

MAGRUDER - Fertilizer Check Sample No. - 200404 Grade 20-20-10

- Pass 1 Results for 81 Labs - - Pass 2 Results for 80 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	5	8.54	0.36	0.16	5	8.54	0.36	0.16
Ammoniacal Nitrogen, Other		001.99	8	9.10	1.02	0.12	8	9.10	1.02	0.12
Method Group 001.XX PCT			13	8.89	0.87	0.14	13	8.89	0.87	0.14
Ammon & Nitrate N, Devarda	892.01	009.10	2	9.19	0.23	0.11	2	9.19	0.23	0.11
Total Nitrogen, Reduced Iron		010.10	1	20.58	0.08	0.12	1	20.58	0.08	0.12
Total Nitrogen, Modified Comprehensive	978.02	010.11	8	20.52	0.36	0.22	8	20.52	0.36	0.22
Total Nitrogen, Salicylic	955.04D	010.12	6	20.51	0.35	0.06	5	20.51	0.39	0.02
Total Nitrogen, Combustion		010.60	48	20.72	0.21	0.10	46	20.73	0.19	0.08
Total Nitrogen, Other		010.99	6	20.64	0.43	0.23	5	20.65	0.42	0.08
Method Group 010.XX PCT			72	20.66	0.31	0.12	68	20.67	0.29	0.09
Total Phosphate, Grav Quimociac	962.02	020.10	6	20.87	0.16	0.20	6	20.87	0.16	0.20
Total Phosphate, Spectrometric	958.01	020.20	17	20.70	0.32	0.12	17	20.70	0.32	0.12
Total Phosphate, Automated	978.01	020.40	7	20.54	0.15	0.14	7	20.54	0.15	0.14
Total Phosphate, ICP		020.50	5	20.81	0.39	0.11	5	20.81	0.39	0.11
Total Phosphate, Other		020.99	2	20.90	0.43	0.06	2	20.90	0.43	0.06
Method Group 020.XX PCT			37	20.72	0.30	0.13	37	20.72	0.30	0.13
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	2	0.06	0.05	0.00	2	0.06	0.05	0.00
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.04	0.01	0.01	1	0.04	0.01	0.01
Insoluble Phosphate, Automated	978.01	030.40	3	0.04	0.03	0.01	3	0.04	0.03	0.01
Method Group 030.XX PCT			6	0.05	0.03	0.01	6	0.05	0.03	0.01
InDir Available Phosphate, Grav Quim ..	960.02	040.10	2	20.94	0.11	0.16	2	20.94	0.11	0.16
InDir Available Phosphate, Spectrometri	960.02	040.20	2	20.19	0.14	0.17	2	20.19	0.14	0.17
InDir Available Phosphate, Automated ..	960.02	040.40	2	20.60	0.09	0.06	2	20.60	0.09	0.06
InDir Available Phosphate, Other		040.99	1	20.53	0.16	0.23	1	20.53	0.16	0.23
Method Group 040.XX PCT			7	20.57	0.31	0.15	7	20.57	0.31	0.15
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	21	20.84	0.18	0.10	20	20.84	0.18	0.07
Dir Available Phosphate, Spectrometric	960.03D	041.20	5	20.58	0.20	0.13	5	20.58	0.20	0.13
Dir Available Phosphate, Automated	978.01	041.40	4	20.47	0.26	0.16	4	20.47	0.26	0.16
Dir Available Phosphate, ICP		041.50	8	20.70	0.33	0.07	8	20.70	0.33	0.07
Dir Available Phosphate, EDTA Extract .	993.01	041.60	10	20.82	0.10	0.12	10	20.82	0.10	0.12
Method Group 041.XX PCT			50	20.76	0.26	0.12	48	20.74	0.25	0.10
Water Soluble Phosphate, Spectrometric	970.01	048.20	4	19.70	0.19	0.15	4	19.70	0.19	0.15
Water Soluble Phosphate, Other		048.99	1	19.61	0.02	0.03	1	19.61	0.02	0.03
Method Group 048.XX PCT			5	19.68	0.17	0.13	5	19.68	0.17	0.13
Soluble Potash, STPB Oxalate	958.02	050.00	24	10.59	0.15	0.07	23	10.58	0.14	0.05
Soluble Potash, STPB Citrate	969.04	050.10	1	10.71	0.02	0.02	1	10.71	0.02	0.02
Soluble Potash, AA (Oxalate)		050.30	9	10.36	0.29	0.12	9	10.33	0.31	0.09
Soluble Potash, AA (Citrate)		050.31	1	10.15	0.07	0.10	1	10.15	0.07	0.10
Soluble Potash, ICP (Oxalate)		050.50	4	10.55	0.50	0.07	4	10.55	0.50	0.07

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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	10.54	0.15	0.13	7	10.52	0.12	0.08
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	6	10.49	0.10	0.09	6	10.49	0.10	0.09
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	8	10.58	0.21	0.20	8	10.58	0.21	0.20
Soluble Potash, Other		050.99	9	10.51	0.19	0.08	8	10.51	0.20	0.05
Method Group 050.XX PCT			71	10.53	0.23	0.11	63	10.53	0.18	0.07
Free Water, Vacuum Oven	965.08B	060.00	6	0.53	0.07	0.04	5	0.51	0.05	0.02
Free Water, Vacuum Desiccate	965.08A	060.10	1	0.54	0.09	0.13	1	0.54	0.09	0.13
Method Group 060.XX PCT			7	0.53	0.07	0.05	7	0.53	0.07	0.05
Acid Soluble Calcium, AA	945.04	101.00	1	2.44	0.04	0.06	1	2.44	0.04	0.06
Acid Soluble Calcium, ICP		101.30	7	2.48	0.20	0.06	7	2.48	0.20	0.06
Method Group 101.XX PCT			8	2.48	0.19	0.06	8	2.48	0.19	0.06
Acid Soluble Magnesium, AA	984.01	121.00	3	1.69	0.08	0.06	3	1.69	0.08	0.06
Acid Soluble Magnesium, ICP		121.30	7	1.64	0.09	0.03	7	1.64	0.09	0.03
Method Group 121.XX PCT			10	1.65	0.09	0.04	9	1.64	0.08	0.03
Sulfur, Gravimetric	980.02a	144.01	2	1.00	0.01	0.02	2	1.00	0.01	0.02
Sulfur, Spectrometric		144.70	1	0.97	0.02	0.03	1	0.97	0.02	0.03
Sulfur, Other		144.99	6	0.99	0.08	0.01	5	1.01	0.07	0.01
Method Group 144.XX PCT			9	0.99	0.06	0.02	9	0.99	0.06	0.02
Arsenic, ICP		151.30	3	1.75	0.96	0.32	3	1.75	0.96	0.32
Arsenic, Other		151.99	1	2.00	0.00	0.00	1	2.00	0.00	0.00
Method Group 151.XX PPM			4	1.81	0.82	0.24	4	1.81	0.82	0.24
Acid Soluble Boron, Other		165.99	4	0.024	0.010	0.001	4	0.024	0.010	0.001
Cadmium, Atomic Absorption		181.00	3	14.72	1.39	0.80	3	14.72	1.39	0.80
Cadmium, ICP		181.30	9	13.82	1.02	0.54	8	13.84	1.03	0.37
Cadmium, Other		181.99	2	14.88	0.19	0.15	2	14.88	0.19	0.15
Method Group 181.XX PPM			14	14.16	1.12	0.54	13	14.20	1.12	0.44
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	2	4.08	4.59	0.05	2	4.08	4.59	0.05
Water Soluble Chlorine, Other		190.99	2	8.43	0.36	0.23	2	8.43	0.36	0.23
Method Group 190.XX PCT			4	6.26	3.81	0.14	3	5.44	4.13	0.03
Chromium, ICP		191.30	9	132.62	9.91	5.62	8	130.99	7.35	2.48
Chromium, Other		191.99	1	105.00	7.07	10.00	1	105.00	7.07	10.00
Method Group 191.XX PPM			10	129.86	12.76	6.06	9	128.10	11.01	3.32
Acid Soluble Cobalt, AA		202.00	1	2.40	0.00	0.00	1	2.40	0.00	0.00
Acid Soluble Cobalt, ICP	965.11	202.30	9	3.51	1.16	0.36	9	3.51	1.16	0.36
Acid Soluble Cobalt, Other		202.99	1	3.00	0.00	0.00	1	3.00	0.00	0.00
Method Group 202.XX PPM			11	3.36	1.10	0.29	10	3.45	1.10	0.22
Acid Soluble Copper, Atomic Absorption	975.01	221.00	11	0.0321	0.0019	0.0011	11	0.0321	0.0019	0.0011
Acid Soluble Copper, ICP		221.30	16	0.0307	0.0024	0.0019	15	0.0307	0.0023	0.0014
Acid Soluble Copper, Other		221.99	1	0.0362	0.0003	0.0004	1	0.0362	0.0003	0.0004

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Method Group 221.XX PCT			28	0.0314	0.0025	0.0015	27	0.0315	0.0024	0.0013
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	15	0.40	0.03	0.01	14	0.40	0.03	0.01
Acid Soluble Iron, ICP		241.30	17	0.40	0.03	0.01	16	0.40	0.03	0.01
Acid Soluble Iron, Other		241.99	2	0.42	0.10	0.04	2	0.42	0.10	0.04
Method Group 241.XX PCT			34	0.40	0.04	0.01	31	0.40	0.03	0.01
Lead, Atomic Absorption		251.00	1	3.11	0.34	0.48	1	3.11	0.34	0.48
Lead, ICP		251.30	3	2.18	1.91	0.20	3	2.18	1.91	0.20
Lead, Other		251.99	2	2.00	1.25	0.60	2	2.00	1.25	0.60
Method Group 251.XX PPM			6	2.28	1.50	0.38	6	2.28	1.50	0.38
Acid Soluble Manganese, AA	972.02a	261.00	13	0.042	0.006	0.003	12	0.041	0.005	0.002
Acid Soluble Manganese, AA	972.02b	261.11	1	0.048	0.003	0.004	1	0.048	0.003	0.004
Acid Soluble Manganese, ICP	972.02a	261.30	16	0.041	0.005	0.002	16	0.041	0.005	0.002
Acid Soluble Manganese, ICP	972.02b	261.31	2	0.039	0.002	0.001	2	0.039	0.002	0.001
Acid Soluble Manganese, Other		261.99	1	0.040	0.000	0.000	1	0.040	0.000	0.000
Method Group 261.XX PCT			33	0.041	0.005	0.002	32	0.041	0.005	0.002
Molybdenum, ICP		289.30	9	5.23	0.58	0.28	8	5.22	0.53	0.09
Molybdenum, Other		289.99	1	6.00	0.00	0.00	1	6.00	0.00	0.00
Method Group 289.XX PPM			10	5.31	0.60	0.25	9	5.31	0.55	0.08
Nickel, ICP		291.30	11	27.70	3.28	2.50	10	27.67	2.65	1.39
Nickel, Other		291.99	2	20.08	2.65	1.95	2	20.08	2.65	1.95
Method Group 291.XX PPM			13	26.52	4.21	2.41	12	26.40	3.88	1.49
Selenium, ICP		301.30	1	44.15	4.49	6.35	1	44.15	4.49	6.35
Selenium, Other		301.99	1	1.00	0.00	0.00	1	1.00	0.00	0.00
Method Group 301.XX PPM			2	22.57	25.04	3.18	2	22.57	25.04	3.18
Sodium, Flame Photometric	974.01	311.30	1	0.29	0.00	0.01	1	0.29	0.00	0.01
Sodium, Other		311.99	6	0.34	0.09	0.01	6	0.34	0.09	0.01
Method Group 311.XX PCT			7	0.33	0.08	0.01	7	0.33	0.08	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	7	0.048	0.005	0.002	7	0.048	0.005	0.002
Acid Soluble Zinc, ICP		321.30	15	0.048	0.004	0.002	13	0.048	0.004	0.001
Acid Soluble Zinc, Other		321.99	1	0.055	0.000	0.000	1	0.055	0.000	0.000
Method Group 321.XX PCT			23	0.048	0.004	0.002	21	0.048	0.004	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: 009.10 PCT			Meth: 010.60 PCT			Meth: 010.60 PCT			Meth: 010.XX PCT		
Ammoniacal Nitrogen			Ammon & Nitrate N			Total Nitrogen			Total Nitrogen			<u>Total Nitrogen</u>		
<u>MgO Distillation</u>			<u>Devarda</u>			<u>Combustion</u>			<u>Combustion</u>					
258	9.07	1.48	258	9.38	.92	114	21.08	1.77	177	20.58	-.78	022	20.94	.91
220	8.57	.62	Avg	9.19		422	21.05	1.66	102	20.60	-.85	405	20.94	.91
415	8.64	.26	416	9.00	-.81	023	21.02	1.51	411	20.57	-.88	072	20.90	.83
Avg	8.54					361	20.97	1.21	234	20.54	-.99	330	20.90	.77
288	8.35	-.53	Meth: 010.10 PCT			022	20.94	1.07	095	20.55	-1.04	376	20.90	.77
324	8.09	-1.26	Total Nitrogen			072	20.90	.98	232	20.50	-1.20	307	20.87	.77
			<u>Reduced Iron</u>			307	20.87	.91	043	20.39	-1.79	007	20.88	.71
			072	20.58	.71	376	20.90	.86	292	20.33	-2.11	377	20.87	.68
Meth: 001.99 PCT			Meth: 010.11 PCT			330	20.90	.86	070	20.38 R	-2.16	024	20.86	.64
Ammoniacal Nitrogen			Total Nitrogen			007	20.88	.79	034	20.30	-2.28	142	20.85	.60
<u>Other</u>			<u>Modified Comprehensi</u>			377	20.87	.73	041	20.33 R	-2.36	096	20.85	.59
376	11.12	1.98	090	21.13	1.66	024	20.86	.67	389	20.25	-2.49	035	20.81	.58
363	10.23	1.11	288	20.80	.77	035	20.81	.66	360	19.98 s	-4.00	406	20.84	.57
Avg	9.10		105	20.60	.29	220	20.76	.63	027	19.94 s	-4.09	220	20.76	.51
320	9.09	-.09	Avg	20.52		142	20.85	.61				296	20.80	.49
354	8.83	-.29	414	20.46	-.37	096	20.85	.58	Meth: 010.99 PCT			038	20.82	.49
300	8.71	-.39	363	20.51	-.41	406	20.84	.56	Total Nitrogen			028	20.81	.47
096	8.61	-.49	029	20.51	-.48	296	20.80	.50	<u>Other</u>			055	20.69	.45
409	8.21	-.88	322	20.07	-1.25	038	20.82	.43	354	21.18	1.28	288	20.80	.44
394	8.02	-1.05	073	20.11	-1.40	028	20.81	.41	405	20.94	.69	262	20.80	.43
Meth: 001.XX PCT			Meth: 010.12 PCT			018	20.80	.35	Avg	20.65		018	20.80	.43
Ammoniacal Nitrogen			Total Nitrogen			262	20.80	.35	397	20.61	-.16	049	20.77	.36
376	11.12	2.58	<u>Salicylic</u>			049	20.77	.33	300	20.50	-.38	324	20.72	.35
363	10.23	1.55	351	20.55 R	.29	106	20.77	.17	368	20.56 R	-1.20	106	20.77	.31
320	9.09	.26	Avg	20.51		Avg	20.73		105	20.04	-1.49	409	20.73	.31
258	9.07	.24	185	20.61	.26	029	20.73	-.08	030	18.78 S	-4.64	025	20.68	.21
Avg	8.89		102	20.48	-.07	233	20.72	-.12				029	20.73	.18
354	8.83	-.17	415	19.98	-1.35	325	20.71	-.15	Meth: 010.XX PCT			247	20.69	.18
300	8.71	-.21				131	20.69	-.24	<u>Total Nitrogen</u>			233	20.72	.17
415	8.64	-.29	Meth: 010.60 PCT			247	20.69	-.34	073	21.29	2.16	325	20.71	.14
096	8.61	-.33	Total Nitrogen			409	20.73	-.36	354	21.18	1.75	131	20.69	.09
220	8.57	-.45	<u>Combustion</u>			025	20.68	-.41	090	21.13	1.55	Avg	20.67	
288	8.35	-.62	073	21.29 s	2.95	324	20.72	-.47	137	21.11	1.50	009	20.63	-.17
409	8.21	-.80				009	20.63	-.55	114	21.08	1.38	231	20.63	-.19
324	8.09	-.92	S/s=Screened Outlier			231	20.63	-.56	422	21.05	1.30	185	20.61	-.24
394	8.02	-1.00	R=Duplicate Range too large			055	20.69	-.70	023	21.02	1.20	393	20.60	-.27
			A=Analysis beyond 3-s limits			393	20.60	-.70	361	20.97	1.00	397	20.61	-.29
												177	20.58	-.33

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	
Meth: 010.XX PCT			Meth: 020.10 PCT			Meth: 020.50 PCT			Meth: 020.XX PCT			Meth: 030.40 PCT			
<u>Total Nitrogen</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Insoluble Phosphate</u>			
105	20.60	-.35	095	20.79	-1.19	330	21.81 S	2.80	376	20.70	-.10	409	0.07	1.08	
072	20.58	-.38	Grav Quimociac			307	21.32	1.35	406	20.72	-.13	Automated			
411	20.57	-.39	Meth: 020.20 PCT			361	21.18	.94	363	20.68	-.19	096	0.05	.22	
102	20.60	-.43	<u>Total Phosphate</u>			Avg 20.81			096	20.58	-.48	Avg 0.04			
234	20.54	-.47	<u>Spectrometric</u>			422	20.58	-.63	258	20.63	-.50	247 0.01 -1.14			
095	20.55	-.51	292	24.97 s	13.56	389	20.55	-.69	035	20.60	-.50	Meth: 030.XX PCT			
351	20.55	-.56	232	21.28	1.84	393	20.44	-.97	392	20.57	-.52	<u>Insoluble Phosphate</u>			
232	20.50	-.60	416	21.13	1.36	Meth: 020.99 PCT			422	20.58	-.52	363	0.40 s	10.60	
300	20.50	-.62	362	21.07	1.23	<u>Total Phosphate</u>			389	20.55	-.59	405	0.10	1.62	
102	20.48	-.67	391	21.08	1.20	<u>Other</u>			320	20.55	-.62	409	0.07	.79	
363	20.51	-.76	234	20.78	.41	368	21.27	.86	420	20.52	-.68	Avg 0.05			
029	20.51	-.84	288	20.81	.39	Avg 20.90	Meth: 020.XX PCT			247	20.54	-.72	096	0.05	-.15
414	20.46	-.85	406	20.72	.15	420	20.52	-.87	324	20.51	-.79	220	0.04	-.33	
043	20.39	-1.00	376	20.70	.06	<u>Total Phosphate</u>			393	20.49	-.84	090	0.01	-1.03	
211	20.36	-1.10	231	20.70	.01	292	24.97 s	14.02	393	20.44	-.93	247 0.01 -1.03			
292	20.33	-1.21	Avg 20.70			397	20.41	-1.12	142	20.38	-1.15	Meth: 040.10 PCT			
070	20.38 R	-1.28	363	20.68	-.13	399	20.41	-1.23	169	20.30 X	-1.39	<u>InDir Available Phos</u>			
034	20.30	-1.33	392	20.57	-.42	394	20.30	-1.38	220	20.14	-1.94	<u>Grav Quim</u>			
041	20.33 R	-1.40	258	20.63	-.44	169	20.30 X	-1.39	038	10.27 s	-34.49	405	20.98	1.06	
389	20.25	-1.47	324	20.51	-.70	330	21.81 s	3.85	Meth: 030.10 PCT			Avg 20.94			
368	20.56 R	-1.73	142	20.38	-1.03	307	21.32	2.02	<u>Insoluble Phosphate</u>			090 20.91 -.61			
322	20.07	-2.07	397	20.41	-1.12	232	21.28	1.83	<u>Grav Quimociac</u>			Meth: 040.20 PCT			
073	20.11 R	-2.19	220	20.14	-1.79	368	21.27	1.81	Avg 0.06			<u>InDir Available Phos</u>			
105	20.04	-2.20	038	10.27 s	-33.09	361	21.18	1.50	090 0.01 -.87			<u>Spectrometri</u>			
415	19.98	-2.37	Meth: 020.40 PCT			416	21.13	1.34	Meth: 030.20 PCT			363 0.40 S 52.31			
360	19.98	-2.47	<u>Total Phosphate</u>			405	21.08	1.24	<u>Insoluble Phosphate</u>			<u>InDir Available Phos</u>			
027	19.94	-2.53	<u>Automated</u>			362	21.07	1.21	<u>Spectrometric</u>			363 20.28 .92			
030	18.78 s	-6.71	409	20.74	1.39	391	21.08	1.17	Avg 0.04			Avg 20.19			
Meth: 020.10 PCT			035	20.60	.69	090	20.92	.66	090 0.01 -.87			220 20.11 -.81			
<u>Total Phosphate</u>			320	20.55	.55	414	20.89	.64	Meth: 030.20 PCT			Meth: 040.40 PCT			
<u>Grav Quimociac</u>			096	20.58	.26	095	20.79	.64	<u>Insoluble Phosphate</u>			<u>InDir Available Phos</u>			
405	21.08	1.47	Avg 20.54	Meth: 020.10 PCT			234	20.78	.38	<u>Spectrometric</u>			<u>Automated</u>		
414	20.89	.65	393	20.49	-.74	<u>Total Phosphate</u>			363	0.40 S	52.31	409 20.67 .96			
090	20.92	.45	247	20.54	-.78	409	20.74	.22	Avg 0.04			Avg 20.60			
Avg 20.87			394	20.30	-1.60	409	20.74	.22	220 0.04			096 20.53			
313	20.79	-.63	S/s=Screened Outlier			231	20.70	-.07	-.71			-.76			
114	20.74	-.94	R=Duplicate Range too large			A=Analysis beyond 3-s limits									

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 040.99 PCT			Meth: 041.10 PCT			Meth: 041.60 PCT			Meth: 041.XX PCT			Meth: 048.20 PCT		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Water Soluble Phosph</u>		
<u>Other</u>			<u>Grav Quimociac</u>			<u>EDTA Extract</u>			009	20.87	.51	<u>Spectrometric</u>		
247	20.53	.71	260	20.49	-1.98	262	21.70 s	8.55	362	20.86	.48	362	19.77 X	1.02
						018	21.30 s	5.47	029	20.78	.46	247	19.79	.53
						177	20.96	1.45	377	20.76	.42	096	19.79	.46
Meth: 040.XX PCT			Meth: 041.20 PCT			296	20.88	1.32	131	20.84	.41	Avg	19.70	
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			073	20.91	1.10	131	20.84	.40	363	19.44	-1.40
405	20.98	1.35	<u>Spectrometric</u>			105	20.88	.89	105	20.81	.39			
090	20.91	1.08	362	20.86	1.39	Avg	20.82		361	20.83	.33			
409	20.67	.35	106	20.69	.60	043	20.79	-.34	288	20.77	.24	Meth: 048.99 PCT		
Avg	20.57		Avg	20.58		034	20.77	-.58	043	20.79	.20	<u>Water Soluble Phosph</u>		
096	20.53	-.13	415	20.55	-.21	095	20.76	-.64	095	20.76	.14	<u>Other</u>		
247	20.53	-.39	055	20.42	-.86	288	20.77	-.75	034	20.77	.13	420	19.61	.71
363	20.28	-.98	030	20.37	-1.19	028	20.74	-.91	102	20.75	.13			
220	20.11	-1.50				377	20.76	-1.19	360	20.75	.08	Meth: 048.XX PCT		
			Meth: 041.40 PCT			351	20.26 s	-5.68	Avg	20.74		<u>Water Soluble Phosph</u>		
			<u>Dir Available Phosph</u>						022	20.70	-.19	362	19.77 X	1.17
			<u>Automated</u>						028	20.74	-.20	247	19.79	.69
			072	22.20 S	6.60	Meth: 041.XX PCT			106	20.69	-.29	096	19.79	.62
			131	20.84	1.41	<u>Dir Available Phosph</u>			414	20.69	-.29	Avg	19.68	
			Avg	20.47		072	22.20 s	5.84	049	20.64	-.63	420	19.61	-.43
			029	20.45	-.43	262	21.70 s	3.85	322	20.58	-.66	363	19.44	-1.45
			027	20.32	-.57	018	21.30 R	2.53	415	20.55	-.80			
			393	20.27	-1.00	022	21.30	2.23	007	20.50	-1.00	Meth: 050.00 PCT		
			025	19.10 S	-5.25	411	21.25	2.06	260	20.49	-1.01	<u>Soluble Potash</u>		
						185	20.81 R	1.13	043	20.48	-1.10	<u>STPB Oxalate</u>		
			Meth: 041.50 PCT			072	21.02	1.13	393	20.47	-1.12	043	10.85	1.88
			<u>Dir Available Phosph</u>			325	21.01	1.06	029	20.45	-1.25	055	10.75 R	1.81
			<u>ICP</u>			254	21.00	1.03	055	20.42	-1.33	102	10.75	1.22
			022	21.30	1.82	177	20.96	.90	030	20.37	-1.58	073	10.74	1.14
			325	21.01	.93	137	20.97	.89	027	20.32	-1.69	258	10.73	1.07
			361	20.83	.39	177	20.95	.83	023	20.26	-1.97	391	10.72	1.00
			360	20.75	.17	296	20.94	.77	393	20.27	-2.01	114	10.72	.98
			Avg	20.70		296	20.88	.73	351	20.26	-2.07	009	10.70	.83
			007	20.50	-.61	041	20.91	.73				392	10.65	.65
			043	20.48	-.69	073	20.91	.72				131	10.64	.43
			393	20.47	-.70	233	20.92	.71	354	19.31 s	-5.73	350	10.60	.26
			023	20.26	-1.34	055	20.90	.64	025	19.10 s	-6.60	416	10.62	.26
			070	20.15 S	-3.04	105	20.88	.62				029	10.58	.21
			354	19.31 S	-4.16	211	20.88	.55				Avg	10.58	

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 050.00 PCT			Meth: 050.31 PCT			Meth: 050.61 PCT			Meth: 050.XX PCT			Meth: 050.XX PCT		
Soluble Potash			Soluble Potash			Soluble Potash			<u>Soluble Potash</u>			<u>Soluble Potash</u>		
<u>STPB Oxalate</u>			<u>AA (Citrate)</u>			<u>Flame (Citrate)</u>								
211	10.51	-.52	254	10.15	.71	025	10.86	1.29	102	10.75	1.22	106	10.45	-.47
231	10.50	-.56				018	10.80	1.14	073	10.74	1.15	049	10.44	-.50
220	10.53	-.60	Meth: 050.50 PCT			105	10.60	.27	258	10.73	1.10	137	10.45	-.51
296	10.51	-.60	Soluble Potash			Avg	10.58		391	10.72	1.05	095	10.48	-.59
233	10.48	-.70	<u>ICP (Oxalate)</u>			028	10.53	-.29	114	10.72	1.03	090	10.42	-.61
411	10.48	-.70	422	11.21	1.32	034	10.47	-.50	393	10.67	.98	007	10.42	-.61
022	10.45	-.95	324	10.64	.19	035	10.38	-1.04	322	10.71	.98	232	10.42	-.61
095	10.48	-.99	Avg	10.55		029	10.43	-1.24	072	10.53	.92	415	10.41	-.67
049	10.44	-1.00	106	10.45	-.22	030	10.57	-1.24	009	10.70	.91	288	10.40	-.70
090	10.42	-1.16	354	9.91	-1.30	Meth: 050.99 PCT			262	10.55	.82	394	10.39	-.73
072	10.27	-2.25	Meth: 050.51 PCT			Soluble Potash			392	10.65	.73	035	10.38	-.97
Meth: 050.10 PCT			Soluble Potash			<u>Other</u>			038	10.66	.72	360	10.35	-1.03
Soluble Potash			<u>ICP (Citrate)</u>			325	10.83	1.63	105	10.60	.63	043	10.33	-1.11
<u>STPB Citrate</u>			070	10.70 s	3.53	177	10.79	1.43	169	10.61 X	.62	029	10.43 R	-1.31
322	10.71	.71	023	10.67 R	2.22	072	10.53 R	.87	324	10.64	.62	376	10.29	-1.32
Meth: 050.30 PCT			393	10.67	1.50	368	10.51	.36	131	10.64	.60	095	10.28	-1.35
Soluble Potash			361	10.62	.78	Avg	10.51		361	10.62	.48	363	10.28	-1.35
<u>AA (Oxalate)</u>			389	10.55	.47	260	10.50	-.11	416	10.62	.48	072	10.27	-1.46
234	10.80	1.50	377	10.55	.35	232	10.42	-.49	105	10.60	.47	254	10.15	-2.07
038	10.66	1.05	Avg	10.52		394	10.39	-.59	350	10.60	.43	420	10.14	-2.11
262	10.55	.85	022	10.51	-.33	360	10.35	-.88	029	10.58	.33	142	10.00	-2.89
137	10.45	.39	007	10.42	-.84	376	10.29	-1.14	389	10.55	.30	185	10.05 R	-2.92
Avg	10.39		043	10.33	-1.58	Meth: 050.XX PCT			028	10.53	.22	073	10.08 s	-2.95
095	10.28	-.17	Meth: 050.60 PCT			<u>Soluble Potash</u>			377	10.55	.20	354	9.91 A	-3.39
363	10.28	-.19	Soluble Potash			422 11.21 A 3.68			Avg	10.53		397	9.82 s	-3.85
420	10.14	-.62	<u>Flame (Oxalate)</u>			070	10.70 R	2.36	211	10.51	-.12	351	9.28 s	-6.79
142	10.00	-1.07	169	10.61 X	1.38	025	10.86	1.78	231	10.50	-.15	Meth: 060.00 PCT		
185	10.05 R	-1.20	105	10.60	1.35	043	10.85	1.73	260	10.50	-.18	Free Water		
073	10.08 S	-1.27	Avg	10.49		325	10.83	1.64	022	10.51	-.24	<u>Vacuum Oven</u>		
397	9.82 S	-1.64	406	10.47	-.28	055	10.75 R	1.59	233	10.48	-.26	361	5.26 s	90.31
351	9.28 S	-3.36	055	10.46	-.47	018	10.80	1.58	411	10.48	-.26	363	0.61 R	2.29
			415	10.41	-.84	234	10.80	1.48	296	10.51	-.29	096	0.59	1.39
			288	10.40	-.88	023	10.67 R	1.48	034	10.47	-.31	416	0.53	.36
						030	10.57 R	1.45	406	10.47	-.35	105	0.53	.26
						177	10.79	1.44	220	10.53	-.35	Avg	0.51	
									368	10.51	-.39	007	0.48	-.85
									055	10.46	-.42	362	0.45	-1.28
									022	10.45	-.45	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: 060.10 PCT			Meth: 101.XX PCT			Meth: 121.XX PCT			Meth: 144.XX PCT			Meth: 181.00 PPM		
<u>Free Water</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>			<u>Sulfur</u>			<u>Cadmium</u>		
<u>Vacuum Desiccate</u>			320	2.54	.47	Avg	1.64		Avg	0.99		<u>Atomic Absorption</u>		
247	0.54	.71	Avg	2.48		288	1.64	-.10	247	0.98	-.20	296	15.80	.83
			105	2.44	-.26	095	1.63	-.29	393	0.97	-.43	233	15.30	.60
Meth: 060.XX PCT			102	2.37	-.60	009	1.60	-.52	422	0.92	-1.14	Avg	14.72	
<u>Free Water</u>			009	2.37	-.63	035	1.57	-.96	232	0.89	-1.64	397	13.07	-1.20
361	5.26 s	69.81	288	2.33	-.81	320	1.51	-1.75	Meth: 151.30 PPM			Meth: 181.30 PPM		
363	0.61	1.56	232	2.29	-1.07	232	0.57 s	-13.36	<u>Arsenic</u>			<u>Cadmium</u>		
247	0.54	.98	Meth: 121.00 PCT			Meth: 144.01 PCT			<u>ICP</u>			<u>ICP</u>		
096	0.59	.81	<u>Acid Soluble Magnesi</u>			<u>Sulfur</u>			368	17.99 S	18.23	368	14.87	1.14
Avg	0.53		<u>AA</u>			<u>Gravimetric</u>			376	2.95	1.25	106	15.00	1.13
416	0.53	-.07	131	1.77 X	1.34	288	1.01	1.17	Avg	1.75		049	14.52	.79
105	0.53	-.11	Avg	1.69		Avg	1.00		102	1.31	-.53	102	14.42	.57
007	0.48	-.90	105	1.66	-.39	102	1.00	-.36	106	1.00	-.81	376	13.90	.11
362	0.45	-1.27	095	1.63	-.75	Meth: 144.70 PCT			Meth: 151.99 PPM			Avg	13.84	
Meth: 101.00 PCT			Meth: 121.30 PCT			<u>Sulfur</u>			<u>Arsenic</u>			035	13.65 R	-.94
<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>			<u>Spectrometric</u>			<u>Other</u>			324	12.85	-.97
<u>AA</u>			<u>ICP</u>			393	0.97	.71	409	2.00	.00	009	12.70	-1.10
105	2.44	-.71	422	2.92 s	14.02	Meth: 144.99 PCT			Meth: 151.XX PPM			232	12.45	-1.35
Meth: 101.30 PCT			307	1.77	1.42	<u>Sulfur</u>			<u>Arsenic</u>			393	0.00 s	-13.40
<u>Acid Soluble Calcium</u>			361	1.74	1.04	<u>Other</u>			368			Meth: 181.99 PPM		
<u>ICP</u>			102	1.68	.37	035	1.11	1.52	376			<u>Cadmium</u>		
422	4.62 s	10.51	Avg	1.64		009	1.02	.25	409			<u>Other</u>		
035	2.85	1.81	288	1.64	-.09	361	1.01	.03	Avg			409		
361	2.65	.82	009	1.60	-.45	Avg	1.01		102			Avg		
320	2.54	.42	035	1.57	-.84	247	0.98	-.45	106			362		
Avg	2.48		320	1.51	-1.53	422	0.92	-1.38	1.81			14.88		
102	2.37	-.58	232	0.57 s	-11.76	232	0.89 R	-1.86	1.81			14.75		
009	2.37	-.61	Meth: 121.XX PCT			Meth: 144.XX PCT			1.31			-1.02		
288	2.33	-.78	<u>Acid Soluble Magnesi</u>			<u>Sulfur</u>			1.31			Meth: 181.XX PPM		
232	2.29	-1.03	422	2.92 s	15.92	<u>Other</u>			1.31			<u>Cadmium</u>		
Meth: 101.XX PCT			131	1.77 R	1.77	035	1.11	1.92	1.31			296		
<u>Acid Soluble Calcium</u>			307	1.77	1.61	Avg	0.024		1.31			233		
422	4.62 s	11.27	361	1.74	1.18	422	0.022	-.26	1.31			368		
035	2.85	1.96	102	1.68	.42	288	0.020	-.38	1.31			106		
361	2.65	.91	105	1.66	.18	361	0.015	-.92	1.31			409		
* X=Excluded from lab performance			S/s=Screened Outlier			102	1.00	.12	1.31			362		
									1.31			14.75		
									1.31			.51		
									1.31			.49		
									1.31			14.42		
									1.31			.21		
									1.31			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.XX PPM			Meth: 191.30 PPM			Meth: 202.30 PPM			Meth: 221.00 PCT			Meth: 221.99 PCT		
<u>Cadmium</u>			<u>Chromium</u>			<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Copper</u>		
Avg	14.20		ICP			ICP			Atomic Absorption			Other		
376	13.90	-.28	102	134.50	.48	009	5.15	1.42	043	0.0333	1.09	409	0.0362	.71
035	13.65 R	-.98	Avg	130.99		324	3.65	.18	177	0.0340	.99	Avg	0.0362	
397	13.07	-1.03	376	130.55	-.25	102	3.58	.16	038	0.0335	.78	368	0.0250 S	-43.36
324	12.85	-1.22	288	129.50	-.29	Avg	3.51		105	0.0330	.70			
009	12.70	-1.34	324	122.00	-1.25	288	3.40	-.09	Avg	0.0321		Meth: 221.XX PCT		
232	12.45	-1.57	232	118.50	-1.70	106	3.30	-.39	029	0.0319	-.22	<u>Acid Soluble Copper</u>		
393	0.00 s	-12.70	393	0.13 s	-17.79				233	0.0315	-.39	137	0.0500 s	7.80
						035	2.36	-1.00	095	0.0313	-.42	397	0.0370 s	3.89
Meth: 190.00 PCT			Meth: 191.99 PPM			Meth: 202.99 PPM			Meth: 221.30 PCT			Meth: 221.99 PCT		
<u>Water Soluble Chlori</u>			<u>Chromium</u>			<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Copper</u>		
<u>Titrimetric</u>			<u>Other</u>			<u>Other</u>								
422	8.06	.87	409	105.00	.71	409	3.00	.00	262	0.0290	-1.58	409	0.0362	1.99
Avg	4.08								296	0.0221 s	-5.79	106	0.0350	1.54
232	0.11	-.87	Meth: 191.XX PPM			Meth: 202.XX PPM			Meth: 221.30 PCT			028	0.0348	1.40
			<u>Chromium</u>			<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			177	0.0340	1.06
Meth: 190.99 PCT			368	145.71 R	2.12	Meth: 202.XX PPM			Meth: 221.30 PCT			043	0.0333	1.05
<u>Water Soluble Chlori</u>			009	139.45	1.03	<u>Acid Soluble Cobalt</u>			<u>ICP</u>			038	0.0335	.88
<u>Other</u>			035	137.50	.86	368	5.48	1.85	231	0.0370 s	4.13	049	0.0317	.82
288	8.70	.98	049	135.88	.73	009	5.15	1.55	106	0.0350	1.93	105	0.0330	.77
Avg	8.43		102	134.50	.58	324	3.65	.23	009	0.0331	1.03	009	0.0331	.67
009	8.17	-.74	376	130.55	.27	102	3.58	.20	049	0.0317	.96	360	0.0315	.63
			288	129.50	.19	Avg	3.45		354	0.0325	.81	354	0.0325	.48
Meth: 190.XX PCT			Avg	128.10		288	3.40	-.04	360	0.0315	.74	029	0.0319	.25
<u>Water Soluble Chlori</u>			324	122.00	-.58	106	3.30	-.39	288	0.0313	.56	233	0.0315	.21
288	8.70 R	.79	232	118.50	-.87	409	3.00	-.40	393	0.0310	.46	Avg	0.0315	
009	8.17	.66	409	105.00	-2.15	296	2.40	-.95	330	0.0310	.37	035	0.0314	-.06
422	8.06	.63	393	0.13 s	-11.62	320	2.50 R	-.97	035	0.0314	.27	095	0.0313	-.15
Avg	5.44					232	2.15	-1.18	Avg	0.0307		330	0.0310	-.39
232	0.11	-1.29	Meth: 202.00 PPM			Meth: 221.00 PCT			102	0.0300	-.32	393	0.0310	-.47
			<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			300	0.0295	-.58	288	0.0313	-.49
Meth: 191.30 PPM			<u>AA</u>			<u>Atomic Absorption</u>			389	0.0295	-.58	220	0.0300	-.62
<u>Chromium</u>			296	2.40	.00	<u>Atomic Absorption</u>			422	0.0290	-.76	102	0.0300	-.62
<u>ICP</u>			Meth: 202.30 PPM			<u>Atomic Absorption</u>			232	0.0285	-1.00	055	0.0305	-.75
368	145.71 R	2.89	<u>Acid Soluble Cobalt</u>			<u>Atomic Absorption</u>			324	0.0306 R	-1.83	389	0.0295	-.86
009	139.45	1.15	<u>ICP</u>			<u>Atomic Absorption</u>			023	0.0260	-2.12	300	0.0295	-.86
035	137.50	.91	368	5.48	1.71	137	0.0500 s	9.23				422	0.0290	-1.04
049	135.88	.72	S/s=Screened Outlier			397	0.0370 s	4.58				262	0.0290	-1.04
* X=Excluded from lab performance			R=Duplicate Range too large			394	0.0370 S	3.43				232	0.0285	-1.27
			A=Analysis beyond 3-s limits			028	0.0348	1.41						

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 221.XX PCT			Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 251.99 PPM			Meth: 261.30 PCT		
<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>			<u>Lead</u>			<u>Acid Soluble Manganese</u>		
324	0.0306 R	-1.79	ICP			035	0.40	.14	<u>Other</u>			ICP		
023	0.0260	-2.34	320	0.39	-.20	Avg	0.40		Avg	2.00		422	0.051	2.01
368	0.0250 s	-3.45	360	0.40	-.24	320	0.39	-.15	409	1.00	-.80	389	0.045	.82
296	0.0221 s	-4.52	422	0.39	-.26	360	0.40	-.20	Meth: 251.XX PPM			106	0.044	.72
Meth: 241.00 PCT			023	0.37	-1.08	422	0.39	-.21	<u>Lead</u>			360	0.044	.72
<u>Acid Soluble Iron</u>			324	0.37	-1.13	055	0.40	-.38	368	4.25	1.32	009	0.044	.57
<u>Atomic Absorption</u>			389	0.36	-1.62	296	0.39	-.45	376	3.00	.63	330	0.044	.51
137	0.44	1.40	232	0.35	-1.79	394	0.38	-.68	397	3.11	.58	049	0.043	.44
029	0.44	1.26	368	0.33 R	-2.63	038	0.38	-.81	106	2.30	.13	320	0.042	.39
220	0.43	1.09	300	0.25 s	-5.50	023	0.37	-.98	Avg	2.28		102	0.042	.28
397	0.42	.65	393	0.22 s	-6.73	177	0.37	-.99	409	1.00	-.85	Avg	0.041	
095	0.41 R	.63	Meth: 241.99 PCT			324	0.37	-1.03	393	0.00	-1.52	231	0.041	-.20
043	0.42	.63	<u>Acid Soluble Iron</u>			389	0.36	-1.50	Meth: 261.00 PCT			035	0.039	-.40
028	0.41	.43	<u>Other</u>			232	0.35	-1.65	<u>Acid Soluble Manganese</u>			393	0.040	-.45
105	0.41	.37	362	0.51	.86	262	0.35	-1.69	<u>AA</u>			354	0.039	-.87
055	0.40	.35	Avg	0.42		233	0.34	-2.18	137	0.050	1.56	300	0.036	-1.02
Avg	0.40		368	0.33	-.87	368	0.33 R	-2.45	220	0.045 R	1.12	232	0.034	-1.39
296	0.39	-.34	Meth: 241.XX PCT			300	0.25 s	-5.16	029	0.047	1.09	023	0.031	-2.15
394	0.38	-.55	<u>Acid Soluble Iron</u>			393	0.22 s	-6.33	397	0.044	.69	Meth: 261.31 PCT		
038	0.38	-.68	362	0.51 A	3.74	Meth: 251.00 PPM			105	0.045	.67	<u>Acid Soluble Manganese</u>		
177	0.37	-.84	330	0.45	1.71	<u>Lead</u>			177	0.043	.34	<u>ICP</u>		
262	0.35	-1.48	137	0.44	1.45	<u>Atomic Absorption</u>			394	0.043	.27	288	0.041	.87
233	0.34	-1.93	029	0.44	1.30	397	3.11	.71	043	0.043	.21	Avg	0.039	
Meth: 241.30 PCT			220	0.43	1.11	Meth: 251.30 PPM			Avg	0.041		324	0.037	-.86
<u>Acid Soluble Iron</u>			409	0.43	1.11	<u>Lead</u>			028	0.041	-.03	Meth: 261.99 PCT		
<u>ICP</u>			009	0.42	.86	<u>ICP</u>			296	0.039	-.71	<u>Acid Soluble Manganese</u>		
330	0.45	1.76	288	0.42	.76	368	4.25	1.08	038	0.037	-.83	<u>Other</u>		
409	0.43	1.13	106	0.42	.76	106	2.30	.12	055	0.033	-1.55	368	0.040	.00
009	0.42	.87	354	0.42	.75	Avg	2.18		262	0.032	-1.76	Meth: 261.XX PCT		
106	0.42	.76	095	0.41	.64	393	0.00	-1.14	Meth: 261.11 PCT			<u>Acid Soluble Manganese</u>		
288	0.42	.76	397	0.42	.64	Meth: 251.99 PPM			<u>Acid Soluble Manganese</u>			422	0.051	1.95
354	0.42	.75	043	0.42	.61	<u>Lead</u>			<u>AA</u>			137	0.050	1.74
231	0.40	.37	028	0.41	.41	<u>Other</u>			095	0.048	.71	095	0.048	1.40
102	0.40	.19	231	0.40	.35	376	3.00	.93	Meth: 261.11 PCT			220	0.045 R	1.24
035	0.40	.11	105	0.41	.33	S/s=Screened Outlier			Meth: 261.11 PCT			029	0.047	1.23
Avg	0.40		102	0.40	.20	R=Duplicate Range too large			Meth: 261.11 PCT			A=Analysis beyond 3-s limits		
* X=Excluded from lab performance			S/s=Screened Outlier			R=Duplicate Range too large			Meth: 261.11 PCT			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: 261.XX PCT			Meth: 289.30 PPM			Meth: 291.30 PPM			Meth: 301.99 PPM			Meth: 321.00 PCT		
<u>Acid Soluble Manganese</u>			<u>Molybdenum</u>			<u>Nickel</u>			<u>Selenium</u>			<u>Acid Soluble Zinc</u>		
397	0.044	.79	<u>ICP</u>			<u>ICP</u>			<u>Other</u>			<u>Atomic Absorption</u>		
105	0.045	.77	Avg	5.22		376	27.70	.01	409	1.00	.00	131	0.053	1.16
389	0.045	.77	232	5.20	-.04	Avg	27.67					105	0.053	1.08
360	0.044	.68	288	5.15	-.17	232	26.80	-.33	Meth: 301.XX PPM			028	0.049	.51
106	0.044	.68	324	5.05	-.34	389	26.50	-.48	<u>Selenium</u>			029	0.048	.10
009	0.044	.52	102	5.02	-.43	288	26.50	-.72	049	44.15	.87	Avg	0.048	
330	0.044	.46	035	4.17	-2.00	324	25.95	-.76	Avg	22.57		043	0.048	-.11
049	0.043	.41	393	0.00 s	-9.93	106	23.00	-1.76	409	1.00	-.86	296	0.043	-1.05
177	0.043	.40										095	0.040	-1.61
320	0.042	.37	Meth: 289.99 PPM			Meth: 291.99 PPM			Meth: 311.30 PCT			Meth: 321.30 PCT		
394	0.043	.33	<u>Molybdenum</u>			<u>Nickel</u>			<u>Sodium</u>			<u>Acid Soluble Zinc</u>		
043	0.043	.27	<u>Other</u>			<u>Other</u>			<u>Flame Photometric</u>			<u>ICP</u>		
102	0.042	.25	409	6.00	.00	035	22.15	.86	320	0.29	-.71	330	0.061 s	3.76
028	0.041	.02				Avg	20.08					049	0.054	1.57
Avg	0.041		Meth: 289.XX PPM			Meth: 291.XX PPM			Meth: 311.99 PCT			389	0.052	1.09
288	0.041	-.16	<u>Molybdenum</u>			<u>Nickel</u>			<u>Other</u>			102	0.049 R	.86
231	0.041	-.20	368	8.98 s	6.84	368	28.01 R	1.79	422	0.52	2.09	376	0.051	.82
368	0.040	-.24	409	6.00	1.25	009	31.55	1.48	Avg	0.34		106	0.050	.55
035	0.039	-.43	389	5.90	1.08	102	30.50	1.06	307	0.33	-.17	009	0.049	.54
393	0.040	-.47	422	5.79	.87	049	29.66	.84	288	0.32	-.30	288	0.050	.44
296	0.039	-.74	009	5.50	.35	232	28.50	.56	009	0.31	-.30	393	0.050	.43
038	0.037	-.86	Avg	5.31		393	28.50	.56	232	0.28	-.66	354	0.049	.39
354	0.039	-.88	232	5.20	-.20	288	26.50	.39	035	0.28	-.70	Avg	0.048	
324	0.037	-.91	288	5.15	-.30	376	27.70	.33				422	0.046	-.60
300	0.036	-1.04	324	5.05	-.48	389	26.50	.13	Meth: 311.XX PCT			320	0.046	-.65
232	0.034	-1.40	102	5.02	-.56	232	26.80	.11	<u>Sodium</u>			324	0.046 R	-1.13
055	0.033	-1.64	106	5.30 R	-1.62	Avg	26.40		422	0.52	2.30	300	0.043	-1.35
262	0.032	-1.87	035	4.17	-2.06	324	25.95	-.29	Avg	0.33		035	0.043	-1.38
023	0.031	-2.15	393	0.00 s	-9.57	106	23.00	-.88	307	0.33	-.12	232	0.042	-1.61
						035	22.15	-1.12	009	0.31	-.22	Meth: 321.99 PCT		
						409	18.00	-2.18	288	0.32	-.22	<u>Acid Soluble Zinc</u>		
Meth: 289.30 PPM			Meth: 291.30 PPM			Meth: 301.30 PPM			Meth: 301.99 PPM			Meth: 321.99 PCT		
<u>Molybdenum</u>			<u>ICP</u>			<u>Selenium</u>			<u>Other</u>			<u>Other</u>		
<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>Other</u>			<u>Other</u>		
368	8.98 s	7.37	368	28.01 R	2.56	049	44.15	.71	035	0.28	-.65	409	0.055	.00
106	5.30 R	1.72	009	31.55	1.75									
389	5.90	1.30	102	30.50	1.09									
422	5.79	1.09	049	29.66	.76									
009	5.50	.53	393	28.50	.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

<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.XX PCT											
<u>Acid Soluble Zinc</u>											
330	0.061	S			3.23						
409	0.055				1.61						
049	0.054				1.32						
131	0.053				1.16						
105	0.053				1.08						
389	0.052				.90						
102	0.049	R			.73						
376	0.051				.67						
028	0.049				.48						
009	0.049				.44						
106	0.050				.43						
288	0.050				.34						
393	0.050				.33						
354	0.049				.31						
Avg	0.048										
029	0.048				-.05						
043	0.048				-.20						
422	0.046				-.57						
320	0.046				-.61						
324	0.046	R			-1.02						
300	0.043				-1.22						
035	0.043				-1.25						
296	0.043				-1.32						
232	0.042				-1.45						
095	0.040				-1.95						

* 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	5	0.00	1.00	0.32	050.XX	66	- 0.17	1.47	0.60
001.99	8	0.00	1.03	0.08	060.00	7	13.17	34.03	0.57
001.XX	13	0.00	1.01	0.11	060.XX	8	8.73	24.69	0.53
009.10	2	0.00	1.14	0.32	101.30	8	1.31	3.83	0.19
009.XX	2	0.00	1.14	0.32	101.XX	9	1.25	3.87	0.20
010.11	8	0.00	0.95	0.39	121.00	3	0.00	0.96	0.47
010.12	6	0.02	0.95	0.12	121.30	9	0.25	6.52	0.24
010.60	51	- 0.18	1.33	0.38	121.XX	12	0.35	6.33	0.33
010.99	7	- 0.67	1.90	0.62	144.01	2	0.00	0.50	0.79
010.XX	68	- 0.14	1.21	0.48	144.99	6	- 0.30	1.20	0.16
020.10	6	0.00	0.76	0.66	144.XX	9	0.00	1.01	0.18
020.20	19	- 1.03	8.41	0.25	151.30	4	4.23	8.52	3.38
020.40	7	0.00	0.88	0.52	151.XX	5	3.95	8.89	3.54
020.50	6	0.43	1.40	0.49	165.99	4	0.000	1.076	0.077
020.99	2	0.00	1.22	0.07	165.XX	4	0.000	1.076	0.077
020.XX	39	- 0.41	6.12	0.35	181.00	3	0.00	1.05	0.31
030.10	2	0.00	1.22	0.00	181.30	10	- 1.36	4.32	0.37
030.20	2	25.81	36.50	6.02	181.99	2	0.00	0.93	0.56
030.40	3	0.00	1.08	0.23	181.XX	15	- 0.88	3.40	0.33
030.XX	7	1.49	4.06	0.68	190.00	2	0.00	1.22	0.01
040.10	2	0.00	0.48	0.80	190.99	2	0.00	1.05	0.45
040.20	2	0.00	0.86	0.61	190.XX	4	0.20	0.99	0.03
040.40	2	0.00	1.06	0.44	191.30	10	- 1.58	5.80	0.68
040.XX	7	0.00	1.00	0.26	191.XX	11	- 0.91	3.70	0.46
041.10	21	- 0.01	0.95	0.44	202.30	9	0.00	1.01	0.21
041.20	5	0.00	0.98	0.36	202.XX	11	- 0.08	1.00	0.20
041.40	6	0.22	3.84	0.34	221.00	15	0.6080	3.0177	1.3890
041.50	10	- 0.58	1.63	0.82	221.30	17	0.1576	1.1001	0.9427
041.60	13	0.60	3.20	1.15	221.99	2	- 19.79	28.000	12.510
041.XX	45	- 0.15	1.81	0.76	221.XX	34	0.2257	1.9207	1.0532
048.20	4	0.00	0.89	0.53	241.00	15	0.03	0.98	0.18
048.XX	5	0.00	0.89	0.52	241.30	19	- 0.77	2.17	0.32
050.00	24	0.05	0.99	0.38	241.99	2	0.00	1.20	0.17
050.30	12	- 0.42	1.30	0.41	241.XX	35	- 0.29	1.81	0.27
050.50	4	0.00	1.07	0.09	251.30	3	0.00	1.11	0.07
050.51	9	0.29	1.00	1.29	251.99	2	0.00	1.13	0.34
050.60	6	0.00	0.87	0.53	251.XX	6	0.00	1.03	0.19
050.61	8	0.00	0.79	0.62	261.00	13	0.050	0.961	0.356
050.99	9	0.01	0.95	0.34	261.30	16	0.000	0.967	0.303

Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
261.31	2	0.000	1.197	0.185					
261.XX	33	0.023	0.960	0.327					
289.30	11	- 0.24	3.95	0.75					
289.XX	12	- 0.25	3.61	0.68					
291.30	11	0.01	0.89	0.86					
291.99	2	0.00	1.11	0.37					
291.XX	13	0.03	0.95	0.55					
301.XX	2	0.00	1.22	0.09					
311.99	6	0.00	1.05	0.06					
311.XX	7	0.00	1.04	0.06					
321.00	7	0.000	1.013	0.220					
321.30	16	0.205	1.288	0.438					
321.XX	23	0.141	1.149	0.343					