

MAGRUDER - Fertilizer Check Sample No. - 200509 Grade 15-5-10

- Pass 1 Results for 78 Labs - - Pass 2 Results for 78 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	14.51	0.16	0.03	2	14.51	0.16	0.03
Ammoniacal Nitrogen, Other		001.99	7	13.74	0.41	0.06	7	13.74	0.41	0.06
Method Group 001.XX PCT			9	13.91	0.49	0.05	9	13.91	0.49	0.05
Nitrate Nitrogen, Other		002.99	2	0.58	0.14	0.15	2	0.58	0.14	0.15
Ammon & Nitrate N, Devarda	892.01	009.10	4	14.44	0.23	0.08	4	14.44	0.23	0.08
Total Nitrogen, Modified Comprehensive	978.02	010.11	5	14.71	0.19	0.04	5	14.71	0.19	0.04
Total Nitrogen, Salicylic	955.04D	010.12	6	14.30	0.31	0.04	6	14.30	0.31	0.04
Total Nitrogen, Raney	970.03	010.16	1	14.50	0.01	0.01	1	14.50	0.01	0.01
Total Nitrogen, Combustion		010.60	46	14.60	0.18	0.07	44	14.60	0.18	0.06
Total Nitrogen, Other		010.99	5	14.44	0.36	0.09	5	14.44	0.36	0.09
Method Group 010.XX PCT			64	14.58	0.25	0.06	61	14.58	0.25	0.05
Total Phosphate, Grav Quimociac	962.02	020.10	6	7.65	0.09	0.07	6	7.65	0.09	0.07
Total Phosphate, Spectrometric	958.01	020.20	12	7.58	0.18	0.07	12	7.58	0.18	0.07
Total Phosphate, Automated	978.01	020.40	7	7.51	0.17	0.13	7	7.51	0.17	0.13
Total Phosphate, ICP		020.50	5	7.44	0.27	0.13	5	7.44	0.27	0.13
Total Phosphate, Other		020.99	2	7.32	0.37	0.14	2	7.32	0.37	0.14
Method Group 020.XX PCT			32	7.54	0.21	0.10	30	7.57	0.16	0.08
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	2	0.03	0.01	0.00	2	0.03	0.01	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.04	0.01	0.01	1	0.04	0.01	0.01
Insoluble Phosphate, ICP		030.50	1	0.02	0.01	0.02	1	0.02	0.01	0.02
Insoluble Phosphate, Other		030.99	1	0.06	0.01	0.02	1	0.06	0.01	0.02
Method Group 030.XX PCT			5	0.03	0.02	0.01	5	0.03	0.02	0.01
InDir Available Phosphate, Grav Quim ..	960.02	040.10	2	7.70	0.07	0.12	2	7.70	0.07	0.12
InDir Available Phosphate, Spectrometri	960.02	040.20	2	7.50	0.05	0.05	2	7.50	0.05	0.05
InDir Available Phosphate, Automated ..	960.02	040.40	1	7.60	0.03	0.04	1	7.60	0.03	0.04
InDir Available Phosphate, Other		040.99	2	7.58	0.08	0.11	2	7.58	0.08	0.11
Method Group 040.XX PCT			7	7.59	0.10	0.08	7	7.59	0.10	0.08
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	17	7.57	0.06	0.05	16	7.57	0.06	0.04
Dir Available Phosphate, Spectrometric	960.03D	041.20	1	7.55	0.06	0.09	1	7.55	0.06	0.09
Dir Available Phosphate, Automated	978.01	041.40	5	7.44	0.16	0.05	5	7.44	0.16	0.05
Dir Available Phosphate, ICP		041.50	7	7.44	0.11	0.15	7	7.44	0.11	0.15
Dir Available Phosphate, EDTA Extract .	993.01	041.60	10	7.54	0.08	0.04	10	7.54	0.08	0.04
Method Group 041.XX PCT			41	7.52	0.10	0.07	37	7.54	0.08	0.05
Water Soluble Phosphate, Spectrometric	970.01	048.20	5	6.72	0.13	0.05	5	6.72	0.13	0.05
Soluble Potash, STPB Oxalate	958.02	050.00	19	11.15	0.15	0.12	17	11.15	0.13	0.08
Soluble Potash, STPB Citrate	969.04	050.10	1	11.01	0.05	0.06	1	11.01	0.05	0.06
Soluble Potash, AA (Oxalate)		050.30	7	10.86	0.31	0.17	8	10.76	0.40	0.16
Soluble Potash, AA (Citrate)		050.31	1	10.77	0.08	0.11	1	10.77	0.08	0.11
Soluble Potash, ICP (Oxalate)		050.50	8	10.84	0.34	0.11	8	10.84	0.34	0.11

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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
Soluble Potash, ICP (Citrate)		050.51	8	11.15	0.39	0.09	8	11.15	0.39	0.09
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	6	11.05	0.37	0.18	6	11.05	0.37	0.18
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	7	11.00	0.34	0.17	7	11.00	0.34	0.17
Soluble Potash, Other		050.99	13	11.18	0.28	0.18	12	11.17	0.26	0.13
Method Group 050.XX PCT			73	11.05	0.33	0.14	71	11.05	0.32	0.13
Free Water, Vacuum Oven	965.08B	060.00	7	0.51	0.08	0.02	7	0.51	0.08	0.02
Acid Soluble Calcium, ICP		101.30	16	0.83	0.04	0.02	16	0.83	0.04	0.02
Acid Soluble Magnesium, AA	984.01	121.00	15	1.17	0.06	0.02	14	1.17	0.06	0.02
Acid Soluble Magnesium, ICP		121.30	30	1.19	0.08	0.04	28	1.19	0.07	0.02
Method Group 121.XX PCT			45	1.18	0.07	0.03	43	1.18	0.07	0.02
Water Soluble Magnesium, AA		131.00	1	1.17	0.00	0.00	1	1.17	0.00	0.00
Water Soluble Magnesium, ICP		131.30	4	1.05	0.10	0.05	3	1.08	0.06	0.01
Method Group 131.XX PCT			5	1.07	0.10	0.04	4	1.10	0.07	0.00
Sulfur, Gravimetric	980.02a	144.01	13	15.92	0.24	0.13	12	15.93	0.24	0.11
Sulfur, Gravimetric	980.02b	144.02	2	15.89	0.10	0.12	2	15.89	0.10	0.12
Sulfur, Spectrometric		144.70	1	15.32	0.09	0.13	1	15.32	0.09	0.13
Sulfur, Other		144.99	20	15.70	0.38	0.20	20	15.70	0.38	0.20
Method Group 144.XX PCT			36	15.78	0.35	0.17	35	15.79	0.34	0.16
Arsenic, Atomic Absorption		151.00	2	1.04	0.63	0.03	2	1.04	0.63	0.03
Arsenic, ICP		151.30	7	2.09	1.03	0.33	6	1.92	0.98	0.19
Arsenic, Other		151.99	1	2.05	0.07	0.10	1	2.05	0.07	0.10
Method Group 151.XX PPM			10	1.87	0.98	0.25	9	1.74	0.92	0.14
Acid Soluble Boron, Spectrometric	982.01	165.00	11	0.095	0.010	0.004	11	0.095	0.010	0.004
Acid Soluble Boron, Other		165.99	14	0.094	0.007	0.004	13	0.094	0.006	0.003
Method Group 165.XX PCT			26	0.095	0.009	0.005	24	0.095	0.008	0.004
Water Soluble Boron, Spectrometric	982.01	171.10	1	0.085	0.007	0.010	1	0.085	0.007	0.010
Water Soluble Boron, Other		171.99	1	0.118	0.003	0.004	1	0.118	0.003	0.004
Method Group 171.XX PCT			2	0.102	0.020	0.007	2	0.102	0.020	0.007
Cadmium, Atomic Absorption		181.00	2	0.83	0.22	0.11	2	0.83	0.22	0.11
Cadmium, ICP		181.30	11	0.64	0.31	0.07	11	0.64	0.31	0.07
Cadmium, Other		181.99	1	0.60	0.00	0.00	1	0.60	0.00	0.00
Method Group 181.XX PPM			14	0.67	0.29	0.07	14	0.67	0.29	0.07
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	12	7.04	0.19	0.05	12	7.04	0.19	0.05
Water Soluble Chlorine, Other		190.99	3	7.05	0.09	0.08	3	7.05	0.09	0.08
Method Group 190.XX PCT			15	7.04	0.17	0.05	15	7.04	0.17	0.05
Chromium, ICP		191.30	11	32.81	3.02	1.66	11	32.81	3.02	1.66
Chromium, Other		191.99	1	32.00	0.00	0.00	1	32.00	0.00	0.00
Method Group 191.XX PPM			12	32.74	2.90	1.52	11	32.71	2.93	1.21
Acid Soluble Cobalt, AA		202.00	1	3.05	0.64	0.90	1	3.05	0.64	0.90

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Acid Soluble Cobalt, ICP	965.11	202.30	9	1.82	0.43	0.33	9	1.82	0.43	0.33
Acid Soluble Cobalt, Other		202.99	1	2.45	0.07	0.10	1	2.45	0.07	0.10
Method Group 202.XX PPM			11	1.99	0.56	0.36	11	1.99	0.56	0.36
Acid Soluble Copper, Atomic Absorption	975.01	221.00	4	0.0021	0.0003	0.0003	4	0.0021	0.0003	0.0003
Acid Soluble Copper, ICP		221.30	17	0.0019	0.0003	0.0002	16	0.0019	0.0003	0.0001
Acid Soluble Copper, Other		221.99	1	0.0017	0.0001	0.0001	1	0.0017	0.0001	0.0001
Method Group 221.XX PCT			22	0.0019	0.0003	0.0002	20	0.0019	0.0003	0.0001
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	11	0.16	0.02	0.01	11	0.16	0.02	0.01
Acid Soluble Iron, ICP		241.30	27	0.17	0.01	0.01	25	0.17	0.01	0.00
Method Group 241.XX PCT			38	0.17	0.01	0.01	36	0.17	0.01	0.00
Lead, Atomic Absorption		251.00	3	3.76	0.54	0.75	3	3.76	0.54	0.75
Lead, ICP		251.30	9	4.48	1.47	1.05	9	4.48	1.47	1.05
Lead, Other		251.99	1	5.99	0.16	0.22	1	5.99	0.16	0.22
Method Group 251.XX PPM			13	4.43	1.36	0.91	13	4.43	1.36	0.91
Acid Soluble Manganese, AA	972.02a	261.00	2	0.039	0.001	0.002	2	0.039	0.001	0.002
Acid Soluble Manganese, ICP	972.02a	261.30	15	0.039	0.003	0.003	15	0.039	0.003	0.003
Acid Soluble Manganese, ICP	972.02b	261.31	1	0.036	0.000	0.000	1	0.036	0.000	0.000
Acid Soluble Manganese, Other		261.99	1	0.036	0.000	0.000	1	0.036	0.000	0.000
Method Group 261.XX PCT			19	0.039	0.003	0.003	17	0.039	0.003	0.002
Water Soluble Manganese, Atomic Abs ...	972.03	271.00	1	0.005	0.000	0.001	1	0.005	0.000	0.001
Mercury, Atomic Absorption		281.00	2	0.12	0.08	0.02	2	0.12	0.08	0.02
Mercury, Other		281.99	1	0.15	0.06	0.08	1	0.15	0.06	0.08
Method Group 281.XX PPM			3	0.13	0.07	0.04	3	0.13	0.07	0.04
Molybdenum, Atomic Absorption		289.00	1	2.40	0.14	0.20	1	2.40	0.14	0.20
Molybdenum, ICP		289.30	13	3.12	0.92	0.47	13	3.12	0.92	0.47
Molybdenum, Other		289.99	1	3.11	0.07	0.10	1	3.11	0.07	0.10
Method Group 289.XX PPM			15	3.07	0.87	0.43	15	3.07	0.87	0.43
Nickel, Atomic Absorption		291.00	1	12.50	0.71	1.00	1	12.50	0.71	1.00
Nickel, ICP		291.30	7	16.51	1.55	0.62	7	16.51	1.55	0.62
Nickel, Other		291.99	1	12.30	0.14	0.20	1	12.30	0.14	0.20
Method Group 291.XX PPM			9	15.60	2.23	0.61	9	15.60	2.23	0.61
Selenium, Atomic Absorption		301.00	1	0.07	0.01	0.02	1	0.07	0.01	0.02
Selenium, ICP		301.30	2	0.35	0.17	0.00	2	0.35	0.17	0.00
Method Group 301.XX PPM			3	0.26	0.20	0.01	3	0.26	0.20	0.01
Sodium, Other		311.99	8	0.26	0.04	0.01	8	0.26	0.04	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	15	0.233	0.019	0.012	15	0.233	0.019	0.012
Acid Soluble Zinc, ICP		321.30	26	0.229	0.017	0.011	23	0.229	0.014	0.007
Acid Soluble Zinc, Other		321.99	1	0.265	0.009	0.013	1	0.265	0.009	0.013
Method Group 321.XX PCT			42	0.232	0.018	0.011	39	0.232	0.017	0.009

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Water Soluble Zinc, Atomic Absorption .		325.00	1	0.028	0.002	0.003	1	0.028	0.002	0.003
Water Soluble Zinc, ICP		325.30	1	0.160	0.014	0.020	1	0.160	0.014	0.020
Method Group 325.XX PCT			2	0.094	0.077	0.012	2	0.094	0.077	0.012

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: 030.XX PCT		
<u>Total Nitrogen</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Insoluble Phosphate</u>		
325	14.45	- .50	<u>Spectrometric</u>			<u>Other</u>			232	7.26	-1.94	363	0.25 s	12.80
041	14.45	- .50	Avg	7.58		234	7.63	.84	409	7.21	-2.27	247	0.06	1.69
007	14.55 R	- .60	416	7.57	- .10	Avg	7.32		307	7.05 A	-3.35	096	0.04	.32
369	14.45	- .61	376	7.57	- .10	393	7.01	- .89	393	7.01 A	-3.52	Avg	0.03	
351	14.36	- .85	292	7.58	- .26	Meth: 020.XX PCT			369	6.72 s	-5.29	405	0.03	- .18
009	14.36	- .87	418	7.54 X	- .33	<u>Total Phosphate</u>			422	6.35 s	-7.50	090	0.02	- .76
420	14.36	- .89	420	7.30	-1.62	368	9.52 s	15.11	324	5.94 s	-10.01	409	0.02	- .96
034	14.35	- .91	232	7.26	-1.82	257	8.40 s	5.08	Meth: 030.10 PCT			Meth: 040.10 PCT		
023	14.28	-1.17	369	6.72 s	-4.87	262	7.95	2.32	<u>InDir Available Phos</u>			<u>InDir Available Phos</u>		
185	14.25	-1.31	324	5.94 s	-9.17	330	7.74	1.10	<u>Grav Quimociac</u>			<u>Grav Quim</u>		
102	14.23	-1.39	Meth: 020.40 PCT			405	7.75	1.06	405	0.03	.87	405	7.72	.53
300	14.20	-1.49	<u>Total Phosphate</u>			363	7.72	.94	Avg	0.03		Avg	7.70	
423	14.18	-1.60	<u>Automated</u>			090	7.70	.91	090	0.02	- .87	090	7.68	-1.11
254	14.02	-2.20	247	7.65	1.08	247	7.65	.81	Meth: 030.20 PCT			Meth: 040.20 PCT		
289	14.02	-2.23	096	7.64	.76	390	7.63	.70	<u>InDir Available Phos</u>			<u>InDir Available Phos</u>		
211	13.86	-2.85	035	7.56	.68	406	7.68	.65	<u>Spectrometric</u>			<u>Spectrometri</u>		
Meth: 020.10 PCT			042	7.53	.63	095	7.67	.59	363	0.25 S	.00	289	7.53	.93
<u>Total Phosphate</u>			024	7.56	.34	114	7.66	.58	Meth: 030.40 PCT			Meth: 040.40 PCT		
<u>Grav Quimociac</u>			Avg	7.51		157	7.63	.42	<u>InDir Available Phos</u>			<u>InDir Available Phos</u>		
405	7.75	1.13	193	7.42	- .74	096	7.64	.38	<u>Automated</u>			<u>Automated</u>		
090	7.70	1.07	409	7.21	-1.80	392	7.63	.34	096	0.04	- .71	096	7.60	.71
114	7.66	.47	Meth: 020.50 PCT			234	7.63	.34	Meth: 030.50 PCT			Meth: 040.50 PCT		
095	7.67	.30	<u>Total Phosphate</u>			177	7.60	.34	<u>InDir Available Phos</u>			<u>InDir Available Phos</u>		
Avg	7.65		<u>ICP</u>			292	7.58	.28	<u>Spectrometric</u>			<u>Spectrometri</u>		
157	7.63	- .46	368	9.52 s	9.61	258	7.62	.26	<u>ICP</u>			<u>ICP</u>		
300	7.52	-1.61	Avg	7.57		416	7.57	- .07	409	0.02	- .71	423	7.06 S	.00
Meth: 020.20 PCT			330	7.74	1.16	376	7.57	- .07	Meth: 030.99 PCT			Meth: 040.99 PCT		
<u>Total Phosphate</u>			390	7.63	.81	024	7.56	- .15	<u>InDir Available Phos</u>			<u>InDir Available Phos</u>		
<u>Spectrometric</u>			Avg	7.44		418	7.54 X	- .33	<u>Other</u>			<u>Other</u>		
257	8.40 s	4.58	389	7.40	- .14	300	7.52	- .37	247	0.06	.71	247	7.60	1.21
262	7.95	2.06	423	7.37	- .26	035	7.56	- .65	Meth: 040.99 PCT			Meth: 040.99 PCT		
363	7.72	.81	307	7.05	-1.56	042	7.53	- .71	<u>InDir Available Phos</u>			<u>InDir Available Phos</u>		
406	7.68	.55	422	6.35 S	-4.06	389	7.40	-1.07	<u>Other</u>			<u>Other</u>		
177	7.60	.29	432	5.86 S	-5.95	193	7.42	-1.11	Meth: 040.99 PCT			Meth: 040.99 PCT		
392	7.63	.26	Meth: 020.99 PCT			423	7.37	-1.26	<u>InDir Available Phos</u>			<u>InDir Available Phos</u>		
258	7.62	.19	<u>Total Phosphate</u>			420	7.30	-1.72	<u>Other</u>			<u>Other</u>		
* X=Excluded from lab performance			S/s=Screened Outlier			R=Duplicate Range too large			A=Analysis beyond 3-s limits			376 7.57 - .20		

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 040.XX PCT			Meth: 041.20 PCT			Meth: 041.60 PCT			Meth: 041.XX PCT			Meth: 050.00 PCT		
<u>InDir Available Phos</u>			<u>Dir Available Phosph Spectrometric</u>			<u>Dir Available Phosph EDTA Extract</u>			<u>Dir Available Phosph</u>			<u>Soluble Potash</u>		
405	7.72	1.30				028	7.50	-.45	022	7.52	-1.04	<u>STPB Oxalate</u>		
090	7.68	1.21	Avg	7.55		057	7.48	-.89	360	7.47	-1.33	029	11.24	.73
247	7.60	.98	200	7.05 S	-7.88	137	7.44	-1.36	009	7.53	-1.33	095	11.23	.59
096	7.60	.22				351	7.42	-1.51	137	7.44	-1.38	Avg	11.15	
Avg	7.59		Meth: 041.40 PCT						322	7.42	-1.50	392	11.14	-.17
376	7.57	-.27	<u>Dir Available Phosph Automated</u>			Meth: 041.XX PCT			351	7.42	-1.54	137	11.15	-.34
289	7.53	-.73	029	7.60	1.05	<u>Dir Available Phosph</u>			027	7.40	-1.79	231	11.07	-.72
363	7.47	-1.30	131	7.55	.67	055	7.81 s	3.94	043	7.41	-1.79	418	11.06 X	-.75
423	7.06 s	-5.65	025	7.48	.26	057	7.64	1.21	185	7.46 R	-1.80	043	11.12	-.84
Meth: 041.10 PCT			Avg	7.44		024	7.63	1.17	325	7.40	-1.82	233	11.04	-.92
<u>Dir Available Phosph Grav Quimociac</u>			027	7.40	-.33	009	7.63	1.08	023	7.40 R	-2.49	211	11.02	-1.03
049	7.59	1.09	409	7.19	-1.66	029	7.63	1.08	007	7.38 R	-2.60	257	11.01	-1.09
057	7.64	1.09	Meth: 041.50 PCT			073	7.63	1.08	409	7.19 A	-4.48	055	11.06 R	-1.72
260	7.59	.92	<u>Dir Available Phosph ICP</u>			049	7.59	.99	200	7.05 s	-6.24	258	10.89	-2.04
029	7.63	.91	009	7.53	1.18	029	7.60	.99	393	6.82 s	-9.13	022	10.53 s	-4.68
009	7.63	.91	361	7.55	.91	254	7.62	.97	354	6.46 s	-13.62	397	10.45 s	-5.35
254	7.62	.78	360	7.47	.69	260	7.59	.90	Meth: 048.20 PCT			Meth: 050.10 PCT		
211	7.60	.39	Avg	7.44		043	7.58	.72	<u>Water Soluble Phosph Spectrometric</u>			<u>Soluble Potash</u>		
136	7.58	.21	325	7.40	-.44	211	7.60	.71	096	6.87	1.20	<u>STPB Citrate</u>		
040	7.58	.09	043	7.41	-.61	102	7.55	.64	420	6.82	.74	322	11.01	.71
Avg	7.57		007	7.38	-1.27	296	7.58	.64	363	6.73	.27	Meth: 050.30 PCT		
131	7.56	-.33	023	7.40	-1.28	055	7.57	.64	Avg	6.72		<u>Soluble Potash</u>		
233	7.54	-.57	393	6.82 S	-5.61	095	7.59	.58	247	6.65	-.49	<u>AA (Oxalate)</u>		
041	7.56	-.57	354	6.46 S	-8.77	106	7.55	.57	193	6.53	-1.48	073	12.23 S	3.69
296	7.55	-.66	Meth: 041.60 PCT			136	7.58	.53	Meth: 050.00 PCT			369	11.26	1.26
055	7.57	-.70	<u>Dir Available Phosph EDTA Extract</u>			041	7.56	.46	<u>Soluble Potash</u>			193	11.05	.96
102	7.55	-.96	024	7.63	1.24	040	7.58	.46	<u>STPB Oxalate</u>			040	11.03	.71
022	7.52 R	-1.68	073	7.63	1.15	296	7.55	.32	102	11.64 s	3.77	095	10.82	.36
322	7.42	-2.68	043	7.58	.77	131	7.56	.21	114	11.21 R	1.67	136	10.88	.30
185	7.46 s	-2.89	296	7.58	.69	361	7.55	.20	416	11.33	1.34	Avg	10.86	
Meth: 041.20 PCT			095	7.59	.64	131	7.55	.10	090	11.31	1.15	351	10.63	-.33
<u>Dir Available Phosph Spectrometric</u>			Avg	7.54		233	7.54	.06	057	11.24	1.01	262	10.36	-1.01
055	7.81 S	4.84	034	7.53	-.23	Avg	7.54		049	11.27	.90	185	10.05 S	-1.77
106	7.55	.71	028	7.50	-.49	034	7.53	-.26	009	11.27	.89			
* X=Excluded from lab performance			025	7.48	-.76	028	7.50	-.49	073	11.23	.84			
			057	7.48	-.92	057	7.48	-.92	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: 050.31 PCT			Meth: 050.60 PCT			Meth: 050.XX PCT			Meth: 050.XX PCT			Meth: 050.XX PCT			
Soluble Potash			Soluble Potash			<u>Soluble Potash</u>			<u>Soluble Potash</u>			<u>Soluble Potash</u>			
<u>AA (Citrate)</u>			<u>Flame (Oxalate)</u>			073	12.23	s 3.66	389	11.05	.15	185	10.05	s -3.09	
254	10.77	.71	Avg	11.05		009	11.93	2.73	325	11.07	.11	368	9.65	s -6.69	
Meth: 050.50 PCT			200			10.42	-1.74	102	11.64	1.86	418	11.06	X .08		
Soluble Potash			Meth: 050.61 PCT			234	11.63	1.83	Avg			11.05	Meth: 060.00 PCT		
<u>ICP (Oxalate)</u>			Soluble Potash			042	11.56	1.69	131	11.02	-.09	Free Water			
390	11.43	1.73	<u>Flame (Citrate)</u>			330	11.31	R 1.58	211	11.02	-.10	<u>Vacuum Oven</u>			
292	11.14	.90	025	11.38	1.12	300	11.50	1.39	233	11.04	-.12	416	0.63	1.49	
106	11.04	.61	057	11.18	.70	361	11.46	1.26	007	11.04	-.13	409	0.60	1.11	
Avg	10.84		024	11.19	.56	390	11.43	1.17	257	11.01	-.15	247	0.54	.37	
324	10.80	-.14	035	11.04	.35	025	11.38	1.01	106	11.04	-.16	Avg	0.51		
157	10.70	-.53	Avg	11.00		232	11.37	.98	322	11.01	-.16	096	0.49	-.34	
354	10.68	-.67	028	10.97	-.16	360	11.33	.89	376	11.02	-.21	193	0.49	-.41	
420	10.57	-.80	029	10.91	-.39	416	11.33	.87	040	11.03	-.25	007	0.44	-.98	
422	10.38	-1.39	034	10.33	-2.03	114	11.21	.82	028	10.97	-.29	363	0.42	-1.30	
307	10.40	S -1.91	Meth: 050.99 PCT			090	11.31	.79	023	11.01	-.30	Meth: 101.30 PCT			
Meth: 050.51 PCT			Soluble Potash			193	11.05	R .77	027	10.95	-.32	Acid Soluble Calcium			
Soluble Potash			<u>Other</u>			043	11.28	.73	035	11.04	-.34	<u>ICP</u>			
<u>ICP (Citrate)</u>			234	11.63	1.82	049	11.27	.69	029	10.91	-.53	065	7.60	s 177.11	
009	11.93	1.99	330	11.31	R 1.76	369	11.26	.68	258	10.89	-.54	422	1.20	s 9.70	
361	11.46	.78	300	11.50	1.25	009	11.27	.68	136	10.88	-.54	432	1.02	s 6.25	
043	11.28	.35	232	11.37	.76	057	11.24	.66	324	10.80	-.77	009	0.93	2.48	
Avg	11.15		360	11.33	.66	055	11.06	.65	289	10.80	-.78	361	0.90	1.63	
389	11.05	-.29	177	11.24	.28	057	11.18	.62	247	10.86	-.78	035	0.87	1.19	
007	11.04	-.30	Avg	11.17		073	11.23	.61	095	10.82	-.81	292	0.85	.45	
023	11.01	-.43	260	11.14	-.21	029	11.24	.61	393	10.76	-.89	423	0.84	.32	
393	10.76	-1.00	325	11.07	-.38	432	11.12	.60	254	10.77	-.89	Avg	0.83		
423	10.69	-1.20	376	11.02	-.60	177	11.24	.59	157	10.70	-1.12	096	0.83	-.08	
368	9.65	s -5.71	432	11.12	-.71	095	11.23	.56	423	10.69	-1.13	390	0.83	-.12	
Meth: 050.60 PCT			027	10.95	-.84	055	11.15	.44	354	10.68	-1.23	057	0.83	-.34	
Soluble Potash			247	10.86	-1.33	024	11.19	.43	420	10.57	-1.47	307	0.82	-.44	
<u>Flame (Oxalate)</u>			289	10.80	-1.41	043	11.12	.38	022	10.53	-1.61	420	0.81	-.53	
042	11.56	1.49	Meth: 050.99 PCT			137	11.15	.33	397	10.45	-1.88	409	0.81	-.60	
055	11.15	.38	Soluble Potash			292	11.14	.32	200	10.42	-1.96	106	0.81	-.61	
041	11.08	.27	<u>Flame (Oxalate)</u>			041	11.08	.31	422	10.38	-2.08	102	0.82	-.69	
406	11.09	.17	042	11.56	1.49	260	11.14	.30	262	10.36	-2.15	027	0.81	-.72	
* X=Excluded from lab performance			055	11.15	.38	392	11.14	.29	034	10.33	-2.28	433	0.79	-1.03	
			041	11.08	.27	406	11.09	.20	307	10.40	s -2.47	232	0.79	-1.26	
			406	11.09	.17	231	11.07	.17	A=Analysis beyond 3-s limits						
			S/s=Screened Outlier			R=Duplicate Range too large									

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 121.00 PCT			Meth: 121.30 PCT			Meth: 121.XX PCT			Meth: 131.30 PCT			Meth: 144.02 PCT		
Acid Soluble Magnesi			Acid Soluble Magnesi			<u>Acid Soluble Magnesi</u>			Water Soluble Magnes			Sulfur		
<u>AA</u>			<u>ICP</u>			389 1.20 .22			<u>ICP</u>			<u>Gravimetric</u>		
177	1.29	1.93	096	1.18	-.26	Avg	1.18		300	1.16	1.14	292	17.28 S	14.09
200	1.27	1.49	393	1.17	-.30	029	1.18	-.05	Avg	1.08		136	15.95	.79
028	1.26	1.33	433	1.17	-.32	420	1.18	-.09	027	1.08	-.05	Avg	15.89	
233	1.21	.64	360	1.16	-.39	392	1.18	-.23	432	0.94 R	-2.77	029	15.83	-.93
392	1.18	.24	330	1.18	-.43	096	1.18	-.23	Meth: 131.XX PCT			Meth: 144.70 PCT		
029	1.18	.11	247	1.16	-.44	393	1.17	-.24	Water Soluble Magnes			Sulfur		
Avg	1.17		157	1.14	-.63	433	1.17	-.26	029	1.17	.97	<u>Spectrometric</u>		
040	1.16	-.23	106	1.14	-.70	040	1.16	-.33	300	1.16	.76	393	15.32	-.71
193	1.16	-.25	289	1.14	-.76	193	1.16	-.33	Avg	1.10		Meth: 144.99 PCT		
055	1.16	-.36	009	1.13	-.78	360	1.16	-.33	027	1.08	-.37	Sulfur		
397	1.13	-.74	324	1.12	-.96	247	1.16	-.38	289	1.01	-1.36	<u>Other</u>		
043	1.13	-.75	232	1.10	-1.14	055	1.16	-.43	432	0.94 R	-2.90	232	55.36 s	103.74
351	1.12	-.77	300	1.07	-1.69	330	1.18	-.44	Meth: 144.01 PCT			361	16.33	1.65
137	1.15 R	-.83	376	1.05	-1.94	157	1.14	-.58	Sulfur			300	16.25	1.44
257	1.10	-1.22	432	1.14 R	-2.19	106	1.14	-.66	<u>Gravimetric</u>			390	16.06	1.18
258	1.09	-1.38	307	0.99 s	-3.72	289	1.14	-.72	043	18.56 s	10.90	389	16.05	.92
Meth: 121.30 PCT			Meth: 121.XX PCT			009	1.13	-.73	262	16.50	2.40	330	16.00	.77
Acid Soluble Magnesi			<u>Acid Soluble Magnesi</u>			397	1.13	-.79	137	16.11	.75	360	15.93	.72
<u>ICP</u>			065 11.05 s 143.55			043	1.13	-.81	157	16.07	.74	289	15.79	.62
065	11.05 s	137.39	422	1.38	2.86	351	1.12	-.83	324	16.01	.67	393	15.80	.54
422	1.38	2.67	035	1.30 R	2.17	137	1.15	-.83	232	16.00	.34	247	15.79	.39
035	1.30 R	2.02	027	1.32	2.05	324	1.12	-.93	257	1.10	-1.25	177	15.81	.31
027	1.32	1.89	177	1.29	1.65	232	1.10	-1.11	258	1.09	-1.39	035	15.80	.26
057	1.29	1.44	057	1.29	1.58	257	1.10	-1.25	300	1.07	-1.68	Avg	15.70	
023	1.24	.88	200	1.27	1.25	258	1.09	-1.39	028	15.87	-.27	354	15.68	-.39
409	1.25	.82	028	1.26	1.10	300	1.07	-1.68	040	15.87	-.29	009	15.66	-.47
090	1.24	.75	023	1.24	.99	376	1.05	-1.95	095	15.85	-.34	090	15.47	-.60
361	1.23	.55	409	1.25	.94	432	1.14 R	-2.26	055	15.85	-.44	023	15.45	-.67
390	1.22	.53	090	1.24	.86	307	0.99 s	-3.82	029	15.75	-.76	131	15.36	-.90
354	1.19	.40	361	1.23	.65	Meth: 131.00 PCT			193	15.69	-1.00	368	15.44	-1.10
368	1.21	.37	390	1.22	.62	Water Soluble Magnes			200	15.83 R	-1.04	376	15.25	-1.19
102	1.19	.29	233	1.21	.47	<u>AA</u>			106	15.59	-1.41	422	15.13	-1.54
423	1.21	.27	368	1.21	.46	029	1.17	.71	Meth: 144.01 PCT			423	15.00	-1.83
389	1.20	.14	354	1.19	.45	Sulfur			Sulfur					
Avg	1.19		423	1.21	.36	<u>Gravimetric</u>			Sulfur					
420	1.18	-.14	102	1.19	.32	043 18.56 s 10.90			Sulfur					

* 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.XX PCT			Meth: 144.XX PCT			Meth: 151.XX PPM			Meth: 165.99 PCT			Meth: 171.10 PCT		
<u>Sulfur</u>			<u>Sulfur</u>			<u>Arsenic</u>			<u>Acid Soluble Boron</u>			<u>Water Soluble Boron</u>		
232	55.36 s	116.23	422	15.13	-1.99	200	0.49 X	-1.36	433	0.088 R	-1.98	296	0.085	.71
043	18.56 s	8.14	423	15.00	-2.32	368	0.20	-1.67	232	0.079	-2.54	<u>Spectrometric</u>		
292	17.28 s	4.38	Meth: 151.00 PPM			Meth: 165.00 PCT			Meth: 165.XX PCT			Meth: 171.99 PCT		
262	16.50	2.11	<u>Arsenic</u>			<u>Acid Soluble Boron</u>			<u>Acid Soluble Boron</u>			<u>Water Soluble Boron</u>		
361	16.33	1.59	<u>Atomic Absorption</u>			<u>Spectrometric</u>			028 0.895 s 103.12			027 0.118 .71		
300	16.25	1.36	040	1.58	.87	028	0.895 s	83.26	368	0.134 s	5.94	Meth: 171.99 PCT		
390	16.06	1.12	Avg	1.04		040	0.114	1.89	432	0.120 R	3.51	<u>Water Soluble Boron</u>		
137	16.11	.94	200	0.49 X	-.87	137	0.110	1.53	040	0.114	2.43	027 0.118 .85		
157	16.07	.89	Meth: 151.30 PPM			Avg			137	0.110	1.98	Meth: 171.XX PCT		
389	16.05	.78	<u>Arsenic</u>			296 0.095			258	0.103	1.03	<u>Water Soluble Boron</u>		
324	16.01	.77	<u>ICP</u>			200 0.095			040	0.114	2.43	027 0.118 .85		
200	15.83	.69	247	3.30	1.41	257	0.091	-.53	258	0.103	.95	Avg 0.102		
289	15.79	.65	106	3.10 R	1.35	057	0.090	-.59	360	0.102	.95	296 0.085 -.88		
102	16.00	.63	376	2.34	.49	055	0.090	-.59	200	0.095	.65	Meth: 181.00 PPM		
330	16.00	.61	065	2.15	.25	392	0.090	-.66	106	0.095	.65	Cadmium		
360	15.93	.60	102	1.93	.17	029	0.089	-.69	296	0.095	.65	<u>Atomic Absorption</u>		
393	15.80	.54	Avg	1.92		023	0.084	-1.25	324	0.099	.59	200 2.23 S 6.42		
136	15.95	.49	096	1.60	-.33	Meth: 165.99 PCT			289	0.096	.48	193 1.00 .92		
247	15.79	.35	368	0.20	-1.75	<u>Acid Soluble Boron</u>			043	0.097	.40	Avg 0.83		
040	15.87	.26	Meth: 151.99 PPM			<u>Other</u>			423	0.097	.27	040 0.65 -.80		
055	15.85	.25	<u>Arsenic</u>			368 0.134 s 7.88			354	0.095	-.19	Meth: 181.30 PPM		
029	15.83	.24	<u>Other</u>			432 0.120 s 4.70			300	0.094	-.29	Cadmium		
028	15.87	.22	409	2.05	.71	360 0.102 1.35			409	0.092	-.36	<u>ICP</u>		
095	15.85	.19	Meth: 151.XX PPM			324 0.099 .88			257	0.091	-.57	096 1.15 1.64		
177	15.81	.17	<u>Arsenic</u>			106 0.095 .86			422	0.090	-.60	376 0.88 .83		
035	15.80	.03	247	3.30	1.70	289 0.096 .69			057	0.090	-.64	065 0.82 .58		
Avg	15.79		106	3.10 R	1.62	043 0.097 .59			055	0.090	-.65	035 0.78 .47		
029	15.75	-.14	376	2.34	.71	090 0.097 .50			009	0.090	-.68	324 0.70 .37		
193	15.69	-.32	065	2.15	.46	423 0.097 .46			392	0.090	-.74	106 0.65 .16		
354	15.68	-.54	409	2.05	.34	300 0.094 .37			029	0.089	-.77	102 0.69 .16		
106	15.59	-.60	102	1.93	.27	354 0.095 .27			023	0.084	-1.46	Avg 0.64		
009	15.66	-.65	Avg	1.74		Avg 0.094			433	0.088 R	-1.55	247 0.60 -.14		
090	15.47	-.94	096	1.60	-.15	409 0.092 -.37			232	0.079	-2.01	232 0.60 -.14		
023	15.45	-1.01	040	1.58	-.17	422 0.090 -.68						368 0.20 -1.43		
131	15.36	-1.28	Meth: 151.99 PPM			009 0.090 -.81						393 0.00 -2.07		
393	15.32	-1.41	<u>Arsenic</u>											
368	15.44 R	-1.41	<u>Other</u>											
376	15.25	-1.59	409 0.092 -.37											

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 181.99 PPM			Meth: 190.99 PCT			Meth: 191.30 PPM			Meth: 202.30 PPM			Meth: 221.00 PCT		
<u>Cadmium</u>			<u>Water Soluble Chlori</u>			<u>Chromium</u>			<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>		
<u>Other</u>			<u>Other</u>			<u>ICP</u>			<u>ICP</u>			<u>Atomic Absorption</u>		
409	0.60	.00	389	7.90 S	9.30	324	31.25	-.54	368	204.86 s	475.34	233	0.0023	.70
			300	7.13	1.15	376	30.15	-.88	009	2.46	1.53	Avg	0.0021	
Meth: 181.XX PPM			009			065			102			043		
<u>Cadmium</u>			Avg			233			233			029		
200	2.23 s	5.36	057	6.97	-1.08	368	8.07 S	-8.19	040	2.00	.48			
096	1.15	1.67	Meth: 190.XX PCT			393			Avg			Meth: 221.30 PCT		
193	1.00	1.20	<u>Water Soluble Chlori</u>			027			324			Acid Soluble Copper		
376	0.88	.81	389			043			247			<u>ICP</u>		
065	0.82	.55	262			029			035			065		
035	0.78	.42	300			289			106			247		
324	0.70	.36	102			009			232			422		
102	0.69	.10	027			296			Meth: 202.99 PPM			390		
Avg	0.67		043			Avg			<u>Acid Soluble Cobalt</u>			393		
040	0.65	-.06	029			040			<u>Other</u>			040		
106	0.65	-.18	289			028			409			368		
			009			057			209			057		
409	0.60	-.23	296			055			Meth: 202.XX PPM			433		
232	0.60	-.23	Avg			397			<u>Acid Soluble Cobalt</u>			102		
368	0.20	-1.60	040			422			368			376		
393	0.00	-2.29	028			376			204.86 s			096		
			057			065			204.86 s			Avg		
Meth: 190.00 PCT			Meth: 191.30 PPM			065			193			330		
<u>Water Soluble Chlori</u>			<u>Chromium</u>			232			102			035		
<u>Titrimetric</u>			<u>ICP</u>			324			009			009		
262	7.47	2.25	096			376			409			106		
102	7.13	.49	102			065			233			232		
027	7.12	.45	233			29.95			040			035		
043	7.10	.42	368			28.97			2.00			324		
029	7.09	.38	393			28.97			1.99			324		
289	7.09	.30	096			8.07 s			1.65			247		
296	7.04	.11	102			0.00 s			1.60			232		
Avg	7.04		390			-11.17			1.65			035		
040	6.99	-.24	009			Meth: 202.00 PPM			1.40			106		
028	6.96	-.40	035			<u>Acid Soluble Cobalt</u>			Meth: 221.00 PCT			Acid Soluble Copper		
055	6.97	-.47	Avg			<u>AA</u>			Acid Soluble Copper			<u>Atomic Absorption</u>		
397	6.83	-1.08	247			193			296			0.0021		
422	6.66	-1.99	232			3.05			0.0021			1.53		
* X=Excluded from lab performance			S/s=Screened Outlier			R=Duplicate Range too large			A=Analysis beyond 3-s limits					

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 221.XX PCT			Meth: 241.00 PCT			Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 251.30 PPM		
<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>			<u>Lead</u>		
065	0.0162 s	56.05	<u>Atomic Absorption</u>			<u>ICP</u>			262 0.17 X -.35			<u>ICP</u>		
247	0.0031 s	4.79	043	0.15	-.58	157	0.15	-1.35	292	0.16	-.43	247 1.85 -1.79		
422	0.0025	2.22	028	0.15	-.73	422	0.12 s	-3.33	354	0.17	-.48	Meth: 251.99 PPM		
390	0.0021 R	1.81	233	0.15	-.84	Meth: 241.99 PCT			423	0.16	-.53	Lead		
296	0.0021 R	1.73	040	0.13	-1.97	<u>Acid Soluble Iron</u>			232	0.16	-.68	<u>Other</u>		
233	0.0023	1.40	Meth: 241.30 PCT			<u>Other</u>			177	0.15	-.81	409 5.99 -.71		
393	0.0021	.80	<u>Acid Soluble Iron</u>			065	1.43 S	.00	043	0.15	-.84	Meth: 251.XX PPM		
040	0.0021	.73	<u>ICP</u>			Meth: 241.XX PCT			376	0.15	-.95	<u>Lead</u>		
368	0.0021	.73	300	1.52 s	93.77	<u>Acid Soluble Iron</u>			027	0.15	-.97	324 5.30 1.22		
029	0.0020	.60	432	0.34 s	13.47	300	1.52 s	91.91	028	0.15	-.99	409	5.99	1.15
043	0.0021	.57	389	0.21	2.92	065	1.43 s	85.82	368	0.17 R	-1.09	232	5.95	1.15
057	0.0020	.52	390	0.19	1.68	193	0.30 s	13.64	233	0.15	-1.10	376	5.55	1.08
433	0.0020	.40	247	0.17 R	1.39	432	0.34 s	13.28	393	0.15	-1.11	368	5.69	.93
102	0.0020	.34	330	0.19	1.23	389	0.21	2.97	409	0.15	-1.11	102	4.67	.57
376	0.0020	.34	090	0.18	.84	390	0.19	1.74	040	0.13	-2.26	Avg	4.43	
Avg	0.0019		324	0.18	.84	247	0.17 R	1.38	422	0.12 s	-3.16	096	4.25	-.23
330	0.0019	-.31	106	0.18	.60	330	0.19	1.31	Meth: 251.00 PPM			040	4.17	-.36
096	0.0019	-.39	360	0.17	.45	137	0.19	1.31	<u>Lead</u>			106	3.90	-.49
035	0.0018	-.64	023	0.17	.44	090	0.18	.93	<u>Atomic Absorption</u>			043	3.60	-.63
009	0.0017	-.87	102	0.17	.25	324	0.18	.93	040	4.17	1.09	193	3.50	-.78
409	0.0017	-.91	057	0.17	.17	106	0.18	.68	Avg	3.76		065	3.16 X	-.98
106	0.0017	-1.04	096	0.17	.14	055	0.18	.68	043	3.60	-.47	247	1.85	-1.90
232	0.0016	-1.09	Avg	0.17		351	0.17	.58	Meth: 251.30 PPM			Meth: 261.00 PCT		
324	0.0016	-1.27	009	0.17	-.11	023	0.17	.54	<u>Lead</u>			<u>Acid Soluble Mangane</u>		
307	0.0015	-1.85	035	0.17	-.21	360	0.17	.53	<u>ICP</u>			<u>AA</u>		
Meth: 241.00 PCT			433	0.16	-.29	029	0.17	.47	324	5.30	1.10	262	0.040 X	.50
<u>Acid Soluble Iron</u>			289	0.17	-.35	397	0.17	.43	232	5.95	1.03	Avg	0.039	
<u>Atomic Absorption</u>			307	0.16	-.42	102	0.17	.30	376	5.55	.97	193	0.039	-1.12
193	0.30 s	13.45	354	0.17	-.50	057	0.17	.27	368	5.69	.82	Meth: 261.30 PCT		
137	0.19	1.51	292	0.16	-.55	096	0.17	.25	102	4.67	.51	<u>Acid Soluble Mangane</u>		
055	0.18	.88	423	0.16	-.65	035	0.17	.22	Avg	4.48		<u>ICP</u>		
351	0.17	.80	232	0.16	-.81	009	0.17	.13	096	4.25	-.23	390	0.388 s	104.65
029	0.17	.70	376	0.15	-1.07	Avg	0.17		106	3.90	-.48	393	0.180 s	42.20
397	0.17	.66	027	0.15	-1.10	433	0.16	-.21	065	3.16 X	-.93	096	0.044	1.84
262	0.17 X	.36	368	0.17 R	-1.13	289	0.17	-.31	A=Analysis beyond 3-s limits					
Avg	0.16		393	0.15	-1.24	307	0.16	-.31						
177	0.15	-.55	409	0.15	-1.24									

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.XX PCT			Meth: 281.XX PPM			Meth: 289.XX PPM			Meth: 291.XX PPM		
<u>Acid Soluble Mangane</u>			<u>Acid Soluble Mangane</u>			<u>Mercury</u>			<u>Molybdenum</u>			<u>Nickel</u>		
ICP			106	0.040	.62	193	0.05	-1.13	057	3.23	.18	035	16.45	.51
102	0.044	1.33	247	0.040	.61				233	3.10	.08	247	15.60	.04
232	0.040	1.32	423	0.040	.60	Meth: 289.00 PPM			409	3.11	.07	Avg	15.60	
307	0.042	.82	065	0.040	.50	<u>Molybdenum</u>			Avg	3.07		232	14.85	-.34
009	0.040	.74	262	0.040 X	.47	<u>Atomic Absorption</u>			009	2.88	-.23	065	14.83	-.35
106	0.040	.45	Avg	0.039		040	2.40	.71	232	2.80	-.46	193	12.50	-1.41
247	0.040	.42	433	0.038	-.47	Meth: 289.30 PPM			324	2.55	-.72	409	12.30	-1.48
035	0.041	.37	193	0.039	-.56	<u>Molybdenum</u>			040	2.40	-.78	Meth: 301.00 PPM		
423	0.040	.27	057	0.037	-.70	<u>ICP</u>			102	2.52	-1.00	<u>Selenium</u>		
065	0.040	.23	422	0.037	-.74	390	4.96	2.02	368	1.04	-2.33	<u>Atomic Absorption</u>		
Avg	0.039		409	0.036	-.92	106	3.60	.76	Meth: 291.00 PPM			040	0.07	-.71
433	0.038	-.58	027	0.036	-1.01	065	3.52	.58	<u>Nickel</u>			Meth: 301.30 PPM		
057	0.037	-.75	376	0.036	-1.25	247	3.55	.54	<u>Atomic Absorption</u>			<u>Selenium</u>		
422	0.037	-.79	289	0.034	-1.79	035	3.52	.46	193	12.50	.71	<u>ICP</u>		
376	0.036	-1.20	292	0.025 s	-5.12	433	3.31	.21	Meth: 291.30 PPM			409	0.50	.87
289	0.034	-1.67	Meth: 271.00 PCT			057	3.23	.12	<u>Nickel</u>			Avg	0.35	
292	0.025 s	-4.38	<u>Water Soluble Mangan</u>			Avg	3.12		<u>ICP</u>			368	0.20	-.87
Meth: 261.31 PCT			<u>Atomic Abs</u>			233	3.10	-.08	102			18.91	1.59	
<u>Acid Soluble Mangane</u>			193	0.005	.71	009	2.88	-.27	009			17.95	.97	
ICP			Meth: 281.00 PPM			232	2.80	-.48	106			17.00	.32	
027	0.036	.00	<u>Mercury</u>			324	2.55	-.73	Avg			16.51		
Meth: 261.99 PCT			<u>Atomic Absorption</u>			102	2.52	-.98	035			16.45	-.49	
<u>Acid Soluble Mangane</u>			363	0.19	.89	368	1.04	-2.27	247			15.60	-.59	
<u>Other</u>			Avg	0.12		Meth: 289.99 PPM			232			14.85	-1.08	
409	0.036	-.71	193	0.05	-.84	<u>Molybdenum</u>			065			14.83	-1.09	
Meth: 261.XX PCT			Meth: 281.99 PPM			<u>Other</u>			Meth: 291.99 PPM			Meth: 301.XX PPM		
<u>Acid Soluble Mangane</u>			<u>Mercury</u>			409			<u>Nickel</u>			<u>Selenium</u>		
390	0.388 s	128.96	<u>Other</u>			Meth: 289.XX PPM			<u>Other</u>			422		
393	0.180 s	52.15	409	0.15	.71	<u>Molybdenum</u>			409			12.30	-.71	102
096	0.044 R	2.45	Meth: 281.XX PPM			390	4.96	2.19	Meth: 291.XX PPM			009		
102	0.044	1.90	<u>Mercury</u>			106	3.60	.83	<u>Nickel</u>			035		
232	0.040 R	1.69	363	0.19	.89	065	3.52	.65	102			18.91	1.50	423
307	0.042	1.25	409	0.15	.66	247	3.55	.62	009			17.95	1.08	Avg
009	0.040	1.02	Avg	0.13		035	3.52	.53	057			17.00	.63	232
035	0.041	.70	S/s=Screened Outlier			433	3.31	.28	106			17.00	.63	057
* X=Excluded from lab performance			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: 311.99 PCT Sodium <u>Other</u>			Meth: 321.30 PCT Acid Soluble Zinc <u>ICP</u>			Meth: 321.XX PCT <u>Acid Soluble Zinc</u>			Meth: 325.00 PCT Water Soluble Zinc <u>Atomic Absorption</u>					
409	0.21	-1.60	360	0.237	.68	200	0.243	1.19	193	0.028	.71			
			035	0.233	.40	057	0.249	1.05						
			389	0.233	.29	390	0.247	.87						
Meth: 321.00 PCT Acid Soluble Zinc <u>Atomic Absorption</u>			023 0.230 .15 Avg 0.229			090 0.245 .82 106 0.245 .82 258 0.240 .75			Meth: 325.30 PCT Water Soluble Zinc <u>ICP</u>					
055	0.280 s	3.18	009	0.226	-.34	324	0.240	.75	432	0.160	.71			
193	0.270	1.89	027	0.223	-.43	040	0.233	.67						
137	0.260	1.47	409	0.225	-.45	354	0.242	.60				Meth: 325.XX PCT <u>Water Soluble Zinc</u>		
397	0.246	1.05	307	0.223	-.46	257	0.240	.48	432	0.160	.87			
200	0.243	1.02	433	0.223	-.49	360	0.237	.47	Avg	0.094				
258	0.240	.62	247	0.218	-.76	177	0.235	.46	193	0.028	-.86			
177	0.235	.39	423	0.217	-.88	035	0.233	.25						
257	0.240	.34	289	0.218	-.92	389	0.233	.15						
Avg	0.233		292	0.214	-1.08	Avg	0.232							
262	0.230 X	-.18	232	0.212	-1.21	262	0.230 X	-.10						
029	0.229	-.24	376	0.212	-1.26	023	0.230	-.15						
043	0.230	-.36	368	0.221 R	-1.54	029	0.229	-.18						
040	0.233	-.60	422	0.206	-1.66	043	0.230	-.36						
233	0.216	-.89	393	0.210 R	-1.91	009	0.226	-.39						
028	0.216	-.98	Meth: 321.99 PCT Acid Soluble Zinc <u>Other</u>			409	0.225	-.49						
351	0.212	-1.10	042	0.265 X	.71	027	0.223	-.51						
392	0.204	-1.56	Meth: 321.XX PCT <u>Acid Soluble Zinc</u>			307	0.223	-.54						
Meth: 321.30 PCT Acid Soluble Zinc <u>ICP</u>			065 2.147 s 132.57 300 2.125 s 131.05 432 0.530 s 21.35 330 0.260 R 2.54 102 0.257 1.91 057 0.249 1.43 390 0.247 1.21 090 0.245 1.15 106 0.245 1.15 324 0.240 1.02 354 0.242 .89			028 0.216 -1.00 292 0.214 -1.06 351 0.212 -1.13 232 0.212 -1.16 376 0.212 -1.20 368 0.221 R -1.36 422 0.206 -1.55 392 0.204 -1.64 393 0.210 R -1.72								
* 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	0.13	050.XX	70	- 0.14	1.17	0.74
001.99	7	0.00	1.04	0.08	060.00	7	0.00	1.02	0.18
001.XX	9	0.00	1.03	0.06	060.XX	7	0.00	1.02	0.18
002.99	2	0.00	0.84	0.63	101.30	19	10.07	40.48	2.14
002.XX	2	0.00	0.84	0.63	101.XX	19	10.07	40.48	2.14
009.10	4	0.00	1.06	0.17	121.00	15	- 0.03	0.97	0.25
009.XX	4	0.00	1.06	0.17	121.30	32	4.24	24.31	1.01
010.11	5	0.00	1.05	0.15	121.XX	47	3.02	20.96	0.88
010.12	6	0.00	1.05	0.07	131.30	4	- 0.57	1.46	0.80
010.60	48	0.16	1.22	0.30	131.XX	5	- 0.50	1.45	0.67
010.99	6	0.75	2.07	0.87	144.01	14	0.75	3.06	0.37
010.XX	65	0.15	1.26	0.42	144.02	3	4.70	8.16	0.52
020.10	6	0.00	0.90	0.49	144.99	21	4.94	22.65	0.57
020.20	15	- 0.63	3.09	0.27	144.XX	37	3.47	19.13	0.52
020.40	7	0.00	0.92	0.46	151.00	2	0.00	1.22	0.03
020.50	8	- 0.27	4.05	2.04	151.30	7	0.17	1.05	0.26
020.99	2	0.00	1.18	0.23	151.XX	10	0.15	1.07	0.23
020.XX	38	- 0.60	3.66	1.57	165.00	12	6.939	24.054	0.315
030.10	2	0.00	1.22	0.00	165.99	16	0.636	2.165	1.222
030.XX	6	2.12	5.27	0.60	165.XX	28	3.951	19.488	0.749
040.10	2	0.00	0.33	0.83	171.XX	2	0.000	1.193	0.195
040.20	2	0.00	0.93	0.56	181.00	3	2.14	3.79	0.27
040.99	2	0.00	0.22	0.85	181.30	11	0.00	1.01	0.16
040.XX	8	- 0.69	2.12	0.64	181.XX	15	0.36	1.69	0.17
041.10	18	- 0.17	0.98	0.74	190.00	12	0.00	1.01	0.16
041.20	3	- 1.26	6.07	1.58	190.99	4	2.33	4.71	0.46
041.40	5	0.00	1.03	0.21	190.XX	16	0.31	1.56	0.20
041.50	9	- 1.59	3.30	0.75	191.30	13	- 1.46	3.72	0.34
041.60	10	0.00	0.98	0.31	191.XX	14	- 1.39	3.70	0.34
041.XX	38	- 1.01	2.95	0.77	202.30	10	47.53	150.32	0.55
048.20	5	0.00	1.04	0.21	202.XX	12	29.96	103.77	0.45
048.XX	5	0.00	1.04	0.21	221.00	4	0.0000	0.5030	0.8278
050.00	22	- 0.30	1.90	0.64	221.30	19	3.1996	12.688	0.8560
050.30	9	0.41	1.54	0.27	221.XX	24	2.5894	11.443	0.8480
050.50	9	- 0.15	1.04	0.51	241.00	12	0.76	2.79	2.87
050.51	9	- 0.43	1.60	1.41	241.30	30	3.41	17.24	1.22
050.60	6	0.00	1.00	0.29	241.XX	43	4.55	18.99	2.11
050.61	7	0.00	0.99	0.30	251.00	3	0.00	0.67	0.73
050.99	13	0.04	0.93	0.56	251.30	9	0.00	0.91	0.45

Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
251.XX	13	0.00	0.92	0.43					
261.00	2	0.000	0.707	0.707					
261.30	18	7.917	26.156	0.654					
261.XX	22	8.112	29.230	0.738					
281.00	2	0.00	1.18	0.22					
281.XX	3	0.00	1.01	0.39					
289.30	13	0.00	0.96	0.33					
289.XX	15	0.00	0.96	0.33					
291.30	7	0.00	1.00	0.26					
291.XX	9	0.00	1.01	0.18					
301.30	2	0.00	1.22	0.00					
301.XX	3	0.00	1.12	0.03					
311.99	8	0.00	1.02	0.17					
311.XX	8	0.00	1.02	0.17					
321.00	16	0.151	1.070	0.664					
321.30	29	9.814	34.024	1.049					
321.XX	46	5.239	22.871	0.828					