion		010.60	51	8.77	0.13	0.06	50	8.76	0.13	0.06
Total Nitrogen, Other		010.99	3	8.68	0.11	0.04	3	8.68	0.11	0.04
Method Group 010.XX PCT			62	8.76	0.13	0.06	59	8.75	0.13	0.05
Total Phosphate, Grav Quimociac	962.02	020.10	6	9.38	0.10	0.09	5	9.38	0.07	0.04
Total Phosphate, Spectrometric	958.01	020.20	15	9.29	0.23	0.12	13	9.32	0.18	0.07
Total Phosphate, Automated	978.01	020.40	5	9.30	0.13	0.08	5	9.30	0.13	0.08
Total Phosphate, ICP		020.50	14	9.25	0.50	0.14	13	9.25	0.51	0.11
Total Phosphate, Other		020.99	3	9.17	0.27	0.12	3	9.17	0.27	0.12
Method Group 020.XX PCT			45	9.24	0.37	0.13	42	9.26	0.36	0.10
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	1	0.01	0.01	0.01	1	0.01	0.01	0.01
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.02	0.01	0.02	1	0.02	0.01	0.02
Insoluble Phosphate, Automated	978.01	030.40	1	0.03	0.01	0.01	1	0.03	0.01	0.01
Insoluble Phosphate, Other		030.99	1	0.01	0.00	0.00	1	0.01	0.00	0.00
Method Group 030.XX PCT			4	0.02	0.01	0.01	4	0.02	0.01	0.01
InDir Available Phosphate, Grav Quim ..	960.02	040.10	1	9.37	0.01	0.02	1	9.37	0.01	0.02
InDir Available Phosphate, Spectrometri	960.02	040.20	2	9.18	0.11	0.08	2	9.18	0.11	0.08
InDir Available Phosphate, Automated ..	960.02	040.40	1	9.18	0.05	0.07	1	9.18	0.05	0.07
InDir Available Phosphate, Other		040.99	1	9.04	0.21	0.30	1	9.04	0.21	0.30
Method Group 040.XX PCT			5	9.19	0.15	0.11	5	9.19	0.15	0.11
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	12	9.34	0.06	0.05	11	9.33	0.04	0.04
Dir Available Phosphate, Spectrometric	960.03D	041.20	1	9.01	0.11	0.16	1	9.01	0.11	0.16
Dir Available Phosphate, Automated	978.01	041.40	2	9.25	0.19	0.11	2	9.25	0.19	0.11
Dir Available Phosphate, ICP		041.50	7	9.38	0.23	0.13	7	9.38	0.23	0.13
Dir Available Phosphate, EDTA Extract .	993.01	041.60	10	9.41	0.12	0.09	10	9.41	0.12	0.09
Dir Available Phosphate, Other		041.99	3	9.11	0.30	0.09	3	9.11	0.30	0.09
Method Group 041.XX PCT			37	9.33	0.19	0.09	35	9.36	0.15	0.08
Water Soluble Phosphate, Grav Quimociac	962.03	048.10	1	8.51	0.10	0.14	1	8.51	0.10	0.14
Water Soluble Phosphate, Spectrometric	970.01	048.20	5	8.52	0.18	0.06	5	8.52	0.18	0.06
Water Soluble Phosphate, ICP		048.50	1	8.75	0.05	0.07	1	8.75	0.05	0.07
Method Group 048.XX PCT			7	8.55	0.17	0.07	7	8.55	0.17	0.07

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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, STPB Oxalate	958.02	050.00	9	11.01	0.11	0.05	9	11.01	0.11	0.05
Soluble Potash, STPB Citrate	969.04	050.10	1	11.35	0.29	0.41	1	11.35	0.29	0.41
Soluble Potash, AA (Oxalate)		050.30	6	10.85	0.25	0.09	6	10.85	0.25	0.09
Soluble Potash, ICP (Oxalate)		050.50	9	11.06	0.51	0.25	9	11.06	0.51	0.25
Soluble Potash, ICP (Citrate)		050.51	8	11.12	0.38	0.12	8	11.12	0.38	0.12
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	5	10.62	0.36	0.12	5	10.62	0.36	0.12
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	7	11.01	0.28	0.21	7	11.01	0.28	0.21
Soluble Potash, Other		050.99	19	10.98	0.46	0.17	19	10.98	0.46	0.17
Method Group 050.XX PCT			67	10.97	0.44	0.16	63	10.99	0.40	0.14
Free Water, Vacuum Oven	965.08B	060.00	7	0.52	0.23	0.06	7	0.52	0.23	0.06
Free Water, Karl Fischer	972.01	060.20	1	0.40	0.02	0.03	1	0.40	0.02	0.03
Method Group 060.XX PCT			8	0.51	0.22	0.06	8	0.51	0.22	0.06
Acid Soluble Calcium, AA	945.04	101.00	1	7.65	0.28	0.39	1	7.65	0.28	0.39
Acid Soluble Calcium, ICP		101.30	13	7.18	0.28	0.14	12	7.19	0.27	0.10
Acid Soluble Calcium, Other		101.99	2	7.10	0.18	0.31	2	7.10	0.18	0.31
Method Group 101.XX PCT			16	7.20	0.29	0.17	15	7.21	0.28	0.15
Acid Soluble Magnesium, AA	984.01	121.00	9	0.39	0.02	0.01	9	0.39	0.02	0.01
Acid Soluble Magnesium, ICP		121.30	30	0.39	0.04	0.02	27	0.40	0.03	0.01
Acid Soluble Magnesium, Other		121.99	3	0.42	0.04	0.02	3	0.42	0.04	0.02
Method Group 121.XX PCT			42	0.40	0.03	0.01	38	0.40	0.03	0.01
Water Soluble Magnesium, AA		131.00	1	0.37	0.00	0.00	1	0.37	0.00	0.00
Water Soluble Magnesium, ICP		131.30	5	0.40	0.04	0.01	4	0.42	0.03	0.00
Water Soluble Magnesium, Other		131.99	2	0.37	0.04	0.01	2	0.37	0.04	0.01
Method Group 131.XX PCT			8	0.39	0.04	0.01	7	0.40	0.04	0.00
Sulfur, Gravimetric	980.02a	144.01	14	14.74	0.44	0.15	13	14.69	0.40	0.12
Sulfur, Gravimetric	980.02b	144.02	1	14.41	0.02	0.03	1	14.41	0.02	0.03
Sulfur, Spectrometric		144.70	1	14.72	0.10	0.14	1	14.72	0.10	0.14
Sulfur, Other		144.99	21	14.38	0.70	0.27	20	14.30	0.61	0.23
Method Group 144.XX PCT			37	14.53	0.62	0.22	35	14.50	0.57	0.18
Arsenic, Atomic Absorption		151.00	1	2.69	0.26	0.37	1	2.69	0.26	0.37
Arsenic, ICP		151.30	9	3.70	1.18	0.31	9	3.70	1.18	0.31
Method Group 151.XX PPM			10	3.60	1.16	0.32	10	3.60	1.16	0.32
Acid Soluble Boron, Spectrometric	982.01	165.00	5	0.027	0.005	0.003	4	0.027	0.004	0.001
Acid Soluble Boron, Titrimetric	949.02	165.70	1	0.028	0.001	0.001	1	0.028	0.001	0.001
Acid Soluble Boron, Other		165.99	20	0.027	0.003	0.001	19	0.027	0.003	0.001
Method Group 165.XX PCT			26	0.027	0.003	0.001	25	0.027	0.003	0.001
Water Soluble Boron, AA	52.950	171.00	1	0.019	0.000	0.000	1	0.019	0.000	0.000
Water Soluble Boron, Titrimetric	949.03	171.70	1	0.029	0.001	0.001	1	0.029	0.001	0.001
Water Soluble Boron, Other		171.99	1	0.016	0.001	0.002	1	0.016	0.001	0.002

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Method Group 171.XX PCT			3	0.021	0.006	0.001	3	0.021	0.006	0.001
Cadmium, Atomic Absorption		181.00	1	2.78	0.01	0.01	1	2.78	0.01	0.01
Cadmium, ICP		181.30	15	2.52	0.37	0.09	15	2.52	0.37	0.09
Method Group 181.XX PPM			16	2.53	0.36	0.08	16	2.53	0.36	0.08
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	3	8.14	0.04	0.03	3	8.14	0.04	0.03
Chromium, Atomic Absorption		191.00	1	35.20	0.85	1.20	1	35.20	0.85	1.20
Chromium, ICP		191.30	12	29.26	5.08	2.81	10	28.81	4.40	0.98
Method Group 191.XX PPM			13	29.72	5.13	2.69	11	29.39	4.59	1.00
Acid Soluble Cobalt, ICP	965.11	202.30	8	0.97	0.24	0.10	7	0.91	0.17	0.05
Method Group 202.XX PPM			9	1.03	0.33	0.20	8	0.97	0.24	0.10
Acid Soluble Copper, Atomic Absorption	975.01	221.00	3	0.0019	0.0004	0.0005	3	0.0019	0.0004	0.0005
Acid Soluble Copper, ICP		221.30	18	0.0015	0.0003	0.0002	16	0.0014	0.0002	0.0001
Acid Soluble Copper, Other		221.99	1	0.0018	0.0006	0.0009	1	0.0018	0.0006	0.0009
Method Group 221.XX PCT			23	0.0016	0.0004	0.0003	20	0.0015	0.0003	0.0002
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	8	0.26	0.02	0.01	7	0.26	0.02	0.00
Acid Soluble Iron, ICP		241.30	29	0.26	0.02	0.01	28	0.26	0.02	0.01
Acid Soluble Iron, Other		241.99	2	0.25	0.02	0.03	2	0.25	0.02	0.03
Method Group 241.XX PCT			40	0.26	0.02	0.01	37	0.26	0.02	0.01
Lead, ICP		251.30	12	5.50	1.49	0.72	12	5.50	1.49	0.72
Acid Soluble Manganese, AA	972.02a	261.00	3	0.013	0.001	0.000	3	0.013	0.001	0.000
Acid Soluble Manganese, AA	972.02b	261.11	4	0.011	0.002	0.000	4	0.011	0.002	0.000
Acid Soluble Manganese, ICP	972.02a	261.30	23	0.012	0.002	0.001	22	0.012	0.002	0.001
Acid Soluble Manganese, ICP	972.02b	261.31	2	0.012	0.002	0.001	2	0.012	0.002	0.001
Acid Soluble Manganese, Other		261.99	7	0.011	0.003	0.001	7	0.011	0.003	0.001
Method Group 261.XX PCT			39	0.012	0.002	0.001	37	0.012	0.002	0.001
Water Soluble Manganese, Atomic Abs ...	972.03	271.00	2	0.010	0.002	0.001	2	0.010	0.002	0.001
Water Soluble Manganese, ICP	972.03	271.30	3	0.011	0.001	0.001	3	0.011	0.001	0.001
Water Soluble Manganese, Other		271.99	2	0.011	0.001	0.001	2	0.011	0.001	0.001
Method Group 271.XX PCT			7	0.011	0.001	0.001	7	0.011	0.001	0.001
Mercury, Atomic Absorption		281.00	1	0.04	0.00	0.01	1	0.04	0.00	0.01
Mercury, Other		281.99	1	0.06	0.01	0.01	1	0.06	0.01	0.01
Method Group 281.XX PPM			2	0.05	0.01	0.01	2	0.05	0.01	0.01
Molybdenum, ICP		289.30	13	2.29	0.57	0.27	11	2.26	0.58	0.14
Nickel, ICP		291.30	14	5.29	1.84	0.66	13	5.00	1.51	0.51
Selenium, ICP		301.30	3	3.05	3.25	1.62	3	3.05	3.25	1.62
Selenium, Other		301.99	1	0.41	0.00	0.00	1	0.41	0.00	0.00
Method Group 301.XX PPM			4	2.39	3.01	1.22	3	1.05	1.33	0.03
Sodium, Atomic Absorption	983.04	311.00	1	0.32	0.01	0.01	1	0.32	0.01	0.01
Sodium, Other		311.99	11	0.29	0.03	0.01	10	0.29	0.03	0.01

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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 311.XX PCT			12	0.30	0.03	0.01	11	0.29	0.03	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	7	0.033	0.001	0.001	7	0.033	0.001	0.001
Acid Soluble Zinc, ICP		321.30	32	0.033	0.004	0.002	29	0.033	0.004	0.001
Acid Soluble Zinc, Other		321.99	3	0.035	0.005	0.001	3	0.035	0.005	0.001
Method Group 321.XX PCT			43	0.033	0.004	0.002	40	0.033	0.003	0.001
Water Soluble Zinc, Atomic Absorption .		325.00	1	0.033	0.001	0.001	1	0.033	0.001	0.001
Water Soluble Zinc, ICP		325.30	2	0.033	0.000	0.001	2	0.033	0.000	0.001
Water Soluble Zinc, Other		325.99	1	0.035	0.001	0.001	1	0.035	0.001	0.001
Method Group 325.XX PCT			4	0.033	0.001	0.001	4	0.033	0.001	0.001

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: 010.12 PCT			Meth: 010.60 PCT			Meth: 010.XX 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>Salicylic</u>			<u>Combustion</u>								
498	9.00	1.03	486	8.50	-.33	481	8.97	1.09	086	8.73	-.29	307	9.06	2.37
481	8.85	.55	027	8.45	-.52	498	8.95	1.00	028	8.76	-.31	055	8.98	1.70
258	8.83	.52	500	8.20	-1.40	504	8.82	.21	489	8.72	-.35	483	8.98	1.70
444	8.75	.30	368	8.19	-1.43	Avg	8.81		472	8.73	-.35	481	8.97	1.62
416	8.68	.07	230	7.94	-2.36	117	8.70	-.79	034	8.74	-.36	095	8.97	1.59
Avg	8.67		Meth: 002.10 PCT			185	8.63 X	-1.29	354	8.72	-.36	117	8.96	1.57
504	8.63	-.12	Nitrate Nitrogen			Meth: 010.60 PCT			451	8.74	-.38	040	8.95	1.52
230	7.94	-2.18	<u>Robertson</u>			<u>Total Nitrogen</u>			356	8.72	-.47	498	8.95	1.52
			504	0.00	.00	<u>Combustion</u>			009	8.70	-.50	494	8.90 R	1.33
Meth: 001.99 PCT			Meth: 003.10 PCT			307	9.06	2.40	102	8.71	-.53	482	8.89 R	1.26
<u>Ammoniacal Nitrogen</u>			Water Insoluble Nitr			055	8.98	1.69	368	8.72	-.57	049	8.90	1.07
<u>Other</u>			<u>Meth I</u>			483	8.98	1.69	106	8.75	-.60	029	8.87	1.03
493	8.75	1.08	504	0.26	.71	095	8.97	1.58	402	8.68	-.70	231	8.89	1.02
096	8.72	.90	Meth: 005.00 PCT			117	8.96	1.57	423	8.68	-.72	177	8.88	.94
300	8.71	.85	Nitrogen From Urea			040	8.95	1.51	234	8.66	-.86	105	8.87	.87
371	8.65	.58	<u>Urease (as N)</u>			494	8.90	1.32	041	8.66 X	-.87	504	8.82	.55
420	8.57 R	.47	444	8.43	.00	482	8.89 R	1.25	025	8.65	-.89	485	8.80	.51
Avg	8.52		Meth: 009.10 PCT			049	8.90	1.03	043	8.67	-.91	405	8.82	.47
486	8.50	-.11	Ammon & Nitrate N			029	8.87	1.01	324	8.70	-.92	096	8.82	.47
027	8.45	-.35	<u>Devarda</u>			231	8.89	.99	035	8.66	-.99	024	8.77	.47
500	8.20	-1.45	309	9.39	1.31	177	8.88	.90	230	8.59	-1.32	023	8.81	.45
368	8.19	-1.49	258	8.97	.40	105	8.87	.84	157	8.58	-1.44	136	8.79	.35
Meth: 001.XX PCT			485	8.80	.48	485	8.80	.48	351	8.55	-1.70	443	8.80	.35
<u>Ammoniacal Nitrogen</u>			024	8.77	.47	024	8.77	.47	406	8.52	-1.90	007	8.80	.35
498	9.00	1.53	096	8.82	.42	096	8.82	.42	275	8.50	-2.14	028	8.76	.30
481	8.85	.95	405	8.82	.42	405	8.82	.42	042	7.40 s	-10.76	502	8.77	.20
258	8.83	.91	023	8.81	.39	136	8.79	.31	428	5.94 s	-22.09	247	8.75	.19
444	8.75	.64	007	8.80	.29	007	8.80	.29	Meth: 010.99 PCT			377	8.77	.14
493	8.75	.61	443	8.80	.29	443	8.80	.29	<u>Total Nitrogen</u>			292	8.76	.09
096	8.72	.46	Meth: 010.11 PCT			Meth: 010.11 PCT			<u>Other</u>			Avg	8.75	
300	8.71	.42	Total Nitrogen			Total Nitrogen						501	8.75	-.06
416	8.68	.34	<u>Modified Comprehensi</u>			<u>Modified Comprehensi</u>						233	8.75	-.11
371	8.65	.21	105	8.71	.89	105	8.71	.89	502	8.77	.94	086	8.73	-.21
504	8.63	.16	474	8.64	.37	474	8.64	.37	420	8.71	.42	489	8.72	-.26
Avg	8.59		Avg	8.60		Avg	8.60		Avg	8.68		354	8.72	-.27
420	8.57	-.31	211	8.44	-1.25	211	8.44	-1.25	486	8.55	-1.20	472	8.73	-.28
									500	8.20 S	-4.50	034	8.74	-.31
												451	8.74	-.34

* 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: 020.10 PCT			Meth: 020.50 PCT			Meth: 020.XX PCT			Meth: 030.10 PCT		
<u>Total Nitrogen</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Insoluble Phosphate</u>		
105	8.71	-.38	<u>Grav Quimociac</u>			<u>ICP</u>			211	9.49	.65	<u>Grav Quimociac</u>		
356	8.72	-.39	444	9.34 R	-2.71	483	10.21	1.87	444	9.34	.54	504	0.01	.71
009	8.70	-.40	157	8.52 s	-13.30	025	9.70	.91	247	9.44	.51	Meth: 030.20 PCT		
117	8.70	-.43	Meth: 020.20 PCT			234	9.64	.76	489	9.41	.48	<u>Insoluble Phosphate</u>		
102	8.71	-.45	<u>Total Phosphate</u>			451	9.59	.70	500	9.42	.46	<u>Spectrometric</u>		
420	8.71	-.45	<u>Spectrometric</u>			501	9.52	.57	105	9.41	.45	504 0.02 -.71		
368	8.72	-.50	324	9.38 R	1.25	368	9.53	.55	309	9.40	.41	Meth: 030.40 PCT		
106	8.75	-.56	292	9.54	1.19	444	9.27 R	.52	105	9.39	.39	<u>Insoluble Phosphate</u>		
402	8.68	-.60	406	9.54	1.17	Avg	9.25		258	9.39	.37	<u>Automated</u>		
423	8.68	-.62	231	9.50	.98	247	9.25	-.05	504	9.38	.33	096 0.03 -.71		
234	8.66	-.74	489	9.41	.62	402	9.21	-.07	322	9.34	.24	Meth: 030.99 PCT		
041	8.66 X	-.76	309	9.40	.47	502	9.08	-.36	356	9.30	.24	<u>Insoluble Phosphate</u>		
025	8.65	-.77	258	9.39	.37	482	8.80	-.89	493	9.32	.20	<u>Other</u>		
043	8.67	-.81	504	9.29	-.24	157	8.64	-1.21	420	9.30	.18	247 0.01 .00		
324	8.70 R	-.85	420	9.30	-.30	474	8.62	-1.22	504	9.29	.12	Meth: 030.XX PCT		
474	8.64	-.85	356	9.30	-.44	307	8.42	-1.61	Avg	9.26		<u>Insoluble Phosphate</u>		
035	8.66	-.88	405	9.25	-.48	Meth: 020.99 PCT			247	9.25	-.08	096 0.03 1.05		
185	8.63 X	-.97	416	9.21	-.64	<u>Total Phosphate</u>			443	9.24	-.10	504 0.02 1.05		
230	8.59	-1.19	169	9.21	-.67	<u>Other</u>			402	9.21	-.14	Avg 0.02		
157	8.58	-1.31	027	8.86	-2.57	500	9.42	.92	042	9.25	-.14	247 0.01 -.47		
486	8.55	-1.52	481	8.82 R	-2.93	443	9.24	.27	405	9.25	-.15	504 0.01 -1.05		
351	8.55	-1.56	498	8.35 s	-5.40	Avg	9.17		416	9.21	-.16	Meth: 040.10 PCT		
406	8.52	-1.75	Meth: 020.40 PCT			371	8.86	-1.26	169	9.21	-.18	<u>InDir Available Phos</u>		
275	8.50	-1.98	<u>Total Phosphate</u>			Meth: 020.XX PCT			096	9.19	-.24	<u>Grav Quim</u>		
211	8.44	-2.35	<u>Automated</u>			<u>Total Phosphate</u>			035	9.20	-.27	504 9.37 -.71		
500	8.20 s	-4.14	247	9.44	1.14	483	10.21	2.67	502	9.08	-.55	Meth: 040.20 PCT		
042	7.40 s	-10.24	105	9.41	.98	025	9.70	1.28	027	8.86	-1.13	<u>InDir Available Phos</u>		
428	5.94 s	-21.08	247	9.30		234	9.64	1.06	371	8.86	-1.18	<u>Grav Quim</u>		
Meth: 020.10 PCT			105	9.41	.98	451	9.59	.98	482	8.80	-1.31	504 9.37 -.71		
<u>Total Phosphate</u>			042	9.25	-.55	292	9.54	.79	481	8.82	-1.33	Meth: 040.20 PCT		
<u>Grav Quimociac</u>			096	9.19	-.96	501	9.52	.79	157	8.64	-1.78	<u>InDir Available Phos</u>		
211	9.49	1.59	035	9.20	-1.01	406	9.54	.78	474	8.62	-1.79	<u>Spectrometri</u>		
105	9.39	.82	Meth: 020.10 PCT			368	9.53	.77	157	8.52 R	-2.16	504 9.27 .87		
Avg	9.38		<u>Total Phosphate</u>			444	9.27 R	.75	307	8.42	-2.36	Avg 9.18		
504	9.38	-.15	<u>Automated</u>			324	9.38 R	.71	498	8.35	-2.59	169 9.10 -.86		
322	9.34	-.61	247 9.44 1.14			231	9.50	.68						
493	9.32	-.95	105 9.41 .98											

* 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: 040.40 PCT			Meth: 041.20 PCT			Meth: 041.99 PCT			Meth: 041.XX PCT			Meth: 048.XX PCT		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Water Soluble Phosph</u>		
<u>Automated</u>			<u>Spectrometric</u>			<u>Other</u>								
096	9.18	.71	504	9.01	.71	105	9.45	1.12	472	9.34	-.81	498	8.45	-.65
Meth: 040.99 PCT			Meth: 041.40 PCT			230 9.10 -.17			494 9.24 -.81			096 8.41 -.79		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			486 8.79 -1.11			230 9.10 -1.76			405 8.40 -.91		
<u>Other</u>			<u>Automated</u>			Meth: 041.XX PCT			504 9.09 -1.82			Meth: 050.00 PCT		
275	9.04	.71	095	9.41	.89	<u>Dir Available Phosph</u>			027 9.09 -1.82			Soluble Potash		
Meth: 040.XX PCT			Meth: 041.50 PCT			055 9.65 1.91			504 9.01 -2.39			<u>STPB Oxalate</u>		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			231 9.60 1.61			486 8.79 A -3.86			230 11.85 s 7.41		
504	9.37	1.23	<u>ICP</u>			055 9.57 1.42			493 8.70 s -4.39			405 11.18 1.49		
504	9.27	.61	055	9.65	1.14	029 9.56 1.30			354 7.29 s -13.78			504 11.12 .97		
Avg	9.19		023	9.54	.67	023 9.54 1.19			Meth: 048.10 PCT			489 11.10 .76		
096	9.18	-.26	377	9.48	.60	377 9.48 1.04			Water Soluble Phosph			211 11.09 .67		
169	9.10	-.68	043	9.45	.27	494 9.43 .98			<u>Grav Quimociac</u>			Avg 11.01		
275	9.04	-1.44	Avg	9.38		105 9.45 .72			504 8.51 .71			102 11.00 -.11		
Meth: 041.10 PCT			Meth: 041.60 PCT			105 9.45 .60			Meth: 048.20 PCT			049 10.95 -.55		
<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			043 9.44 .59			Water Soluble Phosph			231 10.95 -.61		
<u>Grav Quimociac</u>			<u>EDTA Extract</u>			043 9.45 .57			<u>Spectrometric</u>			055 10.88 -1.29		
055	9.57 s	5.55	368	9.31	-.39	095 9.41 .53			420 8.85 1.84			494 10.86 -1.39		
494	9.43 R	3.74	007	8.96	-2.01	034 9.40 .51			Avg 8.52			258 10.52 s -5.27		
009	9.40	1.58	354	7.29 s	-9.08	177 9.43 .49			504 8.50 -.20			416 9.73 s -11.13		
040	9.35	1.23	Meth: 041.60 PCT			009 9.40 .27			498 8.45 -.48			Meth: 050.10 PCT		
485	9.34	.94	<u>Dir Available Phosph</u>			Avg 9.36			096 8.41 -.59			Soluble Potash		
105	9.34	.66	<u>EDTA Extract</u>			086 9.34 -.12			405 8.40 -.71			<u>STPB Citrate</u>		
086	9.34	.28	231	9.60	1.59	351 9.34 -.17			Meth: 048.50 PCT			444 11.35 .71		
351	9.34	.26	029	9.56	1.20	177 9.33 -.18			Water Soluble Phosph			Meth: 050.30 PCT		
177	9.33	.09	105	9.45	.60	105 9.34 -.19			<u>ICP</u>			Soluble Potash		
Avg	9.33		043	9.44	.42	485 9.34 -.30			444 8.75 -.71			<u>AA (Oxalate)</u>		
102	9.30	-.70	177	9.43	.24	049 9.33 -.33			Meth: 048.XX PCT			356 11.14 1.16		
041	9.31 X	-.82	Avg	9.41		040 9.35 -.34			Water Soluble Phosph			040 11.00 .72		
049	9.33	-.92	034	9.40	-.57	106 9.32 -.38			420 8.85 1.72			185 11.00 X .60		
185	9.25 X	-1.74	106	9.32	-.79	102 9.30 -.40			444 8.75 1.14			Avg 10.85		
504	9.09 s	-5.59	136	9.31	-.87	041 9.31 X -.40			Avg 8.55			157 10.80 -.21		
493	8.70 s	-14.43	472	9.34	-1.13	423 9.32 -.43			504 8.50 -.35			136 10.75 -.43		
			494	9.24	-1.39	136 9.31 -.43			504 8.50 -.35			504 10.43 -1.75		
						368 9.31 -.47			504 8.51 -.47			498 9.90 s -4.53		
						185 9.25 X -.70								

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 050.31 PCT			Meth: 050.60 PCT			Meth: 050.99 PCT			Meth: 050.XX PCT			Meth: 050.XX PCT		
Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash		
<u>AA (Citrate)</u>			<u>Flame (Oxalate)</u>			<u>Other</u>								
472	8.40 S	.00	443	9.98	-1.81	482	10.60	-.86	042	11.00	.25	498	9.90 s	-3.09
Meth: 050.50 PCT			Meth: 050.61 PCT			Meth: 050.XX PCT			049			Meth: 060.00 PCT		
Soluble Potash			Soluble Potash			Soluble Potash			231			Free Water		
<u>ICP (Oxalate)</u>			<u>Flame (Citrate)</u>			<u>Soluble Potash</u>			351			<u>Vacuum Oven</u>		
406	11.88	1.62	029	11.42	1.47	025	12.55 s	3.88	234	10.92	-.18	489	0.94	1.82
444	11.50	1.04	041	11.06 X	.92	500	12.48 s	3.71	043	10.90	-.28	096	0.72	.90
324	11.10	.59	095	11.18	.61	483	11.88	2.22	105	10.87	-.29	416	0.52	.20
106	11.30	.55	105	11.05	.17	406	11.88	2.22	494	10.96	-.31	Avg	0.52	
292	11.12	.13	Avg	11.01		230	11.85	2.17	055	10.88	-.31	105	0.45	-.33
420	11.07	.05	494	10.96	-.48	368	11.77	1.95	494	10.86	-.34	007	0.41	-.52
Avg	11.06		034	10.76	-.92	474	11.64	1.74	423	10.85	-.36	247	0.37	-.73
055	10.82	-.47	035	10.69	-1.42	444	11.50 R	1.46	493	10.85	-.36	474	0.25	-1.20
157	10.50	-1.10	Meth: 050.99 PCT			029			055			Meth: 060.20 PCT		
354	10.23	-1.64	Soluble Potash			444			096			Free Water		
Meth: 050.51 PCT			<u>Other</u>			502			307			<u>Karl Fischer</u>		
Soluble Potash			025 12.55 s 3.39			451			105			504 0.40 -.71		
<u>ICP (Citrate)</u>			500 12.48 S 3.23			106			504			Meth: 060.XX PCT		
483	11.88	2.00	474 11.64 1.53			324			027			<u>Free Water</u>		
023	11.30	.51	322 11.52 1.15			023			136			489 0.94 1.99		
007	11.20	.34	502 11.39 .89			041			501			096 0.72 1.02		
043	11.21	.23	451 11.37 .84			007			402			416 0.52 .23		
Avg	11.12		177 11.17 .41			043			035			Avg 0.51		
377	11.11	-.11	275 11.08 .27			095			485			105 0.45 -.29		
423	10.85	-.72	042 11.00 .22			405			482			007 0.41 -.47		
096	10.81	-.82	Avg 10.98			177			157			504 0.40 -.52		
485	10.61	-1.36	234 10.92 -.15			356			504			247 0.37 -.70		
Meth: 050.60 PCT			043 10.90 -.24			504			504			474 0.25 -1.18		
Soluble Potash			105 10.87 -.25			292			258					
<u>Flame (Oxalate)</u>			493 10.85 -.31			377			354					
351	10.94	.90	307 10.84 -.39			275			443					
105	10.80	.52	504 10.79 -.45			489								
309	10.68	.26	027 10.77 -.49			211								
169	10.71	.26	501 10.81 -.53			040								
Avg	10.62		402 10.77 -.61											

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	
Meth: 101.00 PCT			Meth: 101.XX PCT			Meth: 121.30 PCT			Meth: 121.99 PCT			Meth: 121.XX PCT			
<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>			
AA			105	7.65	1.70	ICP			Other			095	0.39	-.45	
105	7.65	.71	096	7.37	.58	247	0.67 s	9.67	Avg	0.42		035	0.39	-.47	
Avg	7.65		231	7.37	.58	483	0.47	2.52	486	0.41	-.27	504	0.39	-.48	
504	5.08 S	-9.32	102	7.28	.35	472	0.40 R	2.41	105	0.38	-.90	105	0.38	-.59	
			494	7.24	.32	502	0.46	2.19				501	0.39	-.72	
			420	7.29	.31	106	0.45	1.64	Meth: 121.XX PCT			105	0.38	-.76	
Meth: 101.30 PCT			Avg 7.21			231 0.44 1.28			<u>Acid Soluble Magnesi</u>			494	0.38	-.82	
<u>Acid Soluble Calcium</u>			035 7.17 -.27			368 0.43 .93			096 1.09 s 25.95			433	0.37 X	-.94	
ICP			472 7.12 -.37			157 0.42 .76			247 0.67 s 10.23			423	0.37	-.95	
247	9.75 s	9.42	502	7.09	-.64	444	0.40	.36	169	0.52 s	4.43	420	0.37	-1.13	
027	7.97 s	3.88	105	7.11	-.71	102	0.41	.29	483	0.47	2.74	027	0.37 R	-1.37	
483	7.81	2.29	423	6.96	-.90	Avg	0.40		042	0.47 R	2.72	498	0.36	-1.43	
096	7.37	.67	041	6.93 X	-.98	023	0.39	-.21	472	0.40 R	2.53	485	0.36	-1.53	
231	7.37	.67	474	7.06 R	-1.14	474	0.40	-.24	502	0.46	2.39	354	0.35	-1.77	
102	7.28	.42	482	6.88	-1.19	482	0.40	-.24	106	0.45	1.81	230	0.28 A	-4.23	
420	7.29	.38	307	6.84	-1.31	041	0.40 X	-.24	231	0.44	1.44				
494	7.24	.37	354	6.22 s	-3.48	049	0.40	-.24	029	0.43	1.36	Meth: 131.00 PCT			
Avg	7.19		504	5.08 s	-7.52	055	0.40	-.24	368	0.43	1.07	Water Soluble Magnes			
035	7.17	-.25				177	0.39	-.27	157	0.42	.89	<u>AA</u>			
472	7.12	-.33	Meth: 121.00 PCT			307	0.40	-.31	028	0.42	.70	504	0.37	.00	
423	6.96	-.87	<u>Acid Soluble Magnesi</u>			300	0.39	-.34	102	0.41	.40				
041	6.93 X	-.95	AA			324	0.39	-.39	444	0.40	.39	Meth: 131.30 PCT			
474	7.06 R	-1.15	169	0.52 s	5.18	095	0.39	-.49	486	0.41	.36	Water Soluble Magnes			
482	6.88	-1.17	029	0.43	1.77	035	0.39	-.50	481	0.40	.12	<u>ICP</u>			
307	6.84	-1.29	028	0.42	1.05	371	0.39	-.50	Avg	0.40		368	0.47	1.54	
354	6.22 S	-3.55	481	0.40	.40	501	0.39	-.75	023	0.39	-.13	Avg	0.42		
			258	0.39	.17	494	0.38	-.87	177	0.39	-.19	230	0.41	-.15	
Meth: 101.99 PCT			Avg 0.39			433 0.37 X -.99			482 0.40			027 0.40			
<u>Acid Soluble Calcium</u>			040 0.39			423 0.37			041 0.40 X			275 0.39			
Other			504 0.39			420 0.37			049 0.40			444 0.34 R			
105	7.11	.97	105 0.38	-.42	027 0.37 R	-1.38	474 0.40	-.20	055 0.40	-.20		Meth: 131.99 PCT			
Avg	7.10		498 0.36	-1.33	354 0.35	-1.79	040 0.39	-.26	040 0.39	-.26	Water Soluble Magnes				
502	7.09	-.75	485 0.36	-1.43	230 0.28 A	-4.13	300 0.39	-.26	258 0.39	-.27	<u>Other</u>				
			Meth: 121.30 PCT			Meth: 121.99 PCT			258 0.39			486 0.41 .87			
Meth: 101.XX PCT			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>			307 0.40			Avg 0.37			
247	9.75 s	9.00	ICP			Other			324 0.39			498 0.34			
027	7.97 s	3.68	096	1.09 s	24.67	042 0.47 1.27			371 0.39			-.87			
483	7.81	2.14													

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 131.XX PCT			Meth: 144.70 PCT			Meth: 144.XX PCT			Meth: 151.00 PPM			Meth: 165.00 PCT		
<u>Water Soluble Magnes</u>			<u>Sulfur</u>			<u>Sulfur</u>			<u>Arsenic</u>			<u>Acid Soluble Boron</u>		
368	0.47	1.80	474	14.72	.71	494	14.93	.75	498	2.69	.71	258	0.027 R	1.15
230	0.41	.37				371	14.91	.73				029	0.030	.77
486	0.41	.27	Meth: 144.99 PCT			483	14.90	.70	Meth: 151.30 PPM			494	0.030	.66
027	0.40	.11	<u>Sulfur</u>			324	14.80	.56	<u>Arsenic</u>			055	0.028	.20
Avg	0.40		<u>Other</u>			504	14.80	.54	<u>ICP</u>			Avg	0.027	
275	0.39	-.31	502	15.99 R	2.90	043	14.72	.43	230	5.70	1.69	481	0.020	-1.56
504	0.37	-.67	027	15.42	1.90	474	14.72	.41	474	5.00	1.10			
444	0.34 R	-1.54	368	15.16	1.42	157	14.70	.39	095	4.50	.80	Meth: 165.70 PCT		
498	0.34	-1.58	247	15.03	1.21	029	14.68	.31	368	4.20	.43	<u>Acid Soluble Boron</u>		
			371	14.91	1.01	102	14.65	.29	Avg	3.70		<u>Titrimetric</u>		
Meth: 144.01 PCT			483	14.90	.99	029	14.66	.28	096	3.30	-.35	504	0.028	.71
<u>Sulfur</u>			029	14.66	.59	Avg	14.50		041	3.18 X	-.47	Meth: 165.99 PCT		
055	15.60	2.31	177	14.63	.54	040	14.45	-.12	486	2.61	-.93	<u>Acid Soluble Boron</u>		
095	15.50 R	2.18	023	14.43	.23	023	14.43	-.15	102	2.54	-.98	<u>Other</u>		
485	15.03	.89	Avg	14.30		292	14.41	-.17	481	2.30	-1.21	483	0.048 s	6.41
494	14.93	.60	354	14.24	-.13	105	14.36	-.26	Meth: 151.99 PPM			049	0.033	1.86
324	14.80	.38	049	14.15	-.27	354	14.24	-.46	<u>Arsenic</u>			354	0.030	.90
504	14.80	.33	482	14.30	-.33	482	14.30	-.50	<u>Other</u>			482	0.030	.90
043	14.72	.29	423	14.10	-.34	231	14.22	-.50	117	399.00 S	.00	231	0.030	.90
157	14.70	.26	351	14.06	-.42	049	14.15	-.63	Meth: 151.XX PPM			324	0.029	.66
Avg	14.69		096	14.01	-.49	423	14.10	-.71	<u>Arsenic</u>			433	0.029 X	.63
029	14.68	-.03	472	14.01	-.58	351	14.06	-.78	117	399.00 s	339.59	368	0.029	.59
102	14.65	-.17	501	14.10	-.74	096	14.01	-.87	230	5.70	1.80	023	0.029	.46
040	14.45	-.61	275	13.70	-1.04	230	14.00	-.89	474	5.00	1.20	095	0.028	.27
105	14.36	-.84	444	13.61	-1.19	472	14.01	-.93	095	4.50	.88	501	0.028	.20
231	14.22	-1.19	307	13.39	-1.56	501	14.10 R	-.99	368	4.20	.52	Avg	0.027	
230	14.00	-1.75	486	13.22	-1.78	275	13.70	-1.45	096	3.60		009	0.027	-.25
498	9.90 S	-12.12	Meth: 144.XX PCT			444	13.61	-1.60	041	3.18 X	-.39	486	0.027	-.25
481	9.29 s	-13.67	<u>Sulfur</u>			307	13.39	-1.99	498	2.69	-.80	040	0.027	-.31
405	8.80 s	-14.90	502	15.99 R	2.75	486	13.22	-2.25	096	3.30	-.27	444	0.026	-.47
			055	15.60	1.93	498	9.90 s	-8.08	041	3.18 X	-.39	423	0.026	-.51
Meth: 144.02 PCT			095	15.50	1.82	481	9.29 s	-9.15	498	2.69	-.80	472	0.026	-.53
<u>Sulfur</u>			027	15.42	1.69	405	8.80 s	-10.01	486	2.61	-.86	042	0.026 R	-.69
<u>Gravimetric</u>			368	15.16	1.17				102	2.54	-.91	043	0.024	-1.14
292	14.41	-.71	485	15.03	.94				481	2.30	-1.15	230	0.021	-1.96
			247	15.03	.94							106	0.020	-2.23

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 165.XX PCT			Meth: 171.99 PCT			Meth: 181.XX PPM			Meth: 191.30 PPM			Meth: 202.30 PPM		
<u>Acid Soluble Boron</u>			<u>Water Soluble Boron</u>			<u>Cadmium</u>			<u>Chromium</u>			<u>Acid Soluble Cobalt</u>		
483	0.048 s	6.31	Other			247	3.10	1.60	ICP			368	1.15	1.40
049	0.033	1.86	444	0.016	.71	095	3.00	1.29	102	30.57	.41	105	29.66	.19
029	0.030	.96				102	2.81	.76	474	29.00	.04	041	1.04 X	.76
354	0.030	.91	Meth: 171.XX PCT			368	2.80	.74	Avg	28.81		474	1.00	.50
482	0.030	.91	<u>Water Soluble Boron</u>			498	2.78	.67	368	28.65	-.04	096	0.98	.45
231	0.030	.91	504	0.029	1.25	035	2.74	.61	482	26.55	-.54	Avg	0.91	
494	0.030	.81	Avg	0.021		300	2.75	.60	444	27.80 R	-1.18	494	0.85	-.46
324	0.029	.68	027	0.019	-.37	041	2.60 X	.22	230	23.10	-1.30	230	0.71	-1.22
433	0.029 X	.65	444	0.016	-.90	482	2.55	.15	486	20.80	-1.82	102	0.68	-1.35
368	0.029	.61				096	2.55	.15						
023	0.029	.48	Meth: 181.00 PPM			Avg	2.53		Meth: 191.XX PPM			Meth: 202.XX PPM		
095	0.028	.30	Cadmium			009	2.50	-.29	<u>Chromium</u>			<u>Acid Soluble Cobalt</u>		
055	0.028	.21	<u>Atomic Absorption</u>			444	2.29	-.77	041	35.25 R	1.96	504	188.05 s	785.62
501	0.028	.21	498	2.78	.71	481	2.05	-1.35	096	35.60	1.37	095	1.50 R	3.06
504	0.028	.21				230	2.03	-1.41	481	35.20	1.27	035	1.37	1.93
Avg	0.027		Meth: 181.30 PPM			474	2.00	-1.48	035	33.70	.97	368	1.15	.78
009	0.027	-.22	Cadmium			486	2.00	-1.48	009	30.50	.41	041	1.04 X	.34
486	0.027	-.22	<u>ICP</u>			Meth: 190.00 PCT			102	30.57	.26	096	0.98	.17
040	0.027	-.31	247	3.10	1.61	Water Soluble Chlori			105	29.66	.06	474	1.00	.12
444	0.026	-.44	095	3.00	1.32	<u>Titrimetric</u>			Avg	29.39		Avg	0.97	
423	0.026	-.47	102	2.81	.79	504	8.15	.92	474	29.00	-.09	494	0.85	-.55
472	0.026	-.49	368	2.80	.77	258	8.18	.83	368	28.65	-.16	230	0.71	-1.12
042	0.026	-.65	035	2.74	.64	Avg	8.14		482	26.55	-.64	102	0.68	-1.21
043	0.024	-1.09	300	2.75	.63	009	8.10	-.98	444	27.80 R	-1.16			
258	0.027 R	-1.53	041	2.60 X	.25	Meth: 191.00 PPM			230	23.10	-1.37	Meth: 221.00 PCT		
230	0.021	-1.89	096	2.55	.16	Chromium			486	20.80	-1.87	Acid Soluble Copper		
481	0.020	-2.15	482	2.55	.16	<u>Atomic Absorption</u>			Meth: 202.00 PPM			<u>Atomic Absorption</u>		
106	0.020	-2.15	Avg	2.52		481	35.20	-.71	Acid Soluble Cobalt			043	0.0174 S	39.89
			009	2.50	-.28	Meth: 191.30 PPM			AA			105	0.0020	1.43
			444	2.29	-.71	Chromium			504 188.05 S .00			504	0.0020	.44
			481	2.05	-1.28	<u>ICP</u>			Meth: 202.30 PPM			Avg 0.0019		
			230	2.03	-1.34	041	35.25 R	2.14	Acid Soluble Cobalt			481 0.0017 -.50		
			474	2.00	-1.41	096	35.60	1.56	<u>ICP</u>			Meth: 221.30 PCT		
			486	2.00	-1.41	035	33.70	1.14	095 1.50 s 4.47			Acid Soluble Copper		
						009	30.50	.51	035 1.37 R 2.95			<u>ICP</u>		
									Meth: 202.30 PPM			502 0.0100 s 37.36		
									Acid Soluble Cobalt			402 0.0025 s 5.10		

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 221.30 PCT			Meth: 221.XX PCT			Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 241.XX PCT		
<u>Acid Soluble Copper</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>		
ICP			481	0.0017	.64	ICP			247	0.37 s	5.58	354	0.24	-1.07
324	0.0021 R	3.15	009	0.0017	.42	106	0.29	1.55	027	0.27 s	3.45	040	0.24	-1.31
354	0.0015 R	2.20	300	0.0016	.18	041	0.28 X	1.32	482	0.30 s	3.04	504	0.23	-1.32
247	0.0018	1.62	368	0.0016	.14	055	0.26 R	1.08	324	0.31	2.67	474	0.22	-1.83
423	0.0017	1.31	Avg	0.0015		234	0.28	1.04	029	0.29	1.61	300	0.22	-1.83
433	0.0017 X	1.25	095	0.0015	-.10	501	0.28	1.04	106	0.29	1.51	230	0.21 R	-2.62
009	0.0017	.93	041	0.0015 X	-.31	483	0.27	.85	485	0.29	1.49	498	0.11 s	-7.70
300	0.0016	.51	035	0.0014	-.42	231	0.27	.75	041	0.28 X	1.28	Meth: 251.30 PPM		
368	0.0016	.51	474	0.0014	-.53	444	0.27	.55	105	0.26 R	1.25	<u>Lead</u>		
095	0.0015	.25	444	0.0014	-.62	368	0.26	.31	055	0.26 R	1.05	<u>ICP</u>		
041	0.0015 X	.22	096	0.0013	-.64	371	0.26	.30	043	0.28	1.01	247	8.50	2.04
Avg	0.0014		494	0.0013	-.88	494	0.26	.30	234	0.28	1.01	444	6.42	.94
035	0.0014	-.19	230	0.0012	-1.08	Avg	0.26		501	0.28	1.01	096	6.75	.89
474	0.0014	-.48	483	0.0011	-1.26	402	0.25	-.15	483	0.27	.83	105	6.72	.82
096	0.0013	-.48	354	0.0015 R	-1.63	423	0.25	-.20	231	0.27	.72	041	6.04 X	.65
444	0.0014	-.59	102	0.0010	-1.73	420	0.25	-.25	444	0.27	.53	Avg	5.50	
494	0.0013	-.81	Meth: 241.00 PCT			502	0.26	-.26	368	0.26	.30	102	5.34	-.18
230	0.0012	-1.08	<u>Acid Soluble Iron</u>			096	0.26	-.26	494	0.26	.29	095	5.00	-.33
483	0.0011	-1.31	<u>Atomic Absorption</u>			433	0.25 X	-.27	371	0.26	.29	368	4.95	-.37
102	0.0010	-1.94	029	0.29	1.25	177	0.25	-.50	258	0.26	.04	230	4.62	-.60
Meth: 221.99 PCT			485	0.29	1.14	157	0.25	-.51	Avg	0.26		474	4.50	-.75
<u>Acid Soluble Copper</u>			043	0.28	.71	023	0.25	-.56	402	0.25	-.15	481	3.60	-1.29
<u>Other</u>			Avg	0.26		472	0.25	-.58	423	0.25	-.20	486	3.55	-1.32
105	0.0018	.71	258	0.26	-.21	095	0.25	-.62	420	0.25	-.25	Meth: 261.00 PCT		
Meth: 221.XX PCT			028	0.25	-.62	102	0.24	-.73	502	0.26	-.26	<u>Acid Soluble Mangane</u>		
<u>Acid Soluble Copper</u>			307	0.24	-.75	307	0.24	-.75	096	0.26	-.26	<u>AA</u>		
043	0.0174 s	51.55	105	0.24	-.77	035	0.24	-.87	433	0.25 X	-.27	481	0.060 S	61.85
502	0.0100 s	27.60	040	0.24 R	-1.41	354	0.24	-1.09	028	0.25	-.43	485	0.014	1.17
402	0.0025 R	3.56	504	0.23	-1.45	300	0.22	-1.86	177	0.25	-.50	Avg	0.013	
105	0.0020 R	2.26	498	0.11 s	-7.34	474	0.22	-1.86	157	0.25	-.51	029	0.013	-.27
324	0.0021	2.10	Meth: 241.30 PCT			230	0.21 s	-2.68	023	0.25	-.56	043	0.013	-1.03
105	0.0018	1.63	<u>Acid Soluble Iron</u>			Meth: 241.99 PCT			472	0.25	-.57	Meth: 261.11 PCT		
504	0.0020	1.45	<u>ICP</u>			<u>Acid Soluble Iron</u>			105	0.24	-.58	<u>Acid Soluble Mangane</u>		
247	0.0018	.94	247	0.37 s	5.71	<u>Other</u>			095	0.25	-.61	<u>AA</u>		
423	0.0017	.70	027	0.27 s	3.52	105	0.26	1.14	486	0.25	-.61	504	0.013	.73
433	0.0017 X	.65	482	0.30 s	3.11	Avg	0.25		102	0.24	-.72			
			324	0.31	2.74	486	0.25	-.46	307	0.24	-.74			
									035	0.24	-.85			

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 261.11 PCT			Meth: 261.31 PCT			Meth: 261.XX PCT			Meth: 271.30 PCT			Meth: 289.30 PPM		
Acid Soluble Manganese			Acid Soluble Manganese			Acid Soluble Manganese			Water Soluble Manganese			Molybdenum		
<u>AA</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>		
105	0.012	.52	324	0.013	.93	009	0.013	.33	444	0.011	-1.39	041	3.28 X	1.76
040	0.012	.43	Avg	0.012		023	0.013	.33				368	2.90	1.10
Avg	0.011		230	0.010	-.79	504	0.013	.33	Meth: 271.99 PCT			095	2.50 R	.96
498	0.008	-1.59	Meth: 261.99 PCT			474	0.013	.24	Water Soluble Manganese			035	2.43 R	.87
			Acid Soluble Manganese			035	0.012	.06	<u>Other</u>			105	2.48	.84
			<u>Other</u>			Avg	0.012		504	0.012	.94	300	2.52	.45
			423	0.015	1.34	040	0.012	-.11	Avg	0.011		096	2.30	.18
			042	0.014	.84	102	0.012	-.11	486	0.010	-.78	Avg	2.26	
			105	0.013	.77	041	0.012 X	-.11				102	2.21	-.09
			Avg	0.011		105	0.012	-.23	Meth: 271.XX PCT			494	2.18	-.17
			501	0.011	-.33	300	0.012	-.48	<u>Water Soluble Manganese</u>			433	2.07 X	-.39
			502	0.010	-.46	096	0.011	-.62	027	0.012	1.08	474	2.00	-.45
			486	0.010	-.46	494	0.011	-.80	444	0.011	.70	486	1.90	-.63
			483	0.007	-1.70	472	0.011	-.88	368	0.012	.60	230	1.04	-2.11
			Meth: 261.XX PCT			501	0.011	-1.00	504	0.012	.60	Meth: 291.30 PPM		
			<u>Acid Soluble Manganese</u>			157	0.011	-1.00	230	0.011	.47	Nickel		
			433	0.067 s	44.10	501	0.011	-1.00	Avg	0.011		<u>ICP</u>		
			481	0.060 s	27.08	230	0.010	-1.16	486	0.010	-.53	041	9.12 R	2.86
			482	0.015 s	3.25	486	0.010	-1.24	498	0.008	-1.90	444	7.75	1.89
			354	0.016	1.90	502	0.010	-1.24	Meth: 281.00 PPM			105	7.53	1.70
			307	0.016	1.90	231	0.010	-1.24	Mercury			247	6.00	.94
			423	0.015	1.54	106	0.010	-1.24	<u>Atomic Absorption</u>			035	6.05	.71
			368	0.015	1.34	498	0.008	-2.37	230	0.04	.71	009	5.30	.33
			485	0.014	1.23	483	0.007 A	-3.17	Meth: 271.00 PCT			095	5.00	.00
			049	0.013 R	1.22	Meth: 271.00 PCT			Water Soluble Manganese			Avg	5.00	
			420	0.014	1.19	Water Soluble Manganese			<u>Atomic Abs</u>			482	4.60	-.33
			444	0.014	.79	027	0.012	.91	Mercury			096	4.35	-.43
			042	0.014	.79	Avg	0.010		<u>Other</u>			102	4.33	-.44
			105	0.013	.73	498	0.008	-.82	486	0.06	.71	474	4.00	-.66
			095	0.013	.73	Meth: 271.30 PCT			Meth: 281.XX PPM			230	3.69	-.87
			029	0.013	.66	Water Soluble Manganese			Mercury			368	3.30	-1.14
			324	0.013	.61	<u>ICP</u>			Avg			486	3.10	-1.26
			402	0.013	.46	368	0.012	.71	230	0.04	-.78			
			043	0.013	.35	230	0.011	.27						
			055	0.013	.33	Avg	0.011							

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 301.30 PPM			Meth: 311.99 PCT			Meth: 321.30 PCT			Meth: 321.99 PCT			Meth: 321.XX PCT		
Selenium			Sodium			Acid Soluble Zinc			Acid Soluble Zinc			Acid Soluble Zinc		
<u>ICP</u>			<u>Other</u>			<u>ICP</u>			<u>Other</u>			<u>ICP</u>		
105	6.41	1.27	494	0.25	-1.71	474	0.035 R	1.50	105	0.035	-.21	035	0.032	-.54
Avg	3.05					482	0.035 R	1.50	486	0.030	-1.09	009	0.031	-.66
368	2.75	-.10	Meth: 311.XX PCT			095	0.034 R	.88				371	0.031	-.75
095	0.00	-.94	<u>Sodium</u>			433	0.036 X	.88	Meth: 321.XX PCT			472	0.031	-.85
			275	0.35	2.00	501	0.036	.84	<u>Acid Soluble Zinc</u>			502	0.030	-.88
Meth: 301.99 PPM			354	0.32	1.09	096	0.036	.79	042	0.040	2.01	292	0.030	-.88
Selenium			502	0.31 R	1.00	307	0.036	.72	106	0.040	2.01	486	0.030	-.88
<u>Other</u>			504	0.32	.85	423	0.035	.69	231	0.040	2.01	027	0.029	-1.30
485	0.41	.71	307	0.30	.20	247	0.035	.65	324	0.039	1.74	055	0.028	-1.48
			Avg	0.29		483	0.035	.55	474	0.035 R	1.55	498	0.028	-1.61
Meth: 301.XX PPM			474	0.29	-.15	023	0.034	.44	482	0.035 R	1.55	157	0.027	-1.74
Selenium			035	0.29	-.17	041	0.034 X	.29	095	0.034 R	.91	230	0.026	-2.08
105	6.41 R	4.42	102	0.29	-.22	300	0.034	.20	433	0.036 X	.89	402	0.001 s	-9.27
368	2.75	1.28	423	0.28	-.38	Avg	0.033		501	0.036	.85	Meth: 325.00 PCT		
Avg	1.05		096	0.29	-.39	420	0.033	-.06	096	0.036	.80	Water Soluble Zinc		
485	0.41	-.49	482	0.27	-.92	444	0.033	-.19	307	0.036	.72	<u>Atomic Absorption</u>		
095	0.00	-.79	494	0.25	-1.81	494	0.033	-.19	423	0.035	.70	504	0.033	.71
						102	0.032	-.27	247	0.035	.65	Meth: 325.30 PCT		
Meth: 311.00 PCT			Meth: 321.00 PCT			368	0.032	-.27	485	0.035	.61	Water Soluble Zinc		
Sodium			Acid Soluble Zinc			354	0.032	-.39	028	0.035	.59	<u>ICP</u>		
<u>Atomic Absorption</u>			<u>Atomic Absorption</u>			035	0.032	-.51	105	0.035	.56	105	0.033	1.20
504	0.32	.71	485	0.035	1.28	009	0.031	-.62	483	0.035	.55	Avg	0.033	
			028	0.035	1.21	371	0.031	-.70	023	0.034	.45	444	0.033	-.26
Meth: 311.99 PCT			040	0.034	.47	472	0.031	-.81	040	0.034	.28	Meth: 325.99 PCT		
Sodium			Avg	0.033		502	0.030	-.83	041	0.034 X	.28	Water Soluble Zinc		
<u>Other</u>			043	0.033	-.52	292	0.030	-.83	300	0.034	.20	<u>Other</u>		
275	0.35	2.06	504	0.033	-.63	027	0.029	-1.24	Avg	0.033		028	0.035	-.71
354	0.32	1.15	258	0.032	-1.10	055	0.028	-1.42	420	0.033	-.09	Meth: 325.XX PCT		
502	0.31 R	1.05	029	0.032	-1.14	157	0.027	-1.67	043	0.033	-.17	Water Soluble Zinc		
307	0.30	.23	498	0.028 s	-3.90	230	0.026	-1.99	444	0.033	-.21	<u>Other</u>		
Avg	0.29					402	0.001 s	-8.94	504	0.033	-.21	028	0.035	-.71
474	0.29	-.06	Meth: 321.30 PCT			Meth: 321.99 PCT			494	0.033	-.21	Water Soluble Zinc		
035	0.29	-.08	Acid Soluble Zinc			Acid Soluble Zinc			102	0.032	-.30	028	0.035	1.48
102	0.29	-.19	<u>ICP</u>			<u>Other</u>			368	0.032	-.30	Avg	0.033	
423	0.28	-.30	106	0.040	1.96	042	0.040	1.13	354	0.032	-.42	444	0.033	-.39
096	0.29	-.32	231	0.040	1.96	Avg	0.035		258	0.032	-.42	105	0.033	-.51
482	0.27	-.83	324	0.039	1.70				029	0.032	-.44	504	0.033	-.94

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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	7	0.00	1.03	0.16	101.99	2	0.00	0.08	0.86
001.99	9	0.03	0.97	0.16	101.XX	19	- 0.02	3.05	0.71
001.XX	16	0.00	1.00	0.16	121.00	10	0.52	1.89	0.20
009.10	5	0.00	1.04	0.18	121.30	32	0.91	4.81	0.50
009.XX	5	0.00	1.04	0.18	121.99	3	0.00	1.04	0.34
010.11	3	0.00	1.11	0.08	121.XX	44	0.88	4.38	0.48
010.12	5	0.00	1.02	0.26	131.30	5	- 0.46	1.39	0.28
010.60	53	- 0.60	3.47	0.42	131.99	2	0.00	1.21	0.12
010.99	4	- 1.12	2.42	0.19	131.XX	8	- 0.18	1.09	0.20
010.XX	63	- 0.55	3.11	0.41	144.01	17	- 2.27	5.50	0.27
020.10	7	- 1.94	4.87	1.69	144.99	21	0.13	1.13	0.32
020.20	16	- 0.48	1.71	0.50	144.XX	39	- 0.66	2.68	0.28
020.40	5	0.00	0.97	0.38	151.30	9	0.00	1.01	0.18
020.50	14	0.00	0.97	0.19	151.XX	11	30.87	102.38	1.56
020.99	3	0.00	1.06	0.30	165.00	5	0.010	0.927	0.526
020.XX	40	- 0.02	1.01	0.25	165.99	21	0.279	1.689	0.249
030.XX	3	0.08	0.75	0.65	165.XX	27	0.232	1.537	0.372
040.20	2	0.00	1.13	0.34	171.XX	3	0.000	1.110	0.110
040.XX	4	- 0.22	0.83	0.56	181.30	15	0.00	1.00	0.16
041.10	15	- 0.80	4.39	1.03	181.XX	16	0.00	1.00	0.16
041.40	2	0.00	1.16	0.28	190.00	3	0.00	0.92	0.52
041.50	8	- 1.14	3.33	0.34	190.XX	3	0.00	0.92	0.52
041.60	10	0.00	0.92	0.44	191.30	12	0.10	1.01	0.58
041.99	3	0.00	1.10	0.17	191.XX	13	0.07	1.00	0.53
041.XX	32	- 0.80	2.74	0.42	202.30	9	0.67	1.61	1.08
048.20	5	0.00	1.04	0.19	202.XX	10	78.78	248.34	2.95
048.XX	6	0.05	1.10	0.23	221.00	4	9.9723	19.946	0.7702
050.00	12	- 0.68	4.24	0.99	221.30	20	2.2546	8.3932	0.7802
050.30	7	- 0.55	1.72	0.94	221.XX	24	3.4390	11.723	0.6503
050.50	9	0.00	0.97	0.32	241.00	9	- 0.95	2.59	0.28
050.51	8	0.00	1.02	0.17	241.30	33	0.21	1.45	0.81
050.60	5	0.00	1.04	0.18	241.99	2	0.00	0.56	0.77
050.61	7	0.00	0.89	0.50	241.XX	43	- 0.01	1.79	0.72
050.99	23	- 0.11	1.92	0.21	251.30	12	0.00	0.97	0.32
050.XX	64	- 0.21	1.77	0.35	251.XX	12	0.00	0.97	0.32
060.00	7	0.00	1.03	0.16	261.00	4	15.462	30.937	0.218
060.XX	8	0.00	1.02	0.16	261.11	4	0.000	1.064	0.161
101.00	2	- 4.66	6.59	0.54	261.30	25	1.396	6.631	6.648
101.30	16	0.52	2.78	0.73	261.31	2	0.000	1.116	0.357

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
261.99	7	0.000	1.025	0.168					
261.XX	40	1.446	6.535	4.968					
271.00	2	0.000	1.155	0.289					
271.30	3	0.000	0.365	0.863					
271.99	2	0.000	1.108	0.369					
271.XX	7	0.000	0.942	0.411					
281.XX	2	0.000	0.963	0.535					
289.30	13	0.05	0.92	0.40					
289.XX	13	0.05	0.92	0.40					
291.30	14	0.20	1.19	0.34					
291.XX	14	0.20	1.19	0.34					
301.30	3	0.00	0.99	0.42					
301.XX	4	1.01	2.22	0.90					
311.99	11	0.06	0.97	0.31					
311.XX	12	0.05	0.97	0.30					
321.00	8	- 0.485	1.576	0.549					
321.30	33	- 0.228	1.821	0.420					
321.99	3	0.000	1.108	0.122					
321.XX	44	- 0.179	1.691	0.392					
325.30	2	0.000	0.375	0.824					
325.XX	3	0.277	0.965	0.416					