

MAGRUDER - Fertilizer Check Sample No. - 200605 Grade 5-3-3 Cert. Org.

- Pass 1 Results for 70 Labs - - Pass 2 Results for 70 Labs -

Method	AOAC Ref.	Method Code	No. of Labs	Grand Avq.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avq.	Std. Dev.	Average Range of Dups
Ammoniacal Nitrogen, MgO Distillation .	920.03	001.10	2	0.86	0.10	0.03	2	0.86	0.10	0.03
Ammoniacal Nitrogen, Other		001.99	2	1.08	0.07	0.01	2	1.08	0.07	0.01
Method Group 001.XX PCT			4	0.97	0.15	0.02	4	0.97	0.15	0.02
Water Insoluble Nitrogen, Meth I	945.01	003.10	4	2.76	0.85	0.20	4	2.76	0.85	0.20
Water Insoluble Nitrogen, Other		003.99	1	0.33	0.01	0.02	1	0.33	0.01	0.02
Method Group 003.XX PCT			5	2.28	1.27	0.16	4	1.91	1.13	0.06
Nitrogen From Urea, Urease (as N)	959.03	005.00	1	0.20	0.00	0.00	1	0.20	0.00	0.00
Nitrogen From Urea, Other		005.99	1	3.70	0.00	0.00	1	3.70	0.00	0.00
Method Group 005.XX PCT			2	1.95	2.02	0.00	2	1.95	2.02	0.00
Total Nitrogen, Reduced Iron		010.10	1	5.44	0.02	0.03	1	5.44	0.02	0.03
Total Nitrogen, Modified Comprehensive	978.02	010.11	5	5.39	0.16	0.03	5	5.39	0.16	0.03
Total Nitrogen, Salicylic	955.04D	010.12	2	5.40	0.06	0.01	2	5.40	0.06	0.01
Total Nitrogen, Combustion		010.60	45	5.51	0.13	0.06	43	5.52	0.11	0.05
Total Nitrogen, Other		010.99	6	5.50	0.16	0.13	6	5.50	0.16	0.13
Method Group 010.XX PCT			59	5.49	0.14	0.06	56	5.49	0.13	0.05
Total Phosphate, Grav Quimociac	962.02	020.10	4	4.52	0.52	0.04	4	4.52	0.52	0.04
Total Phosphate, Spectrometric	958.01	020.20	15	4.55	0.60	0.09	14	4.56	0.62	0.07
Total Phosphate, Automated	978.01	020.40	3	5.07	0.32	0.22	3	5.07	0.32	0.22
Total Phosphate, ICP		020.50	6	5.60	0.33	0.13	5	5.72	0.18	0.05
Total Phosphate, Other		020.99	2	5.11	0.30	0.24	2	5.11	0.30	0.24
Method Group 020.XX PCT			30	4.85	0.65	0.12	27	4.85	0.68	0.07
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	1	0.44	0.00	0.00	1	0.44	0.00	0.00
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.17	0.01	0.02	1	0.17	0.01	0.02
Insoluble Phosphate, Automated	978.01	030.40	1	0.83	0.04	0.06	1	0.83	0.04	0.06
Insoluble Phosphate, Other		030.99	1	0.49	0.10	0.14	1	0.49	0.10	0.14
Method Group 030.XX PCT			4	0.48	0.25	0.06	4	0.48	0.25	0.06
InDir Available Phosphate, Grav Quim ..	960.02	040.10	1	3.83	0.05	0.07	1	3.83	0.05	0.07
InDir Available Phosphate, Automated ..	960.02	040.40	1	3.97	0.00	0.00	1	3.97	0.00	0.00
InDir Available Phosphate, Other		040.99	2	4.76	0.36	0.20	2	4.76	0.36	0.20
Method Group 040.XX PCT			4	4.33	0.52	0.12	4	4.33	0.52	0.12
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	13	4.00	0.31	0.06	12	4.01	0.31	0.05
Dir Available Phosphate, Spectrometric	960.03D	041.20	2	4.21	0.58	0.38	2	4.21	0.58	0.38
Dir Available Phosphate, Automated	978.01	041.40	5	4.08	0.74	0.06	5	4.08	0.74	0.06
Dir Available Phosphate, ICP		041.50	10	5.09	0.25	0.10	10	5.09	0.25	0.10
Dir Available Phosphate, EDTA Extract .	993.01	041.60	7	4.61	0.39	0.07	7	4.61	0.39	0.07
Dir Available Phosphate, Other		041.99	2	4.94	0.48	0.19	2	4.94	0.48	0.19
Method Group 041.XX PCT			40	4.42	0.64	0.09	37	4.43	0.66	0.07
Water Soluble Phosphate, Spectrometric	970.01	048.20	1	1.22	0.01	0.01	1	1.22	0.01	0.01
Water Soluble Phosphate, Other		048.99	1	1.24	0.07	0.10	1	1.24	0.07	0.10

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Method	AOAC Ref.	Method Code	No. of Labs	Grand Avq.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avq.	Std. Dev.	Average Range of Dups
Method Group 048.XX PCT			2	1.23	0.04	0.06	2	1.23	0.04	0.06
Soluble Potash, STPB Oxalate	958.02	050.00	10	3.04	0.26	0.11	10	3.04	0.26	0.11
Soluble Potash, STPB Citrate	969.04	050.10	1	3.12	0.01	0.01	1	3.12	0.01	0.01
Soluble Potash, AA (Oxalate)		050.30	9	3.12	0.22	0.09	9	3.12	0.22	0.09
Soluble Potash, AA (Citrate)		050.31	2	3.05	0.42	0.06	2	3.05	0.42	0.06
Soluble Potash, ICP (Oxalate)		050.50	4	3.30	0.10	0.01	4	3.30	0.10	0.01
Soluble Potash, ICP (Citrate)		050.51	8	3.22	0.27	0.06	8	3.22	0.27	0.06
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	7	3.10	0.26	0.02	7	3.10	0.26	0.02
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	8	3.14	0.17	0.09	8	3.14	0.17	0.09
Soluble Potash, Other		050.99	12	3.22	0.21	0.08	11	3.21	0.20	0.04
Method Group 050.XX PCT			62	3.16	0.25	0.08	57	3.15	0.24	0.05
Free Water, Vacuum Oven	965.08B	060.00	2	5.10	0.54	0.16	2	5.10	0.54	0.16
Free Water, Other		060.99	1	5.71	0.58	0.82	1	5.71	0.58	0.82
Method Group 060.XX PCT			3	5.30	0.58	0.38	3	5.30	0.58	0.38
Acid Soluble Calcium, AA	945.04	101.00	11	10.78	0.75	0.16	11	10.78	0.75	0.16
Acid Soluble Calcium, ICP		101.30	26	11.29	0.60	0.20	24	11.30	0.60	0.14
Acid Soluble Calcium, Other		101.99	1	9.50	0.07	0.10	1	9.50	0.07	0.10
Method Group 101.XX PCT			39	11.16	0.80	0.19	37	11.16	0.82	0.14
Acid Soluble Magnesium, AA	984.01	121.00	12	0.64	0.05	0.03	11	0.65	0.05	0.02
Acid Soluble Magnesium, ICP		121.30	25	0.66	0.04	0.01	24	0.66	0.04	0.01
Method Group 121.XX PCT			37	0.65	0.04	0.02	35	0.65	0.04	0.01
Water Soluble Magnesium, AA		131.00	2	0.29	0.05	0.03	2	0.29	0.05	0.03
Water Soluble Magnesium, ICP		131.30	4	0.16	0.07	0.03	4	0.16	0.07	0.03
Method Group 131.XX PCT			6	0.20	0.09	0.03	6	0.20	0.09	0.03
Sulfur, Spectrometric		144.70	1	0.77	0.03	0.04	1	0.77	0.03	0.04
Sulfur, Other		144.99	9	0.66	0.08	0.01	9	0.66	0.08	0.01
Method Group 144.XX PCT			10	0.67	0.09	0.01	10	0.67	0.09	0.01
Arsenic, Atomic Absorption		151.00	1	0.20	0.00	0.00	1	0.20	0.00	0.00
Arsenic, ICP		151.30	2	0.33	0.16	0.04	2	0.33	0.16	0.04
Arsenic, Other		151.99	2	0.32	0.06	0.08	2	0.32	0.06	0.08
Method Group 151.XX PPM			5	0.30	0.11	0.05	5	0.30	0.11	0.05
Acid Soluble Boron, Spectrometric	982.01	165.00	1	0.024	0.009	0.013	1	0.024	0.009	0.013
Acid Soluble Boron, Other		165.99	7	0.004	0.002	0.000	6	0.004	0.002	0.000
Method Group 165.XX PCT			8	0.006	0.007	0.002	7	0.004	0.002	0.000
Cadmium, ICP		181.30	4	0.24	0.18	0.05	4	0.24	0.18	0.05
Cadmium, Other		181.99	1	0.40	0.14	0.20	1	0.40	0.14	0.20
Method Group 181.XX PPM			5	0.27	0.18	0.08	5	0.27	0.18	0.08
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	2	1.18	0.35	0.02	2	1.18	0.35	0.02
Water Soluble Chlorine, Other		190.99	2	1.07	0.22	0.03	2	1.07	0.22	0.03

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Method Group 190.XX PCT			4	1.12	0.28	0.02	4	1.12	0.28	0.02
Chromium, Atomic Absorption		191.00	1	13.00	0.00	0.00	1	13.00	0.00	0.00
Chromium, ICP		191.30	8	11.62	1.21	0.82	8	11.62	1.21	0.82
Chromium, Other		191.99	1	12.95	1.63	2.30	1	12.95	1.63	2.30
Method Group 191.XX PPM			10	11.89	1.26	0.89	10	11.89	1.26	0.89
Acid Soluble Cobalt, ICP	965.11	202.30	8	2.55	0.74	0.22	8	2.55	0.74	0.22
Method Group 202.XX PPM			8	2.55	0.74	0.22	8	2.55	0.74	0.22
Acid Soluble Copper, Atomic Absorption	975.01	221.00	6	0.0042	0.0015	0.0008	6	0.0042	0.0015	0.0008
Acid Soluble Copper, ICP		221.30	12	0.0041	0.0009	0.0006	11	0.0039	0.0006	0.0003
Acid Soluble Copper, Other		221.99	2	0.0041	0.0007	0.0007	2	0.0041	0.0007	0.0007
Method Group 221.XX PCT			20	0.0041	0.0010	0.0006	18	0.0039	0.0008	0.0004
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	11	0.10	0.02	0.01	11	0.10	0.02	0.01
Acid Soluble Iron, ICP		241.30	23	0.08	0.02	0.00	20	0.08	0.02	0.00
Method Group 241.XX PCT			34	0.09	0.02	0.01	31	0.09	0.02	0.00
Lead, Atomic Absorption		251.00	1	6.55	0.78	1.10	1	6.55	0.78	1.10
Lead, ICP		251.30	6	4.11	2.62	0.76	6	4.11	2.62	0.76
Lead, Other		251.99	1	7.93	1.80	2.54	1	7.93	1.80	2.54
Method Group 251.XX PPM			8	4.89	2.72	1.02	8	4.89	2.72	1.02
Acid Soluble Manganese, AA	972.02a	261.00	1	0.035	0.000	0.000	1	0.035	0.000	0.000
Acid Soluble Manganese, ICP	972.02a	261.30	11	0.035	0.002	0.001	11	0.035	0.002	0.001
Acid Soluble Manganese, ICP	972.02b	261.31	1	0.037	0.000	0.000	1	0.037	0.000	0.000
Acid Soluble Manganese, Other		261.99	2	0.039	0.002	0.001	2	0.039	0.002	0.001
Method Group 261.XX PCT			16	0.036	0.003	0.001	16	0.036	0.003	0.001
Mercury, Other		281.99	1	0.07	0.00	0.00	1	0.07	0.00	0.00
Molybdenum, Atomic Absorption		289.00	1	5.30	0.14	0.20	1	5.30	0.14	0.20
Molybdenum, ICP		289.30	8	3.96	0.60	0.46	8	3.96	0.60	0.46
Molybdenum, Other		289.99	1	6.16	0.34	0.48	1	6.16	0.34	0.48
Method Group 289.XX PPM			10	4.32	0.92	0.44	10	4.32	0.92	0.44
Nickel, Atomic Absorption		291.00	1	8.75	0.21	0.30	1	8.75	0.21	0.30
Nickel, ICP		291.30	7	9.49	1.98	0.52	6	9.07	1.76	0.27
Nickel, Other		291.99	1	9.97	1.75	2.47	1	9.97	1.75	2.47
Method Group 291.XX PPM			9	9.46	1.81	0.71	8	9.40	1.86	0.49
Selenium, ICP		301.30	2	1.14	0.24	0.22	2	1.14	0.24	0.22
Sodium, Other		311.99	7	0.51	0.03	0.01	7	0.51	0.03	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	8	0.042	0.007	0.004	7	0.042	0.007	0.002
Acid Soluble Zinc, ICP		321.30	18	0.039	0.005	0.002	17	0.039	0.005	0.001
Acid Soluble Zinc, Other		321.99	1	0.041	0.002	0.003	1	0.041	0.002	0.003
Method Group 321.XX PCT			27	0.040	0.006	0.003	24	0.040	0.006	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: 003.XX PCT			Meth: 010.12 PCT			Meth: 010.60 PCT			Meth: 010.XX PCT		
<u>Ammoniacal Nitrogen</u>			<u>Water Insoluble Nitr</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
<u>MgO Distillation</u>			251 2.54 .56			<u>Salicylic</u>			<u>Combustion</u>			390 5.92 s 3.34		
220	0.95	.86	Avg	1.91		351	5.46	.86	231	5.49	-.30	325	5.86	2.86
Avg	0.86		029	1.63	-.25	Avg	5.40		024	5.49	-.30	415	5.73 R	2.07
288	0.77	-.88	247	0.33	-1.40	185	5.35	-.87	232	5.48	-.32	157	5.72	1.81
Meth: 001.99 PCT			Meth: 005.00 PCT			Meth: 010.60 PCT			422 5.47 -.47			262 5.70 1.64		
<u>Ammoniacal Nitrogen</u>			<u>Nitrogen From Urea</u>			<u>Total Nitrogen</u>			072 5.51 -.67			402 5.55 R 1.32		
<u>Other</u>			<u>Urease (as N)</u>			<u>Combustion</u>			330 5.45 -.74			247 5.64 1.13		
409	1.15	.87	288	0.20	.00	369	6.38 s	7.58	018	5.43	-.82	406	5.62	.98
Avg	1.08		Meth: 005.99 PCT			390	5.92 s	3.54	095	5.43	-.83	037	5.60	.91
096	1.02	-.86	<u>Nitrogen From Urea</u>			325	5.86	3.00	043	5.44	-.93	234	5.60	.89
Meth: 001.XX PCT			<u>Other</u>			157	5.72	1.80	009	5.40	-1.02	230	5.60	.83
<u>Ammoniacal Nitrogen</u>			309 3.70 .00			096	5.71	1.66	055	5.39	-1.19	106	5.57	.67
409	1.15	1.20	Meth: 005.XX PCT			262	5.70	1.62	102	5.47 R	-1.38	025	5.57	.63
096	1.02	.34	<u>Nitrogen From Urea</u>			247	5.64	1.03	324	5.36	-1.45	086	5.57	.61
Avg	0.97		309 3.70 .87			406	5.62	.86	361	5.36	-1.45	072	5.51	.59
220	0.95	-.18	Avg	1.95		037	5.60	.80	233	5.32	-1.72	070	5.55	.48
288	0.77	-1.38	288	0.20	-.87	234	5.60	.78	428	5.23	-2.54	040	5.55	.45
Meth: 003.10 PCT			Meth: 010.10 PCT			230	5.60	.68	034	5.15 A	-3.25	162	5.52	.44
<u>Water Insoluble Nitr</u>			<u>Total Nitrogen</u>			106	5.57	.52	023	5.09 s	-3.79	131	5.54	.41
<u>Meth I</u>			<u>Reduced Iron</u>			025	5.57	.46	027	4.63 s	-7.78	360	5.54	.41
230	3.76	1.21	220	5.44	-.71	086	5.57	.43	Meth: 010.99 PCT			177	5.52	.39
372	3.13	.43	Meth: 010.11 PCT			162	5.52	.40	<u>Total Nitrogen</u>			029	5.54	.38
Avg	2.76		<u>Total Nitrogen</u>			177	5.52	.35	<u>Other</u>			291	5.53 X	.36
251	2.54	-.27	<u>Modified Comprehensi</u>			070	5.55	.32	354 5.93 S 2.65			288	5.53	.33
029	1.63	-1.33	288 5.53 .91			040	5.55	.27	415 5.73 1.59			041	5.53	.33
Meth: 003.99 PCT			029 5.45 .38			131	5.54	.26	402 5.55 1.03			136	5.53	.31
<u>Water Insoluble Nitr</u>			416 5.44 .32			360	5.54	.21	377 5.51 .14			028	5.52	.26
<u>Other</u>			090 5.43 .29			291	5.53 X	.20	Avg 5.50			377	5.51	.23
247	0.33	.71	Avg 5.39			029	5.54	.20	409 5.49 -.29			389	5.51	.19
Meth: 003.XX PCT			309 5.10 -1.83			136	5.53	.14	072 5.43 -.50			231	5.49	.15
<u>Water Insoluble Nitr</u>			322 4.39 S -6.34			041	5.53	.13	372 5.30 -1.25			024	5.49	.15
230	3.76 R	1.66	Meth: 010.XX PCT			028	5.52	.09	Meth: 010.XX PCT			251	5.50	.09
372	3.13	1.08	<u>Total Nitrogen</u>			Avg	5.52		<u>Total Nitrogen</u>			007	5.50	.09
* X	Excluded from lab performance		251 5.50 -.16			389	5.51	-.11	369 6.38 s 6.88			292	5.50	.07
			007 5.50 -.16			251	5.50	-.16	354 5.93 s 3.42			Avg	5.49	
			292 5.50 -.21			007	5.50	-.16	035 5.48			232	5.48	-.12
			S/s=Screened Outlier			292	5.50	-.21	A=Analysis beyond 3-s limits			035	5.48	-.22

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 010.XX PCT			Meth: 020.20 PCT			Meth: 020.99 PCT			Meth: 020.XX PCT			Meth: 040.40 PCT		
<u>Total Nitrogen</u>			<u>Spectrometric</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>InDir Available Phos Automated</u>		
422	5.47	-.23	397	25.38 s	33.77	402	5.34	.82	309	3.50	-1.98	096	3.97	.00
351	5.46	-.25	324	6.00	2.34	Avg	5.11		Meth: 030.10 PCT			Meth: 040.99 PCT		
409	5.49	-.35	262	5.40	1.38	409	4.88	-.91	<u>Insoluble Phosphate</u>			<u>InDir Available Phos</u>		
029	5.45	-.35	406	4.83	.44	Meth: 020.XX PCT			<u>Grav Quimociac</u>			<u>Other</u>		
220	5.44	-.42	428	4.74	.29	<u>Total Phosphate</u>			090	0.44	.00	247	5.05	.81
416	5.44	-.42	288	4.67	.18	397	25.38 s	30.24	Meth: 030.20 PCT			Avg	4.76	
330	5.45	-.48	231	4.67	.18	324	6.00	1.70	<u>Insoluble Phosphate</u>			409	4.47	-.92
095	5.43	-.50	Avg	4.56		390	5.90	1.55	<u>Spectrometric</u>			Meth: 040.XX PCT		
018	5.43	-.50	177	4.49	-.12	361	5.88	1.52	220	0.17	.71	<u>InDir Available Phos</u>		
090	5.43	-.52	234	4.55	-.18	330	5.73	1.29	Meth: 030.40 PCT			247	5.05	1.39
072	5.43	-.55	292	4.40	-.25	422	5.66	1.20	<u>Insoluble Phosphate</u>			409	4.47	.41
043	5.44	-.64	416	4.39	-.28	389	5.44	.87	<u>Automated</u>			Avg	4.33	
009	5.40	-.66	220	4.39	-.30	262	5.40	.83	096	0.83	-.71	096	3.97	-.69
055	5.39	-.81	369	4.53 R	-.37	247	5.38	.79	Meth: 030.99 PCT			090	3.83	-.97
361	5.36	-1.04	232	4.10	-.74	136	5.36	.76	<u>Insoluble Phosphate</u>			Meth: 041.10 PCT		
324	5.36	-1.04	200	3.69	-1.41	402	5.34	.74	<u>Other</u>			<u>Dir Available Phosph</u>		
185	5.35	-1.10	Meth: 020.40 PCT			035	5.04 R	.50	409 0.49 .71			<u>Grav Quimociac</u>		
102	5.47 R	-1.16	<u>Total Phosphate</u>			432	5.03 R	.47	Meth: 030.XX PCT			254	4.67	2.09
233	5.32	-1.27	<u>Automated</u>			409	4.88	.23	<u>Insoluble Phosphate</u>			185	4.27	.83
372	5.30	-1.48	247	5.38	.97	Avg	4.85		096 0.83 1.37			233	4.19	.57
428	5.23	-1.99	Avg	5.07		406	4.83	-.03	409 0.49 .28			055	4.16	.49
034	5.15	-2.62	096	4.80	-.86	096	4.80	-.08	Avg 0.48			072	4.12	.33
309	5.10	-2.98	035	5.04	-.90	428	4.74	-.16	090 0.44 -.17			102	4.10	.29
023	5.09 s	-3.09	Meth: 020.50 PCT			288	4.67	-.26	220 0.17 -1.23			041	4.05	.26
027	4.63 s	-6.59	<u>Total Phosphate</u>			231	4.67	-.27	Meth: 040.10 PCT			Avg	4.01	
322	4.39 s	-8.41	<u>ICP</u>			234	4.55	-.47	<u>InDir Available Phos</u>			131	3.95	-.19
Meth: 020.10 PCT			Meth: 020.10 PCT			177	4.49	-.53	<u>Grav Quim</u>			029	3.83 R	-.68
<u>Total Phosphate</u>			<u>Total Phosphate</u>			369	4.53 R	-.58	090 3.83 -.71			260	3.74	-.89
<u>Grav Quimociac</u>			<u>ICP</u>			292	4.40	-.66	Meth: 040.10 PCT			009	3.72	-.92
136	5.36	1.62	390	5.90	1.03	416	4.39	-.68	<u>InDir Available Phos</u>			040	3.70	-.99
Avg	4.52		361	5.88	.88	220	4.39	-.68	090 3.83 -.71			322	3.47	-1.72
090	4.27	-.48	330	5.73	.14	090	4.27	-.86						
157	4.22	-.57	Avg	5.72		157	4.22	-.92						
095	4.22	-.57	422	5.66	-.33	095	4.22	-.93						
			389	5.44	-1.59	232	4.10	-1.10						
			432	5.03 R	-4.16	200	3.69	-1.71						

* 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: 041.20 PCT			Meth: 041.60 PCT			Meth: 041.XX PCT			Meth: 050.00 PCT			Meth: 050.31 PCT		
<u>Dir Available Phosph Spectrometric</u>			<u>Dir Available Phosph EDTA Extract</u>			<u>Dir Available Phosph</u>			<u>Soluble Potash STPB Oxalate</u>			<u>Soluble Potash AA (Citrate)</u>		
415	7.67 S	5.99	288	4.76	.37	037	4.40	-.07	102	4.63 s	6.12	Avg	3.05	
372	4.68	.89	Avg	4.61		025	4.33	-.16	230	3.48	1.76	095	2.70	-.87
Avg	4.21		037	4.40	-.56	233	4.19	-.37	043	3.18	.82	Meth: 050.50 PCT		
262	3.75	-.84	024	4.18	-1.11	024	4.18	-.39	220	3.20	.75	<u>ICP (Oxalate)</u>		
Meth: 041.40 PCT			Meth: 041.99 PCT			055			416			354		
<u>Dir Available Phosph Automated</u>			<u>Dir Available Phosph Other</u>			043			231			292		
072	4.67	.79	377	5.33	.83	072	4.12	-.48	Avg	3.04	.08	Avg	3.30	
029	4.62	.71	Avg	4.94		102	4.10	-.51	055	2.98	-.26	324	3.30	-.05
025	4.33	.32	230	4.54	-.90	131	4.08	-.54	372	2.93	-.44	422	3.28	-.25
Avg	4.09		Meth: 041.XX PCT			131	3.95	-.73	090	2.65	-1.51	106	3.19	-1.15
131	4.08	-.01	<u>Dir Available Phosph</u>			029	3.83	-.94	029	2.65	-1.52	Meth: 050.51 PCT		
027	2.74	-1.81	415	7.67 s	4.94	260	3.74	-1.06	Meth: 050.10 PCT			<u>Soluble Potash ICP (Citrate)</u>		
Meth: 041.50 PCT			023	5.38	1.45	009	3.72	-1.09	<u>Soluble Potash STPB Citrate</u>			070		
<u>Dir Available Phosph ICP</u>			377	5.33	1.37	040	3.70	-1.12	322			023		
023	5.38	1.20	361	5.33	1.37	322	3.47	-1.47	322			389		
361	5.33	.95	106	5.26	1.27	070	3.04	-2.12	Meth: 050.30 PCT			Avg		
007	5.26	.66	007	5.26	1.26	027	2.74	-2.58	<u>Soluble Potash AA (Oxalate)</u>			361		
251	5.15	.61	325	5.22	1.20	Meth: 048.20 PCT			136			007		
325	5.22	.49	291	5.18 X	1.14	<u>Water Soluble Phosph Spectrometric</u>			086			009		
291	5.18 X	.35	251	5.15	1.12	096			369			251		
043	5.11	.05	043	5.11	1.03	Meth: 048.99 PCT			040			043		
Avg	5.09		009	4.89	.70	<u>Water Soluble Phosph Other</u>			157			291		
009	4.89	-.89	351	4.84	.62	409			Avg			Meth: 050.60 PCT		
354	4.83	-1.11	354	4.83	.62	Meth: 048.XX PCT			351			<u>Soluble Potash Flame (Oxalate)</u>		
360	4.60	-1.99	372	4.68 R	.51	<u>Water Soluble Phosph</u>			234			415		
070	3.04 s	-8.26	288	4.76	.50	409			185			200		
Meth: 041.60 PCT			018	4.75	.49	Meth: 048.99 PCT			428			288		
<u>Dir Available Phosph EDTA Extract</u>			072	4.67	.38	<u>Water Soluble Phosph Other</u>			262			Avg		
106	5.26	1.66	254	4.67	.37	409			212 s			406		
351	4.84	.58	230	4.54 R	.29	Avg			Meth: 050.31 PCT			131		
018	4.75	.38	029	4.62	.29	096			<u>Soluble Potash AA (Citrate)</u>			055		
* X=Excluded from lab performance			360	4.60	.27	Meth: 048.XX PCT			254			2.86		
			Avg	4.43		<u>Water Soluble Phosph</u>			3.41			.86		
						409			2.12 s			-4.61		
						Avg			Meth: 050.31 PCT			406		
						096			<u>Soluble Potash AA (Citrate)</u>			131		
						Meth: 048.99 PCT			254			3.00		
						<u>Water Soluble Phosph Other</u>			3.41			-.41		
						409			2.12 s			-.93		
						Avg			Meth: 050.31 PCT			055		
						096			<u>Soluble Potash AA (Citrate)</u>			2.86		
						Meth: 048.XX PCT			254			.86		
						<u>Water Soluble Phosph</u>			3.41			-4.61		
						409			2.12 s			-4.61		
						Avg			Meth: 050.31 PCT			406		
						096			<u>Soluble Potash AA (Citrate)</u>			131		
						Meth: 048.99 PCT			254			3.00		
						<u>Water Soluble Phosph Other</u>			3.41			-.41		
						409			2.12 s			-.93		
						Avg			Meth: 050.31 PCT			055		
						096			<u>Soluble Potash AA (Citrate)</u>			2.86		
						Meth: 048.XX PCT			254			.86		
						<u>Water Soluble Phosph</u>			3.41			-4.61		
						409			2.12 s			-4.61		
						Avg			Meth: 050.31 PCT			406		
						096			<u>Soluble Potash AA (Citrate)</u>			131		
						Meth: 048.99 PCT			254			3.00		
						<u>Water Soluble Phosph Other</u>			3.41			-.41		
						409			2.12 s			-.93		
						Avg			Meth: 050.31 PCT			055		
						096			<u>Soluble Potash AA (Citrate)</u>			2.86		
						Meth: 048.XX PCT			254			.86		
						<u>Water Soluble Phosph</u>			3.41			-4.61		
						409			2.12 s			-4.61		
						Avg			Meth: 050.31 PCT			406		
						096			<u>Soluble Potash AA (Citrate)</u>			131		
						Meth: 048.99 PCT			254			3.00		
						<u>Water Soluble Phosph Other</u>			3.41			-.41		
						409			2.12 s			-.93		
						Avg			Meth: 050.31 PCT			055		
						096			<u>Soluble Potash AA (Citrate)</u>			2.86		

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: 050.60 PCT			Meth: 050.XX PCT			Meth: 050.XX PCT			Meth: 060.99 PCT			Meth: 101.30 PCT		
Soluble Potash			<u>Soluble Potash</u>			<u>Soluble Potash</u>			Free Water			Acid Soluble Calcium		
<u>Flame (Oxalate)</u>									<u>Other</u>			<u>ICP</u>		
309	2.80	-1.16	023	3.85	2.96	416	3.12	-.17	409	5.71	.71	288	11.65	.58
			354	3.76 R	2.71	406	3.09	-.24				102	11.61	.52
			402	3.72	2.41	360	3.09	-.26				354	11.60	.51
Meth: 050.61 PCT			415	3.61	1.96	231	3.06	-.36	Meth: 060.XX PCT			106	11.57	.44
Soluble Potash			432	3.41 R	1.54	157	3.14	-.38	<u>Free Water</u>			324	11.57	.43
<u>Flame (Citrate)</u>			230	3.48	1.50	351	3.04	-.43	409	5.71	.99	291	11.51 X	.34
037	3.39	1.60	292	3.45	1.29	028	3.04	-.47	096	5.55	.42	027	11.43	.21
018	3.28	.75	037	3.39 R	1.17	043	3.04	-.47	Avg	5.30		360	11.39	.17
024	3.21	.38	136	3.41	1.12	251	3.08	-.50	007	4.65	-1.16	Avg	11.30	
025	3.19	.27	254	3.41	1.12	131	3.00	-.64	Meth: 101.00 PCT			389	11.20	-.17
041	3.19	.27	086	3.37	1.03	055	2.98	-.73	Acid Soluble Calcium			009	11.15	-.32
Avg	3.14		043	3.18 R	.71	377	2.97	-.76	<u>AA</u>			251	11.12	-.32
028	3.04	-.63	389	3.31	.70	234	2.99	-.76	177	11.63	1.13	233	11.17	-.37
029	2.92	-1.34	369	3.31	.68	027	2.95	-.82	220	11.60	1.10	023	11.07	-.45
035	2.95	-1.38	324	3.30	.65	372	2.93	-.93	028	11.20	.58	037	11.05	-.46
			177	3.28	.58	291	2.93 X	-.94	043	11.21	.57	390	11.10	-.47
Meth: 050.99 PCT			422	3.28	.57	029	2.92	-.99	040	11.03	.38	231	10.87	-.72
Soluble Potash			018	3.28	.55	035	2.95 R	-1.02	029	10.99	.28	432	10.94 R	-1.05
<u>Other</u>			072	3.26	.55	055	2.86	-1.20	086	10.85	.11	433	10.58	-1.22
402	3.72	2.54	220	3.20	.52	185	2.85	-1.26	Avg	10.78		232	10.03	-2.11
432	3.41 R	1.61	232	3.25	.45	309	2.80	-1.46	055	10.56	-.30	247	9.77	-2.55
072	3.26	.40	390	3.23	.44	428	2.80	-1.46	397	10.68	-.37	065	7.94 s	-5.97
177	3.28	.39	040	3.22	.31	095	2.70	-1.92	351	9.67	-1.48			
390	3.23	.32	361	3.22	.30	090	2.65	-2.11	Meth: 101.99 PCT			Acid Soluble Calcium		
232	3.25	.24	024	3.21	.27	029	2.65	-2.12	Other					
Avg	3.21		007	3.20	.25	409	2.48 s	-3.02	157	6.95 S	-5.14	409	15.86 S	90.01
260	3.20	-.06	260	3.20	.21	262	2.12 s	-4.40	262	4.43 s	-8.50	200	9.50	.71
397	3.18	-.17	041	3.19	.19	Meth: 060.00 PCT			Meth: 101.30 PCT			Avg		
325	3.16	-.23	025	3.19	.19	Free Water			Acid Soluble Calcium					
360	3.09	-.60	106	3.19	.19	<u>Vacuum Oven</u>			<u>ICP</u>					
377	2.97	-1.21	200	3.19	.18	096	5.55	.84	035	13.40 s	3.48	Meth: 101.XX PCT		
027	2.95	-1.28	288	3.16	.15	Avg	5.10		372	12.55	2.07	<u>Acid Soluble Calcium</u>		
409	2.48 s	-3.87	397	3.18	.14	007	4.65	-.89	422	12.23	1.54	409	15.86 s	5.77
			009	3.16	.11	Meth: 050.XX PCT			041	11.80	.82	035	13.40	2.75
			325	3.16	.06	<u>Soluble Potash</u>			230	11.35 R	.75	372	12.55	1.71
			Avg	3.15		070	5.62 s	10.44	330	11.71	.67	422	12.23	1.32
			009	3.13	-.08	102	4.63 s	6.28	131	11.60	.59	041	11.80	.79
			322	3.12	-.13	* X=Excluded from lab performance			S/s=Screened Outlier			R=Duplicate Range too large		
			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: 101.XX PCT			Meth: 101.XX PCT			Meth: 121.30 PCT			Meth: 121.XX PCT			Meth: 131.00 PCT		
<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>			<u>Water Soluble Magnes</u>		
330	11.71	.68	262	4.43 s	-8.26	ICP			028	0.69	.92	AA		
288	11.65	.61				035	0.65	-.13	029	0.67	.82	220	0.26	-.98
230	11.35 R	.60	Meth: 121.00 PCT			291	0.66 X	-.14	231	0.69	.79	Meth: 131.30 PCT		
131	11.60	.60	<u>Acid Soluble Magnesi</u>			009	0.65	-.16	177	0.67	.48	<u>Water Soluble Magnes</u>		
177	11.63	.58	AA			131	0.65	-.17	037	0.67	.42	ICP		
102	11.61	.56	086	0.71	1.29	390	0.65	-.26	043	0.67	.40	230	0.24	1.16
354	11.60	.55	220	0.70	.94	106	0.64	-.43	041	0.67	.40	291	0.21 X	.65
220	11.60	.55	028	0.69	.84	372	0.64	-.70	288	0.67	.30	Avg	0.16	
106	11.57	.51	029	0.67	.71	324	0.63	-.70	360	0.67	.30	027	0.12	-.51
324	11.57	.50	177	0.67	.46	230	0.63	-.76	233	0.66	.17	432	0.07	-1.21
291	11.51 X	.44	043	0.67	.40	232	0.61	-1.20	095	0.66	.15	Meth: 131.XX PCT		
027	11.43	.33	095	0.66	.19	433	0.61	-1.20	291	0.66 X	.13	<u>Water Soluble Magnes</u>		
360	11.39	.30	Avg	0.65		065	0.60	-1.62	Avg	0.65		029	0.33	1.36
233	11.17	.22	040	0.65	-.19	354	0.58	-2.18	035	0.65	-.10	220	0.26	.70
028	11.20	.13	351	0.60	-1.08	Meth: 121.70 PCT			009	0.65	-.12	230	0.24	.52
043	11.21	.09	200	0.59	-1.43	<u>Acid Soluble Magnesi</u>			131	0.65	-.13	291	0.21 X	.06
389	11.20	.05	055	0.57	-1.76	<u>Titrimetric</u>			390	0.65	-.21	Avg	0.20	
Avg	11.16		262	0.57 R	-2.01	415	0.36 S	.00	040	0.65	-.26	027	0.12	-.90
251	11.12	-.09	157	0.41 s	-5.10	Meth: 121.99 PCT			106	0.64	-.35	432	0.07	-1.45
009	11.15	-.13	Meth: 121.30 PCT			<u>Acid Soluble Magnesi</u>			324	0.63	-.60	Meth: 144.01 PCT		
037	11.05	-.19	<u>Acid Soluble Magnesi</u>			Other			372	0.64	-.61	Sulfur		
023	11.07	-.20	330	1.09 s	11.87	409	1.08 S	.00	230	0.63	-.65	<u>Gravimetric</u>		
029	10.99	-.20	422	0.90 s	6.84	Meth: 121.XX PCT			232	0.61	-1.06	055 25.02 S .00		
040	11.03	-.22	027	0.73	2.02	<u>Acid Soluble Magnesi</u>			433	0.61	-1.06	Sulfur		
390	11.10	-.25	251	0.71	1.43	330	1.09 s	10.85	351	0.60	-1.36	065 25.02 S .00		
231	10.87	-.35	432	0.69 R	1.27	409	1.08 s	10.74	065	0.60	-1.44	Meth: 144.70 PCT		
086	10.85	-.38	389	0.70	1.23	422	0.90 s	6.27	354	0.58	-1.95	Sulfur		
397	10.68	-.67	023	0.70	1.16	027	0.73	1.88	055	0.57	-2.17	<u>Spectrometric</u>		
432	10.94 R	-.69	102	0.69	1.05	086	0.71	1.46	262	0.57 R	-2.46	292 0.77 .71		
433	10.58	-.72	231	0.69	.83	251	0.71	1.34	157	0.41 s	-6.15	Meth: 144.99 PCT		
055	10.56	-.74	037	0.67	.43	432	0.69 R	1.18	415	0.36 s	-7.45	Sulfur		
232	10.03	-1.38	041	0.67	.40	389	0.70	1.16	Meth: 131.00 PCT			Other		
247	9.77	-1.70	360	0.67	.30	023	0.70	1.10	<u>Water Soluble Magnes</u>			102 0.81 X 1.77		
351	9.67	-1.82	288	0.67	.30	220	0.70	1.04	AA			009 0.75 1.03		
200	9.50	-2.03	233	0.66	.17	102	0.69	1.00	029 0.33 .73			220 0.71 .57		
095	9.17	-2.44	Avg	0.66		Meth: 121.30 PCT			Avg 0.29			A=Analysis beyond 3-s limits		
065	7.94 s	-4.24	Meth: 121.30 PCT			<u>Acid Soluble Magnesi</u>			Meth: 121.30 PCT					
157	6.95 s	-5.17	AA			ICP			Meth: 121.30 PCT					
* 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: 144.99 PCT			Meth: 151.99 PPM			Meth: 165.XX PCT			Meth: 190.99 PCT			Meth: 191.XX PPM				
<u>Sulfur</u>			<u>Arsenic</u>			<u>Acid Soluble Boron</u>			<u>Water Soluble Chlori</u>			<u>Chromium</u>				
<u>Other</u>			<u>Other</u>			422	0.006	1.03	<u>Other</u>			035	13.60	1.37		
035	0.67	.10	409	0.35	1.01	106	0.004	.12	288	1.26	.87	409	12.95	1.24		
422	0.67	.03	Avg	0.32		288	0.004	.12	Avg	1.07		220	13.00	.88		
Avg	0.66		220	0.29	-.69	Avg	0.004		009	0.88	-.86	037	12.35	.76		
389	0.66	-.11	Meth: 151.XX PPM			409	0.003	-.68	Meth: 190.XX PCT			324	12.40	.47		
232	0.59	-.84	<u>Arsenic</u>			232	0.002	-.90	<u>Water Soluble Chlori</u>			Avg	11.89			
390	0.56	-1.23	065	0.47 X	1.56	009	0.002	-1.24	422	1.49	1.30	102	11.72	-.18		
409	0.56	-1.31	409	0.35	.63	Meth: 181.30 PPM			288	1.26	.48	106	11.50	-.50		
Meth: 144.XX PCT			Avg	0.30		<u>Cadmium</u>			Avg	1.12		232	10.60	-1.03		
<u>Sulfur</u>			220	0.29	-.26	<u>ICP</u>			009	0.88	-.88	247	10.50	-1.17		
055	25.02 s	286.43	136	0.20	-.90	035	0.46	1.23	102	0.87	-.89	009	10.30	-1.35		
102	0.81 X	1.60	096	0.20	-.90	102	0.28	.23	Meth: 191.00 PPM			065	5.76 s	-4.86		
292	0.77	1.16	Meth: 165.00 PCT			Avg	0.24		<u>Chromium</u>			Meth: 202.30 PPM				
009	0.75	.88	<u>Acid Soluble Boron</u>			065	0.23 X	-.23	<u>Atomic Absorption</u>			<u>Acid Soluble Cobalt</u>				
220	0.71	.43	<u>Spectrometric</u>			324	0.00	-1.37	220	13.00	.00	<u>ICP</u>				
Avg	0.67		055	4.160 S	449.99	Meth: 181.99 PPM			035	13.60	1.66	009	3.50	1.29		
035	0.67	-.09	220	0.024 X	.71	<u>Cadmium</u>			037	12.35	.93	037	3.34	1.12		
422	0.67	-.10	Avg	0.024		<u>Other</u>			324	12.40	.69	035	3.20	.89		
389	0.66	-.23	Meth: 165.99 PCT			409	0.40	-.71	035	13.60	1.66	324	2.80	.37		
232	0.59	-.94	<u>Acid Soluble Boron</u>			Meth: 181.XX PPM			ICP			Avg	2.55			
390	0.56	-1.32	<u>Other</u>			<u>Cadmium</u>			035	13.60	1.66	232	2.25	-.41		
409	0.56	-1.40	433	0.007	1.81	035	0.46	1.06	037	12.35	.93	106	1.80	-1.01		
Meth: 151.00 PPM			422	0.006 R	1.21	409	0.40	.92	324	12.40	.69	102	1.75	-1.07		
<u>Arsenic</u>			106	0.004	.29	102	0.28	.09	102	11.72	.14	230	1.74	-1.14		
<u>Atomic Absorption</u>			288	0.004	.29	Avg	0.27		Avg	11.62		Meth: 202.99 PPM				
136	0.20	.00	Avg	0.004		065	0.23 X	-.32	106	11.50	-.43	<u>Acid Soluble Cobalt</u>				
Meth: 151.30 PPM			409	0.003	-.53	324	0.00	-1.56	232	10.60	-.85	<u>Other</u>				
<u>Arsenic</u>			232	0.002	-.75	Meth: 190.00 PCT			247	10.50	-1.02	409			4.45 S	.00
<u>ICP</u>			009	0.002	-1.10	<u>Water Soluble Chlori</u>			009	10.30	-1.20	Meth: 202.XX PPM				
065	0.47 X	.89	Meth: 165.XX PCT			<u>Titrimetric</u>			065	5.76 s	-4.86	<u>Acid Soluble Cobalt</u>				
Avg	0.33		<u>Acid Soluble Boron</u>			422	1.49	.87	Meth: 191.99 PPM			409	4.45 s	3.68		
096	0.20	-.84	055	4.160 s	2415.14	Avg	1.18		<u>Chromium</u>			009	3.50	1.29		
* X=Excluded from lab performance			220	0.024 R	12.05	102	0.87	-.87	<u>Other</u>			037	3.34	1.12		
S/s=Screened Outlier			433	0.007	1.61	Meth: 191.99 PPM			409			12.95	.71	035	3.20	.89
R=Duplicate Range too large			A=Analysis beyond 3-s limits			<u>Chromium</u>			324			2.80	.37			

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 202.XX PPM			Meth: 221.99 PCT			Meth: 241.00 PCT			Meth: 241.30 PCT			Meth: 241.XX PCT		
<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>		
Avg	2.55		Other			Atomic Absorption			ICP			360	0.08	- .14
232	2.25	- .41	402	0.0045	1.00	177	0.10	.34	409	0.06	-1.10	040	0.09	- .22
106	1.80	-1.01	Avg	0.0041		Avg	0.10		389	0.05	-1.62	397	0.08	- .24
102	1.75	-1.07	409	0.0036	- .70	055	0.09	- .49	023	0.04	-2.06	028	0.08	- .33
230	1.74	-1.14				095	0.09	- .53	065	0.04	-2.28	041	0.07	- .80
			Meth: 221.XX PCT			040	0.09	- .70				102	0.07 R	- .85
Meth: 221.00 PCT			<u>Acid Soluble Copper</u>			029	0.09	- .77	Meth: 241.XX PCT			409	0.06	-1.37
<u>Acid Soluble Copper</u>			422	0.0110 s	8.71	397	0.08	- .92	<u>Acid Soluble Iron</u>			389	0.05	-1.86
<u>Atomic Absorption</u>			354	0.0085 s	5.61	028	0.08	-1.04	247	0.90 s	39.92	023	0.04	-2.29
086	0.0060	1.44	086	0.0060 R	2.84	Meth: 241.30 PCT			422	0.20 s	5.55	065	0.04	-2.50
428	0.0055	.99	288	0.0055 R	2.65	<u>Acid Soluble Iron</u>			372	0.18 s	4.32	Meth: 251.00 PPM		
Avg	0.0042		428	0.0055	2.06	<u>ICP</u>			291	0.18 s	4.32	Lead		
220	0.0040	- .11	035	0.0052	1.51	247	0.90 s	41.83	432	0.15 s	3.09	<u>Atomic Absorption</u>		
095	0.0040	- .15	324	0.0043	1.00	422	0.20 S	6.09	428	0.13	2.36	136	6.55	.71
028	0.0036	- .39	402	0.0045	.93	372	0.18 S	4.82	390	0.12	1.42	Meth: 251.30 PPM		
029	0.0020	-1.50	037	0.0041	.25	291	0.18 S	4.82	354	0.11	1.16	Lead		
			433	0.0040	.17	432	0.15 S	3.51	086	0.11	.95	<u>ICP</u>		
Meth: 221.30 PCT			220	0.0040	.09	390	0.12 R	1.79	035	0.10	.80	232	8.05	1.54
<u>Acid Soluble Copper</u>			230	0.0040	.09	354	0.11	1.52	262	0.10 R	.78	037	5.62	.60
<u>ICP</u>			102	0.0040	.09	035	0.10	1.15	177	0.10	.66	102	4.16	.07
422	0.0110 s	11.21	095	0.0040	.07	131	0.10	.80	029	0.09 R	.66	Avg	4.11	
354	0.0085 s	7.20	009	0.0039	.02	330	0.09	.67	131	0.10	.46	065	3.98	- .05
288	0.0055 R	3.40	Avg	0.0039		288	0.09 R	.61	288	0.09	.38	106	2.85	- .54
035	0.0052	1.91	232	0.0039	- .11	231	0.09	.44	330	0.09	.34	324	0.00	-1.57
324	0.0043	1.27	065	0.0038	- .16	251	0.09	.44	095	0.09	.12	Meth: 251.99 PPM		
037	0.0041	.29	409	0.0036	- .41	433	0.09	.39	251	0.09	.11	Lead		
433	0.0040	.18	028	0.0036	- .41	232	0.09	.39	231	0.09	.11	<u>Other</u>		
230	0.0040	.08	233	0.0036	- .92	027	0.09	.39	055	0.09	.11	409	7.93	.71
102	0.0040	.08	106	0.0028	-1.43	230	0.09	.33	433	0.09	.08	Meth: 251.XX PPM		
Avg	0.0039		029	0.0020	-2.39	106	0.09	.26	232	0.09	.07	Lead		
009	0.0039	- .04	Meth: 241.00 PCT			324	0.09	.25	027	0.09	.06	<u>Lead</u>		
232	0.0039	- .17	<u>Acid Soluble Iron</u>			037	0.09	.23	Avg	0.09		232	8.05	1.21
065	0.0038	- .24	<u>Atomic Absorption</u>			009	0.09	.20	106	0.09	- .06	409	7.93	1.21
233	0.0036	-1.20	428	0.13	2.35	360	0.08	.19	324	0.09	- .08	136	6.55	.64
106	0.0028	-1.89	351	0.11	.77	Avg	0.08		037	0.09	- .08	037	5.62	.31
			262	0.10	.63	041	0.07	- .51	009	0.09	- .11	A=Analysis beyond 3-s limits		
			086	0.11	.60	102	0.07 R	- .64	230	0.09	- .12			
* 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 <u>Lead</u>			Meth: 261.99 PCT Acid Soluble Manganese <u>Other</u>			Meth: 289.30 PPM Molybdenum <u>ICP</u>			Meth: 291.30 PPM Nickel <u>ICP</u>			Meth: 311.99 PCT Sodium <u>Other</u>		
Avg	4.89		402	0.038	-.87	106	4.15	.52	009	10.25	.68	102	0.52	.43
102	4.16	-.28				102	4.09	.35	102	9.77	.40	Avg	0.51	
065	3.98	-.33	Meth: 261.XX PCT <u>Acid Soluble Manganese</u>			232	4.05	.17	Avg	9.07		288	0.50	-.27
106	2.85	-.79	247	0.042	2.31	Avg	3.96		106	8.80	-.15	009	0.50	-.36
324	0.00	-1.80	409	0.041	1.83	324	3.95	-.75	232	8.50	-.33	035	0.48	-1.08
Meth: 261.00 PCT Acid Soluble Manganese <u>AA</u>			402	0.038	.54	037	3.62	-.85	065	5.90	-1.81	232	0.47	-1.23
220	0.035	.00	288	0.038	.54	Meth: 289.99 PPM Molybdenum <u>Other</u>			Meth: 291.99 PPM Nickel <u>Other</u>			Meth: 321.00 PCT Acid Soluble Zinc <u>Atomic Absorption</u>		
Meth: 261.30 PCT Acid Soluble Manganese <u>ICP</u>			131	0.037	.43	409	6.16	.71	409	9.97	.71	428	0.056	1.99
247	0.042 s	4.21	027	0.037	.32	Meth: 289.XX PPM Molybdenum <u>Molybdenum</u>			Meth: 291.XX PPM Nickel <u>Nickel</u>			029	0.045 R	1.35
288	0.038	1.45	102	0.037	.23	409	6.16	2.01	247	12.00	1.50	086	0.046	.58
131	0.037	1.11	035	0.037	.16	220	0.035	-.43	035	11.20	.97	Avg	0.042	
102	0.037	.89	220	0.035	-.43	106	0.035	-.43	409	9.97 R	.73	220	0.040	-.34
035	0.037	.87	009	0.035	-.43	009	0.035	-.64	009	10.25	.47	028	0.039	-.38
009	0.035	.57	422	0.035	-.64	389	0.035	-.64	102	9.77	.20	043	0.040	-.39
Avg	0.035		065	0.034	-.91	065	0.034	-.91	Avg	9.40		095	0.038	-.55
106	0.035	-.03	433	0.033	-1.07	433	0.033	-1.07	106	8.80	-.32	262	0.035	-1.22
422	0.035	-.43	232	0.032	-1.59	232	0.032	-1.59	220	8.75	-.36	Meth: 321.30 PCT Acid Soluble Zinc <u>ICP</u>		
389	0.035	-.43	Meth: 281.99 PPM Mercury <u>Other</u>			106	4.15	-.32	232	8.50	-.48	251	0.570 s	104.15
065	0.034	-.78	409	0.07	.00	324	3.95	-.63	065	5.90	-1.89	035	0.052	2.41
433	0.033	-1.02	Meth: 289.00 PPM Molybdenum <u>Atomic Absorption</u>			037	3.62	-.86	Meth: 301.30 PPM Selenium <u>ICP</u>			247	0.049	1.84
232	0.032	-1.82	220	5.30	-.71	065	2.83 X	-1.67	409	1.29	.64	354	0.045	1.12
Meth: 261.31 PCT Acid Soluble Manganese <u>ICP</u>			Meth: 289.30 PPM Molybdenum <u>ICP</u>			Meth: 291.00 PPM Nickel <u>Atomic Absorption</u>			409	1.14		288	0.041	.32
027	0.037	.00	433	4.61	1.09	220	8.75	.71	Avg	1.14		324	0.040	.20
Meth: 261.99 PCT Acid Soluble Manganese <u>Other</u>			009	4.40	.75	Meth: 291.30 PPM Nickel <u>ICP</u>			065	0.99 X	-1.05	389	0.040	.10
409	0.041	.86	Meth: 289.30 PPM Molybdenum <u>ICP</u>			247	12.00 R	1.76	Meth: 311.99 PCT Sodium <u>Other</u>			Avg	0.039	
Avg	0.039		433	4.61	1.09	035	11.20	1.21	422	0.55	1.36	027	0.039	-.07
* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits			009	4.40	.75	Meth: 291.30 PPM Nickel <u>ICP</u>			409	0.55	1.26	009	0.039	-.09
						247	12.00 R	1.76	Meth: 311.99 PCT Sodium <u>Other</u>			106	0.039	-.19
						035	11.20	1.21	422	0.55	1.36	102	0.039	-.21
									409	0.55	1.26	037	0.038	-.34
												292	0.037	-.46

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>
Meth: 321.30 PCT			Meth: 321.XX PCT								
Acid Soluble Zinc			<u>Acid Soluble Zinc</u>								
<u>ICP</u>			390	0.037	-.88						
232	0.036	-.62	230	0.035	-.96						
390	0.037	-.83	422	0.035	-1.05						
230	0.035	-.85	262	0.035 R	-1.32						
422	0.035	-.96	065	0.035 R	-1.50						
065	0.035 R	-1.51	433	0.031	-1.69						
433	0.031	-1.65									

Meth: 321.99 PCT		
Acid Soluble Zinc		
<u>Other</u>		
402	0.041	.71

Meth: 321.XX PCT		
<u>Acid Soluble Zinc</u>		
251	0.570 s	95.78
428	0.056	2.76
035	0.052	2.05
029	0.045 R	1.81
247	0.049	1.53
086	0.046	.99
354	0.045	.89
402	0.041	.27
288	0.041	.13
Avg	0.040	
324	0.040	-.08
389	0.040	-.17
220	0.040	-.17
028	0.039	-.21
027	0.039	-.23
009	0.039	-.25
102	0.039	-.30
043	0.040	-.31
106	0.039	-.34
095	0.038	-.41
037	0.038	-.47
292	0.037	-.59
232	0.036	-.74

* 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	2	0.00	1.21	0.14	101.00	13	- 1.05	2.80	0.22
001.99	2	0.00	1.22	0.05	101.30	28	- 0.09	1.57	0.48
001.XX	4	0.00	1.08	0.07	101.99	2	44.97	63.60	2.55
003.10	4	0.00	1.06	0.17	101.XX	43	- 0.27	2.05	0.31
003.XX	5	0.33	1.19	0.12	121.00	13	- 0.52	1.70	0.42
005.XX	2	0.00	1.22	0.00	121.30	27	0.72	2.75	0.27
010.11	6	- 1.06	2.75	0.09	121.XX	42	0.31	3.12	0.35
010.12	2	0.00	1.22	0.06	131.00	2	0.00	1.04	0.46
010.60	49	- 0.08	2.01	0.35	131.30	4	0.00	1.04	0.25
010.99	7	0.37	1.27	0.52	131.XX	6	0.00	1.02	0.21
010.XX	63	- 0.03	2.00	0.35	144.99	9	0.00	1.03	0.07
020.10	4	0.00	1.08	0.04	144.XX	11	26.04	86.36	1.00
020.20	16	2.11	8.49	0.16	151.30	2	0.00	1.19	0.20
020.40	3	0.00	0.92	0.52	151.99	2	0.00	0.78	0.67
020.50	6	- 0.65	1.84	0.62	151.XX	5	0.00	1.01	0.29
020.99	2	0.00	1.08	0.41	165.00	2	224.99	318.19	0.917
020.XX	31	0.98	5.51	0.16	165.99	7	0.168	1.052	0.140
030.XX	4	0.00	1.07	0.15	165.XX	9	269.62	804.57	2.313
040.99	2	0.00	1.14	0.33	181.30	4	0.00	1.06	0.17
040.XX	4	0.00	1.06	0.16	181.XX	5	0.00	1.01	0.30
041.10	13	- 0.05	0.99	0.15	190.00	2	0.00	1.22	0.03
041.20	3	2.00	3.55	0.27	190.99	2	0.00	1.22	0.08
041.40	5	0.00	1.06	0.06	190.XX	4	0.00	1.08	0.05
041.50	11	- 0.75	2.66	0.25	191.30	9	- 0.54	1.85	0.37
041.60	7	0.00	1.03	0.11	191.XX	11	- 0.44	1.70	0.42
041.99	2	0.00	1.18	0.24	202.30	8	0.00	1.02	0.19
041.XX	36	0.15	1.27	0.25	202.XX	9	0.29	1.28	0.90
048.XX	2	0.00	0.41	0.82	221.00	6	0.0000	0.9636	0.3780
050.00	11	0.56	2.06	0.31	221.30	14	1.4784	3.4821	0.8984
050.30	10	- 0.45	1.72	0.34	221.99	2	0.0000	0.9350	0.5594
050.31	2	0.00	1.21	0.11	221.XX	22	0.8457	2.3340	0.6725
050.50	5	0.91	2.24	0.85	241.00	11	0.00	0.95	0.36
050.51	9	0.97	3.07	0.15	241.30	28	2.24	8.00	0.30
050.60	7	0.00	1.04	0.06	241.XX	39	1.46	6.52	0.29
050.61	8	0.00	0.95	0.39	251.30	6	0.00	1.03	0.19
050.99	13	- 0.20	1.42	0.52	251.XX	8	0.00	1.00	0.24
050.XX	62	0.26	1.95	0.33	261.30	12	0.349	1.525	0.312
060.00	2	0.00	1.19	0.21	261.99	2	0.000	1.190	0.205
060.XX	3	0.00	0.98	0.44	261.XX	16	0.000	0.999	0.184

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
289.30	8	0.00	0.91	0.46					
289.XX	10	0.00	0.98	0.28					
291.30	7	0.24	1.14	0.24					
291.XX	9	0.03	0.95	0.30					
301.30	2	0.00	0.89	0.59					
301.XX	2	0.00	0.89	0.59					
311.99	7	0.00	1.01	0.22					
311.XX	7	0.00	1.01	0.22					
321.00	8	0.065	0.938	0.516					
321.30	19	5.434	23.920	0.569					
321.XX	27	3.571	18.448	0.564					