

- Pass 1 Results for 78 Labs - - Pass 2 Results for 78 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, Other		001.99	1	0.02	0.02	0.03	1	0.02	0.02	0.03
Total Nitrogen, Modified Comprehensive	978.02	010.11	1	0.07	0.00	0.01	1	0.07	0.00	0.01
Total Nitrogen, Salicylic	955.04D	010.12	1	0.08	0.01	0.01	1	0.08	0.01	0.01
Total Nitrogen, Combustion		010.60	13	0.10	0.10	0.04	12	0.09	0.10	0.02
Total Nitrogen, Other		010.99	3	0.15	0.22	0.01	3	0.15	0.22	0.01
Method Group 010.XX PCT			18	0.11	0.12	0.03	17	0.10	0.12	0.02
Total Phosphate, Grav Quimociac	962.02	020.10	7	11.78	0.61	0.22	8	11.56	0.83	0.19
Total Phosphate, Spectrometric	958.01	020.20	14	12.25	0.37	0.11	13	12.30	0.33	0.07
Total Phosphate, Automated	978.01	020.40	7	12.38	0.47	0.12	6	12.40	0.49	0.05
Total Phosphate, ICP		020.50	14	12.19	0.71	0.28	13	12.27	0.64	0.21
Total Phosphate, Other		020.99	2	11.82	0.29	0.02	2	11.82	0.29	0.02
Method Group 020.XX PCT			44	12.15	0.57	0.18	39	12.25	0.47	0.12
Insoluble Phosphate, Grav Quimociac	963.03C	030.10	1	5.21	0.02	0.03	1	5.21	0.02	0.03
Insoluble Phosphate, ICP		030.50	2	3.92	2.40	0.09	2	3.92	2.40	0.09
Insoluble Phosphate, Other		030.99	1	5.09	0.01	0.02	1	5.09	0.01	0.02
Method Group 030.XX PCT			4	4.53	1.70	0.06	4	4.53	1.70	0.06
InDir Available Phosphate, Grav Quim ..	960.02	040.10	1	6.88	0.01	0.02	1	6.88	0.01	0.02
InDir Available Phosphate, ICP		040.50	1	3.17	0.01	0.01	1	3.17	0.01	0.01
InDir Available Phosphate, Other		040.99	2	6.64	0.51	0.08	2	6.64	0.51	0.08
Method Group 040.XX PCT			4	5.83	1.68	0.05	4	5.83	1.68	0.05
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	12	8.10	1.85	0.23	11	7.81	1.63	0.13
Dir Available Phosphate, Spectrometric	960.03D	041.20	2	6.85	0.10	0.13	2	6.85	0.10	0.13
Dir Available Phosphate, Automated	978.01	041.40	3	7.68	2.31	0.11	3	7.68	2.31	0.11
Dir Available Phosphate, ICP		041.50	13	7.99	1.43	0.21	12	8.04	1.47	0.13
Dir Available Phosphate, EDTA Extract	993.01	041.60	13	10.01	1.38	0.16	13	10.01	1.38	0.16
Dir Available Phosphate, Other		041.99	2	10.48	0.34	0.42	2	10.48	0.34	0.42
Method Group 041.XX PCT			45	8.64	1.85	0.20	43	8.61	1.83	0.15
Water Soluble Phosphate, Spectrometric	970.01	048.20	1	0.33	0.00	0.00	1	0.33	0.00	0.00
Water Soluble Phosphate, ICP		048.50	1	9.39	0.15	0.21	1	9.39	0.15	0.21
Method Group 048.XX PCT			2	4.86	5.23	0.10	2	4.86	5.23	0.10
Soluble Potash, STPB Oxalate	958.02	050.00	13	6.19	0.49	0.13	13	6.19	0.49	0.13
Soluble Potash, STPB Citrate	969.04	050.10	1	7.11	0.02	0.03	1	7.11	0.02	0.03
Soluble Potash, AA (Oxalate)		050.30	11	6.00	0.64	0.14	11	6.00	0.64	0.14
Soluble Potash, AA (Citrate)		050.31	2	5.22	0.20	0.15	2	5.22	0.20	0.15
Soluble Potash, ICP (Oxalate)		050.50	9	6.57	0.88	0.14	8	6.64	0.91	0.10
Soluble Potash, ICP (Citrate)		050.51	11	6.84	0.62	0.07	11	6.84	0.62	0.07
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	4	6.14	0.73	0.05	4	6.14	0.73	0.05
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	8	6.55	0.17	0.07	8	6.55	0.17	0.07
Soluble Potash, Other		050.99	21	6.77	1.06	0.08	19	6.75	1.10	0.06

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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 050.XX PCT			81	6.48	0.82	0.10	78	6.48	0.84	0.09
Free Water, Vacuum Oven	965.08B	060.00	3	1.34	0.13	0.06	3	1.34	0.13	0.06
Acid Soluble Calcium, AA	945.04	101.00	8	14.80	0.71	0.29	8	14.80	0.71	0.29
Acid Soluble Calcium, ICP		101.30	32	15.21	0.68	0.28	29	15.26	0.67	0.18
Acid Soluble Calcium, Other		101.99	5	15.07	0.69	0.21	5	15.07	0.69	0.21
Method Group 101.XX PCT			46	15.06	0.80	0.27	42	15.15	0.70	0.21
Acid Soluble Magnesium, AA	984.01	121.00	9	2.32	0.09	0.04	9	2.32	0.09	0.04
Acid Soluble Magnesium, ICP		121.30	33	2.36	0.11	0.04	32	2.36	0.11	0.04
Acid Soluble Magnesium, Other		121.99	3	2.30	0.34	0.07	3	2.30	0.34	0.07
Method Group 121.XX PCT			45	2.35	0.13	0.04	42	2.35	0.11	0.04
Water Soluble Magnesium, ICP		131.30	4	0.91	1.01	0.06	4	0.91	1.01	0.06
Sulfur, Gravimetric	980.02a	144.01	11	1.56	0.08	0.03	11	1.56	0.08	0.03
Sulfur, Gravimetric	980.02b	144.02	1	1.88	0.01	0.01	1	1.88	0.01	0.01
Sulfur, Other		144.99	27	1.54	0.12	0.03	26	1.55	0.12	0.02
Method Group 144.XX PCT			39	1.55	0.12	0.03	38	1.56	0.12	0.03
Arsenic, Atomic Absorption		151.00	1	16.40	0.14	0.20	1	16.40	0.14	0.20
Arsenic, ICP		151.30	11	17.27	1.77	0.91	11	17.27	1.77	0.91
Arsenic, Other		151.99	1	16.95	0.52	0.73	1	16.95	0.52	0.73
Method Group 151.XX PPM			13	17.18	1.64	0.84	12	17.38	1.48	0.67
Acid Soluble Boron, Spectrometric	982.01	165.00	4	0.010	0.005	0.001	4	0.010	0.005	0.001
Acid Soluble Boron, Other		165.99	20	0.011	0.002	0.001	19	0.011	0.002	0.001
Method Group 165.XX PCT			24	0.011	0.003	0.001	23	0.010	0.003	0.001
Water Soluble Boron, Other		171.99	2	0.007	0.005	0.000	2	0.007	0.005	0.000
Cadmium, Atomic Absorption		181.00	1	0.50	0.14	0.20	1	0.50	0.14	0.20
Cadmium, ICP		181.30	8	0.52	0.37	0.10	8	0.52	0.37	0.10
Cadmium, Other		181.99	1	0.46	0.00	0.01	1	0.46	0.00	0.01
Method Group 181.XX PPM			10	0.52	0.33	0.10	10	0.52	0.33	0.10
Water Soluble Chlorine, Titrimetric	928.02	190.00	2	1.22	1.39	0.01	2	1.22	1.39	0.01
Chromium, ICP		191.30	11	318.65	98.80	14.46	11	318.65	98.80	14.46
Chromium, Other		191.99	1	67.65	3.67	5.20	1	67.65	3.67	5.20
Method Group 191.XX PPM			12	297.73	118.05	13.69	12	297.73	118.05	13.69
Acid Soluble Cobalt, AA		202.00	1	270.50	0.71	1.00	1	270.50	0.71	1.00
Acid Soluble Cobalt, ICP	965.11	202.30	13	173.46	87.00	10.84	13	173.46	87.00	10.84
Acid Soluble Cobalt, Other		202.99	1	19.63	0.30	0.43	1	19.63	0.30	0.43
Method Group 202.XX PPM			15	169.67	93.76	9.49	14	157.79	85.02	7.88
Acid Soluble Copper, Atomic Absorption	975.01	221.00	7	0.1160	0.0034	0.0024	7	0.1160	0.0034	0.0024
Acid Soluble Copper, ICP		221.30	31	0.1147	0.0072	0.0026	27	0.1158	0.0067	0.0016
Acid Soluble Copper, Other		221.99	5	0.1100	0.0147	0.0024	4	0.1138	0.0138	0.0005
Method Group 221.XX PCT			44	0.1149	0.0088	0.0025	39	0.1162	0.0080	0.0016

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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
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	7	0.81	0.09	0.02	6	0.82	0.09	0.01
Acid Soluble Iron, ICP		241.30	37	0.77	0.09	0.02	36	0.76	0.08	0.01
Acid Soluble Iron, Other		241.99	4	0.63	0.12	0.02	4	0.63	0.12	0.02
Method Group 241.XX PCT			48	0.76	0.10	0.02	45	0.76	0.08	0.01
Lead, ICP		251.30	13	48.78	4.90	2.50	13	48.78	4.90	2.50
Lead, Other		251.99	1	49.13	1.18	1.67	1	49.13	1.18	1.67
Method Group 251.XX PPM			14	48.81	4.72	2.44	14	48.81	4.72	2.44
Acid Soluble Manganese, AA	972.02a	261.00	7	0.147	0.005	0.002	6	0.147	0.005	0.001
Acid Soluble Manganese, ICP	972.02a	261.30	35	0.141	0.009	0.003	32	0.141	0.009	0.002
Acid Soluble Manganese, ICP	972.02b	261.31	1	0.150	0.005	0.007	1	0.150	0.005	0.007
Acid Soluble Manganese, Other		261.99	3	0.146	0.008	0.007	3	0.146	0.008	0.007
Method Group 261.XX PCT			47	0.142	0.009	0.003	44	0.142	0.009	0.002
Water Soluble Manganese, ICP	972.03	271.30	1	0.109	0.002	0.002	1	0.109	0.002	0.002
Mercury, Atomic Absorption		281.00	1	0.03	0.00	0.00	1	0.03	0.00	0.00
Mercury, ICP		281.30	1	0.45	0.01	0.02	1	0.45	0.01	0.02
Mercury, Other		281.99	1	0.02	0.00	0.00	1	0.02	0.00	0.00
Method Group 281.XX PPM			3	0.17	0.22	0.01	3	0.17	0.22	0.01
Molybdenum, ICP		289.30	18	28.12	11.06	1.21	17	28.30	11.30	0.70
Molybdenum, Other		289.99	1	15.26	0.56	0.79	1	15.26	0.56	0.79
Method Group 289.XX PPM			19	27.44	11.14	1.19	18	27.58	11.38	0.70
Nickel, Atomic Absorption		291.00	1	189.50	0.71	1.00	1	189.50	0.71	1.00
Nickel, ICP		291.30	12	161.77	18.13	5.98	11	162.94	18.22	4.54
Method Group 291.XX PPM			13	163.90	18.96	5.59	12	165.15	18.95	4.25
Selenium, ICP		301.30	3	3.07	1.37	0.06	3	3.07	1.37	0.06
Selenium, Other		301.99	2	4.12	0.55	0.27	2	4.12	0.55	0.27
Method Group 301.XX PPM			5	3.49	1.20	0.14	5	3.49	1.20	0.14
Sodium, Other		311.99	8	1.49	0.06	0.03	8	1.49	0.06	0.03
Method Group 311.XX PCT			8	1.49	0.06	0.03	8	1.49	0.06	0.03
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	9	0.102	0.007	0.003	9	0.102	0.007	0.003
Acid Soluble Zinc, ICP		321.30	37	0.102	0.008	0.004	34	0.102	0.008	0.003
Acid Soluble Zinc, Other		321.99	2	0.100	0.012	0.000	2	0.100	0.012	0.000
Method Group 321.XX PCT			48	0.102	0.008	0.003	45	0.102	0.008	0.003
Water Soluble Zinc, ICP		325.30	2	0.094	0.010	0.003	2	0.094	0.010	0.003
Water Soluble Zinc, Other		325.99	2	0.094	0.017	0.004	2	0.094	0.017	0.004
Method Group 325.XX PCT			4	0.094	0.013	0.003	4	0.094	0.013	0.003

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.99 PCT Ammoniacal Nitrogen <u>Other</u>			Meth: 010.99 PCT Total Nitrogen <u>Other</u>			Meth: 020.10 PCT Total Phosphate <u>Grav Quimociac</u>			Meth: 020.50 PCT Total Phosphate <u>ICP</u>			Meth: 020.XX PCT Total Phosphate		
420	0.02	.71	420	0.00	-.68	262	10.00 S	-1.87	390	13.25	1.54	368	12.50	.53
									368	12.50	.36	095	12.44	.39
									389	12.30	.16	415	12.38	.28
Meth: 010.11 PCT Total Nitrogen <u>Modified Comprehensi</u>			Meth: 010.XX PCT Total Nitrogen			Meth: 020.20 PCT Total Phosphate <u>Spectrometric</u>			Avg			389		
260	0.07	.71	043	0.85 s	6.09	309	12.97	2.04	422	12.25	-.05	300	12.25	-.24
			460	0.44	2.76	234	12.60	.94	247	12.02	-.39	247	12.02	-.39
			247	0.26	1.29	406	12.58	.85	423	12.03	-.43	423	12.03	-.43
Meth: 010.12 PCT Total Nitrogen <u>Salicylic</u>			022			324			444			157		
185	0.08	.71	022	0.15 R	1.29	406	12.58	.85	444	12.01	-.43	157	12.05	-.65
			354	0.25	1.20	415	12.38	.26	451	11.74	-.84	451	11.74	-.84
			262	0.24	1.13	Avg	12.30		307	11.71	-.99	307	11.71	-.99
			422	0.11	.10	450	12.29	-.25	402	11.58	-1.10	402	11.58	-1.10
			Avg	0.10		479	12.19	-.33	432	11.08 R	-2.12	432	11.08 R	-2.12
Meth: 010.60 PCT Total Nitrogen <u>Combustion</u>			185			232			291			255		
043	0.85 s	7.63	185	0.08	-.15	232	12.30	-.35	291	6.51 s	-9.04	291	6.51 s	-9.04
247	0.26	1.68	292	0.08	-.15	292	12.18	-.38	255	5.01 s	-11.38	255	5.01 s	-11.38
022	0.15 R	1.62	260	0.07	-.30	231	12.15	-.47				090	12.09	-.36
354	0.25	1.56	007	0.07	-.31	169	12.06	-.74	Meth: 020.99 PCT			137	12.07	-.38
262	0.24	1.48	325	0.06	-.41	177	11.97	-.99	Total Phosphate			169	12.06	-.42
422	0.11	.19	042	0.05	-.59	420	11.66	-1.96	<u>Other</u>			247	12.02	-.49
Avg	0.09		030	0.02	-.72	230	11.60 R	-2.32	137	12.07	.86	444	12.01	-.53
292	0.08	-.11	255	0.01	-.74	Meth: 020.40 PCT			Avg	11.82		423	12.03	-.54
007	0.07	-.31	009	0.01	-.74	Total Phosphate			460	11.58	-.87	105	12.04	-.57
325	0.06	-.43	018	0.00	-.84	<u>Automated</u>			455	9.75 S	-7.24	105	12.23	-.58
042	0.05	-.68	420	0.00	-.84	456	13.18	1.58	322	6.91 S	-17.15	177	11.97	-.59
255	0.01	-.84	420	0.00	-.84	027	12.78	.78				157	12.05 R	-.85
009	0.01	-.84				095	12.44	.07	Meth: 020.XX PCT			444	11.86	-.88
018	0.00	-.96	Meth: 020.10 PCT			Avg			Total Phosphate			451	11.74	-1.09
420	0.00	-.96	Total Phosphate			247			114			157		
			<u>Grav Quimociac</u>			035			393			420		
			114	20.12 s	10.27	105			390			307		
			211	12.12	.67	042			456			460		
			470	12.11	.65	Meth: 020.50 PCT			309			402		
			090	12.09	.63	Total Phosphate			027			230		
			105	12.04	.61	<u>ICP</u>			234			432		
			157	11.85	.55	393			406			041		
			444	11.86	.40	13.85 X			324			262		
			Avg	11.78		2.47								
			041	10.42	-1.38									

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 020.XX PCT			Meth: 040.50 PCT			Meth: 041.20 PCT			Meth: 041.60 PCT			Meth: 041.XX PCT		
<u>Total Phosphate</u>			<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>		
455	9.75 s	-5.29	<u>ICP</u>			<u>Spectrometric</u>			<u>EDTA Extract</u>			040	9.80	.65
322	6.91 s	-11.29	255	3.17	.71	262	6.90	1.09	296	10.89	.64	231	9.55	.53
291	6.51 s	-12.14	Meth: 040.99 PCT			030			105	10.69	.49	423	9.14	.29
255	5.01 s	-15.29	<u>InDir Available Phos</u>			6.80			136	10.58	.41	233	9.08	.27
Meth: 030.10 PCT			Meth: 041.40 PCT			Meth: 041.60 PCT			Meth: 041.99 PCT			Meth: 041.99 PCT		
<u>Insoluble Phosphate</u>			247			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>		
<u>Grav Quimociac</u>			7.08			<u>Automated</u>			<u>Other</u>			377		
090	5.21	.71	479	6.20	-.87	072	10.62	1.27	231	9.55	-.38	393	8.45	-.10
Meth: 030.50 PCT			Meth: 040.XX PCT			027			233	9.08	-.69	049	8.04	-.33
<u>Insoluble Phosphate</u>			<u>InDir Available Phos</u>			6.62			177	7.35	-1.94	131	7.39	-.67
<u>ICP</u>			247			5.80			043	7.09	-2.12	086	7.36	-.69
479	5.99	.87	090	6.88	.62	Meth: 041.50 PCT			Meth: 041.99 PCT			177	7.35	-.69
Avg	3.92		479	6.20	.22	<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			360	7.36 R	-.75
255	1.85	-.87	Avg	5.83		<u>ICP</u>			<u>Other</u>			325	7.16	-.80
Meth: 030.99 PCT			Meth: 041.10 PCT			023			296	10.66	1.07	354	7.16	-.80
<u>Insoluble Phosphate</u>			<u>Dir Available Phosph</u>			10.29			Avg	10.48		043	7.09	-.83
<u>Other</u>			040			9.86			230	10.30	-.60	262	6.90	-.94
247	5.09	.71	423	9.14	.74	Meth: 041.50 PCT			Meth: 041.99 PCT			043	6.83	-.97
Meth: 030.XX PCT			377			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			030	6.80	-.99
<u>Insoluble Phosphate</u>			8.45			<u>ICP</u>			<u>Other</u>			102	6.70	-1.05
479	5.99	.86	393	8.45	.28	023			296	10.66	1.13	007	6.62	-1.09
090	5.21	.39	Avg	8.04		055			Avg	10.48		027	6.62	-1.09
247	5.09	.33	360	7.36 R	-.59	072			230	10.30	-.60	009	6.61	-1.09
Avg	4.53		325	7.16	-.60	105			018	11.25 R	1.48	177	6.61	-1.10
255	1.85	-1.58	354	7.16	-.61	055			072	11.07	1.34	254	6.50	-1.16
Meth: 040.10 PCT			049			Meth: 041.60 PCT			Meth: 041.99 PCT			Meth: 048.20 PCT		
<u>InDir Available Phos</u>			Avg			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Water Soluble Phosph</u>		
<u>Grav Quim</u>			7.81			<u>EDTA Extract</u>			<u>EDTA Extract</u>			<u>Spectrometric</u>		
090	6.88	.71	131	7.39	-.26	034			351	10.37	.96	420	0.33	.00
Meth: 040.10 PCT			007			018			230	10.30	.92			
<u>InDir Available Phos</u>			6.62			10.25			023	10.29	.92			
<u>Grav Quim</u>			-1.21			10.94			117	10.06	.80			
090	6.88	.71	102	6.70	-.69	029			055	9.86	.68			
Meth: 040.10 PCT			368			10.93								
<u>InDir Available Phos</u>			6.21			.67								
<u>Grav Quim</u>			-1.24											
090	6.88	.71	009	6.61	-.74									
Meth: 040.10 PCT			072											
<u>InDir Available Phos</u>			10.07											
<u>Grav Quim</u>			2.00											
090	6.88	.71	105	10.60	1.71									
Meth: 040.10 PCT			055											
<u>InDir Available Phos</u>			8.78											
<u>Grav Quim</u>			.59											
090	6.88	.71	049	8.04	.16									
Meth: 040.10 PCT			Avg											
<u>InDir Available Phos</u>			7.81											
<u>Grav Quim</u>			-.26											
090	6.88	.71	131	7.39	-.26									
Meth: 040.10 PCT			086											
<u>InDir Available Phos</u>			7.36											
<u>Grav Quim</u>			-.30											
090	6.88	.71	102	6.70	-.69									
Meth: 040.10 PCT			009											
<u>InDir Available Phos</u>			6.61											
<u>Grav Quim</u>			-.74											
090	6.88	.71	177	6.61	-.74									
Meth: 040.10 PCT			254											
<u>InDir Available Phos</u>			6.50											
<u>Grav Quim</u>			-.81											
090	6.88	.71	185	6.30	-.93									
Meth: 040.10 PCT			034											
<u>InDir Available Phos</u>			11.39											
<u>Grav Quim</u>			1.00											
090	6.88	.71	018	11.25	.90									
Meth: 040.10 PCT			037											
<u>InDir Available Phos</u>			10.94											
<u>Grav Quim</u>			.67											
090	6.88	.71	029	10.93	.67									
Meth: 040.10 PCT			007											
<u>InDir Available Phos</u>			6.62											
<u>Grav Quim</u>			-.97											
090	6.88	.71	009	6.62	-1.21									
Meth: 040.10 PCT			009											
<u>InDir Available Phos</u>			6.26											
<u>Grav Quim</u>			-1.21											
090	6.88	.71	368	6.21	-1.24									
Meth: 040.10 PCT			007											
<u>InDir Available Phos</u>			6.62											
<u>Grav Quim</u>			-.97											
090	6.88	.71	009	6.62	-1.21									
Meth: 040.10 PCT			009											
<u>InDir Available Phos</u>			6.26											
<u>Grav Quim</u>			-1.21											
090	6.88	.71	368	6.21	-1.24									
Meth: 040.10 PCT			009											
<u>InDir Available Phos</u>			6.26											
<u>Grav Quim</u>			-1.21											
090	6.88	.71	368	6.21	-1.24									
Meth: 040.10 PCT			009											
<u>InDir Available Phos</u>			6.26											
<u>Grav Quim</u>			-1.21											
090	6.88	.71	368	6.21	-1.24									

* 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: 048.50 PCT			Meth: 050.30 PCT			Meth: 050.51 PCT			Meth: 050.99 PCT			Meth: 050.XX PCT		
Water Soluble Phosph			Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash		
<u>ICP</u>			<u>AA (Oxalate)</u>			<u>ICP (Citrate)</u>			<u>Other</u>					
426	9.39	.71	136	6.38	.59	393	7.28	.70	177	7.75	.91	368	7.42	1.12
			040	6.10	.22	Avg	6.84		131	7.64	.81	450	7.40	1.11
			Avg	6.00		043	6.63	-.35	260	7.54	.72	402	7.39	1.08
Meth: 048.XX PCT			Meth: 050.31 PCT			Meth: 050.60 PCT			Meth: 050.99 PCT			Meth: 050.XX PCT		
Water Soluble Phosph			Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash		
<u>ICP</u>			<u>AA (Citrate)</u>			<u>Flame (Oxalate)</u>								
426	9.39	.87	030	5.38	.97	309	6.91	1.06	460	6.60	-.11	023	6.87	.47
Avg	4.86		Avg	5.22		105	6.57	.59	325	6.62 R	-.18	230	6.78 R	.43
420	0.33	-.87	254	5.07	-.75	Avg	6.14		072	6.36	-.35	262	6.74	.33
						406	5.96	-.25	230	5.40	-1.22	157	6.70 R	.33
			Meth: 050.50 PCT			Meth: 050.61 PCT			Meth: 050.99 PCT			Meth: 050.XX PCT		
			Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash		
			<u>ICP (Oxalate)</u>			<u>Flame (Citrate)</u>								
			420	7.49	.93	035	7.36 s	4.84	455	5.40	-1.23	029	6.70	.27
			422	7.48	.93	029	6.70	.94	322	5.18	-1.43	037	6.66	.93
			157	7.34	.77	037	6.66	.93	018	6.68	.77	018	6.68	.24
			292	7.07	.47	041	6.63	.44	027	5.07	-1.53	018	6.68	.24
			324	6.96	.35	Avg	6.55		444	4.56	-1.99	360	6.64	.20
			Avg	6.64		456	6.52	-.20	255	2.95 S	-3.45	041	6.63	.17
			390	6.20	-.50	034	6.54	-.35				043	6.63	.17
			354	6.01 R	-.74	095	6.49	-.37	Meth: 050.XX PCT			460	6.60	.14
			426	5.54	-1.22	131	6.19	-2.16	<u>Soluble Potash</u>			007	6.59	.13
			055	5.05	-1.76				247	8.56	2.49	291	6.58	.12
			Meth: 050.51 PCT			Meth: 050.99 PCT			389	7.77	1.54	105	6.57	.12
			Soluble Potash			Soluble Potash			177	7.75	1.52	034	6.54	.10
			<u>AA (Oxalate)</u>			<u>ICP (Citrate)</u>			432	7.68	1.43	456	6.52	.05
023	6.87	1.36	389	7.77	1.50	420	7.49	1.20	423	7.65	1.39	095	6.49	.01
262	6.74	1.16	432	7.68	1.35	451	7.49	1.20	131	7.64	1.39	Avg	6.48	
157	6.70	1.12	423	7.65	1.30	<u>Other</u>			260	7.54	1.27	377	6.46	-.02
						247	8.56	1.65	232	7.51	1.23	296	6.46	-.08
									420	7.49	1.20	136	6.38	-.13
									451	7.49	1.20	072	6.36	-.14
									422	7.48	1.20	114	6.31	-.21
									042	7.45	1.15	049	6.34	-.21

* 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: 060.00 PCT			Meth: 101.30 PCT			Meth: 101.XX PCT			Meth: 101.XX PCT		
<u>Soluble Potash</u>			<u>Free Water</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>		
055	6.28	-.31	<u>Vacuum Oven</u>			390	16.10	1.37	043	14.20	-1.37	043	14.20	-1.37
131	6.19	-.35	479	1.43	.72	354	15.21	-.09	420	16.00	1.22	042	14.00	-1.65
233	6.21	-.35	Avg	1.34		131	15.07	-.30	232	15.81	.95	351	14.00	-1.65
390	6.20	-.36	456	1.18	-1.21	433	14.92	-.52	040	15.63	.77	029	13.87	-1.86
090	6.16	-.38	Meth: 101.00 PCT			157	15.00	-.59	030	15.57	.75	090	13.60	-2.23
009	6.10	-.46	<u>Acid Soluble Calcium</u>			292	14.82	-.66	037	15.64	.74	426	12.40 A	-3.96
072	6.09	-.47	<u>AA</u>			432	14.77	-.75	023	15.61	.69	247	12.19 s	-4.26
040	6.10	-.47	040	15.63	1.20	095	14.75	-.76	423	15.60	.66	255	5.84 s	-13.37
022	6.10	-.47	055	15.49	.98	377	14.74	-.78	137	15.60	.64	Meth: 121.00 PCT		
009	6.09	-.48	177	15.40	.93	393	14.75	-.79	231	15.59	.63	<u>Acid Soluble Magnesi</u>		
231	6.07	-.49	296	15.22	.63	102	14.73	-.83	460	15.50	.58	<u>AA</u>		
368	6.07	-.49	Avg	14.80		368	14.67	-.89	177	15.40	.55	177	2.49	2.02
406	5.96	-.62	262	14.61	-.28	022	14.66	-.91	444	15.53	.54	309	2.40	.86
354	6.01 R	-.63	043	14.20	-.85	114	14.80 R	-1.06	450	15.50	.53	296	2.33	.35
043	5.96	-.63	351	14.00	-1.12	233	14.72 R	-1.07	055	15.49	.53	040	2.35	.29
351	5.81	-.80	029	13.87	-1.33	360	14.63 R	-1.48	389	15.50	.52	169	2.32	.22
073	5.79	-.83	Meth: 101.30 PCT			009	14.23	-1.55	307	15.32	.50	Avg	2.32	
234	5.70	-.93	<u>Acid Soluble Calcium</u>			090	13.60	-2.49	027	15.38	.33	262	2.31	-.23
211	5.58	-1.08	<u>ICP</u>			426	12.40 s	-4.28	296	15.22	.26	043	2.26	-.76
426	5.54	-1.14	479	19.95 s	7.00	247	12.19 s	-4.59	354	15.21	.09	029	2.22	-1.17
230	5.40	-1.29	035	16.60	2.00	255	5.84 s	-14.07	Avg	15.15		351	2.21	-1.20
455	5.40	-1.30	041	16.12	1.28	Meth: 101.99 PCT			131	15.07	-.15	Meth: 121.30 PCT		
030	5.38	-1.33	390	16.10	1.26	<u>Acid Soluble Calcium</u>			433	14.92	-.34	<u>Acid Soluble Magnesi</u>		
102	5.22	-1.51	420	16.00	1.11	<u>Other</u>			292	14.82	-.48	<u>ICP</u>		
322	5.18	-1.56	232	15.81	.83	030	15.57	.85	157	15.00	-.48	114	3.14 s	6.84
169	5.12	-1.63	037	15.64	.62	137	15.60	.77	432	14.77	-.57	479	3.02 s	5.83
185	5.10	-1.65	023	15.61	.56	460	15.50	.69	095	14.75	-.58	041	2.88 s	4.59
254	5.07	-1.69	423	15.60	.53	Avg	15.07		377	14.74	-.59	432	2.74 s	3.46
027	5.07	-1.69	231	15.59	.49	291	14.67	-.58	393	14.75	-.60	422	2.64	2.49
055	5.05	-1.71	307	15.32	.46	042	14.00	-1.54	102	14.73	-.65	049	2.63	2.40
254	4.85	-1.95	450	15.50	.40	Meth: 101.XX PCT			291	14.67	-.69	390	2.49	1.13
444	4.56	-2.30	444	15.53	.40	<u>Acid Soluble Calcium</u>			368	14.67	-.70	131	2.47	.96
255	2.95 s	-4.22	389	15.50	.38	479	19.95 s	6.89	291	14.67	-.71	027	2.46	.94
Meth: 060.00 PCT			027	15.38	.18	035	16.60	2.08	022	14.66	-.78	231	2.45	.76
<u>Free Water</u>			Avg	15.26		422	16.42	1.82	262	14.61	-.78	232	2.44	.73
<u>Vacuum Oven</u>						041	16.12	1.39	233	14.72 R	-.92	300	2.44	.71
007	1.40	.72							114	14.80 R	-.92			
									360	14.63 R	-1.32			
									009	14.23	-1.33			

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 121.30 PCT			Meth: 121.XX PCT			Meth: 121.XX PCT			Meth: 144.01 PCT			Meth: 144.99 PCT		
Acid Soluble Magnesi			Acid Soluble Magnesi			Acid Soluble Magnesi			Sulfur			Sulfur		
<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>Gravimetric</u>			<u>Other</u>		
291	2.44	.66	114	3.14 s	7.24	420	2.27	-.79	055	1.43	-1.76	450	1.41 R	-1.28
022	2.43	.65	479	3.02 s	6.18	043	2.26	-.90				022	1.26	-2.50
354	2.40	.34	041	2.88 s	4.89	157	2.26	-.90				255	0.73 s	-6.96
450	2.39	.31	432	2.74 s	3.71	233	2.29 R	-.91	Meth: 144.02 PCT					
360	2.38	.26	460	2.68 R	3.12	389	2.24	-1.06	Sulfur					
037	2.38	.18	422	2.64	2.69	029	2.22	-1.24	<u>Gravimetric</u>			Meth: 144.XX PCT		
Avg	2.36		049	2.63	2.60	351	2.21	-1.28	292	1.88	.71	<u>Sulfur</u>		
009	2.35	-.11	177	2.49	1.41	444	2.21	-1.29				377	2.99 s	12.35
393	2.35	-.20	390	2.49	1.27	102	2.20	-1.42	Meth: 144.99 PCT			292	1.88	2.71
433	2.34	-.20	131	2.47	1.10	307	2.18	-1.56	Sulfur			360	1.79	1.94
095	2.33	-.30	027	2.46	1.08	292	2.17	-1.65	<u>Other</u>			354	1.77	1.83
423	2.33	-.34	231	2.45	.89	042	1.94 A	-3.79	377	2.99 s	12.47	035	1.70	1.21
023	2.36	-.35	232	2.44	.85	247	1.65 s	-6.45	360	1.79	2.04	114	1.70	1.17
368	2.32	-.35	300	2.44	.84	255	1.01 s	-12.35	354	1.77	1.93	390	1.65	.80
324	2.32	-.36	291	2.44	.79				035	1.70	1.31	300	1.65	.75
377	2.30	-.58	022	2.43	.77	Meth: 131.30 PCT			390	1.65	.89	095	1.64	.72
035	2.30	-.58	354	2.40	.45	Water Soluble Magnes			300	1.65	.85	009	1.64	.70
055	2.30	-.59	309	2.40	.44	<u>ICP</u>			009	1.64	.80	023	1.63	.63
420	2.27	-.85	450	2.39	.40	090	2.21	1.29	023	1.63	.73	102	1.61	.52
233	2.29 R	-.93	023	2.36	.37	426	1.40	.50	102	1.61	.60	230	1.59	.43
157	2.26	-.95	360	2.38	.33	Avg	0.91		393	1.59	.38	296	1.60	.39
389	2.24	-1.10	037	2.38	.28	027	0.02	-.88	037	1.58	.31	393	1.59	.28
444	2.21	-1.32	393	2.35	.18	230	0.00	-.90	137	1.58	.28	037	1.58	.21
102	2.20	-1.44	009	2.35	.07				231	1.55	.09	029	1.58	.20
307	2.18	-1.58	Avg	2.35		Meth: 144.01 PCT			Avg	1.55		137	1.58	.18
292	2.17	-1.68	040	2.35	-.06	Sulfur			422	1.53	-.17	Avg	1.56	
247	1.65 s	-6.27	433	2.34	-.13	<u>Gravimetric</u>			247	1.52	-.23	043	1.56	-.05
255	1.01 s	-11.93	095	2.33	-.22	114	1.70	1.81	291	1.52	-.25	231	1.55	-.11
			423	2.33	-.27	095	1.64	1.11	368	1.51	-.29	262	1.54	-.18
			368	2.32	-.29	230	1.59	.67	232	1.51	-.37	422	1.53	-.26
			324	2.32	-.29	296	1.60	.61	426	1.50	-.38	324	1.53	-.31
			169	2.32	-.33	029	1.58	.32	423	1.50	-.45	247	1.52	-.33
			296	2.33	-.33	Avg	1.56		479	1.49	-.55	291	1.52	-.34
			262	2.31	-.43	043	1.56	-.07	389	1.48	-.62	368	1.51	-.39
			035	2.30	-.50	262	1.54	-.26	049	1.44	-.93	233	1.51	-.41
			377	2.30	-.50	324	1.53	-.47	307	1.42	-1.10	232	1.51	-.45
			055	2.30	-.53	233	1.51	-.61	027	1.41	-1.18	426	1.50	-.48
			137	2.29	-.55	105	1.47	-1.14	444	1.41	-1.18	423	1.50	-.55

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
<u>Meth: 144.XX PCT Sulfur</u>			<u>Meth: 151.XX PPM Arsenic</u>			<u>Meth: 165.99 PCT Acid Soluble Boron Other</u>			<u>Meth: 165.XX PCT Acid Soluble Boron</u>			<u>Meth: 181.XX PPM Cadmium</u>		
479	1.49	-.64	233	19.32	1.50	114	0.010	-.16	009	1.16	1.99	009	1.16	1.99
389	1.48	-.72	368	18.89	1.02	300	0.012	.52	423	0.010	-.20	232	0.87	1.06
105	1.47	-.76	049	18.81	1.01	324	0.012	.52	232	0.009	-.43	300	0.65	.39
049	1.44	-1.03	300	18.60	.82	Avg	0.011		230	0.009	-.48	102	0.54	.08
055	1.43	-1.16	037	17.92	.42	137	0.010	-.23	296	0.008	-1.00	Avg	0.52	
307	1.42	-1.20	450	17.50	.35	389	0.010	-.23	255	0.007	-1.20	230	0.51	-.05
027	1.41	-1.27	009	17.40	.03	432	0.010	-.23	422	0.006	-1.69	231	0.46	-.18
444	1.41	-1.27	Avg	17.38		291	0.010	-.23	393	0.003	-2.68	136	0.50	-.31
450	1.41 R	-1.37	231	16.95	-.38	114	0.010	-.23	<u>Meth: 171.99 PCT Water Soluble Boron Other</u>			368	0.30	-.71
022	1.26	-2.60	136	16.40	-.66	423	0.010	-.28	426	0.011	.87	450	0.15	-1.19
255	0.73 s	-7.05	230	16.25	-.76	232	0.009	-.58	Avg	0.007		393	0.02	-1.49
<u>Meth: 151.00 PPM Arsenic Atomic Absorption</u>			247	16.00	-1.15	230	0.009	-.64	<u>Meth: 190.00 PCT Water Soluble Chlori Titrimetric</u>			105	2.42	.87
136	16.40	.71	102	14.51	-1.93	296	0.008	-1.29	027	0.002	-.87	Avg	1.22	
<u>Meth: 151.30 PPM Arsenic ICP</u>			232	14.75 R	-2.02	255	0.007	-1.55	<u>Meth: 181.00 PPM Cadmium Atomic Absorption</u>			422	0.01	-.87
233	19.32	1.31	393	4.41 s	-8.74	422	0.006	-2.16	136	0.50	.71	<u>Meth: 191.30 PPM Chromium ICP</u>		
368	18.89	.92	<u>Meth: 165.00 PCT Acid Soluble Boron Spectrometric</u>			055	0.225 s	79.44	<u>Meth: 181.30 PPM Cadmium ICP</u>			450	459.50	1.43
049	18.81	.91	055	0.225 s	45.08	354	0.030 s	7.24	009	1.16	1.75	035	423.50	1.06
300	18.60	.75	029	0.016	1.12	368	0.016 s	2.50	232	0.87	.92	009	407.60	.90
037	17.92	.41	023	0.012	.30	029	0.016	1.88	300	0.65	.33	368	386.50	.69
450	17.50	.31	037	0.011	.12	043	0.014 R	1.46	102	0.54	.05	300	344.50	.26
009	17.40	.08	Avg	0.010		009	0.013	1.07	Avg	0.52		037	329.27	.14
Avg	17.27		393	0.003	-1.46	042	0.013	1.02	230	0.51	-.06	Avg	318.65	
230	16.25	-.57	<u>Meth: 165.99 PCT Acid Soluble Boron Other</u>			049	0.013	.96	368	0.30	-.65	102	272.66	-.51
247	16.00	-.91	354	0.030 s	9.13	090	0.013	.95	450	0.15	-1.09	232	263.55	-.56
102	14.51	-1.56	368	0.016 s	3.14	433	0.013	.84	393	0.02	-1.36	027	255.03	-.64
232	14.75	-1.64	043	0.014 R	1.83	360	0.013	.78	<u>Meth: 181.99 PPM Cadmium Other</u>			230	254.50	-.66
393	4.41 s	-7.26	009	0.013	1.33	300	0.012	.43	231	0.46	.71	393	108.55	-2.13
<u>Meth: 151.99 PPM Arsenic Other</u>			042	0.013	1.26	324	0.012	.43						
231	16.95	.71	049	0.013	1.19	023	0.012	.43						
			090	0.013	1.17	037	0.011	.19						
			433	0.013	1.03	Avg	0.010							
			360	0.013	.97	137	0.010	-.16						
						389	0.010	-.16						
						432	0.010	-.16						
						291	0.010	-.16						

* 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: 191.99 PPM Chromium			Meth: 202.30 PPM Acid Soluble Cobalt			Meth: 221.00 PCT Acid Soluble Copper			Meth: 221.30 PCT Acid Soluble Copper			Meth: 221.XX PCT Acid Soluble Copper		
<u>Other</u>			<u>ICP</u>			<u>Atomic Absorption</u>			<u>ICP</u>			<u>Avg</u>		
231	67.65	.71	232	94.80	-.90	460	0.1135	-.86	433	0.1065	-1.39	354	0.1160	-.03
			102	87.02	-.99	296	0.1130	-.88	422	0.1050 R	-1.78	022	0.1155	-.11
Meth: 191.XX PPM Chromium			393 65.80 -1.24			029 0.1125 -1.46			041 0.1020 R -2.19			009 0.1150 -.20		
450	459.50	1.37	Meth: 202.99 PPM Acid Soluble Cobalt			Meth: 221.30 PCT Acid Soluble Copper			426 0.0760 s -5.97			233 0.1142 -.27		
035	423.50	1.07	<u>Other</u>			<u>ICP</u>			255 0.0427 s -10.92			460 0.1135 -.39		
009	407.60	.93	231	19.63	-.71	432	0.1850 s	10.99	393 0.0336 s -12.29			296 0.1130 -.40		
368	386.50	.75	Meth: 202.XX PPM Acid Soluble Cobalt			423 0.1280 1.83			Meth: 221.99 PCT Acid Soluble Copper			027 0.1130 -.42		
300	344.50	.40	<u>Avg</u>			247 0.1257 1.48			Other			377 0.1136 -.44		
037	329.27	.28	450	336.00 R	2.10	390 0.1255 1.47			114 0.1300 1.17			029 0.1125 -.64		
Avg	297.73		009	272.85	1.36	450 0.1240 1.36			231 0.1200 .45			102 0.1135 R -.66		
102	272.66	-.28	136	270.50	1.33	037 0.1235 1.17			Avg 0.1138			420 0.1110 -.70		
232	263.55	-.30	035	266.50	1.28	049 0.1200 .63			137 0.1100 -.27			389 0.1100 -.77		
027	255.03	-.36	233	240.70	.98	368 0.1197 .59			042 0.0950 -1.36			137 0.1100 -.77		
230	254.50	-.38	368	222.00	.77	230 0.1180 .33			291 0.0950 R -1.40			292 0.1100 -.77		
393	108.55	-1.60	422	200.00	.50	360 0.1170 .23			Meth: 221.XX PCT Acid Soluble Copper			479 0.1100 -.77		
231	67.65	-1.95	037	167.86	.13	354 0.1160 .03			432 0.1850 s 9.12			231 0.1100 -.77		
Meth: 202.00 PPM Acid Soluble Cobalt			Avg 157.79			Avg 0.1158			177 0.1390 2.84			402 0.1090 -.90		
<u>AA</u>			022	108.72	-.58	022 0.1155 -.09			300 0.1300 1.72			035 0.1085 -.96		
136	270.50	.71	230	97.85	-.71	009 0.1150 -.20			114 0.1300 1.72			232 0.1085 -.98		
Meth: 202.30 PPM Acid Soluble Cobalt			049	94.86	-.74	233 0.1142 -.26			423 0.1280 1.47			090 0.1095 R -1.01		
<u>ICP</u>			232	94.80	-.74	023 0.1130 -.44			247 0.1257 1.18			433 0.1065 -1.21		
450	336.00	1.88	102	87.02	-.83	027 0.1130 -.44			390 0.1255 1.17			422 0.1050 R -1.53		
009	272.85	1.15	393	65.80	-1.08	377 0.1136 -.49			450 0.1240 1.09			041 0.1020 R -1.88		
035	266.50	1.07	231	19.63	-1.63	095 0.1115 -.65			037 0.1235 .93			042 0.0950 -2.65		
233	240.70	.77	Meth: 221.00 PCT Acid Soluble Copper			420 0.1110 -.78			049 0.1200 .47			291 0.0950 R -2.72		
368	222.00	.58	<u>Atomic Absorption</u>			292 0.1100 -.87			055 0.1200 .47			426 0.0760 s -5.03		
422	200.00	.31	177	0.1390 s	6.81	231 0.1100 -.87			231 0.1200 .47			255 0.0427 s -9.16		
Avg	173.46		055	0.1200	1.19	479 0.1100 -.87			368 0.1197 .44			393 0.0336 s -10.30		
037	167.86	-.08	043	0.1180	.84	389 0.1100 -.87			043 0.1180 .33			Meth: 241.00 PCT Acid Soluble Iron		
022	108.72	-.75	351	0.1185	.75	402 0.1090 -1.02			351 0.1185 .29			<u>Atomic Absorption</u>		
230	97.85	-.87	040	0.1164	.40	035 0.1085 -1.09			230 0.1180 .22			351 0.99 1.90		
049	94.86	-.90	Avg	0.1160		232 0.1085 -1.11			040 0.1164 .16			040 0.84 .25		
						090 0.1095 R -1.16			360 0.1170 .16			460 0.83 .08		

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 241.00 PCT			Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 241.XX PCT			Meth: 251.XX PPM		
Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron			Lead		
<u>Atomic Absorption</u>			<u>ICP</u>			<u>ICP</u>			<u>Atomic Absorption</u>					
Avg	0.82		402	0.71	-.64	157	0.83	.75	426	0.21 s	-6.61	450	52.00	.71
296	0.79	-.36	114	0.70	-.72	460	0.83	.74	393	0.20 s	-6.66	049	51.02	.64
043	0.75	-.80	423	0.69	-.84	324	0.82	.69				231	49.13	.19
262	0.73	-1.02	230	0.67	-1.11	233	0.81	.64	Meth: 251.00 PPM			Avg	48.81	
029	0.73 R	-1.07	023	0.65	-1.28	131	0.80	.50	Lead			233	48.78	-.06
			292	0.65	-1.39	389	0.80	.46	<u>Atomic Absorption</u>			035	47.55	-.31
			090	0.63	-1.54	095	0.80	.41	136	69.50 S	.00	368	47.25	-.38
Meth: 241.30 PCT			090			296			Meth: 251.30 PPM			300		
Acid Soluble Iron			232			368			Lead			230		
<u>ICP</u>			420			300			<u>ICP</u>			102		
479	1.06 R	3.72	247	0.60	-1.95	041	0.77	.16	247	58.00	1.98	232	47.70	-.62
055	0.93	2.05	255	0.29 s	-5.80	Avg	0.76		009	52.97	.86	027	37.87	-2.32
037	0.87	1.32	426	0.21 s	-6.75	444	0.76	-.03	037	51.91	.79	393	15.72 s	-7.01
035	0.86	1.23	393	0.20 s	-6.80	102	0.76	-.11	450	52.00	.69	Meth: 261.00 PCT		
049	0.86	1.21				231	0.75	-.15	049	51.02	.62	Acid Soluble Manganese		
422	0.84	1.03	Meth: 241.99 PCT			043	0.75	-.15	Avg	48.78		<u>AA</u>		
354	0.84	.99	Acid Soluble Iron			022	0.73	-.38	233	48.78	-.06	460	0.156	1.66
450	0.84	.98	<u>Other</u>			262	0.73	-.39	035	47.55	-.29	177	0.150	.55
360	0.83	.86	137	0.72	.71	377	0.73	-.41	368	47.25	-.36	Avg	0.147	
027	0.83	.83	291	0.71	.60	433	0.73	-.43	300	46.55	-.47	040	0.147	-.05
157	0.83	.82	042	0.67	.30	009	0.73	-.44	230	46.55	-.52	351	0.146	-.28
324	0.82	.76	Avg	0.63		307	0.72	-.50	102	46.00	-.57	029	0.145	-.49
233	0.81	.71	030	0.44	-1.60	137	0.72	-.51	232	47.70	-.59	043	0.145 R	-1.10
131	0.80	.57	Meth: 241.XX PCT			029	0.73 R	-.52	027	37.87	-2.23	296	0.140	-1.46
389	0.80	.52	Acid Soluble Iron			402	0.71	-.68	393	15.72 s	-6.75	262	0.120 s	-5.45
095	0.80	.47	479	1.06 R	3.56	291	0.71	-.71	Meth: 251.99 PPM			Meth: 261.30 PCT		
368	0.78	.28	351	0.99	2.69	114	0.70	-.75	Lead			Acid Soluble Manganese		
300	0.78	.26	055	0.93	1.94	423	0.69	-.86	<u>Other</u>			<u>ICP</u>		
041	0.77	.21	037	0.87	1.23	042	0.67	-1.10	231	49.13	.71	432	0.145 R	1.80
102	0.76	.12	035	0.86	1.14	230	0.67	-1.13	390	0.156	1.75	423	0.155	1.59
444	0.76	.02	049	0.86	1.13	023	0.65	-1.30	Meth: 251.XX PPM			041		
Avg	0.76		422	0.84	.95	292	0.65	-1.40	Lead			055		
231	0.75	-.10	040	0.84	.93	090	0.63	-1.55	136	69.50 s	4.39	422	0.150	1.07
022	0.73	-.34	354	0.84	.91	232	0.63	-1.57	247	58.00	2.05	247	0.149	.90
377	0.73	-.37	450	0.84	.90	420	0.61	-1.87	009	52.97	.89	354	0.149	.90
433	0.73	-.39	360	0.83	.79	247	0.60	-1.94	037	51.91	.81			
009	0.73	-.40	027	0.83	.75	030	0.44 A	-3.85						
307	0.72	-.47				255	0.29 s	-5.69						

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 261.30 PCT			Meth: 261.99 PCT			Meth: 261.XX PCT			Meth: 281.99 PPM			Meth: 289.XX PPM		
Acid Soluble Manganese			Acid Soluble Manganese			Acid Soluble Manganese			Mercury			Molybdenum		
<u>ICP</u>			<u>Other</u>			<u>ICP</u>			<u>Other</u>			<u>ICP</u>		
450	0.148	.79	137	0.150	.46	300	0.140	-.21	296	0.02	.71	049	47.54	1.75
389	0.145	.76	037	0.149	.35	231	0.140	-.21				450	37.00	.83
023	0.144 R	.71	Avg	0.146		296	0.140	-.24				009	35.64	.71
102	0.146	.56	291	0.140	-1.47	360	0.141	-.32	Meth: 281.XX PPM			247	35.00	.65
009	0.145	.53	255	0.059 S	-10.92	233	0.139	-.34	<u>Mercury</u>			433	33.57	.53
377	0.145	.48				131	0.139	-.38	393	0.45	1.29	368	32.90	.47
049	0.144	.37	Meth: 261.XX PCT			368	0.140	-.39	Avg	0.17		300	32.40	.43
022	0.143	.27	<u>Acid Soluble Manganese</u>			402	0.137	-.55	230	0.03	-.62	035	31.75	.37
420	0.143	.22	432	0.145 R	1.72	035	0.135	-.83	296	0.02	-.67	230	30.70	.28
Avg	0.141		390	0.156	1.58	090	0.137 R	-.87	Meth: 289.30 PPM			232	30.70	.28
292	0.140	-.08	460	0.156	1.53	027	0.134	-.91	Molybdenum			233	29.84	.22
300	0.140	-.08	423	0.155	1.41	291	0.140 R	-1.14	<u>ICP</u>			102	29.07	.18
231	0.140	-.08	041	0.153	1.29	114	0.130	-1.33	049	47.54	1.70	037	28.37	.08
095	0.140	-.08	324	0.150	.94	444	0.129	-1.45	450	37.00	.78	Avg	27.58	
233	0.139	-.21	422	0.150	.91	433	0.129	-1.50	009	35.64	.65	027	26.34	-.11
131	0.139	-.26	177	0.150	.91	307	0.128	-1.55	247	35.00	.59	422	25.00 R	-.49
360	0.141	-.29	055	0.150	.91	230	0.127	-1.67	433	33.57	.47	231	15.26	-1.08
368	0.140	-.36	137	0.150	.91	262	0.120	-2.45	368	32.90	.41	255	10.82	-1.47
402	0.137	-.42	037	0.149	.81	232	0.119	-2.52	300	32.40	.36	393	9.50	-1.59
035	0.135	-.71	354	0.149	.74	255	0.059 s	-9.34	035	31.75	.31	114	0.00	-2.42
027	0.134	-.80	247	0.149	.74	Meth: 271.30 PCT			230	30.70	.22	Meth: 291.00 PPM		
090	0.137 R	-.81	389	0.145	.66	Water Soluble Mangan			232	30.70	.21	Nickel		
114	0.130	-1.23	043	0.145	.66	<u>ICP</u>			233	29.84	.16	<u>Atomic Absorption</u>		
444	0.129	-1.35	023	0.144	.64	426	0.109	.71	102	29.07	.14	136	189.50	.71
433	0.129	-1.40	450	0.148	.63	Meth: 281.00 PPM			037	28.37	.05	Meth: 291.30 PPM		
307	0.128	-1.46	040	0.147	.57	Mercury			Avg	28.30		Nickel		
230	0.127	-1.58	351	0.146	.45	<u>Atomic Absorption</u>			027	26.34	-.17	<u>ICP</u>		
232	0.119	-2.45	102	0.146	.41	230	0.03	.71	422	25.00 R	-.53	009	190.85	1.54
			009	0.145	.38	Meth: 281.30 PPM			255	10.82	-1.55	450	189.00	1.44
			029	0.145	.37	Mercury			393	9.50	-1.66	368	177.95	.83
			377	0.145	.33	<u>ICP</u>			114	0.00	-2.51	233	174.85	.66
			049	0.144	.25	393	0.45	.71	Meth: 289.99 PPM			247	164.00	.12
			022	0.143	.18	Meth: 289.99 PPM			Molybdenum			049	163.84	.06
			420	0.143	.09	<u>Other</u>			Avg			300	155.00	-.45
			Avg	0.142		231			15.26	-.71	035	151.50	-.63	
			095	0.140	-.21									
			292	0.140	-.21									

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 291.30 PPM Nickel			Meth: 301.99 PPM Selenium			Meth: 311.XX PCT Sodium			Meth: 321.30 PCT Acid Soluble Zinc			Meth: 321.XX PCT Acid Soluble Zinc		
<u>ICP</u>			<u>Other</u>			<u>ICP</u>			<u>ICP</u>					
037	147.16	-.88	231	4.57	.85	423	1.49	-.18	090	0.104	.23	432	0.140 s	4.72
102	148.96 R	-.97	Avg	4.12		035	1.49	-.18	360	0.104	.23	114	0.120	2.22
230	140.00	-1.29	296	3.66	-.88	232	1.47	-.37	233	0.103	.08	460	0.116	1.83
232	138.15	-1.37	Meth: 301.XX PPM Selenium			102	1.44	-.99	Avg	0.102		049	0.116	1.69
393	41.56 s	-6.66	231	4.57	.91	307	1.41	-1.46	247	0.102	-.04	009	0.115	1.64
Meth: 291.99 PPM Nickel			450	4.00	.43	105	1.13 s	-6.39	420	0.100	-.30	423	0.114	1.42
<u>Other</u>			230	3.92	.36	Meth: 321.00 PCT Acid Soluble Zinc			292	0.100	-.30	390	0.113	1.32
231	46.46 S	.00	296	3.66	.19	<u>Atomic Absorption</u>			300	0.100	-.30	231	0.110	.97
Meth: 291.XX PPM Nickel			Avg	3.49		460	0.116	2.04	055	0.100	-.30	450	0.109	.90
009	190.85	1.37	393	1.31	-1.82	177	0.108	.86	479	0.100	-.30	041	0.107	.86
136	189.50	1.28	Meth: 311.30 PCT Sodium			296	0.103	.43	231	0.100	-.30	037	0.109	.78
450	189.00	1.27	<u>Flame Photometric</u>			040	0.105	.35	035	0.100	-.37	177	0.108	.75
368	177.95	.68	105	1.13 S	.00	Avg	0.102		023	0.101	-.41	389	0.105	.71
233	174.85	.52	Meth: 311.99 PCT Sodium			029	0.100	-.28	022	0.097	-.74	354	0.108	.66
Avg	165.15		<u>Other</u>			043	0.100	-.28	377	0.102 R	-.75	324	0.107	.62
049	163.84	-.08	422	1.59	1.71	351	0.098	-.59	433	0.094	-1.05	296	0.103	.39
247	164.00	-.12	009	1.55	1.09	169	0.094	-1.16	102	0.097 R	-1.10	095	0.105	.34
300	155.00	-.55	300	1.50	.27	262	0.095	-1.19	422	0.095	-1.11	040	0.105	.29
035	151.50	-.72	Meth: 321.30 PCT Acid Soluble Zinc			Meth: 321.30 PCT Acid Soluble Zinc			232	0.092	-1.26	360	0.104	.25
037	147.16	-.96	<u>ICP</u>			<u>ICP</u>			291	0.100 R	-1.28	090	0.104	.25
102	148.96 R	-1.03	432	0.140 s	4.65	Meth: 321.99 PCT Acid Soluble Zinc			307	0.091	-1.42	233	0.103	.09
230	140.00	-1.35	114	0.120	2.18	<u>Other</u>			230	0.090	-1.55	Avg	0.102	-.02
232	138.15	-1.43	049	0.116	1.65				444	0.090	-1.61	247	0.102	-.02
231	46.46 s	-6.26	009	0.115	1.60				027	0.088	-1.80	300	0.100	-.28
393	41.56 s	-6.52	423	1.49	-.18				255	0.034 s	-8.48	420	0.100	-.28
Meth: 301.30 PPM Selenium			035	1.49	-.18				Meth: 321.99 PCT Acid Soluble Zinc			231	0.100	-.28
<u>ICP</u>			232	1.47	-.37				<u>Other</u>			043	0.100	-.28
450	4.00	.68	102	1.44	-.99							292	0.100	-.28
230	3.92	.62	307	1.41	-1.46							479	0.100	-.28
Avg	3.07		Meth: 311.XX PCT Sodium									029	0.100	-.28
393	1.31	-1.29	422	1.59	1.71							131	0.100	-.31
			009	1.55	1.09							035	0.100	-.35
			300	1.50	.27							023	0.101	-.41
			Avg	1.49								351	0.098	-.56
												022	0.097	-.72
												377	0.102 R	-.75

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Laboratory Averages & Accuracy Indexes

<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>
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Meth: 321.XX PCT

<u>Acid Soluble Zinc</u>		
433	0.094	-1.04
169	0.094	-1.09
102	0.097 R	-1.10
422	0.095	-1.10
262	0.095	-1.10
232	0.092	-1.25
291	0.100 R	-1.28
307	0.091	-1.41
042	0.090	-1.53
230	0.090	-1.54
444	0.090	-1.60
027	0.088	-1.79
255	0.034 s	-8.54

Meth: 325.30 PCT

<u>Water Soluble Zinc</u>		
<u>ICP</u>		
393	0.103	.86
Avg	0.094	
426	0.086	-.88

Meth: 325.99 PCT

<u>Water Soluble Zinc</u>		
<u>Other</u>		
450	0.109	.88
Avg	0.094	
137	0.080	-.85

Meth: 325.XX PCT

<u>Water Soluble Zinc</u>		
450	0.109	1.14
393	0.103	.68
Avg	0.094	
426	0.086	-.68
137	0.080	-1.12

* 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
010.60	14	0.58	2.23	0.45	121.XX	51	0.04	2.77	0.28
010.99	3	0.00	1.12	0.03	131.30	4	0.00	1.08	0.04
010.XX	18	0.41	1.71	0.32	131.XX	4	0.00	1.08	0.04
020.10	9	1.14	3.55	0.17	144.01	11	0.00	0.99	0.24
020.20	14	- 0.15	1.12	0.28	144.99	29	0.14	2.85	0.34
020.40	7	- 0.05	0.96	0.22	144.XX	41	0.09	2.44	0.29
020.50	16	- 1.39	3.61	0.33	151.30	12	- 0.61	2.28	0.36
020.99	4	- 6.10	8.15	0.10	151.XX	14	- 0.75	2.51	0.40
020.XX	46	- 0.85	4.38	0.30	165.00	5	9.015	20.180	0.124
030.50	2	0.00	1.22	0.02	165.99	22	0.592	2.197	0.527
030.XX	4	0.00	1.08	0.02	165.XX	27	3.326	15.306	0.388
040.99	2	0.00	1.22	0.10	171.99	2	0.000	1.225	0.013
040.XX	4	0.00	1.08	0.02	171.XX	2	0.000	1.225	0.013
041.10	12	0.18	1.15	0.13	181.30	8	0.00	1.01	0.20
041.20	2	0.00	0.69	0.72	181.XX	10	0.00	1.00	0.22
041.40	3	0.00	1.12	0.03	190.00	2	0.00	1.22	0.01
041.50	13	- 0.04	0.99	0.12	190.XX	2	0.00	1.22	0.01
041.60	13	0.00	1.02	0.08	191.30	11	0.00	1.02	0.09
041.99	2	0.00	0.74	0.69	191.XX	12	0.00	1.02	0.07
041.XX	37	0.03	1.00	0.14	202.30	13	0.00	1.02	0.08
048.XX	2	0.00	1.22	0.01	202.XX	15	0.14	1.12	0.08
050.00	13	0.00	1.00	0.19	221.00	8	0.8518	2.5455	0.4709
050.30	11	0.00	1.02	0.13	221.30	35	- 0.679	3.5558	0.6999
050.31	2	0.00	1.06	0.44	221.99	5	- 0.271	1.1141	0.1648
050.50	9	- 0.08	0.99	0.11	221.XX	47	- 0.483	2.6673	0.5266
050.51	11	0.00	1.02	0.07	241.00	7	- 0.15	1.03	0.14
050.60	4	0.00	1.08	0.04	241.30	40	- 0.39	2.08	0.12
050.61	9	0.54	1.86	0.28	241.99	4	0.00	1.07	0.10
050.99	22	- 0.14	1.20	0.05	241.XX	51	- 0.39	1.92	0.13
050.XX	73	- 0.02	1.08	0.22	251.30	14	- 0.48	2.03	0.30
060.00	3	0.00	1.05	0.31	251.XX	16	- 0.16	2.31	0.31
060.XX	3	0.00	1.05	0.31	261.00	8	- 0.737	2.102	0.370
101.00	8	0.00	1.00	0.24	261.30	35	0.011	0.955	0.373
101.30	36	- 0.51	2.96	0.30	261.99	4	- 2.731	5.490	0.626
101.99	5	0.00	1.03	0.24	261.XX	48	- 0.203	1.646	0.365
101.XX	49	- 0.34	2.48	0.28	281.XX	3	0.000	1.118	0.026
121.00	9	0.00	0.98	0.30	289.30	18	- 0.02	0.99	0.11
121.30	39	0.05	2.92	0.26	289.XX	19	- 0.01	0.99	0.11
121.99	3	0.00	1.10	0.14	291.30	13	- 0.57	2.06	0.21

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
291.XX	15	- 0.91	2.41	0.19					
301.30	3	0.00	1.12	0.03					
301.99	2	0.00	1.17	0.25					
301.XX	5	0.00	1.06	0.08					
311.99	8	0.00	1.00	0.25					
311.XX	9	- 0.70	2.31	0.37					
321.00	9	0.000	0.956	0.364					
321.30	39	- 0.125	1.813	0.358					
321.99	2	0.000	1.225	0.000					
321.XX	49	- 0.105	1.681	0.364					
325.30	2	0.000	1.204	0.160					
325.99	2	0.000	1.207	0.148					
325.XX	3	- 0.370	0.936	0.103					