

MAGRUDER - Fertilizer Check Sample No. - 200510 Grade 10-10-10

- Pass 1 Results for 88 Labs - - Pass 2 Results for 88 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, Other		001.99	7	9.95	0.15	0.06	7	9.95	0.15	0.06
Ammon & Nitrate N, Devarda	892.01	009.10	4	9.92	0.13	0.02	4	9.92	0.13	0.02
Ammon & Nitrate N, Other		009.99	1	9.90	0.04	0.05	1	9.90	0.04	0.05
Method Group 009.XX PCT			5	9.92	0.12	0.03	5	9.92	0.12	0.03
Total Nitrogen, Modified Comprehensive	978.02	010.11	6	10.02	0.20	0.06	5	9.96	0.15	0.03
Total Nitrogen, Salicylic	955.04D	010.12	6	10.06	0.22	0.08	6	10.06	0.22	0.08
Total Nitrogen, Raney	970.03	010.16	2	10.27	0.02	0.02	2	10.27	0.02	0.02
Total Nitrogen, Combustion		010.60	52	10.08	0.12	0.07	49	10.09	0.11	0.06
Total Nitrogen, Other		010.99	6	9.95	0.18	0.08	6	9.95	0.18	0.08
Method Group 010.XX PCT			74	10.08	0.16	0.07	69	10.07	0.15	0.06
Total Phosphate, Grav Quimociac	962.02	020.10	7	9.99	0.07	0.02	7	9.99	0.07	0.02
Total Phosphate, Spectrometric	958.01	020.20	20	10.00	0.22	0.08	19	10.01	0.21	0.07
Total Phosphate, Automated	978.01	020.40	6	9.92	0.11	0.11	6	9.92	0.11	0.11
Total Phosphate, ICP		020.50	6	10.04	0.17	0.08	6	10.04	0.17	0.08
Total Phosphate, Other		020.99	1	10.44	0.02	0.03	1	10.44	0.02	0.03
Method Group 020.XX PCT			41	10.00	0.19	0.08	39	10.01	0.19	0.07
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	1	0.06	0.00	0.00	1	0.06	0.00	0.00
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.25	0.00	0.00	1	0.25	0.00	0.00
Insoluble Phosphate, Automated	978.01	030.40	1	0.04	0.01	0.02	1	0.04	0.01	0.02
Insoluble Phosphate, ICP		030.50	1	0.06	0.01	0.01	1	0.06	0.01	0.01
Insoluble Phosphate, Other		030.99	1	0.04	0.00	0.00	1	0.04	0.00	0.00
Method Group 030.XX PCT			5	0.09	0.09	0.01	4	0.10	0.09	0.00
InDir Available Phosphate, Grav Quim ..	960.02	040.10	1	9.89	0.01	0.01	1	9.89	0.01	0.01
InDir Available Phosphate, Spectrometri	960.02	040.20	2	9.77	0.04	0.05	2	9.77	0.04	0.05
InDir Available Phosphate, Automated ..	960.02	040.40	1	9.87	0.07	0.10	1	9.87	0.07	0.10
InDir Available Phosphate, ICP		040.50	1	9.95	0.01	0.02	1	9.95	0.01	0.02
InDir Available Phosphate, Other		040.99	1	9.86	0.04	0.05	1	9.86	0.04	0.05
Method Group 040.XX PCT			6	9.85	0.07	0.05	6	9.85	0.07	0.05
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	21	9.95	0.09	0.06	20	9.95	0.09	0.05
Dir Available Phosphate, Spectrometric	960.03D	041.20	6	9.97	0.23	0.16	6	9.97	0.23	0.16
Dir Available Phosphate, Automated	978.01	041.40	6	9.89	0.19	0.04	7	9.84	0.22	0.06
Dir Available Phosphate, ICP		041.50	10	9.89	0.16	0.11	10	9.89	0.16	0.11
Dir Available Phosphate, EDTA Extract .	993.01	041.60	10	9.94	0.09	0.05	10	9.94	0.09	0.05
Dir Available Phosphate, Other		041.99	1	9.97	0.07	0.10	1	9.97	0.07	0.10
Method Group 041.XX PCT			54	9.93	0.14	0.08	53	9.93	0.13	0.07
Water Soluble Phosphate, Grav Quimociac	962.03	048.10	1	8.62	0.02	0.03	1	8.62	0.02	0.03
Water Soluble Phosphate, Spectrometric	970.01	048.20	5	8.61	0.13	0.06	5	8.61	0.13	0.06
Method Group 048.XX PCT			6	8.61	0.12	0.05	6	8.61	0.12	0.05
Soluble Potash, STPB Oxalate	958.02	050.00	22	10.41	0.18	0.11	21	10.41	0.16	0.08

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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, STPB Citrate	969.04	050.10	1	9.99	0.00	0.00	1	9.99	0.00	0.00
Soluble Potash, AA (Oxalate)		050.30	7	10.44	0.20	0.18	6	10.43	0.17	0.11
Soluble Potash, AA (Citrate)		050.31	1	10.12	0.01	0.01	1	10.12	0.01	0.01
Soluble Potash, ICP (Oxalate)		050.50	8	10.22	0.23	0.14	8	10.22	0.23	0.14
Soluble Potash, ICP (Citrate)		050.51	11	10.41	0.25	0.09	11	10.41	0.25	0.09
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	7	10.54	0.29	0.09	7	10.54	0.29	0.09
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	10	10.46	0.20	0.08	10	10.46	0.20	0.08
Soluble Potash, Other		050.99	15	10.31	0.34	0.11	15	10.31	0.34	0.11
Method Group 050.XX PCT			83	10.39	0.27	0.11	79	10.38	0.25	0.09
Free Water, Vacuum Oven	965.08B	060.00	8	0.65	0.23	0.09	8	0.65	0.23	0.09
Acid Soluble Calcium, AA	945.04	101.00	1	1.13	0.05	0.07	1	1.13	0.05	0.07
Acid Soluble Calcium, ICP		101.30	15	1.11	0.05	0.02	15	1.11	0.05	0.02
Acid Soluble Calcium, Other		101.99	1	1.34	0.06	0.09	1	1.34	0.06	0.09
Method Group 101.XX PCT			17	1.12	0.08	0.02	16	1.11	0.05	0.02
Acid Soluble Magnesium, AA	984.01	121.00	19	1.27	0.07	0.03	19	1.27	0.07	0.03
Acid Soluble Magnesium, ICP		121.30	31	1.29	0.07	0.03	31	1.29	0.07	0.03
Acid Soluble Magnesium, Other		121.99	1	1.48	0.07	0.10	1	1.48	0.07	0.10
Method Group 121.XX PCT			51	1.28	0.08	0.03	50	1.28	0.07	0.03
Water Soluble Magnesium, AA		131.00	1	1.21	0.03	0.04	1	1.21	0.03	0.04
Water Soluble Magnesium, ICP		131.30	4	0.97	0.09	0.02	4	0.97	0.09	0.02
Method Group 131.XX PCT			5	1.02	0.13	0.02	5	1.02	0.13	0.02
Sulfur, Gravimetric	980.02a	144.01	17	11.71	0.21	0.08	17	11.71	0.21	0.08
Sulfur, Gravimetric	980.02b	144.02	2	11.46	0.36	0.05	2	11.46	0.36	0.05
Sulfur, Spectrometric		144.70	1	11.63	0.08	0.11	1	11.63	0.08	0.11
Sulfur, Other		144.99	17	11.62	0.34	0.17	17	11.62	0.34	0.17
Method Group 144.XX PCT			37	11.65	0.29	0.12	33	11.65	0.28	0.08
Arsenic, Atomic Absorption		151.00	2	4.89	0.56	0.96	2	4.89	0.56	0.96
Arsenic, ICP		151.30	11	5.43	1.63	0.35	11	5.43	1.63	0.35
Arsenic, Other		151.99	1	1.70	0.00	0.00	1	1.70	0.00	0.00
Method Group 151.XX PPM			14	5.09	1.75	0.41	14	5.09	1.75	0.41
Acid Soluble Boron, Spectrometric	982.01	165.00	12	0.038	0.003	0.002	12	0.038	0.003	0.002
Acid Soluble Boron, Other		165.99	16	0.039	0.004	0.001	15	0.039	0.004	0.001
Method Group 165.XX PCT			28	0.039	0.004	0.002	27	0.039	0.003	0.002
Water Soluble Boron, Spectrometric	982.01	171.10	2	0.031	0.002	0.002	2	0.031	0.002	0.002
Water Soluble Boron, Other		171.99	1	0.036	0.001	0.001	1	0.036	0.001	0.001
Method Group 171.XX PCT			3	0.033	0.003	0.001	3	0.033	0.003	0.001
Cadmium, Atomic Absorption		181.00	2	1.27	0.14	0.16	2	1.27	0.14	0.16
Cadmium, ICP		181.30	13	1.76	0.61	0.23	12	1.65	0.47	0.18
Cadmium, Other		181.99	1	0.34	0.01	0.01	1	0.34	0.01	0.01

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Method Group 181.XX PPM			16	1.61	0.66	0.21	15	1.51	0.54	0.17
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	2	6.48	0.39	0.05	2	6.48	0.39	0.05
Water Soluble Chlorine, Other		190.99	1	6.62	0.01	0.01	1	6.62	0.01	0.01
Method Group 190.XX PCT			3	6.52	0.31	0.04	3	6.52	0.31	0.04
Chromium, ICP		191.30	13	125.83	37.30	4.49	13	125.83	37.30	4.49
Chromium, Other		191.99	1	10.15	0.49	0.70	1	10.15	0.49	0.70
Method Group 191.XX PPM			15	109.88	53.97	3.95	15	109.88	53.97	3.95
Acid Soluble Cobalt, AA		202.00	2	83.60	3.11	2.38	2	83.60	3.11	2.38
Acid Soluble Cobalt, ICP	965.11	202.30	13	45.44	30.58	2.56	13	45.44	30.58	2.56
Acid Soluble Cobalt, Other		202.99	1	7.50	0.42	0.60	1	7.50	0.42	0.60
Method Group 202.XX PPM			16	47.84	32.09	2.42	16	47.84	32.09	2.42
Acid Soluble Copper, Atomic Absorption	975.01	221.00	8	0.0071	0.0005	0.0004	8	0.0071	0.0005	0.0004
Acid Soluble Copper, ICP		221.30	20	0.0070	0.0008	0.0007	18	0.0068	0.0006	0.0005
Method Group 221.XX PCT			29	0.0071	0.0009	0.0006	26	0.0069	0.0006	0.0004
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	18	0.51	0.08	0.03	16	0.50	0.07	0.02
Acid Soluble Iron, ICP		241.30	25	0.49	0.06	0.02	23	0.49	0.05	0.01
Acid Soluble Iron, Other		241.99	5	0.52	0.07	0.03	4	0.50	0.05	0.01
Method Group 241.XX PCT			48	0.50	0.07	0.02	43	0.49	0.06	0.01
Lead, Atomic Absorption		251.00	3	7.54	1.43	0.34	3	7.54	1.43	0.34
Lead, ICP		251.30	14	8.25	2.88	0.97	13	8.22	2.94	0.74
Lead, Other		251.99	1	2.15	0.07	0.10	1	2.15	0.07	0.10
Method Group 251.XX PPM			18	7.79	2.94	0.82	17	7.74	2.99	0.63
Acid Soluble Manganese, AA	972.02a	261.00	14	0.188	0.017	0.011	13	0.190	0.016	0.009
Acid Soluble Manganese, AA	972.02b	261.11	4	0.191	0.030	0.022	4	0.191	0.030	0.022
Acid Soluble Manganese, ICP	972.02a	261.30	27	0.189	0.015	0.011	25	0.189	0.014	0.008
Acid Soluble Manganese, ICP	972.02b	261.31	2	0.178	0.009	0.006	2	0.178	0.009	0.006
Acid Soluble Manganese, Other		261.99	1	0.182	0.010	0.015	1	0.182	0.010	0.015
Method Group 261.XX PCT			48	0.188	0.017	0.012	44	0.188	0.016	0.009
Mercury, Atomic Absorption		281.00	1	0.19	0.01	0.02	1	0.19	0.01	0.02
Mercury, ICP		281.30	1	0.00	0.00	0.00	1	0.00	0.00	0.00
Mercury, Other		281.99	1	0.07	0.00	0.00	1	0.07	0.00	0.00
Method Group 281.XX PPM			3	0.09	0.09	0.01	3	0.09	0.09	0.01
Molybdenum, Atomic Absorption		289.00	1	7.10	0.28	0.40	1	7.10	0.28	0.40
Molybdenum, ICP		289.30	12	10.27	1.83	0.40	12	10.27	1.83	0.40
Method Group 289.XX PPM			13	10.03	1.96	0.40	13	10.03	1.96	0.40
Nickel, ICP		291.30	10	61.22	8.37	2.33	10	61.22	8.37	2.33
Method Group 291.XX PPM			10	61.22	8.37	2.33	10	61.22	8.37	2.33
Selenium, Atomic Absorption		301.00	1	0.06	0.01	0.01	1	0.06	0.01	0.01
Selenium, ICP		301.30	3	0.65	0.69	0.18	3	0.65	0.69	0.18

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<u>Method</u>	<u>AOAC Ref.</u>	<u>Method Code</u>	<u>No. of Labs</u>	<u>Grand Avq.</u>	<u>Std. Dev.</u>	<u>Average Range of Dups</u>	<u>No. of Labs</u>	<u>Grand Avq.</u>	<u>Std. Dev.</u>	<u>Average Range of Dups</u>
Method Group 301.XX PPM			4	0.50	0.64	0.14	3	0.19	0.25	0.00
Sodium, Other		311.99	8	0.36	0.03	0.01	8	0.36	0.03	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	19	0.149	0.013	0.009	18	0.149	0.013	0.008
Acid Soluble Zinc, ICP		321.30	27	0.152	0.013	0.007	25	0.151	0.012	0.005
Acid Soluble Zinc, Other		321.99	1	0.152	0.005	0.007	1	0.152	0.005	0.007
Method Group 321.XX PCT			47	0.151	0.013	0.008	44	0.150	0.012	0.006

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index		
Meth: 001.99 PCT			Meth: 010.11 PCT			Meth: 010.60 PCT			Meth: 010.60 PCT			Meth: 010.XX PCT				
Ammoniacal Nitrogen			Total Nitrogen			Total Nitrogen			Total Nitrogen			<u>Total Nitrogen</u>				
<u>Other</u>			<u>Modified Comprehensi</u>			<u>Combustion</u>			<u>Combustion</u>							
418	10.21 X	1.79	105	10.04	.55	381	10.18	1.10	028	10.01	-.78	025	10.23	1.00		
434	10.04	.63	Avg	9.96		040	10.18	1.10	361	9.97	-1.08	381	10.18	.88		
393	10.00	.44	029	9.91	-.40	275	10.20	1.04	009	10.00	-1.11	136	10.16	.88		
Avg	9.95		322	9.87	-.62	389	10.20	1.02	034	9.95	-1.29	040	10.18	.88		
193	9.90	-.44	090	9.80	-1.10	291	10.19	.91	037	9.95	-1.42	434	10.20	.86		
096	9.89	-.46	415	9.32 S	-4.28	022	10.18	.88	423	9.91	-1.62	275	10.20	.85		
420	9.82	-.86	Meth: 010.12 PCT			102	10.11	.87	023	9.97 R	-1.62	389	10.20	.84		
409	9.79	-1.24	Total Nitrogen			234	10.18	.84	007	9.90	-1.66	416	10.20	.81		
Meth: 009.10 PCT			<u>Salicylic</u>			247	10.16	.67	369	9.90 R	-2.25	291	10.19	.75		
Ammon & Nitrate N			137	10.44	1.73	393	10.15	.58	042	9.80	-2.55	022	10.18	.73		
<u>Devarda</u>			434	10.20	.65	351	10.09	.55	Meth: 010.99 PCT			234	10.18	.70		
392	10.14	1.58	397	10.06	.37	072	10.14	.52	Total Nitrogen			102	10.11	.66		
Avg	9.92		Avg	10.06		035	10.14	.46	<u>Other</u>			247	10.16	.57		
258	9.89	-.24	254	9.90	-.73	049	10.12	.27	354	10.21	1.55	393	10.15	.50		
420	9.84	-.68	185	9.91	-.79	114	10.11	.18	368	10.05	.52	072	10.14	.46		
257	9.83	-.69	211	9.86	-.89	232	10.10	.16	105	10.01	.32	351	10.09	.43		
Meth: 009.99 PCT			Meth: 010.16 PCT			296	10.10	.09	Avg	9.95		035	10.14	.42		
Ammon & Nitrate N			Total Nitrogen			Avg	10.09		420	9.95	-.11	409	10.09	.31		
<u>Other</u>			<u>Raney</u>			231	10.09	-.04	289	9.80	-.89	049	10.12	.27		
376	9.90	.71	434	10.28	1.04	377	10.08	-.05	030	9.70	-1.38	114	10.11	.21		
Meth: 009.XX PCT			200			10.26 X	-.65	027	10.07	-.14	072	9.72 S	-1.98	232	10.10	.18
<u>Ammon & Nitrate N</u>			Meth: 010.60 PCT			029	10.06	-.29	426	10.08	-.16	027	10.08	.10		
392	10.14	1.83	Total Nitrogen			057	10.05	-.32	029	10.06	-.29	426	10.08	.10		
Avg	9.92		<u>Combustion</u>			096	10.05	-.32	057	10.05	-.32	231	10.09	.08		
258	9.89	-.23	422	10.79 s	6.26	131	10.05	-.37	096	10.05	-.32	377	10.08	.04		
376	9.90	-.28	262	10.45 s	3.52	409	10.09	-.40	Avg	10.07		027	10.07	-.03		
420	9.84	-.72	043	10.41 s	3.00	325	10.04	-.41	422	10.79 s	4.74	057	10.05	-.16		
257	9.83	-.73	157	10.42	2.94	162	10.07	-.46	262	10.45 R	2.69	368	10.05	-.16		
Meth: 010.11 PCT			095	10.27	1.62	055	10.03	-.56	137	10.44	2.41	096	10.05	-.16		
Total Nitrogen			406	10.24	1.42	041	10.03	-.59	043	10.41	2.31	029	10.06	-.16		
<u>Modified Comprehensi</u>			360	10.13 R	1.34	324	10.04	-.60	157	10.42	2.27	131	10.05	-.20		
405	10.32 R	2.50	025	10.23	1.25	292	10.07	-.64	405	10.32	1.79	325	10.04	-.23		
416	10.20	1.56	136	10.16	1.12	177	10.02	-.64	434	10.28	1.34	105	10.04	-.26		
* 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: 020.40 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>		
177	10.02	-.42	<u>Grav Quimociac</u>			<u>Automated</u>			105	10.09	.41	<u>Grav Quimociac</u>		
106	10.03	-.44	090	9.95	-.57	096	9.91	-.36	257	10.05	.33	090	0.06	.00
105	10.01	-.45	414	9.91	-1.06	409	9.88	-.54	114	10.07	.28	Meth: 030.20 PCT		
292	10.07	-.47	157	9.89	-1.30	035	9.80	-1.12	416	10.06	.26	<u>Insoluble Phosphate</u>		
425	10.00	-.50	Meth: 020.20 PCT			193	8.45 S	-13.03	376	10.04	.26	<u>Spectrometric</u>		
233	10.01	-.52	<u>Total Phosphate</u>			Meth: 020.50 PCT			258	10.02	.12	234	10.02	.12
028	10.01	-.52	<u>Spectrometric</u>			<u>Total Phosphate</u>			200	10.02 X	.05	363 0.25 .00		
397	10.06	-.54	425	10.43	1.97	<u>ICP</u>			Avg	10.01		Meth: 030.40 PCT		
361	9.97	-.73	324	10.41	1.89	307	10.99 s	5.70	434	10.01	-.04	<u>Insoluble Phosphate</u>		
009	10.00	-.78	362	10.28	1.25	361	10.26	1.32	363	10.00	-.08	<u>Automated</u>		
420	9.95	-.84	406	10.14	.61	423	10.16	.70	095	10.00	-.09	096	0.04	.71
034	9.95	-.89	292	10.02	.54	422	10.10	.35	418	9.97 X	-.23	Meth: 030.50 PCT		
037	9.95	-.99	257	10.05	.29	Avg	10.04		231	9.96	-.29	<u>Insoluble Phosphate</u>		
423	9.91	-1.13	376	10.04	.23	389	9.95	-.59	090	9.95	-.35	<u>ICP</u>		
029	9.91	-1.14	416	10.06	.23	368	9.98	-.77	392	9.93	-.41	409 0.06 .71		
254	9.90	-1.16	258	10.02	.10	393	9.79	-1.49	389	9.95	-.42	Meth: 030.99 PCT		
007	9.90	-1.16	234	10.02	.10	432	8.65 s	-8.44	105	9.95	-.46	<u>Insoluble Phosphate</u>		
023	9.97 R	-1.16	200	10.02 X	.03	Meth: 020.99 PCT			414	9.91	-.54	Meth: 030.XX PCT		
185	9.91	-1.23	Avg	10.01		<u>Total Phosphate</u>			096	9.91	-.58	<u>Insoluble Phosphate</u>		
322	9.87	-1.38	363	10.00	-.08	<u>Other</u>			157	9.89	-.63	<u>Other</u>		
211	9.86	-1.39	418	9.97 X	-.21	426	10.44	.71	247	9.90	-.63	247	0.04	.00
369	9.90 R	-1.62	231	9.96	-.27	Meth: 020.XX PCT			368	9.98	-.64	Meth: 030.10 PCT		
042	9.80	-1.82	392	9.93	-.37	<u>Total Phosphate</u>			409	9.88	-.76	<u>Insoluble Phosphate</u>		
289	9.80	-1.85	232	9.83	-.86	307	10.99 s	5.26	232	9.83	-.96	363 0.25 1.61		
090	9.80	-1.86	420	9.73	-1.37	426	10.44	2.24	035	9.80	-1.16	Avg 0.10		
030	9.70	-2.49	262	9.70	-1.47	425	10.43	2.21	393	9.79	-1.20	090 0.06 -.45		
072	9.72 s	-3.01	381	9.67 R	-1.74	324	10.41	2.13	420	9.73	-1.53	409 0.06 -.50		
415	9.32 s	-5.04	397	9.63	-1.89	362	10.28	1.41	262	9.70	-1.65	247 0.04 -.66		
Meth: 020.10 PCT			369	9.53 s	-2.73	361	10.26	1.32	381	9.67 R	-1.95	096 0.04 R -.67		
<u>Total Phosphate</u>			Meth: 020.40 PCT			<u>Total Phosphate</u>			369	9.53 s	-3.06	Meth: 040.10 PCT		
<u>Grav Quimociac</u>			<u>Total Phosphate</u>			<u>Automated</u>			432	8.65 s	-7.45	<u>InDir Available Phos</u>		
405	10.23 s	3.73	<u>Automated</u>			042 10.08 R .79			193	8.45 s	-8.26	<u>Grav Quim</u>		
105	10.09	1.43	042	10.08	1.85	423 10.16 .76			090 9.89 -.71					
114	10.07	1.11	105	9.95	.55	406 10.14 .69								
434	10.01	.28	Avg	9.92		292 10.02 .61								
095	10.00	.15	247	9.90	-.29	422 10.10 .45								
Avg	9.99		S/s=Screened Outlier			R=Duplicate Range too large			A=Analysis beyond 3-s limits					
* X=Excluded from lab performance														

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 040.20 PCT			Meth: 041.10 PCT			Meth: 041.40 PCT			Meth: 041.99 PCT			Meth: 041.XX PCT		
<u>InDir Available Phos Spectrometri</u>			<u>Dir Available Phosph Grav Quimociac</u>			<u>Dir Available Phosph Automated</u>			<u>Dir Available Phosph Other</u>			<u>Dir Available Phosph</u>		
289	9.80	1.06	137	10.01	.73	409	9.82	-.25	105	9.97	.71	233	9.91	-.15
Avg	9.77		029	9.97	.36	393	9.59	-1.17				361	9.92	-.16
363	9.75	-.62	211	9.98	.33	072	9.55 S	-1.40				414	9.90	-.31
			105	9.97	.29				Meth: 041.XX PCT			049	9.89	-.34
Meth: 040.40 PCT			Avg 9.95			Meth: 041.50 PCT			057 10.36 s 3.73			177 9.88 -.39		
<u>InDir Available Phos Automated</u>			296 9.93 -.15			<u>Dir Available Phosph ICP</u>			415 10.22 2.17			322 9.87 -.41		
096	9.87	-.71	040	9.93	-.26	325	10.15	1.69	030	10.10 R	1.95	136	9.88	-.42
			009	9.93	-.31	007	9.98	.82	025	10.19	1.94	296	9.87	-.49
Meth: 040.50 PCT			233 9.91 -.40			023 9.97 .54			325 10.15 1.68			073 9.87 -.49		
<u>InDir Available Phos ICP</u>			072 9.91 -.43			361 9.92 .24			434 10.13 1.46			131 9.86 -.55		
423	9.95	.71	414	9.90	-.63	291	9.91	.17	362	10.07	1.37	360	9.85	-.60
			049	9.89	-.73	Avg	9.89		057	10.11	1.32	131	9.84	-.66
Meth: 040.99 PCT			185 9.88 -1.20			360 9.85 -.27			028 10.07 1.05			102 9.85 -.69		
<u>InDir Available Phos Other</u>			131 9.84 -1.24			009 9.88 -.70			041 10.05 .97			185 9.88 -.69		
247	9.86	.71	102	9.85	-1.26	377	9.88	-.76	055	9.96	.95	037	9.82	-.77
			260	9.90	-1.27	043	9.71	-1.34	105	10.02	.90	260	9.90	-.77
Meth: 040.XX PCT			Meth: 041.20 PCT			354 9.63 -1.63			007 9.98 .75			409 9.82 -.91		
<u>InDir Available Phos Spectrometric</u>			<u>Dir Available Phosph Spectrometric</u>			393 9.09 s -5.09			351 10.00 .70			377 9.88 -.96		
423	9.95	1.36	415	10.22	1.06				254	10.00	.69	043	9.71	-1.83
096	9.87	.73	030	10.10	1.01	Meth: 041.60 PCT			137	10.01	.60	354	9.63	-2.21
090	9.89	.47	362	10.07	.66	<u>Dir Available Phosph EDTA Extract</u>			029	9.97	.48	393	9.59	-2.51
247	9.86	.35	Avg	9.97		057 10.36 s 5.56			105	9.97	.48	397	9.59	-2.55
Avg	9.85		055	9.94	-.28	028 10.07 1.48			034	9.99	.46	072	9.55 s	-2.88
289	9.80	-.90	106	9.93	-.31	105 10.02 1.28			106	9.93	.44	393	9.09 s	-6.25
363	9.75	-1.39	397	9.59	-1.65	351 10.00 .98			043	9.98	.43			
Meth: 041.10 PCT			Meth: 041.40 PCT			034 9.99 .59			055	9.94	.41	Meth: 048.10 PCT		
<u>Dir Available Phosph Grav Quimociac</u>			<u>Dir Available Phosph Automated</u>			043 9.98 .55			023	9.97	.37	<u>Water Soluble Phosph Grav Quimociac</u>		
434	10.13	2.07	025	10.19	1.59	Avg 9.94			211	9.98	.34	434 8.62 .71		
057	10.11	1.84	029	9.97	.62	177 9.88 -.69			029	9.97	.33	Meth: 048.20 PCT		
055	9.96 R	1.44	027	9.95	.46	136 9.88 -.74			105	9.97	.31	<u>Water Soluble Phosph Spectrometric</u>		
041	10.05	1.32	131	9.86	.05	073 9.87 -.84			027	9.95	.13	247 8.75 1.05		
254	10.00	.93	Avg	9.89		296 9.87 -.84			296	9.93	.06	420 8.70 .78		
* X=Excluded from lab performance						037 9.82 -1.27			Avg	9.93		362 8.65 .50		
						Avg 9.94			009	9.93	-.11	Avg 8.61		
						177 9.88 -.69			072	9.91	-.14	A=Analysis beyond 3-s limits		
						136 9.88 -.74								
						073 9.87 -.84								
						296 9.87 -.84								
						037 9.82 -1.27								

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 048.20 PCT			Meth: 050.00 PCT			Meth: 050.50 PCT			Meth: 050.61 PCT			Meth: 050.XX PCT		
Water Soluble Phosph Spectrometric			Soluble Potash STPB Oxalate			Soluble Potash ICP (Oxalate)			Soluble Potash Flame (Citrate)			Soluble Potash		
363	8.56	- .41	057	10.32	-1.24	292	10.20	- .57	034	10.74	1.38	041	10.77	1.53
096	8.41	-1.54	397	10.04	-2.29	307	10.11	- .73	025	10.65	.96	009	10.75	1.46
			102	10.25 R	-2.37	420	10.06	- .76	028	10.46	.05	137	10.74	1.42
Meth: 048.XX PCT			Meth: 050.10 PCT			Meth: 050.51 PCT			Avg 10.46			361 10.73 1.37		
Water Soluble Phosph			Soluble Potash STPB Citrate			Soluble Potash ICP (Citrate)			105 10.44 - .22			042 10.69 1.30		
247	8.75	1.15	322	9.99	- .71	009	10.75	1.39	057	10.38	- .50	095	10.68	1.29
420	8.70	.85				361	10.73	1.30	030	10.40	- .58	325	10.70	1.25
362	8.65	.55				023	10.65	.97	029	10.30	- .85	262	10.47 R	1.23
434	8.62	.13				423	10.53	.51	037	10.28	- .92	025	10.65	1.05
Avg	8.61					389	10.43	.12	035	10.19	-1.41	324	10.65	1.05
363	8.56	- .46	Meth: 050.30 PCT			Meth: 050.99 PCT			Soluble Potash			023 10.65 1.05		
096	8.41	-1.71	Soluble Potash AA (Oxalate)			Soluble Potash Other			177 10.62 .95			049 10.57 .89		
			381	11.29 S	5.00	432 10.76 1.41			043 10.59 .81			360 10.57 .77		
Meth: 050.00 PCT			262	10.47 R	1.77	325 10.70 1.16			257 10.57 .75			073 10.57 .74		
Soluble Potash			095	10.68	1.67	177 10.62 .93			055 10.56 .69			369 10.55 .66		
STPB Oxalate			369	10.55	.71	360 10.57 .79			260 10.55 .71			260 10.55 .66		
072	11.22 s	4.94	234	10.46	.20	260 10.55 .71			232 10.50 .47			030 10.40 .40		
137	10.74	2.01	Avg	10.43		105 10.44 .55			416 10.48 .41			009 10.47 .35		
049	10.57	1.24	136	10.32	- .69	027 10.42 .33			418 10.45 X .25			233 10.44 .25		
043	10.59	1.07	351	10.31	- .71	Avg 10.31			232 10.50 .47			392 10.45 .24		
257	10.57	.99	040	10.29	-1.10	131 10.28 - .20			030 10.40 .40			416 10.48 .38		
073	10.57	.96	185	9.60 S	-4.92	376 10.25 - .23			416 10.48 .38			009 10.47 .33		
090	10.53	.74	193	8.00 s	-14.27	072 10.17 - .43			234 10.46 .31			234 10.46 .31		
416	10.48	.41	Meth: 050.31 PCT			Flame (Oxalate)			028 10.46 .30			418 10.45 X .27		
009	10.47	.35	Soluble Potash			415 11.08 1.88			418 10.45 X .27			105 10.44 .27		
418	10.45 X	.25	AA (Citrate)			042 10.69 .67			105 10.43 .56			392 10.45 .26		
233	10.44	.25	254	10.12	.71	055 10.56 .07			232 10.50 .47			233 10.44 .24		
392	10.45	.24				Avg 10.54			030 10.40 .40			416 10.48 .38		
Avg	10.41					406 10.53 - .08			416 10.48 .38			009 10.47 .33		
114	10.36	- .45	Meth: 050.50 PCT			105 10.43 - .62			425 9.82 -1.48			009 10.47 .33		
211	10.32	- .61	Soluble Potash			131 10.31 - .83			426 9.68 -1.88			234 10.46 .31		
022	10.32	- .61	ICP (Oxalate)			200 10.20 -1.19			Meth: 050.XX PCT			028 10.46 .30		
055	10.36	- .70	324	10.65	1.88	Meth: 050.61 PCT			Soluble Potash			418 10.45 X .27		
029	10.30	- .70	106	10.47	1.22	Soluble Potash			381 11.29 s 3.56			105 10.44 .27		
231	10.31	- .71	Avg	10.22		Flame (Citrate)			072 11.22 A 3.31			392 10.45 .26		
258	10.28	- .86	422	10.14	- .40	415 11.08 2.74			415 11.08 2.74			233 10.44 .24		
095	10.27	- .94	354	10.13	- .53	432 10.76 1.60			389 10.43 .19			389 10.43 .19		
* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits														

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 050.XX PCT			Meth: 050.XX PCT			Meth: 101.30 PCT			Meth: 121.00 PCT			Meth: 121.30 PCT		
<u>Soluble Potash</u>			<u>Soluble Potash</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>		
027	10.42	.16	322	9.99	-1.56	ICP			AA			ICP		
Avg	10.38		291	9.95	-1.72	Avg	1.11		029	1.44	2.33	023	1.31	.36
377	10.37	-.10	289	9.87	-2.06	106	1.10	-.40	028	1.35	.99	037	1.31	.34
114	10.36	-.21	425	9.82	-2.25	009	1.09	-.44	105	1.32	.88	Avg	1.29	
057	10.38	-.22	426	9.68	-2.78	035	1.11	-.47	200	1.33	.80	360	1.28	-.18
136	10.32	-.28	185	9.60 s	-3.13	420	1.07	-.81	233	1.32	.67	102	1.28	-.19
211	10.32	-.28	193	8.00 s	-9.44	096	1.07	-.81	137	1.32	.62	035	1.28	-.29
022	10.32	-.28				423	1.06	-1.00	434	1.31	.59	289	1.28	-.30
351	10.31	-.29	Meth: 060.00 PCT			131	1.05	-1.09	040	1.30	.49	389	1.28	-.38
131	10.31	-.32	Free Water			247	1.04	-1.27	351	1.29	.30	376	1.28	-.42
029	10.30	-.34	<u>Vacuum Oven</u>						055	1.29	.20	433	1.26	-.44
231	10.31	-.35	409	0.94	1.28	Meth: 101.99 PCT			177	1.28	.19	420	1.26	-.48
393	10.29	-.38	362	0.91	1.17	<u>Acid Soluble Calcium</u>			Avg	1.27		247	1.25	-.58
029	10.30	-.40	096	0.88	.99	<u>Other</u>			043	1.24	-.53	009	1.25	-.58
055	10.36	-.41	416	0.67	.12	434	1.34	.71	397	1.23	-.57	354	1.26	-.62
037	10.28	-.43	Avg	0.65					381	1.22	-.83	131	1.24	-.68
258	10.28	-.44	247	0.58	-.32	Meth: 101.XX PCT			262	1.21	-.86	096	1.22	-1.05
131	10.28	-.48	363	0.48	-.83	<u>Acid Soluble Calcium</u>			296	1.21	-.91	368	1.21	-1.07
095	10.27	-.49	007	0.42	-1.01	065	12.14 s	208.04	257	1.20	-1.03	106	1.21	-1.14
007	10.38	-.54	193	0.36	-1.30	422	3.14 s	38.28	392	1.18	-1.31	157	1.18	-1.60
043	10.25	-.54				434	1.34 R	4.33	258	1.14	-1.86	426	1.16	-1.81
376	10.25	-.57	Meth: 101.00 PCT			307	1.22	2.15				324	1.16	-1.82
040	10.29	-.60	<u>Acid Soluble Calcium</u>			232	1.20	1.77	Meth: 121.30 PCT					
200	10.20	-.73	AA			360	1.16	.94	<u>Acid Soluble Magnesi</u>					
057	10.32 R	-.76	105	1.13	.71	105	1.13	.76	ICP			Meth: 121.70 PCT		
035	10.19	-.83				057	1.11	.24	065	12.86 s	158.83	<u>Acid Soluble Magnesi</u>		
072	10.17	-.87	Meth: 101.30 PCT			433	1.12	.21	422	2.10 s	11.17	<u>Titrimetric</u>		
292	10.20	-.90	<u>Acid Soluble Calcium</u>			102	1.12	.18	307	1.44	2.05	415 1.70 S .00		
422	10.14	-.99	ICP			409	1.12	.13	057	1.39	1.56	Meth: 121.99 PCT		
368	10.18	-1.00	065	12.14 s	205.15	Avg	1.11		423	1.40	1.56	<u>Acid Soluble Magnesi</u>		
354	10.13	-1.06	422	3.14 s	37.77	106	1.10	-.42	027	1.39	1.35	<u>Other</u>		
254	10.12	-1.07	307	1.22	2.15	009	1.09	-.47	409	1.37	1.09	042 1.48 .71		
307	10.11	-1.18	232	1.20	1.77	035	1.11	-.48	231	1.36	.94	Meth: 121.XX PCT		
420	10.06	-1.31	360	1.16	.96	096	1.07	-.84	232	1.34	.79	<u>Acid Soluble Magnesi</u>		
157	10.05	-1.32	057	1.11	.25	420	1.07	-.84	432	1.34	.74	065 12.86 s 157.57		
397	10.04	-1.36	433	1.12	.24	423	1.06	-1.04	090	1.34	.66	422 2.10 s 11.15		
434	10.05	-1.37	102	1.12	.19	131	1.05	-1.13	291	1.32	.58	415 1.70 s 5.67		
102	10.25 R	-1.48	409	1.12	.15	247	1.04	-1.32	361	1.32	.39	A=Analysis beyond 3-s limits		
* X=Excluded from lab performance 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.XX PCT			Meth: 121.XX PCT			Meth: 144.01 PCT			Meth: 144.99 PCT			Meth: 144.XX PCT		
<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>			<u>Sulfur</u>			<u>Sulfur</u>			<u>Sulfur</u>		
042	1.48 A	2.76	043	1.24	-.66	<u>Gravimetric</u>			<u>Other</u>			351	11.77	.44
029	1.44	2.23	397	1.23	-.71	137	12.14	2.00	361	11.96	1.00	233	11.75	.37
307	1.44	2.11	381	1.22	-.96	296	11.96	1.30	027	11.91	.84	354	11.71	.29
423	1.40	1.63	096	1.22	-.96	043	11.99	1.29	368	11.74	.69	055	11.70	.21
057	1.39	1.62	368	1.21	-.98	324	11.87	.77	360	11.84	.65	028	11.70	.17
027	1.39	1.42	262	1.21	-1.00	105	11.76	.54	090	11.70	.64	Avg	11.65	
409	1.37	1.16	296	1.21	-1.05	157	11.81	.48	289	11.69	.41	177	11.63	-.16
231	1.36	1.01	106	1.21	-1.05	351	11.77	.32	354	11.71	.31	393	11.63	-.22
028	1.35	.87	257	1.20	-1.17	233	11.75	.20	291	11.64	.22	102	11.64	-.25
232	1.34	.87	392	1.18	-1.46	Avg	11.71		177	11.63	.11	291	11.64	-.26
432	1.34	.81	157	1.18	-1.51	028	11.70	-.09	Avg	11.62		029	11.57	-.29
105	1.32	.79	426	1.16	-1.71	055	11.70	-.14	389	11.48	-.43	095	11.58	-.31
090	1.34	.74	324	1.16	-1.73	102	11.64	-.45	247	11.43	-.55	040	11.54	-.42
200	1.33	.68	258	1.14	-2.02	095	11.58	-.64	376	11.35	-.82	106	11.48	-.63
291	1.32	.64				029	11.57	-.64	023	11.27	-1.07	389	11.48	-.64
233	1.32	.55	Meth: 131.00 PCT			040	11.54	-.81	232	11.22	-1.42	193	11.51	-.64
137	1.32	.51	Water Soluble Magnes			193	11.51	-1.05	096	10.96 S	-2.22	247	11.43	-.79
434	1.31	.48	<u>AA</u>			106	11.48	-1.08	422	10.86	-2.23	376	11.35	-1.11
361	1.32	.47	029	1.21	.71	397	11.29	-1.98	035	10.25 s	-4.03	397	11.29	-1.33
023	1.31	.44												
037	1.31	.42	Meth: 131.30 PCT			Meth: 144.02 PCT			Meth: 144.XX PCT			434	11.15	-1.82
040	1.30	.38	Water Soluble Magnes			<u>Sulfur</u>			<u>Sulfur</u>			232	11.22 R	-1.84
289	1.28	.29	<u>ICP</u>			<u>Gravimetric</u>			423 12.64 s 3.59			096	10.96 s	-2.83
351	1.29	.17	291	1.11	1.55	029	11.78	.86	137	12.14	1.76	422	10.86	-2.86
055	1.29	.09	Avg	0.97		Avg	11.46		307	12.11	1.66	035	10.25 s	-5.07
177	1.28	.08	027	0.96	-.22	434	11.15	-.87	009	12.01 R	1.56			
Avg	1.28		289	0.94	-.49				043	11.99	1.22	Meth: 151.00 PPM		
360	1.28	-.11	432	0.90	-.90	Meth: 144.70 PCT			296	11.96	1.21	Arsenic		
102	1.28	-.13				<u>Sulfur</u>			361	11.96	1.13	<u>Atomic Absorption</u>		
035	1.28	-.27	Meth: 131.XX PCT			<u>Spectrometric</u>			027	11.91	.93	136	4.90	.90
389	1.28	-.35	<u>Water Soluble Magnes</u>			393	11.63	.71	324	11.87	.81	Avg	4.89	
433	1.26	-.36	029	1.21	1.50				368	11.74 R	.80	040	4.87	-.83
420	1.26	-.41	291	1.11	.71	Meth: 144.99 PCT			090	11.70 R	.76	Meth: 151.30 PPM		
376	1.28	-.41	Avg	1.02		<u>Sulfur</u>			360	11.84	.69	Arsenic		
247	1.25	-.49	027	0.96	-.52	<u>Other</u>			157	11.81	.58	<u>ICP</u>		
009	1.25	-.50	289	0.94	-.69	423	12.64 S	3.00	105	11.76	.54	368	14.54 s	6.08
354	1.26	-.56	432	0.90	-1.00	307	12.11	1.43	289	11.69	.46	065	8.80	2.06
131	1.24	-.59				009	12.01	1.34	029	11.78	.46	A=Analysis beyond 3-s limits		
* X=Excluded from lab performance 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: 151.30 PPM			Meth: 165.00 PCT			Meth: 165.XX PCT			Meth: 171.99 PCT			Meth: 181.99 PPM		
Arsenic			Acid Soluble Boron			<u>Acid Soluble Boron</u>			Water Soluble Boron			Cadmium		
<u>ICP</u>			<u>Spectrometric</u>			409 6.500 s 2177.78			<u>Other</u>			<u>Other</u>		
247	6.85	.87	105	0.044	2.03	432	0.060 s	6.99	027	0.036	-.71	409	0.34	.71
106	6.15	.44	258	0.042	1.09	433	0.045	1.85	Meth: 171.XX PCT			Meth: 181.XX PPM		
434	6.00	.35	137	0.040	.57	105	0.044	1.78	<u>Water Soluble Boron</u>			<u>Cadmium</u>		
009	5.85	.26	257	0.040	.44	090	0.043	1.42	027	0.036	1.00	393	5.18 s	6.78
Avg	5.43		028	0.040	.44	043	0.043	1.31	200	0.033 X	.12	368	3.13 R	3.07
096	5.05	-.24	Avg	0.038		360	0.042	1.03	Avg	0.033		291	2.72	2.25
291	5.43	-.33	057	0.038	-.08	258	0.042	.83	296	0.030	-1.22	096	2.15	1.19
102	4.99	-.38	040	0.038	-.35	307	0.041	.69	Meth: 181.00 PPM			434	1.80	.54
376	4.65	-.49	023	0.036	-.85	434	0.041	.51	Cadmium			324	1.70	.51
037	3.40	-1.25	055	0.036	-.85	423	0.040	.36	<u>Atomic Absorption</u>			065	1.70	.36
043	2.61	-1.73	296	0.038	-.88	137	0.040	.31	136	1.35	.69	037	1.58	.16
Meth: 151.99 PPM			392	0.036	-.96	257	0.040	.22	Avg	1.27		247	1.55	.12
Arsenic			393	0.034	-1.49	028	0.040	.22	040	1.19	-1.01	Avg	1.51	
<u>Other</u>			Meth: 165.99 PCT			231	0.040	.22	Meth: 181.30 PPM			232	1.45	-.14
409	1.70	.00	Acid Soluble Boron			324	0.039	.08	Cadmium			102	1.39	-.22
Meth: 151.XX PPM			<u>Other</u>			291	0.039	-.02	<u>ICP</u>			136	1.35	-.31
Arsenic			409	6.500 s	1675.19	422	0.039	-.25	393	5.18 s	7.57	106	1.35	-.55
368	14.54 s	5.86	432	0.060 s	5.45	057	0.038	-.30	368	3.13 R	3.27	376	1.50	-.55
065	8.80	2.12	433	0.045 s	1.50	289	0.039	-.33	291	2.72	2.32	040	1.19	-.63
247	6.85	1.01	090	0.043 R	1.16	040	0.038	-.49	096	2.15	1.08	009	0.86	-1.20
106	6.15	.61	043	0.043	1.09	368	0.038	-.55	023	0.036	-1.08	409	0.34	-2.17
434	6.00	.52	360	0.042	.87	296	0.038	-.99	055	0.036	-1.08	Meth: 190.00 PCT		
009	5.85	.44	307	0.041	.59	023	0.036	-1.08	354	0.036	-1.08	Water Soluble Chlori		
291	5.43	.37	434	0.041	.46	055	0.036	-1.08	392	0.036	-1.20	<u>Titrimetric</u>		
Avg	5.09		423	0.040	.35	392	0.036	-1.20	393	0.034	-1.73	105	6.82	.87
096	5.05	-.04	289	0.039	.26	393	0.034	-1.73	Avg	1.65		Avg	6.48	
102	4.99	-.26	231	0.040	.23	232	0.033	-1.91	037	1.58	-.18	422	6.14	-.87
376	4.65	-.26	324	0.039	.12	009	0.029 A	-3.50	247	1.55	-.23	Meth: 190.99 PCT		
040	4.87	-.29	291	0.039	.06	Meth: 171.10 PCT			232	1.45	-.43	Water Soluble Chlori		
136	4.90	-.31	Avg	0.039		Water Soluble Boron			102	1.39	-.55	<u>Other</u>		
037	3.40	-.98	422	0.039	-.14	<u>Spectrometric</u>			376	1.50	-.72	009 6.62 .71		
043	2.61	-1.42	368	0.038	-.35	200	0.033 X	.74	106	1.35	-.83			
409	1.70	-1.94	354	0.036	-.75	Avg	0.031		009	0.86	-1.69			
			232	0.033	-1.39	296	0.030	-.98						
			009	0.029	-2.61									

* 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: 190.XX PCT			Meth: 191.XX PPM			Meth: 202.99 PPM			Meth: 221.30 PCT			Meth: 221.XX PCT		
<u>Water Soluble Chlori</u>			<u>Chromium</u>			<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Copper</u>		
105	6.82	.94	232	135.15	.48	409	7.50	.71	065	0.0626 s	85.97	009	0.0069	1.48
009	6.62	.30	102	127.96	.34	<u>Other</u>			422	0.0125 s	8.75	425	0.0077	1.34
Avg	6.52		324	110.40	.01				376	0.0085 R	3.44	354	0.0075	1.27
422	6.14	-1.24	Avg	109.88		Meth: 202.XX PPM			106	0.0077 R	2.15	433	0.0077	1.24
			065	92.24	-.33	<u>Acid Soluble Cobalt</u>			009	0.0069	1.39	105	0.0076	1.23
Meth: 191.30 PPM			037	82.90	-.50	009	104.75	1.77	009	0.0069	1.39	102	0.0074	1.04
<u>Chromium</u>			434	30.70	-1.47	057	93.55	1.42	354	0.0075	1.27	360	0.0074	1.03
<u>ICP</u>			409	10.15	-1.85	434	86.00	1.19	433	0.0077	1.26	389	0.0075	.97
009	161.60	.97	368	2.21	-1.99	393	84.26	1.13	102	0.0074	1.05	057	0.0072	.54
376	158.30	.88	Meth: 202.00 PPM			291	81.19	1.04	360	0.0074	1.04	095	0.0071	.33
096	158.00	.87	<u>Acid Soluble Cobalt</u>			035	52.60	.18	389	0.0075	1.01	029	0.0071	.24
393	154.90	.78	<u>AA</u>			Avg	47.84		057	0.0072	.61	040	0.0070	.22
291	142.67	.46	434	86.00	.84	247	45.00	-.09	040	0.0070	.28	393	0.0070	.14
247	141.50	.42	Avg	83.60		040	43.70	-.14	393	0.0070	.24	233	0.0070	.10
035	139.50	.38	291	81.19	-.89	232	40.00	-.25	Avg	0.0068		043	0.0070	.10
232	135.15	.30	Meth: 202.30 PPM			037	29.65	-.57	247	0.0068	-.07	Avg	0.0069	
102	127.96	.08	<u>Acid Soluble Cobalt</u>			106	29.50	-.57	232	0.0067	-.31	247	0.0068	-.19
Avg	125.83		<u>ICP</u>			102	27.21	-.65	423	0.0067	-.42	232	0.0067	-.45
324	110.40	-.41	009	104.75	1.94	324	26.05	-.68	426	0.0064	-.67	423	0.0067	-.54
065	92.24	-.90	057	93.55	1.57	065	14.12 X	-1.05	037	0.0068	-.86	397	0.0069	-.66
037	82.90	-1.15	393	84.26	1.27	409	7.50	-1.26	291	0.0065	-.94	426	0.0064	-.84
434	30.70	-2.55	035	52.60	.26	368	0.28	-1.48	035	0.0061	-1.19	037	0.0068	-.93
368	2.21 s	-3.31	Avg	45.44		Meth: 221.00 PCT			307	0.0060	-1.30	291	0.0065	-1.07
Meth: 191.99 PPM			247	45.00	-.01	<u>Acid Soluble Copper</u>			324	0.0057	-1.79	434	0.0064	-1.10
<u>Chromium</u>			040	43.70	-.08	<u>Atomic Absorption</u>			368	0.0033 s	-5.49	035	0.0061	-1.39
<u>Other</u>			232	40.00	-.18	262	0.0100 s	6.17	Meth: 221.99 PCT			307	0.0060	-1.51
409	10.15	.71	037	29.65	-.52	425	0.0077	1.39	<u>Acid Soluble Copper</u>			324	0.0057	-2.03
Meth: 191.XX PPM			106	29.50	-.52	105	0.0076	1.28	<u>Other</u>			368	0.0033 s	-6.00
<u>Chromium</u>			102	27.21	-.60	Avg	0.0071					409	0.0021 s	-7.95
009	161.60	.96	029	0.0071	-.12	029	0.0071	-.12	Meth: 221.XX PCT			Meth: 241.00 PCT		
376	158.30	.90	233	0.0070	-.20	043	0.0070	-.28	<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>		
096	158.00	.89	095	0.0071	-.32	095	0.0071	-.32	065	0.0626 s	92.06	137	0.63	1.79
393	154.90	.83	397	0.0069	-.92	434	0.0064	-1.69	422	0.0125 s	9.27	055	0.59 R	1.68
291	142.67	.61							262	0.0100 A	5.10	029	0.60	1.36
247	141.50	.59							376	0.0085 R	3.61	037	0.57 R	1.21
035	139.50	.55							106	0.0077 R	2.23	351	0.58	1.18
* X=Excluded from lab performance			S/s=Screened Outlier			R=Duplicate Range too large			A=Analysis beyond 3-s limits					

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 241.00 PCT			Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 251.00 PPM			Meth: 251.XX PPM		
Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron			Lead			Lead		
<u>Atomic Absorption</u>			<u>ICP</u>			<u>ICP</u>			<u>Atomic Absorption</u>			<u>ICP</u>		
434	0.55	.75	423	0.47	-.32	233	0.53	.61	136	9.15	1.13	037	10.56	.99
095	0.53	.46	231	0.46	-.43	234	0.52	.49	Avg	7.54		106	10.05	.84
233	0.53	.42	096	0.46	-.54	409	0.52	.39	040	7.46	-.25	232	9.90	.74
177	0.51	.13	324	0.46	-.61	289	0.51	.32	363	6.00	-1.07	065	8.59 R	.72
040	0.51	.10	292	0.41	-1.45	009	0.50	.28				102	9.59	.67
Avg	0.50		247	0.40	-1.64	177	0.51	.25	Meth: 251.30 PPM			136	9.15	.47
425	0.49	-.16	368	0.35	-2.54	040	0.51	.22	Lead			035	8.23	.17
105	0.49	-.17	422	0.16 s	-6.24	105	0.49	.19	<u>ICP</u>			434	8.00	.09
296	0.48	-.26				027	0.50	.17	393	54.17 s	15.65	Avg	7.74	
262	0.46	-.61	Meth: 241.99 PCT			102	0.50	.13	291	23.97 s	5.46	040	7.46	-.15
073	0.45	-.70	Acid Soluble Iron			433	0.50	.12	324	11.80	1.23	376	7.15	-.20
043	0.44	-.82	<u>Other</u>			Avg	0.49		096	11.20	1.01	247	6.85	-.30
397	0.37	-1.78	362	0.61 R	2.42	425	0.49	-.09	037	10.56	.86	043	6.63	-.37
381	0.37	-1.81	042	0.56	1.29	296	0.48	-.24	106	10.05	.70	009	6.50	-.45
			234	0.52	.47	307	0.49	-.25	065	8.59 R	.68	363	6.00	-.58
			Avg	0.50		376	0.48	-.30	232	9.90	.60	409	2.15	-1.87
			389	0.47	-.57	426	0.47	-.30	102	9.59	.53	368	0.43	-2.45
			023	0.44	-1.14	035	0.49	-.33	035	8.23	.05			
						232	0.47	-.35	Avg			Meth: 261.00 PCT		
						389	0.47	-.37	434	8.00	-.08	Acid Soluble Mangane		
						423	0.47	-.38	376	7.15	-.37	<u>AA</u>		
						231	0.46	-.47	247	6.85	-.47	258	0.240 s	3.40
						096	0.46	-.56	043	6.63	-.54	073	0.207	1.28
						262	0.46	-.62	009	6.50	-.61	296	0.206	1.05
						324	0.46	-.62	368	0.43	-2.66	262	0.200	.90
						073	0.45	-.74				233	0.203	.87
						023	0.44	-.85	Meth: 251.99 PPM			043	0.195	.45
						043	0.44	-.88	Lead			351	0.196	.42
						292	0.41	-1.37	<u>Other</u>			105	0.194	.42
						247	0.40	-1.53	409	2.15	-.71	177	0.191	.05
						397	0.37	-2.02	Avg			257	0.185	-.44
						381	0.37	-2.06	Meth: 251.XX PPM			137	0.185	-.44
						368	0.35	-2.32	Lead			392	0.182	-.58
						422	0.16 s	-5.56	393	54.17 s	15.54	095	0.173	-1.06
									291	23.97 s	5.52	055	0.170 R	-1.77
									324	11.80	1.37	397	0.152 X	-2.41
									096	11.20	1.16			

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 261.11 PCT			Meth: 261.31 PCT			Meth: 261.XX PCT			Meth: 281.30 PPM			Meth: 289.99 PPM		
Acid Soluble Mangane			Acid Soluble Mangane			<u>Acid Soluble Mangane</u>			Mercury			Molybdenum		
<u>AA</u>			<u>ICP</u>			023 0.190 .18			<u>ICP</u>			<u>Other</u>		
434	0.208	.82	324	0.185	.95	177	0.191	.14	291	0.00	.00	409	1.45 S	.00
040	0.197	.82	Avg	0.178		376	0.190	.11						
029	0.209	.59	027	0.171	-.78	Avg	0.188		Meth: 281.99 PPM			Meth: 289.XX PPM		
Avg	0.191		368	0.127 S	-5.57	324	0.185	-.38	Mercury			<u>Molybdenum</u>		
381	0.150	-1.35				257	0.185	-.38	<u>Other</u>			393	104.15 s	48.03
			Meth: 261.99 PCT			137	0.185	-.38	409	0.07	.00	291	14.45	2.26
			Acid Soluble Mangane			423	0.182	-.43				232	11.15	.58
			<u>Other</u>			392	0.182	-.51	Meth: 281.XX PPM			106	11.00	.50
			042	0.182	.71	393	0.180	-.52	<u>Mercury</u>			247	10.85	.42
			Avg	0.182		289	0.180	-.54	363	0.19	1.20	433	10.62	.31
			409	0.058 S	-12.02	426	0.179	-.57	Avg	0.09		009	10.45	.22
						042	0.182	-.59	409	0.07	-.19	035	10.40	.22
			Meth: 261.XX PCT			232	0.185	-.77	291	0.00	-1.01	102	10.42	.21
			<u>Acid Soluble Mangane</u>			422	0.176	-.81				057	10.16	.12
			258	0.240 s	3.50	106	0.180	-.82	Meth: 289.00 PPM			Avg	10.03	
			291	0.202 R	1.87	247	0.175	-.84	Molybdenum			324	8.85	-.66
			432	0.215	1.72	131	0.175	-.84	<u>Atomic Absorption</u>			065	8.00	-1.05
			434	0.208	1.69	433	0.175	-.88	040	7.10	.71	040	7.10	-1.50
			040	0.197 R	1.61	095	0.173	-.97				037	6.90	-1.62
			009	0.206	1.48	096	0.175	-.99	Meth: 289.30 PPM			368	1.64 s	-4.28
			090	0.205	1.42	027	0.171	-1.10	Molybdenum			409	1.45 s	-4.38
			073	0.207	1.37	035	0.170	-1.19	<u>ICP</u>					
			029	0.209	1.30	037	0.179 R	-1.57	393	104.15 s	51.18	Meth: 291.30 PPM		
			354	0.207	1.21	055	0.170 R	-1.71	291	14.45	2.28	Nickel		
			296	0.206	1.14	397	0.152 X	-2.33	232	11.15	.49	<u>ICP</u>		
			262	0.200	.97	381	0.150	-2.42	106	11.00	.40	376	72.30	1.34
			233	0.203	.97	368	0.127 s	-3.85	247	10.85	.32	009	67.10	.74
			057	0.203	.96	409	0.058 s	-8.21	433	10.62	.20	102	66.19	.60
			389	0.200	.71				035	10.40	.13	106	66.00	.57
			307	0.197	.60	Meth: 281.00 PPM			102	10.42	.12	232	65.25	.53
			043	0.195	.53	Mercury			009	10.45	.10	035	63.95	.45
			231	0.195	.53	<u>Atomic Absorption</u>			Avg	10.27		247	62.75	.18
			351	0.196	.51	363	0.19	.71	057	10.16	-.12	Avg	61.22	
			105	0.194	.48				324	8.85	-.83	324	51.30	-1.19
			102	0.193	.35				065	8.00	-1.25	065	49.53	-1.40
			360	0.190	.33				037	6.90	-1.86	040	47.85	-1.60
			065	0.191	.33				368	1.64 s	-4.70			
* 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
001.99	7	0.00	1.00	0.26	121.30	33	5.15	27.67	0.71
001.XX	7	0.00	1.00	0.26	121.XX	54	3.28	21.48	0.57
009.10	4	0.00	1.07	0.11	131.30	4	0.00	1.07	0.12
009.XX	5	0.00	1.05	0.14	131.XX	5	0.00	1.05	0.10
010.11	7	- 0.27	2.16	0.29	144.01	17	0.00	0.98	0.26
010.12	6	0.00	1.02	0.23	144.02	2	0.00	1.22	0.10
010.16	2	0.00	0.82	0.65	144.99	20	- 0.15	1.50	0.41
010.60	55	0.18	1.38	0.51	144.XX	39	- 0.10	1.45	0.39
010.99	7	- 0.19	1.03	0.64	151.00	2	0.00	0.04	0.87
010.XX	73	0.00	1.28	0.44	151.30	12	0.46	1.88	0.72
020.10	8	0.43	1.53	0.57	151.XX	15	0.36	1.70	0.61
020.20	21	- 0.19	1.11	0.42	165.00	12	0.000	0.942	0.380
020.40	7	- 1.86	4.98	0.57	165.99	18	92.533	390.98	54.474
020.50	8	- 0.32	3.83	0.86	165.XX	30	72.015	393.78	54.857
020.XX	44	- 0.33	2.09	0.49	171.10	2	0.000	1.047	0.449
030.XX	5	- 0.13	0.98	0.05	171.XX	3	0.000	1.048	0.318
040.20	2	0.00	0.80	0.65	181.00	2	0.00	0.83	0.63
040.XX	6	0.00	0.96	0.38	181.30	14	0.77	2.31	0.34
041.10	21	0.00	0.88	0.54	181.XX	17	0.57	1.98	0.28
041.20	6	0.00	0.93	0.44	190.00	2	0.00	1.22	0.07
041.40	7	0.00	1.03	0.17	190.XX	3	0.00	1.11	0.07
041.50	11	- 0.46	1.76	0.43	191.30	14	- 0.24	1.32	0.08
041.60	11	0.43	1.68	0.96	191.XX	15	0.00	1.02	0.05
041.XX	46	- 0.01	1.17	0.62	202.00	2	0.00	1.09	0.39
048.20	5	0.00	1.01	0.28	202.30	13	0.00	1.02	0.05
048.XX	6	0.00	1.00	0.29	202.XX	16	0.00	1.02	0.05
050.00	23	0.17	1.39	0.57	221.00	9	0.6855	2.2187	0.4659
050.30	10	- 1.39	5.13	0.71	221.30	23	4.0462	18.016	0.7879
050.50	8	0.00	0.96	0.36	221.XX	33	2.9196	16.230	0.7306
050.51	11	0.00	0.99	0.27	241.00	18	0.12	1.01	0.35
050.60	7	0.00	1.01	0.24	241.30	26	- 0.16	1.58	0.31
050.61	10	0.00	1.00	0.24	241.99	5	0.44	1.35	0.46
050.99	15	0.00	1.00	0.21	241.XX	49	0.02	1.31	0.34
050.XX	76	- 0.11	1.55	0.43	251.00	3	0.00	1.10	0.16
060.00	8	0.00	1.00	0.24	251.30	16	1.32	4.15	0.34
060.XX	8	0.00	1.00	0.24	251.XX	20	1.06	3.73	0.30
101.30	17	14.28	49.99	2.06	261.00	15	0.127	1.259	0.562
101.XX	19	13.18	47.96	2.00	261.11	4	0.000	0.916	0.496
121.00	19	0.00	0.99	0.22	261.30	27	0.009	0.900	0.646

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	3	- 1.855	3.304	0.350					
261.99	2	- 6.008	8.497	0.510					
261.XX	51	- 0.179	1.616	0.583					
281.XX	3	0.000	1.115	0.067					
289.30	14	3.32	13.86	0.22					
289.XX	16	2.46	12.27	0.19					
291.30	10	0.00	1.01	0.17					
291.XX	11	- 0.59	2.19	0.16					
301.30	4	1.64	3.39	1.51					
301.XX	5	5.10	8.82	3.79					
311.99	9	0.97	3.07	0.18					
311.XX	9	0.97	3.07	0.18					
321.00	21	0.351	1.362	0.620					
321.30	30	0.463	1.542	0.962					
321.99	2	- 13.71	19.392	0.500					
321.XX	52	0.182	2.224	0.838					