

MAGRUDER - Fertilizer Check Sample No. - 200612 Grade 5-8-21

- Pass 1 Results for 83 Labs - - Pass 2 Results for 83 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	4	5.50	0.08	0.05	4	5.50	0.08	0.05
Ammoniacal Nitrogen, Other		001.99	4	5.33	0.09	0.06	4	5.33	0.09	0.06
Method Group 001.XX PCT			8	5.41	0.12	0.06	8	5.41	0.12	0.06
Nitrogen From Urea, Urease (as N)	959.03	005.00	1	0.11	0.05	0.07	1	0.11	0.05	0.07
Ammon & Nitrate N, Devarda	892.01	009.10	3	5.62	0.09	0.04	3	5.62	0.09	0.04
Ammon & Nitrate N, Other		009.99	1	5.10	0.00	0.00	1	5.10	0.00	0.00
Method Group 009.XX PCT			4	5.49	0.25	0.03	4	5.49	0.25	0.03
Total Nitrogen, Modified Comprehensive	978.02	010.11	6	5.40	0.15	0.05	6	5.40	0.15	0.05
Total Nitrogen, Salicylic	955.04D	010.12	2	5.48	0.02	0.00	2	5.48	0.02	0.00
Total Nitrogen, Combustion		010.60	53	5.52	0.11	0.05	51	5.52	0.11	0.04
Total Nitrogen, Other		010.99	6	5.46	0.17	0.14	6	5.46	0.17	0.14
Method Group 010.XX PCT			67	5.50	0.12	0.06	64	5.51	0.11	0.05
Total Phosphate, Grav Quimociac	962.02	020.10	5	8.54	0.25	0.11	5	8.54	0.25	0.11
Total Phosphate, Spectrometric	958.01	020.20	17	8.47	0.21	0.06	17	8.47	0.21	0.06
Total Phosphate, Automated	978.01	020.40	4	8.27	0.22	0.05	4	8.27	0.22	0.05
Total Phosphate, ICP		020.50	13	8.47	0.41	0.15	14	8.55	0.49	0.14
Total Phosphate, Other		020.99	4	8.57	0.23	0.09	4	8.57	0.23	0.09
Method Group 020.XX PCT			43	8.47	0.29	0.09	41	8.49	0.27	0.08
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	2	0.01	0.02	0.00	2	0.01	0.02	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	0.03	0.01	0.01	2	0.03	0.01	0.01
Insoluble Phosphate, ICP		030.50	1	0.05	0.00	0.00	1	0.05	0.00	0.00
Method Group 030.XX PCT			5	0.02	0.02	0.01	5	0.02	0.02	0.01
InDir Available Phosphate, Grav Quim ..	960.02	040.10	2	8.49	0.14	0.05	2	8.49	0.14	0.05
InDir Available Phosphate, Automated ..	960.02	040.40	1	8.42	0.00	0.00	1	8.42	0.00	0.00
InDir Available Phosphate, ICP		040.50	2	8.21	0.35	0.03	2	8.21	0.35	0.03
InDir Available Phosphate, Other		040.99	1	8.40	0.08	0.11	1	8.40	0.08	0.11
Method Group 040.XX PCT			6	8.37	0.23	0.05	6	8.37	0.23	0.05
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	16	8.43	0.12	0.04	14	8.43	0.12	0.03
Dir Available Phosphate, Spectrometric	960.03D	041.20	2	8.45	0.11	0.08	2	8.45	0.11	0.08
Dir Available Phosphate, Alka Quim	960.03C	041.30	1	8.41	0.02	0.03	1	8.41	0.02	0.03
Dir Available Phosphate, Automated	978.01	041.40	6	8.38	0.17	0.09	6	8.38	0.17	0.09
Dir Available Phosphate, ICP		041.50	9	8.38	0.25	0.11	9	8.38	0.25	0.11
Dir Available Phosphate, EDTA Extract .	993.01	041.60	10	8.40	0.16	0.05	10	8.40	0.16	0.05
Dir Available Phosphate, Other		041.99	1	8.38	0.04	0.06	1	8.38	0.04	0.06
Method Group 041.XX PCT			45	8.41	0.16	0.07	44	8.40	0.16	0.06
Water Soluble Phosphate, Spectrometric	970.01	048.20	3	6.52	0.81	0.09	3	6.52	0.81	0.09
Water Soluble Phosphate, ICP		048.50	1	8.30	0.00	0.00	1	8.30	0.00	0.00
Method Group 048.XX PCT			4	6.96	1.07	0.07	4	6.96	1.07	0.07
Soluble Potash, STPB Oxalate	958.02	050.00	13	22.14	0.31	0.15	13	22.14	0.31	0.15

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Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Soluble Potash, STPB Citrate	969.04	050.10	1	22.60	0.01	0.01	1	22.60	0.01	0.01
Soluble Potash, AA (Oxalate)		050.30	11	21.67	0.76	0.27	11	21.67	0.76	0.27
Soluble Potash, AA (Citrate)		050.31	1	22.41	0.04	0.05	1	22.41	0.04	0.05
Soluble Potash, ICP (Oxalate)		050.50	8	22.24	0.77	0.24	7	22.24	0.80	0.12
Soluble Potash, ICP (Citrate)		050.51	9	22.17	0.61	0.10	9	22.17	0.61	0.10
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	8	22.12	0.98	0.22	8	22.12	0.98	0.22
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	8	22.51	0.36	0.15	8	22.51	0.36	0.15
Soluble Potash, Other		050.99	17	22.09	0.74	0.32	16	22.10	0.74	0.25
Method Group 050.XX PCT			78	22.16	0.72	0.22	72	22.15	0.73	0.15
Free Water, Vacuum Oven	965.08B	060.00	3	0.61	0.10	0.02	3	0.61	0.10	0.02
Free Water, Other		060.99	1	0.34	0.01	0.02	1	0.34	0.01	0.02
Method Group 060.XX PCT			4	0.54	0.15	0.02	4	0.54	0.15	0.02
Acid Soluble Calcium, ICP		101.30	11	4.87	0.15	0.07	11	4.87	0.15	0.07
Acid Soluble Magnesium, AA	984.01	121.00	11	1.18	0.06	0.03	10	1.18	0.06	0.02
Acid Soluble Magnesium, ICP		121.30	27	1.18	0.08	0.03	27	1.18	0.08	0.03
Acid Soluble Magnesium, Titrimetric ...	964.01	121.70	2	1.24	0.20	0.06	2	1.24	0.20	0.06
Method Group 121.XX PCT			41	1.18	0.09	0.03	40	1.18	0.08	0.03
Water Soluble Magnesium, AA		131.00	3	1.03	0.11	0.02	3	1.03	0.11	0.02
Water Soluble Magnesium, ICP		131.30	3	0.94	0.08	0.02	3	0.94	0.08	0.02
Method Group 131.XX PCT			6	0.98	0.10	0.02	6	0.98	0.10	0.02
Sulfur, Gravimetric	980.02a	144.01	16	10.29	0.23	0.08	16	10.29	0.23	0.08
Sulfur, Gravimetric	980.02b	144.02	3	10.04	0.20	0.08	3	10.04	0.20	0.08
Sulfur, Other		144.99	22	10.05	0.40	0.11	21	10.04	0.40	0.09
Method Group 144.XX PCT			41	10.14	0.35	0.10	40	10.14	0.35	0.08
Arsenic, Atomic Absorption		151.00	1	3.70	0.14	0.20	1	3.70	0.14	0.20
Arsenic, ICP		151.30	5	3.12	1.73	0.12	5	3.12	1.73	0.12
Method Group 151.XX PPM			6	3.22	1.58	0.13	6	3.22	1.58	0.13
Acid Soluble Boron, Spectrometric	982.01	165.00	5	0.407	0.023	0.007	5	0.407	0.023	0.007
Acid Soluble Boron, Other		165.99	18	0.400	0.042	0.010	18	0.400	0.042	0.010
Method Group 165.XX PCT			23	0.402	0.038	0.009	21	0.400	0.031	0.007
Water Soluble Boron, AA	52.950	171.00	1	0.410	0.014	0.020	1	0.410	0.014	0.020
Water Soluble Boron, Spectrometric	982.01	171.10	1	0.205	0.234	0.331	1	0.205	0.234	0.331
Water Soluble Boron, Other		171.99	1	0.435	0.007	0.010	1	0.435	0.007	0.010
Method Group 171.XX PCT			3	0.350	0.154	0.120	3	0.350	0.154	0.120
Cadmium, Atomic Absorption		181.00	2	11.83	0.67	0.75	2	11.83	0.67	0.75
Cadmium, ICP		181.30	9	11.50	1.30	0.35	9	11.50	1.30	0.35
Cadmium, Other		181.99	1	12.00	0.14	0.20	1	12.00	0.14	0.20
Method Group 181.XX PPM			12	11.60	1.16	0.41	12	11.60	1.16	0.41
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	8	15.81	0.47	0.17	7	15.86	0.46	0.11

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Water Soluble Chlorine, Other		190.99	1	16.05	0.07	0.10	1	16.05	0.07	0.10
Method Group 190.XX PCT			9	15.83	0.44	0.16	8	15.88	0.43	0.11
Chromium, ICP		191.30	7	74.58	5.47	1.48	7	74.58	5.47	1.48
Acid Soluble Cobalt, ICP	965.11	202.30	9	6.95	0.62	0.42	9	6.95	0.62	0.42
Acid Soluble Copper, Atomic Absorption	975.01	221.00	3	0.0026	0.0002	0.0002	3	0.0026	0.0002	0.0002
Acid Soluble Copper, ICP		221.30	15	0.0025	0.0003	0.0002	14	0.0024	0.0003	0.0001
Acid Soluble Copper, Other		221.99	1	0.0045	0.0007	0.0010	1	0.0045	0.0007	0.0010
Method Group 221.XX PCT			20	0.0027	0.0007	0.0002	18	0.0025	0.0003	0.0002
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	11	0.38	0.02	0.00	11	0.38	0.02	0.00
Acid Soluble Iron, ICP		241.30	27	0.38	0.03	0.01	26	0.38	0.03	0.01
Acid Soluble Iron, Other		241.99	1	0.40	0.01	0.01	1	0.40	0.01	0.01
Method Group 241.XX PCT			39	0.38	0.03	0.01	38	0.38	0.03	0.01
Lead, Atomic Absorption		251.00	1	6.95	1.34	1.90	1	6.95	1.34	1.90
Lead, ICP		251.30	6	6.31	1.81	0.95	5	6.12	1.67	0.31
Lead, Other		251.99	1	5.30	0.00	0.00	1	5.30	0.00	0.00
Method Group 251.XX PPM			8	6.26	1.65	0.95	7	6.12	1.51	0.49
Acid Soluble Manganese, ICP	972.02a	261.30	10	0.011	0.001	0.000	10	0.011	0.001	0.000
Acid Soluble Manganese, Other		261.99	1	0.013	0.001	0.001	1	0.013	0.001	0.001
Method Group 261.XX PCT			11	0.012	0.001	0.000	11	0.012	0.001	0.000
Mercury, Other		281.99	1	0.03	0.00	0.00	1	0.03	0.00	0.00
Molybdenum, ICP		289.30	12	5.83	1.06	0.33	11	5.75	1.07	0.26
Nickel, ICP		291.30	6	20.05	1.48	1.28	5	20.05	0.92	0.39
Selenium, ICP		301.30	1	2.95	0.07	0.10	1	2.95	0.07	0.10
Selenium, Other		301.99	1	0.47	0.00	0.01	1	0.47	0.00	0.01
Method Group 301.XX PPM			2	1.71	1.43	0.05	2	1.71	1.43	0.05
Sodium, Other		311.99	8	0.69	0.11	0.01	8	0.69	0.11	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	13	1.371	0.105	0.047	12	1.360	0.092	0.026
Acid Soluble Zinc, ICP		321.30	28	1.386	0.101	0.042	26	1.389	0.097	0.033
Acid Soluble Zinc, Other		321.99	1	1.440	0.057	0.080	1	1.440	0.057	0.080
Method Group 321.XX PCT			42	1.383	0.101	0.044	39	1.381	0.095	0.032

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.10 PCT Ammoniacal Nitrogen <u>MgO Distillation</u>			Meth: 009.10 PCT Ammon & Nitrate N <u>Devarda</u>			Meth: 010.17 PCT Total Nitrogen <u>Comprehensive</u>			Meth: 010.60 PCT Total Nitrogen <u>Combustion</u>			Meth: 010.XX PCT <u>Total Nitrogen</u>		
444	5.61	1.61	257	5.57	-.61	137	5.02 S	.00	356	5.50	-.26	405	5.92 s	3.68
Avg	5.50		090	5.57	-.70				024	5.48	-.39	390	5.91 s	3.61
372	5.48	-.22							028	5.48	-.50	102	5.79	2.49
288	5.47	-.30	Meth: 009.99 PCT Ammon & Nitrate N <u>Other</u>			Meth: 010.60 PCT Total Nitrogen <u>Combustion</u>			307	5.47	-.52	027	5.75	2.18
324	5.43	-.87	430	5.10	.00	390	5.91 s	3.61	255	5.47	-.52	300	5.52 R	1.88
						102	5.79	2.44	425	5.48	-.61	157	5.72	1.88
Meth: 001.99 PCT Ammoniacal Nitrogen <u>Other</u>			Meth: 009.XX PCT Ammon & Nitrate N			027	5.75	2.12	262	5.45	-.72	043	5.67	1.58
442	5.45	1.40	444	5.73	.95	157	5.72	1.81	232	5.45	-.72	389	5.67	1.46
Avg	5.33		090	5.57	.33	043	5.67	1.51	369	5.47	-.74	354	5.63	1.33
096	5.32	-.36	257	5.57	.31	389	5.67	1.38	049	5.45	-.76	095	5.65	1.27
193	5.30	-.49	Avg	5.49		095	5.65	1.18	072	5.44	-.77	377	5.64	1.18
420	5.25	-1.08	430	5.10	-1.55	377	5.64	1.09	073	5.44	-.79	136	5.56 R	1.01
						136	5.56 R	.99	009	5.43	-.86	247	5.61	.96
Meth: 001.XX PCT Ammoniacal Nitrogen			Meth: 010.11 PCT Total Nitrogen <u>Modified Comprehensive</u>			247	5.61	.87	233	5.44	-.86	351	5.61	.90
444	5.61	1.75	405	5.92 S	3.51	351	5.61	.80	360	5.45	-1.00	422	5.60	.79
372	5.48	.58	288	5.54	.96	422	5.60	.73	035	5.42	-1.02	406	5.60	.75
288	5.47	.49	309	5.50	.68	406	5.60	.68	029	5.40	-1.19	361	5.60	.79
442	5.45	.36	073	5.40	.47	361	5.60	.68	055	5.40	-1.19	025	5.59	.75
324	5.43	.17	211	5.41	.05	025	5.59	.65	423	5.40	-1.23	131	5.59	.70
Avg	5.41		Avg	5.40		131	5.59	.59	023	5.37	-1.43	042	5.58	.67
096	5.32	-.82	322	5.11	-1.94	042	5.58	.56	230	5.38 R	-1.58	041	5.58	.65
193	5.30	-.99	415	4.95 S	-3.05	041	5.58	.54	443	5.30	-2.06	291	5.57	.61
420	5.25	-1.44				330	5.55	.53	325	5.28	-2.29	330	5.55	.58
			Meth: 010.12 PCT Total Nitrogen <u>Salicylic</u>			007	5.55	.53	034	5.02 s	-4.66	007	5.55	.58
Meth: 005.00 PCT Nitrogen From Urea <u>Urease (as N)</u>			185	5.50	.87	291	5.57	.50	428	4.19 s	-12.38	234	5.57	.58
288	0.11	.71	Avg	5.48		426	5.54	.40				037	5.57	.51
			254	5.47	-.87	037	5.57	.40				288	5.54	.47
Meth: 009.10 PCT Ammon & Nitrate N <u>Devarda</u>						114	5.54	.16	Meth: 010.99 PCT Total Nitrogen <u>Other</u>			426	5.54	.46
444	5.73	1.28				114	5.54	.16	300	5.52	1.27	114	5.54	.29
Avg	5.62					057	5.53	.14	354	5.63	1.11	040	5.54	.25
						040	5.54	.12	420	5.51	.34	162	5.53	.22
						162	5.53	.11	Avg	5.46		255	5.53	.22
						177	5.53	.09	072	5.31	-.95	177	5.53	.21
						Avg	5.52		402	5.25	-1.21	057	5.53	.20
						296	5.51	-.17				Avg	5.51	
						096	5.50	-.23				296	5.51	-.05
												185	5.50	-.07
												309	5.50	-.07

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 010.XX PCT			Meth: 020.10 PCT			Meth: 020.50 PCT			Meth: 020.XX PCT			Meth: 030.10 PCT		
<u>Total Nitrogen</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Insoluble Phosphate</u>		
096	5.50	-.11	<u>Grav Quimociac</u>			<u>ICP</u>			300	8.59	.61	<u>Grav Quimociac</u>		
356	5.50	-.12	114	8.91	1.51	426	9.61 S	2.14	406	8.64	.56	405	0.03	.90
024	5.48	-.25	300	8.59	.56	361	9.00	.92	090	8.61	.43	Avg	0.01	
420	5.51	-.31	090	8.61	.24	330	8.98	.92	262	8.60	.41	090	0.00	-.83
254	5.47	-.34	Avg	8.54		390	8.89	.74	257	8.59	.39	Meth: 030.40 PCT		
028	5.48	-.37	444	8.34	-.82	389	8.90	.72	444	8.50	.30	<u>Insoluble Phosphate</u>		
307	5.47	-.38	095	8.28	-1.07	255	8.56	.03	372	8.56	.28	<u>Automated</u>		
255	5.47	-.38	Meth: 020.20 PCT			Avg	8.47		255	8.56	.26	096	0.03	.50
425	5.48	-.50	<u>Total Phosphate</u>			444	8.50	-.19	292	8.55	.23	Avg	0.03	
262	5.45	-.56	<u>Spectrometric</u>			307	8.42	-.28	425	8.54	.21	247	0.02	-1.12
232	5.45	-.56	324	8.83	1.76	157	8.42	-.31	442	8.50	.06	Meth: 030.50 PCT		
029	5.45	-.58	428	8.79	1.53	057	8.46	-.38	Avg	8.49		<u>Insoluble Phosphate</u>		
049	5.45	-.61	406	8.64	.81	423	8.13	-.86	232	8.47	-.09	<u>ICP</u>		
072	5.44	-.61	406	8.64	.81	432	8.09	-.93	096	8.45	-.15	255	0.05	.71
073	5.44	-.63	262	8.60	.61	422	8.05	-1.02	288	8.47	-.19	Meth: 030.XX PCT		
369	5.47	-.63	257	8.59	.59	372	7.71	-1.77	363	8.48	-.21	<u>Insoluble Phosphate</u>		
009	5.43	-.70	372	8.56	.43	Meth: 020.99 PCT			307	8.42	-.29	<u>ICP</u>		
233	5.44	-.72	292	8.55	.37	<u>Total Phosphate</u>			405	8.40	-.35	Meth: 030.50 PCT		
035	5.42	-.86	425	8.54	.34	<u>Other</u>			247	8.41	-.36	<u>Insoluble Phosphate</u>		
360	5.45	-.88	363	8.48	.27	443	8.87	1.31	157	8.42	-.39	255	0.05	1.29
211	5.41	-.92	442	8.50	.13	193	8.65	.56	234	8.35	-.52	096	0.03	.37
029	5.40	-1.02	Avg	8.47		Avg	8.57		444	8.34	-.55	405	0.03	.31
055	5.40	-1.03	232	8.47	-.05	405	8.40	-.71	402	8.34	-.57	Avg	0.02	
423	5.40	-1.07	288	8.47	-.22	402	8.34	-.99	057	8.46 R	-.60	247	0.02	-.66
073	5.40	-1.15	234	8.35	-.61	Meth: 020.XX PCT			095	8.28	-.79	090	0.00	-1.47
023	5.37	-1.25	356	8.25	-1.10	<u>Total Phosphate</u>			035	8.25	-.87	Meth: 040.10 PCT		
230	5.38	-1.41	309	8.20	-1.33	426	9.61 s	4.13	356	8.25	-.89	<u>InDir Available Phos</u>		
443	5.30	-1.86	369	8.16	-1.55	361	9.00	1.91	309	8.20	-1.07	<u>Grav Quim</u>		
072	5.31	-1.88	420	8.10	-1.84	420	8.10	-1.84	369	8.16	-1.23	090	8.61	.83
325	5.28	-2.08	Meth: 020.40 PCT			361	9.00	1.91	423	8.13	-1.33	Avg	8.49	
402	5.25	-2.31	<u>Total Phosphate</u>			330	8.98	1.89	420	8.10	-1.45	405	8.38	-.90
322	5.11 A	-3.55	<u>Automated</u>			114	8.91	1.60	432	8.09	-1.46	Meth: 040.40 PCT		
137	5.02 s	-4.37	096	8.45	.85	390	8.89	1.57	422	8.05	-1.63	<u>InDir Available Phos</u>		
034	5.02 s	-4.37	247	8.41	.75	389	8.90	1.55	042	7.95	-2.02	<u>Automated</u>		
415	4.95 s	-5.02	Avg	8.27		443	8.87	1.41	372	7.71 R	-2.99	096	8.42	.00
428	4.19 s	-11.82	035	8.25	-.06	324	8.83	1.28						
			042	7.95	-1.49	428	8.79	1.11						
			042	7.95	-1.49	193	8.65	.70						

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 040.50 PCT			Meth: 041.10 PCT			Meth: 041.50 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>ICP</u>			<u>Grav Quimociac</u>			<u>ICP</u>			041 8.52 .72			<u>Spectrometric</u>		
255	8.51	.87	049	8.31	-1.06	325	8.23	-.63	131	8.51	.67	420	7.56	1.28
Avg	8.21		322	8.11	-2.73	361	8.21	-.71	131	8.50	.59	Avg	6.52	
423	7.91	-.87	185	7.53 s	-7.64	023	8.10	-1.13	288	8.49	.57	363	6.08	-.55
						354 8.09 -1.21			177 8.49 .51			096 5.92 -.74		
Meth: 040.99 PCT			Meth: 041.20 PCT			Meth: 041.60 PCT			040 8.43 .46			Meth: 048.50 PCT		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			296 8.43 .41			<u>Water Soluble Phosph</u>		
<u>Other</u>			<u>Spectrometric</u>			<u>EDTA Extract</u>			177 8.43 .36			<u>ICP</u>		
247	8.40	.71	055	8.54	.85	028	8.61	1.31	291	8.44	.34	430	8.30	.00
			Avg 8.45			296 8.54 .99			072 8.45 .29					
Meth: 040.XX PCT			363 8.36 -.88			288 8.49 .61			043 8.44 .26			Meth: 048.XX PCT		
<u>InDir Available Phos</u>			415 7.82 S -5.47			177 8.43 .38			029 8.43 .25			<u>Water Soluble Phosph</u>		
090	8.61	1.01				043 8.44 .29			024 8.43 .20			430 8.30 1.25		
255	8.51	.61	Meth: 041.30 PCT			024 8.43 .23			260 8.41 .09			420 7.56 .56		
247	8.40	.26	<u>Dir Available Phosph</u>			057 8.40 .19			073 8.41 .09			Avg 6.96		
405	8.38	.22	<u>Alka Quim</u>			Avg 8.40			Avg 8.40			363 6.08 -.83		
096	8.42	.21	073 8.41 -.71			034 8.38 -.18			057 8.40 -.19			096 5.92 -.97		
Avg	8.37					137 8.23 -1.12			034 8.38 -.19					
423	7.91	-1.98	Meth: 041.40 PCT			351 8.05 -2.20			230 8.38 -.23			Meth: 050.00 PCT		
			<u>Dir Available Phosph</u>						254 8.36 -.26			<u>Soluble Potash</u>		
			<u>Automated</u>						377 8.40 -.34			<u>STPB Oxalate</u>		
			023 8.65 X 1.65			Meth: 041.99 PCT			363 8.36 -.40			090 23.56 s 4.54		
			131 8.51 .80			<u>Dir Available Phosph</u>			049 8.31 -.58			257 23.54 s 4.53		
			Avg 8.38			<u>Other</u>			009 8.36 -.60			230 22.60 1.50		
			029 8.32 -.53			230 8.38 .71			029 8.32 -.67			009 22.41 .85		
			027 8.27 -.66						072 8.31 -.84			114 22.33 .68		
			072 8.31 -.70			Meth: 041.XX PCT			027 8.27 -.85			211 22.31 .52		
			025 8.22 -.97			<u>Dir Available Phosph</u>			325 8.23 -1.09			029 22.30 .50		
						007 8.77 2.34			137 8.23 -1.10			049 22.23 .27		
			Meth: 041.50 PCT			360 8.70 1.86			025 8.22 -1.17			072 22.21 .26		
			<u>Dir Available Phosph</u>			023 8.65 X 1.57			361 8.21 -1.22			043 22.19 .25		
			<u>ICP</u>			028 8.61 1.25			322 8.11 -1.80			Avg 22.14		
			007 8.77 1.59			211 8.59 1.19			023 8.10 -1.87			055 22.14 -.45		
			360 8.70 1.27			009 8.53 R 1.12			354 8.09 -1.98			296 21.98 -.53		
			009 8.53 .78			296 8.54 .94			351 8.05 -2.14			102 22.10 X -.66		
			291 8.44 .27			055 8.54 .84			415 7.82 s -3.58			372 21.64 -1.64		
			377 8.40 .22			102 8.53 .78			185 7.53 s -5.37			444 21.47 -2.18		
			Avg 8.38			055 8.52 .73								

* 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: 050.10 PCT			Meth: 050.51 PCT			Meth: 050.99 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 Citrate</u>			<u>ICP (Citrate)</u>			<u>Other</u>								
322	22.60	.71	007	23.05	1.45	177	23.54	1.95	255	22.62	.65	131	21.80	-.48
			023	22.93	1.24	042	22.95	1.16	230	22.60	.63	325	21.80	-.55
			009	22.56	.65	131	22.79	1.15	372	22.60	.62	040	21.98 R	-.59
Meth: 050.30 PCT			0291			360			432			423		
Soluble Potash			291			360			432			232		
<u>AA (Oxalate)</u>			377			255			322			361		
073	22.66	1.32	Avg	22.17		432	22.40	.65	422	22.59	.60	390	21.65	-.69
234	22.38	.94	423	21.69	-.80	027	22.27	.28	009	22.56	.57	372	21.64	-.71
428	22.22	.90	361	21.66	-.84	072	22.14	.05	428	22.22 R	.56	389	21.55	-.83
136	22.20	.72	389	21.55	-1.03	Avg	22.10		291	22.54	.54	354	21.50	-.91
040	21.98	.66	430	21.40	-1.28	300	21.98	-.24	055	22.46	.46	444	21.47	-.95
351	22.10	.57				247	21.89	-.30	035	22.45	.44	330	21.97 R	-1.00
Avg	21.67		Meth: 050.60 PCT			325	21.80	-.49	009	22.41	.36	430	21.40	-1.04
137	21.32	-.47	Soluble Potash			232	21.66	-.60	254	22.41	.35	157	21.47	-1.05
369	21.36	-.53	<u>Flame (Oxalate)</u>			390	21.65	-.61	234	22.38	.32	369	21.36	-1.14
185	21.00	-.88	406	23.62	1.53	354	21.50	-.83	114	22.33	.28	137	21.32	-1.15
262	20.84	-1.10	443	23.35	1.28	330	21.97 R	-.97	024	22.35	.28	415	21.14	-1.38
425	20.31	-1.81	055	22.46	.37	193	21.10	-1.36	028	22.32	.26	444	21.13	-1.42
			309	22.30	.18	402	20.67	-1.95	027	22.27	.23	193	21.10	-1.45
Meth: 050.31 PCT			Avg	22.12		Meth: 050.XX PCT			211	22.31	.21	426	21.07	-1.49
Soluble Potash			131	21.80	-.33	<u>Soluble Potash</u>			029	22.30	.21	185	21.00	-1.58
<u>AA (Citrate)</u>			157	21.47	-.75				309	22.30	.21	442	20.86	-1.78
254	22.41	-.71	415	21.14	-1.00	406	23.62	2.02	034	22.27	.16	262	20.84	-1.81
			442	20.86	-1.30	090	23.56	1.94	136	22.20	.15	402	20.67	-2.05
Meth: 050.50 PCT						257	23.54	1.93	420	22.24	.13	425	20.31	-2.54
Soluble Potash			Meth: 050.61 PCT			177	23.54	1.91	049	22.23	.11			
<u>ICP (Oxalate)</u>			Soluble Potash			443	23.35	1.69	072	22.21	.11	Meth: 060.00 PCT		
292	23.06	1.03	<u>Flame (Citrate)</u>			025	23.27	1.54	043	22.19	.10	Free Water		
324	23.00	.96	025	23.27	2.11	292	23.06	1.25	377	22.18	.03	<u>Vacuum Oven</u>		
307	22.28 R	.68	041	22.63	.73	007	23.05	1.24	Avg	22.15		096	0.73	1.28
372	22.60	.45	057	22.68	.46	324	23.00	1.17	072	22.14	-.03	Avg	0.61	
422	22.59	.43	Avg	22.51		042	22.95	1.11	351	22.10	-.07	007	0.55	-.56
Avg	22.24		035	22.45	-.35	131	22.79 R	1.11	029	22.13	-.14	363	0.54	-.74
420	22.24	-.04	024	22.35	-.45	023	22.93	1.07	055	22.14	-.19			
444	21.13	-1.41	028	22.32	-.58	307	22.28 R	.77	296	21.98	-.24	Meth: 060.99 PCT		
426	21.07	-1.47	034	22.27	-.67	041	22.63	.73	102	22.10 X	-.28	Free Water		
			029	22.13	-1.10	057	22.68	.72	300	21.98	-.29	<u>Other</u>		
						073	22.66	.71	247	21.89	-.37	193	0.34	.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: 060.XX PCT			Meth: 121.00 PCT			Meth: 121.70 PCT			Meth: 121.XX PCT			Meth: 131.XX PCT		
<u>Free Water</u>			Acid Soluble Magnesi			Acid Soluble Magnesi			<u>Acid Soluble Magnesi</u>			<u>Water Soluble Magnes</u>		
096	0.73	1.28	AA			Titrimetric			232	1.14	-.44	432	0.87	-1.10
007	0.55	.14	309	1.10	-1.36	230	1.41	.89	102	1.14	-.47			
Avg	0.54		055	1.10	-1.40	Avg	1.24		324	1.14	-.51	Meth: 144.01 PCT		
363	0.54	-.05	425	0.97 s	-3.69	415	1.07	-.84	372	1.12	-.74	Sulfur		
193	0.34	-1.35							433	1.11	-.81	<u>Gravimetric</u>		
			Meth: 121.30 PCT			Meth: 121.XX PCT			430	1.10	-.95	262	10.55	1.22
			Acid Soluble Magnesi			<u>Acid Soluble Magnesi</u>			309	1.10	-.95	230	10.55	1.15
			<u>ICP</u>			330 2.00 s 10.38			055	1.10	-.98	043	10.52	.99
			330	2.00 s	10.78	422	1.62 s	5.60	307	1.08	-1.20	157	10.51	.98
			422	1.62 s	5.77	230	1.41 R	3.05	065	1.08	-1.29	055	10.46	.77
			027	1.35	2.20	027	1.35	2.20	415	1.07	-1.39	057	10.42	.54
			255	1.29	1.47	028	1.30	1.57	444	1.01	-2.19	296	10.34	.34
			420	1.28	1.26	255	1.29	1.50	425	0.97	-2.65	324	10.35	.27
			390	1.27	1.15	420	1.28	1.30				029	10.35	.23
			389	1.24	.82	390	1.27	1.20	Meth: 131.00 PCT			102	10.31	.13
			057	1.24	.71	296	1.25	1.04	<u>Water Soluble Magnes</u>			Avg	10.29	
			360	1.23	.55	389	1.24	.87	AA			288	10.17	-.57
			423	1.22	.42	057	1.24	.77	137	1.12	.84	040	10.21	-.57
			131	1.21	.39	360	1.23	.63	029	1.08	.45	114	10.15	-.63
			023	1.21	.37	423	1.22	.50	Avg	1.03		363	10.11	-.80
			354	1.21	.37	131	1.21	.47	309	0.90	-1.26	444	9.97	-1.45
			291	1.21	.35	043	1.21	.45				137	9.75	-2.41
			426	1.20	.34	023	1.21	.44	Meth: 131.30 PCT					
			037	1.20	.26	029	1.21	.43	<u>Water Soluble Magnes</u>			Meth: 144.02 PCT		
			432	1.20	.25	354	1.21	.43	ICP			Sulfur		
			Avg	1.18		291	1.21	.42	027	1.04	1.27	<u>Gravimetric</u>		
			009	1.18	-.14	426	1.20	.40	Avg	0.94		136	10.28	1.21
			247	1.18	-.40	177	1.21	.39	372	0.90	-.52	Avg	10.04	
			288	1.15	-.51	247	1.18	.38	432	0.87	-.79	029	9.98	-.34
			232	1.14	-.56	037	1.20	.33				292	9.86	-.96
			102	1.14	-.58	432	1.20	.31	Meth: 131.XX PCT					
			324	1.14	-.64	351	1.19	.24	<u>Water Soluble Magnes</u>			Meth: 144.99 PCT		
			372	1.12	-.88	009	1.18	.16	137	1.12	1.32	Sulfur		
			433	1.11	-.95	Avg	1.18		029	1.08	.93	<u>Other</u>		
			430	1.10	-1.10	040	1.16	-.17	027	1.04	.53	360	10.89	2.12
			307	1.08	-1.36	262	1.17	-.23	Avg	0.98		430	10.75	1.82
			065	1.08	-1.46	257	1.15	-.32	309	0.90	-.81	307	10.07 R	.92
			444	1.01	-2.40	288	1.15	-.41	372	0.90	-.87	291	10.38	.85

* 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: 144.XX PCT			Meth: 151.30 PPM			Meth: 165.99 PCT			Meth: 171.00 PCT		
<u>Sulfur</u>			<u>Sulfur</u>			<u>Arsenic</u>			<u>Acid Soluble Boron</u>			<u>Water Soluble Boron</u>		
<u>Other</u>			<u>ICP</u>			<u>Other</u>			<u>AA</u>					
330	10.37	.83	009	10.29	.47	247	3.60	.28	288	0.401	.18	137	0.410	-.71
390	10.30	.69	136	10.28	.40	102	3.29	.14	423	0.406	.15	Meth: 171.10 PCT		
009	10.29	.64	177	10.28	.38	Avg	3.12		Avg	0.400		<u>Water Soluble Boron</u>		
177	10.28	.58	040	10.21	.35	444	0.00	-1.80	307	0.384	-.41	<u>Spectrometric</u>		
351	10.23	.47	351	10.23	.26	Meth: 151.XX PPM			426	0.383	-.41	296	0.205	.71
027	10.20	.38	027	10.20	.15	<u>Arsenic</u>			444	0.370	-.72	Meth: 171.99 PCT		
027	10.20	.38	288	10.17	.14	065	4.80	1.00	232	0.355	-1.08	<u>Water Soluble Boron</u>		
422	10.10	.14	114	10.15	.04	096	3.90	.43	043	0.345	-1.32	<u>Other</u>		
354	10.06	.10	Avg	10.14		136	3.70	.31	422	0.336	-1.55	027	0.435	.71
Avg	10.04		363	10.11	-.10	247	3.60	.25	430	0.335	-1.60	Meth: 171.XX PCT		
193	10.00	-.12	422	10.10	-.16	102	3.29	.12	Meth: 165.XX PCT			<u>Water Soluble Boron</u>		
028	10.02	-.14	354	10.06	-.26	Avg	3.22		432	0.495 R	3.12	027	0.435	.55
423	9.82	-.58	028	10.02	-.38	444	0.00	-2.03	360	0.441	1.36	137	0.410	.40
255	9.74	-.77	193	10.00	-.43	Meth: 165.00 PCT			029	0.441	1.32	Avg	0.350	
372	9.72	-.82	029	9.98	-.49	<u>Acid Soluble Boron</u>			372	0.440	1.29	296	0.205	-1.43
037	9.70	-.88	444	9.97	-.52	<u>Spectrometric</u>			255	0.432	1.04	Meth: 181.00 PPM		
023	9.67	-.97	292	9.86	-.84	029	0.441	1.48	324	0.425	.82	<u>Cadmium</u>		
131	9.60	-1.14	423	9.82	-.95	055	0.414	.31	354	0.420	.63	<u>Atomic Absorption</u>		
389	9.45	-1.50	307	10.07 R	-1.08	Avg	0.407		291	0.410	.45	363	12.25	.74
232	9.40	-1.66	137	9.75	-1.15	428	0.402	-.24	055	0.414	.45	Avg	11.83	
Meth: 144.XX PCT			255	9.74	-1.16	296	0.405	-.24	009	0.413	.42	136	11.40	-.98
<u>Sulfur</u>			372	9.72	-1.23	057	0.375	-1.44	433	0.410	.32	Meth: 181.30 PPM		
360	10.89	2.15	037	9.70	-1.30	Meth: 165.99 PCT			288	0.401	.24	<u>Cadmium</u>		
430	10.75	1.81	023	9.67	-1.40	<u>Acid Soluble Boron</u>			296	0.405	.22	<u>ICP</u>		
262	10.55	1.21	131	9.60	-1.59	<u>Other</u>			423	0.406	.19	096	14.05	1.96
230	10.55	1.19	389	9.45	-2.01	432	0.495	2.31	Avg	0.400		037	12.42	.70
043	10.52	1.08	232	9.40	-2.18	360	0.441	1.01	307	0.384	-.56	247	11.90	.38
157	10.51	1.06	Meth: 151.00 PPM			372	0.440	.96	057	0.375	-.84	102	11.60	.18
055	10.46	.93	<u>Arsenic</u>			255	0.432	.77	444	0.370	-.99	Avg	11.50	
057	10.42	.79	<u>Atomic Absorption</u>			324	0.425	.61	232	0.355	-1.48	324	11.10	-.32
291	10.38	.69	136	3.70	-.71	354	0.420	.47	043	0.345	-1.81	009	11.10	-.32
330	10.37	.66	Meth: 151.30 PPM			291	0.410	.34	422	0.336	-2.11	390	11.35	-.37
324	10.35	.60	<u>Arsenic</u>			009	0.413	.32	430	0.335 R	-2.18	* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits		
296	10.34	.60	<u>ICP</u>			433	0.410	.24						
029	10.35	.58	065	4.80	.97									
390	10.30	.54	096	3.90	.45									
102	10.31	.47												

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 181.30 PPM			Meth: 190.00 PCT			Meth: 202.30 PPM			Meth: 221.30 PCT			Meth: 241.00 PCT		
Cadmium			Water Soluble Chlori			Acid Soluble Cobalt			Acid Soluble Copper			Acid Soluble Iron		
<u>ICP</u>			<u>Titrimetric</u>			<u>ICP</u>			<u>ICP</u>			<u>Atomic Absorption</u>		
065	10.92	- .52	422	15.42 R	-1.16	096	7.90	1.54	324	0.0023	-.46	137	0.41	1.58
444	9.11	-1.84	444	14.98	-1.95	009	7.60	1.05	444	0.0023	-.59	177	0.40	1.17
232	6.25 s	-5.44	055	11.24 s	-10.08	037	7.42	.80	232	0.0023	-.64	351	0.39	.89
						Avg	6.95		065	0.0022	-.82	043	0.39	.73
						057	6.75	-.34	423	0.0017	-2.47	262	0.39	.54
Meth: 181.99 PPM			Meth: 190.99 PCT			Meth: 221.99 PCT			Meth: 221.99 PCT			Meth: 241.00 PCT		
Cadmium			Water Soluble Chlori			Acid Soluble Copper			Acid Soluble Copper			Acid Soluble Iron		
<u>Other</u>			<u>Other</u>			<u>Other</u>			<u>Other</u>			<u>ICP</u>		
300	12.00	.71	009	16.05	.71	102	6.47	-.79	428	0.37	-.29	136	0.37	-.36
						065	6.67	-1.00	136	0.37	-.36	040	0.36	-.75
						324	6.30	-1.07	040	0.36	-.75	296	0.36	-.79
Meth: 181.XX PPM			Meth: 190.XX PCT			Meth: 221.00 PCT			Meth: 221.XX PCT			Meth: 241.30 PCT		
<u>Cadmium</u>			<u>Water Soluble Chlori</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>		
096	14.05	2.12	296	18.09 s	5.32	029	0.0027	1.06	422	0.0080 s	18.17	028	0.36	-1.22
037	12.42	.71	027	16.42	1.24	043	0.0027	.52	029	0.0045 R	6.84	029	0.35	-1.45
363	12.25	.60	029	16.10	.55	Avg	0.0026		372	0.0045 R	6.84	432	0.48 S	3.50
247	11.90	.37	009	16.05	.40	028	0.0024	-1.05	330	0.0028	1.44	096	0.45 R	2.58
300	12.00	.36	043	16.03	.37				433	0.0029	1.37	330	0.43	1.60
Avg	11.60		057	16.03	.33				247	0.0029	1.22	389	0.42	1.46
102	11.60	-.19	102	15.96	.18				029	0.0027	.97	390	0.42	1.30
009	11.10	-.44	Avg	15.88					043	0.0027	.71	255	0.41	1.18
324	11.10	-.44	028	15.52	-.86				096	0.0026	.55	324	0.41	1.13
390	11.35	-.44	422	15.42 R	-1.28				037	0.0026	.51	102	0.40	.71
136	11.40	-.46	444	14.98	-2.12				057	0.0025	.36	057	0.40	.60
065	10.92	-.65	055	11.24 s	-10.75				102	0.0025	.28	426	0.40	.58
444	9.11	-2.15							288	0.0025	.06	422	0.39	.55
232	6.25 s	-6.18							Avg	0.0025		354	0.39	.47
Meth: 190.00 PCT			Meth: 191.30 PPM			Meth: 221.30 PCT			Meth: 221.30 PCT			Meth: 241.00 PCT		
Water Soluble Chlori			Chromium			Acid Soluble Copper			Acid Soluble Copper			Acid Soluble Iron		
<u>Titrimetric</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>		
296	18.09 s	5.07	037	80.38	1.06	422	0.0080 s	18.32	096	0.0026	.70	028	0.39	.31
027	16.42	1.22	247	80.35	1.05	354	0.0055 s	10.22	037	0.0026	.51	360	0.38	.20
029	16.10	.57	009	80.05	1.03	372	0.0045 s	6.99	057	0.0025	.36	288	0.38	.04
043	16.03	.39	Avg	74.58		330	0.0028 R	1.55	102	0.0025	.28	Avg	0.38	
057	16.03	.36	324	72.75	-.34	433	0.0029	1.52	009	0.0024	-.33	009	0.39	.38
102	15.96	.22	102	72.00	-.55	247	0.0029	1.37	028	0.0024	-.41	023	0.39	.31
Avg	15.86		232	69.20	-1.02	096	0.0026	.70	028	0.0024	-.41	360	0.38	.20
028	15.52	-.76	065	67.34	-1.33	037	0.0026	.63	307	0.0025	-.51	288	0.38	.04
* X=Excluded from lab performance						307	0.0025	.50	324	0.0023	-.61	Avg	0.38	
						057	0.0025	.45	444	0.0023	-.71	131	0.38	-.03
						102	0.0025	.38	232	0.0023	-.79	247	0.38	-.22
						288	0.0025	.20	065	0.0022	-.97	423	0.37	-.29
						Avg	0.0024		423	0.0017	-2.62	423	0.37	-.29
						009	0.0024	-.19				425	0.37	-.43

S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 251.99 PPM			Meth: 261.XX PCT			Meth: 291.30 PPM		
Acid Soluble Iron			Acid Soluble Iron			Lead			Acid Soluble Manganese			Nickel		
<u>ICP</u>			<u>ICP</u>			<u>Other</u>			<u>ICP</u>			<u>ICP</u>		
444	0.37	-.46	360	0.38	.22	300	5.30	.00	422	0.014 s	3.66	065	20.08 R	3.12
291	0.36	-.74	288	0.38	.04	Avg 0.38			402	0.013	1.63	247	21.00	1.03
433	0.36	-.77	131	0.38	-.04	Meth: 251.XX PPM			423	0.012	.95	009	20.70	.78
232	0.35	-.98	247	0.38	-.24	<u>Lead</u>			247	0.012	.65	037	20.46	.50
372	0.35	-1.28	428	0.37	-.29	065	7.28 R	1.59	065	0.012	.52	Avg 20.05		
307	0.34	-1.40	247	0.37	-.33	096	8.25	1.41	009	0.012	.51	232	19.20	-.93
027	0.32	-2.03	136	0.37	-.34	324	7.50	.92	288	0.012	.09	102	18.90	-1.31
065	0.32	-2.04	425	0.37	-.48	136	6.95	.84	Avg 0.012			Meth: 301.30 PPM		
430	0.27 s	-3.95	444	0.37	-.51	Avg 6.12			102	0.011	-.60	Selenium		
Meth: 241.99 PCT			040	0.36	-.61	247	5.90	-.16	433	0.011	-.83	<u>ICP</u>		
Acid Soluble Iron			296	0.36	-.63	300	5.30	-.54	232	0.011	-1.26	247	2.95	-.71
<u>Other</u>			291	0.36	-.82	102	4.93	-.82	307	0.010	-1.75	Meth: 301.99 PPM		
402	0.40	.71	433	0.36	-.86	444	4.01	-1.40	372	0.009 s	-4.49	Selenium		
Meth: 241.XX PCT			028	0.36	-.93	Meth: 261.30 PCT			Meth: 281.99 PPM			Selenium		
Acid Soluble Iron			232	0.35	-1.09	Acid Soluble Manganese			Mercury			<u>Other</u>		
<u>ICP</u>			029	0.35	-1.10	<u>ICP</u>			<u>Other</u>			296	0.47	.71
432	0.48 s	3.88	372	0.35	-1.41	422	0.014 s	4.22	009	0.03	-.71	Meth: 301.XX PPM		
096	0.45 R	2.86	307	0.34	-1.55	423	0.012	1.22	Meth: 289.30 PPM			Selenium		
330	0.43	1.77	027	0.32	-2.25	247	0.012	.89	Molybdenum			247	2.95	.87
389	0.42	1.61	065	0.32	-2.26	065	0.012	.75	<u>ICP</u>			Avg	1.71	
390	0.42	1.44	430	0.27 s	-4.38	057	0.012	.68	009	7.65	1.78	296	0.47	-.87
255	0.41	1.30	Meth: 251.00 PPM			009	0.012	.65	288	7.00	1.17	Meth: 311.99 PCT		
324	0.41	1.25	Lead			288	0.012	.24	324	6.65 R	.99	Sodium		
137	0.41	1.01	<u>Atomic Absorption</u>			Avg	0.011		247	6.50	.70	<u>Other</u>		
402	0.40	.99	136	6.95	.71	102	0.011	-.51	037	6.12	.48	422	0.89	1.75
102	0.40	.79	Meth: 251.30 PPM			433	0.011	-.76	Avg 5.75			057	0.86	1.55
177	0.40	.73	Lead			232	0.011	-1.29	232	5.70	-.11	Avg 0.69		
057	0.40	.66	<u>ICP</u>			307	0.010	-1.79	102	5.57	-.17	102	0.66	-.30
426	0.40	.64	065	7.28 R	1.43	372	0.009 s	-4.85	065	5.74	-.23	288	0.65	-.39
422	0.39	.61	096	8.25	1.28	Meth: 261.99 PCT			057	5.60	-.24	423	0.64	-.49
351	0.39	.54	324	7.50	.84	Acid Soluble Manganese			433	5.18	-.54	009	0.63	-.56
354	0.39	.52	Avg 6.12			<u>Other</u>			096	4.25	-1.43	307	0.61	-.78
043	0.39	.42	247	5.90	-.14	402	0.013	-.71	444	3.98	-1.67	232	0.60	-.81
009	0.39	.42	102	4.93	-.74									
023	0.39	.35	444	4.01	-1.26									
262	0.39	.30												

* 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	4	0.00	0.94	0.47	060.XX	4	0.00	1.08	0.07
001.99	4	0.00	0.98	0.39	101.30	14	0.57	3.41	0.76
001.XX	8	0.00	0.98	0.31	101.XX	14	0.57	3.41	0.76
009.10	3	0.00	1.06	0.28	121.00	12	- 0.21	1.45	0.33
009.XX	4	0.00	1.08	0.08	121.30	29	0.57	2.43	0.23
010.11	8	0.06	1.96	0.20	121.70	2	0.00	1.19	0.21
010.12	2	0.00	1.22	0.00	121.XX	43	0.44	2.05	0.25
010.60	56	- 0.26	2.05	0.33	131.00	3	0.00	1.11	0.12
010.99	6	0.00	0.85	0.57	131.30	3	0.00	1.11	0.13
010.XX	69	- 0.27	2.07	0.40	131.XX	6	0.00	1.04	0.11
020.10	5	0.00	1.01	0.29	144.01	16	0.00	0.99	0.22
020.20	17	0.00	1.00	0.17	144.02	3	0.00	1.08	0.22
020.40	4	0.00	1.06	0.17	144.99	22	0.00	0.98	0.24
020.50	14	0.00	1.00	0.19	144.XX	40	- 0.01	0.99	0.24
020.99	4	0.00	1.04	0.24	151.30	5	0.00	1.06	0.05
020.XX	42	0.06	1.18	0.34	151.XX	6	0.00	1.05	0.06
030.10	2	0.00	1.18	0.24	165.00	5	0.000	1.045	0.163
030.40	2	0.00	0.71	0.71	165.99	18	0.000	1.000	0.166
030.XX	5	0.00	1.00	0.31	165.XX	23	0.042	1.243	0.207
040.10	2	0.00	1.17	0.26	171.XX	3	0.000	0.820	0.621
040.50	2	0.00	1.22	0.05	181.00	2	0.00	0.90	0.59
040.XX	6	0.00	1.04	0.14	181.30	10	- 0.40	1.59	1.17
041.10	17	- 0.49	2.06	0.28	181.XX	13	- 0.36	1.60	1.16
041.20	3	- 1.82	3.26	0.29	190.00	10	- 0.62	3.78	0.51
041.40	6	0.00	0.99	0.32	190.XX	11	- 0.61	3.82	0.52
041.50	9	0.00	0.99	0.27	191.30	7	0.00	1.02	0.17
041.60	10	0.00	1.00	0.22	191.XX	7	0.00	1.02	0.17
041.XX	39	- 0.26	1.37	0.39	202.30	10	- 0.47	1.71	0.44
048.20	3	0.00	1.12	0.06	202.XX	10	- 0.47	1.71	0.44
048.XX	4	0.00	1.08	0.04	221.00	3	0.0000	0.8977	0.5441
050.00	15	0.60	1.82	0.35	221.30	18	2.0215	4.9936	0.6333
050.30	11	0.00	0.99	0.26	221.XX	22	1.8817	4.6528	0.6870
050.50	8	0.01	0.96	0.26	241.00	11	0.00	1.01	0.17
050.51	9	0.00	1.03	0.09	241.30	29	0.06	1.43	0.32
050.60	8	0.00	1.02	0.16	241.XX	41	0.05	1.38	0.31
050.61	8	0.00	0.99	0.29	251.30	6	0.12	0.98	0.52
050.99	17	- 0.01	0.95	0.33	251.XX	8	0.10	0.97	0.55
050.XX	71	0.02	0.98	0.27	261.30	12	- 0.113	1.962	0.831
060.00	3	0.00	1.11	0.11	261.XX	13	- 0.115	1.748	0.744

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	12	0.07	0.99	0.22					
289.XX	12	0.07	0.99	0.22					
291.30	6	0.00	0.91	1.30					
291.XX	6	0.00	0.91	1.30					
301.XX	2	0.00	1.22	0.02					
311.99	8	0.00	1.03	0.08					
311.XX	8	0.00	1.03	0.08					
321.00	13	0.121	1.055	0.477					
321.30	29	- 0.242	1.494	0.309					
321.XX	42	- 0.121	1.377	0.368					