

MAGRUDER - Fertilizer Check Sample No. - 200702 Grade 18-46-0 DAP

- Pass 1 Results for 78 Labs - - Pass 2 Results for 77 Labs -

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
Ammoniacal Nitrogen, MgO Distillation .	920.03	001.10	7	17.14	0.39	0.03	6	17.15	0.42	0.02
Ammoniacal Nitrogen, Other		001.99	12	17.34	0.49	0.05	12	17.34	0.49	0.05
Method Group 001.XX PCT			19	17.27	0.46	0.05	18	17.31	0.44	0.04
Nitrate Nitrogen, Other		002.99	1	0.08	0.00	0.00	1	0.08	0.00	0.00
Nitrogen From Urea, Urease (as N)	959.03	005.00	1	0.42	0.03	0.04	1	0.42	0.03	0.04
Ammon & Nitrate N, Devarda	892.01	009.10	3	17.56	0.36	0.12	3	17.56	0.36	0.12
Ammon & Nitrate N, Other		009.99	1	17.63	0.03	0.04	1	17.63	0.03	0.04
Method Group 009.XX PCT			4	17.58	0.30	0.10	4	17.58	0.30	0.10
Total Nitrogen, Reduced Iron		010.10	1	18.01	0.01	0.02	1	18.01	0.01	0.02
Total Nitrogen, Modified Comprehensive	978.02	010.11	7	18.00	0.31	0.05	6	17.91	0.19	0.03
Total Nitrogen, Salicylic	955.04D	010.12	3	17.88	0.29	0.04	3	17.88	0.29	0.04
Total Nitrogen, Combustion		010.60	50	17.90	0.26	0.09	47	17.92	0.24	0.08
Total Nitrogen, Other		010.99	6	17.78	0.40	0.19	6	17.78	0.40	0.19
Method Group 010.XX PCT			67	17.90	0.28	0.09	62	17.92	0.26	0.07
Total Phosphate, Grav Quimociac	962.02	020.10	5	47.34	0.38	0.18	5	47.34	0.38	0.18
Total Phosphate, Spectrometric	958.01	020.20	10	46.43	1.30	0.13	10	46.43	1.30	0.13
Total Phosphate, Automated	978.01	020.40	6	46.72	0.44	0.19	6	46.72	0.44	0.19
Total Phosphate, ICP		020.50	10	45.76	1.26	0.76	10	45.76	1.26	0.76
Total Phosphate, Other		020.99	4	45.89	0.74	0.70	4	45.89	0.74	0.70
Method Group 020.XX PCT			36	46.33	1.14	0.42	32	46.48	1.02	0.25
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	1	0.32	0.01	0.01	1	0.32	0.01	0.01
Insoluble Phosphate, Automated	978.01	030.40	2	0.67	0.06	0.02	2	0.67	0.06	0.02
Insoluble Phosphate, ICP		030.50	1	1.13	0.00	0.00	1	1.13	0.00	0.00
Insoluble Phosphate, Other		030.99	1	0.71	0.04	0.06	1	0.71	0.04	0.06
Method Group 030.XX PCT			5	0.70	0.27	0.02	5	0.70	0.27	0.02
InDir Available Phosphate, Grav Quim ..	960.02	040.10	1	47.16	0.11	0.15	1	47.16	0.11	0.15
InDir Available Phosphate, Spectrometri	960.02	040.20	1	47.53	0.16	0.22	1	47.53	0.16	0.22
InDir Available Phosphate, Automated ..	960.02	040.40	3	46.33	0.21	0.10	3	46.33	0.21	0.10
InDir Available Phosphate, ICP		040.50	2	45.04	0.46	0.42	2	45.04	0.46	0.42
InDir Available Phosphate, Other		040.99	1	45.61	0.01	0.01	1	45.61	0.01	0.01
Method Group 040.XX PCT			8	46.17	0.91	0.19	8	46.17	0.91	0.19
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	18	46.57	0.55	0.21	17	46.58	0.55	0.17
Dir Available Phosphate, Spectrometric	960.03D	041.20	3	45.79	0.28	0.26	3	45.79	0.28	0.26
Dir Available Phosphate, Automated	978.01	041.40	3	46.75	0.61	0.08	3	46.75	0.61	0.08
Dir Available Phosphate, ICP		041.50	6	45.61	0.53	0.39	6	45.61	0.53	0.39
Dir Available Phosphate, EDTA Extract .	993.01	041.60	10	46.46	0.43	0.17	9	46.51	0.41	0.12
Dir Available Phosphate, Other		041.99	1	46.30	0.16	0.22	1	46.30	0.16	0.22
Method Group 041.XX PCT			41	46.35	0.62	0.22	39	46.38	0.58	0.19
Water Soluble Phosphate, Spectrometric	970.01	048.20	3	42.57	0.99	0.05	3	42.57	0.99	0.05

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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
Water Soluble Phosphate, Other		048.99	1	41.48	0.07	0.10	1	41.48	0.07	0.10
Method Group 048.XX PCT			4	42.30	0.98	0.06	4	42.30	0.98	0.06
Soluble Potash, STPB Oxalate	958.02	050.00	1	0.03	0.02	0.03	1	0.03	0.02	0.03
Soluble Potash, STPB Citrate	969.04	050.10	1	0.35	0.06	0.09	1	0.35	0.06	0.09
Soluble Potash, ICP (Oxalate)		050.50	3	0.16	0.09	0.01	3	0.16	0.09	0.01
Soluble Potash, ICP (Citrate)		050.51	3	0.13	0.02	0.01	3	0.13	0.02	0.01
Soluble Potash, Other		050.99	5	0.17	0.06	0.03	5	0.17	0.06	0.03
Method Group 050.XX PCT			13	0.16	0.09	0.03	11	0.15	0.07	0.01
Free Water, Vacuum Oven	965.08B	060.00	4	1.34	0.24	0.06	3	1.22	0.09	0.01
Free Water, Vacuum Desiccate	965.08A	060.10	1	1.35	0.01	0.02	1	1.35	0.01	0.02
Method Group 060.XX PCT			5	1.34	0.22	0.05	4	1.25	0.10	0.01
Acid Soluble Calcium, ICP		101.30	14	0.22	0.01	0.01	14	0.22	0.01	0.01
Acid Soluble Calcium, Other		101.99	1	0.22	0.03	0.04	1	0.22	0.03	0.04
Method Group 101.XX PCT			15	0.22	0.01	0.01	14	0.22	0.01	0.01
Acid Soluble Magnesium, AA	984.01	121.00	1	0.86	0.06	0.09	1	0.86	0.06	0.09
Acid Soluble Magnesium, ICP		121.30	14	0.83	0.04	0.01	13	0.84	0.04	0.01
Acid Soluble Magnesium, Other		121.99	1	0.76	0.06	0.09	1	0.76	0.06	0.09
Method Group 121.XX PCT			16	0.83	0.04	0.02	14	0.83	0.04	0.01
Sulfur, Gravimetric	980.02a	144.01	3	1.22	0.04	0.06	3	1.22	0.04	0.06
Sulfur, Other		144.99	9	1.12	0.05	0.02	9	1.12	0.05	0.02
Method Group 144.XX PCT			12	1.14	0.06	0.03	11	1.14	0.06	0.02
Arsenic, Atomic Absorption		151.00	2	13.75	1.60	0.60	2	13.75	1.60	0.60
Arsenic, ICP		151.30	6	12.94	2.49	1.06	6	12.94	2.49	1.06
Arsenic, Other		151.99	2	9.23	0.26	0.08	2	9.23	0.26	0.08
Method Group 151.XX PPM			10	12.36	2.58	0.77	10	12.36	2.58	0.77
Acid Soluble Boron, Other		165.99	8	0.022	0.013	0.001	8	0.022	0.013	0.001
Cadmium, Atomic Absorption		181.00	3	2.48	0.19	0.07	3	2.48	0.19	0.07
Cadmium, ICP		181.30	9	2.60	0.55	0.19	9	2.60	0.55	0.19
Cadmium, Other		181.99	1	2.34	0.04	0.05	1	2.34	0.04	0.05
Method Group 181.XX PPM			13	2.55	0.47	0.15	13	2.55	0.47	0.15
Water Soluble Chlorine, Titrimetric	928.02	190.00	1	0.15	0.01	0.01	1	0.15	0.01	0.01
Water Soluble Chlorine, Other		190.99	1	0.02	0.01	0.01	1	0.02	0.01	0.01
Method Group 190.XX PCT			2	0.08	0.07	0.01	2	0.08	0.07	0.01
Chromium, ICP		191.30	11	112.87	14.29	2.02	11	112.87	14.29	2.02
Chromium, Other		191.99	1	89.20	0.28	0.40	1	89.20	0.28	0.40
Method Group 191.XX PPM			12	110.89	15.20	1.88	11	111.05	15.87	1.47
Acid Soluble Cobalt, ICP	965.11	202.30	9	3.20	0.63	0.28	8	3.09	0.49	0.09
Acid Soluble Cobalt, Other		202.99	1	2.56	0.10	0.14	1	2.56	0.10	0.14
Method Group 202.XX PPM			10	3.13	0.62	0.27	9	3.03	0.49	0.10

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Acid Soluble Copper, Atomic Absorption	975.01	221.00	2	0.0003	0.0002	0.0001	2	0.0003	0.0002	0.0001
Acid Soluble Copper, ICP		221.30	6	0.0187	0.0382	0.0002	5	0.0202	0.0421	0.0000
Acid Soluble Copper, Other		221.99	2	0.0773	0.0844	0.0135	2	0.0773	0.0844	0.0135
Method Group 221.XX PCT			10	0.0267	0.0519	0.0028	9	0.0130	0.0319	0.0009
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	1	1.10	0.06	0.08	1	1.10	0.06	0.08
Acid Soluble Iron, ICP		241.30	15	1.06	0.07	0.02	14	1.05	0.06	0.02
Acid Soluble Iron, Other		241.99	1	0.96	0.03	0.04	1	0.96	0.03	0.04
Method Group 241.XX PCT			17	1.05	0.07	0.03	16	1.05	0.07	0.02
Lead, ICP		251.30	3	1.88	2.00	0.10	3	1.88	2.00	0.10
Lead, Other		251.99	2	2.14	0.72	0.14	2	2.14	0.72	0.14
Method Group 251.XX PPM			5	1.98	1.55	0.12	5	1.98	1.55	0.12
Acid Soluble Manganese, AA	972.02a	261.00	1	0.029	0.001	0.001	1	0.029	0.001	0.001
Acid Soluble Manganese, ICP	972.02a	261.30	14	0.027	0.002	0.001	13	0.027	0.002	0.000
Acid Soluble Manganese, Other		261.99	3	0.026	0.004	0.000	3	0.026	0.004	0.000
Method Group 261.XX PCT			18	0.027	0.002	0.001	17	0.027	0.002	0.000
Mercury, Atomic Absorption		281.00	1	0.00	0.00	0.00	1	0.00	0.00	0.00
Molybdenum, ICP		289.30	10	7.19	1.14	0.42	10	7.19	1.14	0.42
Molybdenum, Other		289.99	1	7.10	0.05	0.07	1	7.10	0.05	0.07
Method Group 289.XX PPM			11	7.18	1.09	0.39	11	7.18	1.09	0.39
Nickel, Atomic Absorption		291.00	1	14.00	1.41	2.00	1	14.00	1.41	2.00
Nickel, ICP		291.30	6	12.45	1.36	1.14	6	12.45	1.36	1.14
Method Group 291.XX PPM			7	12.67	1.43	1.26	7	12.67	1.43	1.26
Selenium, ICP		301.30	1	1.00	0.14	0.20	1	1.00	0.14	0.20
Sodium, Other		311.99	7	0.18	0.07	0.00	7	0.18	0.07	0.00
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	5	0.004	0.001	0.001	4	0.004	0.000	0.000
Acid Soluble Zinc, ICP		321.30	17	0.004	0.001	0.000	16	0.004	0.001	0.000
Acid Soluble Zinc, Other		321.99	1	0.004	0.000	0.000	1	0.004	0.000	0.000
Method Group 321.XX PCT			24	0.004	0.001	0.000	22	0.004	0.001	0.000

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.10 PCT			Meth: 001.XX PCT			Meth: 009.XX PCT			Meth: 010.60 PCT			Meth: 010.60 PCT		
<u>Ammoniacal Nitrogen</u>			<u>Ammoniacal Nitrogen</u>			<u>Ammon & Nitrate N</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
<u>MgO Distillation</u>			Avg			090			<u>Combustion</u>			<u>Combustion</u>		
444	17.78	1.48	193	17.23	-.19	257	17.64	.21	422	18.16	1.02	095	17.72 R	-1.05
371	17.54	.92	288	17.20	-.25	420	17.63	.18	291	18.16	.99	425	17.68	-1.06
288	17.20	.11	372	17.19	-.27	Avg	17.58		162	18.16	.98	009	17.67	-1.07
Avg	17.15		234	17.17	-.33	030	17.15	-1.51	073	18.15	.94	369	17.62	-1.31
029	17.10 R	-.19	029	17.10	-.50	Meth: 010.10 PCT			049	18.14	.94	042	17.55	-1.56
351	16.94	-.51	420	17.00	-.72	Total Nitrogen			296	18.12	.83	426	17.52	-1.68
324	16.86	-.70	351	16.94	-.85	<u>Reduced Iron</u>			106	18.12	.81	023	17.50	-1.81
309	16.60	-1.30	324	16.86	-1.03	405			114	18.11	.77	262	17.50	-1.81
230	15.00 s	-5.08	309	16.60	-1.62	.71			040	18.08	.67	307	17.49	-1.83
Meth: 001.99 PCT			027	16.54	-1.76	Meth: 010.11 PCT			055	18.05	.61	325	17.35	-2.38
<u>Ammoniacal Nitrogen</u>			394	16.53 R	-1.78	Total Nitrogen			029	18.07	.60	102	17.21 A	-3.00
<u>Other</u>			230	15.00 s	-5.26	<u>Modified Comprehensi</u>			377	18.06	.58	351	16.51 s	-6.02
430	18.25	1.85	Meth: 002.99 PCT			309	18.60 R	3.64	037	18.04	.58	230	16.40 s	-6.37
300	17.70	.72	Nitrate Nitrogen			322	18.16	1.31	043	18.05	.57	Meth: 010.99 PCT		
255	17.67	.67	<u>Other</u>			090	18.03	.62	330	18.00	.53	Total Nitrogen		
096	17.66	.64	288	0.08	.00	105	17.92	.27	035	18.05	.52	<u>Other</u>		
409	17.60	.52	Meth: 005.00 PCT			Avg	17.91		025	18.03	.46	234	18.13	.88
428	17.58	.48	Nitrogen From Urea			029	17.90	-.06	096	18.01	.38	105	18.06	.86
Avg	17.34		<u>Urease (as N)</u>			288	17.88	-.13	131	18.01	.37	255	17.92	.34
193	17.23	-.23	288	0.42	-.71	211	17.56	-1.82	136	18.01	.36	300	17.79	.13
372	17.19	-.31	Meth: 009.10 PCT			Meth: 010.12 PCT			409	17.96	.27	Avg	17.78	
234	17.17	-.36	Ammon & Nitrate N			Total Nitrogen			007	17.95	.24	402	17.76	-.61
420	17.00	-.70	<u>Devarda</u>			<u>Salicylic</u>			041	17.93	.03	420	17.05	-1.87
027	16.54	-1.64	090	17.90	.95	137	18.21	1.14	Avg	17.92		Meth: 010.XX PCT		
394	16.53	-1.65	257	17.64	.23	Avg	17.88		177	17.91	-.07	<u>Total Nitrogen</u>		
Meth: 001.XX PCT			Avg	17.56		185	17.86	-.18	024	17.90	-.11	428	51.41 s	128.96
<u>Ammoniacal Nitrogen</u>			030	17.15	-1.24	254	17.57	-1.08	372	17.88	-.20	309	18.60	2.65
430	18.25	2.15	Meth: 009.99 PCT			Meth: 010.60 PCT			406	17.88	-.22	028	18.43	2.00
444	17.78	1.08	Ammon & Nitrate N			Total Nitrogen			394	17.85	-.30	027	18.30	1.47
300	17.70	.88	<u>Other</u>			<u>Combustion</u>			389	17.85	-.36	390	18.25	1.29
255	17.67	.83	420	17.63	.71	428	51.41 s	139.89	034	17.85	-.36	137	18.21	1.10
096	17.66	.79	Meth: 009.99 PCT			028	18.43	2.16	394	17.85	-.36	422	18.16	.95
409	17.60	.66	Ammon & Nitrate N			027	18.30	1.59	389	17.85	-.36	105	18.06 R	.94
428	17.58	.61	<u>Other</u>			390	18.25	1.39	034	17.85	-.36	322	18.16	.92
371	17.54	.53	420			022			360	17.88	-.37	422	18.16	.95
* X=Excluded from lab performance			S/s=Screened Outlier			R=Duplicate Range too large			292	17.81	-.53	105	18.06 R	.94
									233	17.77	-.65	322	18.16	.92
									324	17.84 R	-.71	291	18.16	.91
									423	17.75	-.72	A=Analysis beyond 3-s limits		
									022	17.76	-.74			

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 010.XX PCT			Meth: 010.XX PCT			Meth: 020.20 PCT			Meth: 020.50 PCT			Meth: 020.XX PCT		
<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Phosphate Spectrometric</u>			<u>Total Phosphate ICP</u>			<u>Total Phosphate</u>		
162	18.16	.91	292	17.81	-.49	372	47.68	.96	307	44.06	-1.58	369	46.26	-.22
073	18.15	.88	300	17.79	-.53	406	47.60	.91				420	46.20	-.27
049	18.14	.87	233	17.77	-.59	425	47.44	.78	Meth: 020.99 PCT			324	46.19	-.29
234	18.13	.83	324	17.84 R	-.65	371	46.62	.20	<u>Total Phosphate</u>			042	45.94	-.57
296	18.12	.77	423	17.75	-.66	257	46.66	.20	<u>Other</u>			255	45.84	-.68
106	18.12	.76	022	17.76	-.68	292	46.63	.16	234	46.56	1.00	193	45.60 R	-1.10
114	18.11	.72	095	17.72 R	-.96	Avg	46.43		405	46.33	.59	432	45.35	-1.12
040	18.08	.62	425	17.68	-.97	369	46.26	-.13	Avg			007	45.44	-1.13
055	18.05	.57	009	17.67	-.98	420	46.20	-.17	007	45.44	-.91	402	45.24	-1.33
029	18.07	.56	402	17.76 R	-1.11	324	46.19	-.19	402	45.24	-1.15	430	44.35	-2.09
377	18.06	.54	369	17.62	-1.20							330	44.49 R	-2.12
037	18.04	.54	254	17.57	-1.36	428	0.14 s	-35.64	Meth: 020.XX PCT			307	44.06 R	-2.59
043	18.05	.53	211	17.56	-1.40				<u>Total Phosphate</u>			309	43.00	-3.41
330	18.00	.50	042	17.55	-1.43	Meth: 020.40 PCT			114	47.80	1.30	428	0.14 s	-45.46
035	18.05	.49	426	17.52	-1.54	<u>Total Phosphate</u>			372	47.68	1.18	Meth: 030.10 PCT		
025	18.03	.43	023	17.50	-1.66	<u>Automated</u>			406	47.60	1.10	Insoluble Phosphate		
090	18.03	.41	262	17.50	-1.66	409	47.21	1.12	423	47.56	1.06	<u>Grav Quimociac</u>		
096	18.01	.36	307	17.49	-1.68	105	46.86	.45	390	46.65 R	1.04	090	0.32	.71
405	18.01	.35	325	17.35	-2.19	096	46.91	.45	090	47.47	.98	Meth: 030.40 PCT		
131	18.01	.34	102	17.21	-2.76	394	46.90	.40	105	47.47	.98	Insoluble Phosphate		
136	18.01	.34	420	17.05 A	-3.37	Avg	46.72		425	47.44	.94	<u>Automated</u>		
409	17.96	.25	351	16.51 s	-5.54	035	46.52	-.50	095	47.22	.76	096	0.72	.87
007	17.95	.23	230	16.40 s	-5.86	042	45.94	-1.85	409	47.21	.72	Avg	0.67	
105	17.92	.19	Meth: 020.10 PCT			Meth: 020.50 PCT			096	46.91	.43	409	0.62	-.87
041	17.93	.03	<u>Total Phosphate</u>			<u>Total Phosphate</u>			394	46.90	.41	Meth: 030.50 PCT		
255	17.92	.01	<u>Grav Quimociac</u>			<u>ICP</u>			105	46.86	.40	Insoluble Phosphate		
Avg	17.92		114	47.80	1.23	423	47.56	1.43	234	46.56	.32	<u>ICP</u>		
177	17.91	-.06	090	47.47	.39	390	46.65	1.09	444	46.75	.27	255	1.13	.00
024	17.90	-.10	105	47.47	.34	426	46.57	.65	371	46.62	.22	Meth: 030.99 PCT		
029	17.90	-.10	Avg	47.34		422	46.43	.53	257	46.66	.20	Insoluble Phosphate		
288	17.88	-.15	095	47.22	-.57	389	46.30	.44	426	46.57	.16	<u>Other</u>		
372	17.88	-.18	444	46.75	-1.54	255	45.84	.22	292	46.63	.16	405	0.71	.71
406	17.88	-.20	193	45.60 s	-4.89	Avg	45.76		035	46.52	.10	Meth: 030.99 PCT		
394	17.85	-.27				432	45.35	-.34	Avg	46.48		Insoluble Phosphate		
185	17.86	-.30				430	44.35	-1.12	422	46.43	-.08	Other		
034	17.85	-.33				330	44.49	-1.21	405	46.33	-.15	Avg		
389	17.85	-.33							389	46.30	-.20	Meth: 030.99 PCT		
360	17.88	-.34										Insoluble Phosphate		
* 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: 030.XX PCT			Meth: 040.XX PCT			Meth: 041.20 PCT			Meth: 041.99 PCT			Meth: 041.XX PCT		
<u>Insoluble Phosphate</u>			<u>InDir Available Phos</u>			<u>Dir Available Phosph Spectrometric</u>			<u>Dir Available Phosph Other</u>			<u>Dir Available Phosph</u>		
255	1.13	1.56	372	47.53	1.50	262	45.70	-.48	105	46.30	.71	029	46.00	-.69
405	0.71	.12	090	47.16	1.09	055	45.59	-.75	Avg	46.30		296	45.99	-.84
096	0.72	.09	409	46.59	.46	Meth: 041.40 PCT			230	41.90 S	-28.47	009	46.37 R	-.86
Avg	0.70		096	46.19	.08	Dir Available Phosph			137	45.88	-.86	360	45.88	-.98
409	0.62	-.29	394	46.22	.05	<u>Automated</u>			Meth: 041.XX PCT			262	45.70	-1.18
090	0.32	-1.40	Avg	46.17		027	47.33	.95	<u>Dir Available Phosph</u>			055	45.59	-1.37
Meth: 040.10 PCT			405	45.61	-.61	131	46.92	.28	185	47.42	1.78	023	45.35	-1.82
InDir Available Phos			423	45.37	-.90	Avg	46.75		034	47.34	1.64	325	45.15	-2.12
<u>Grav Quim</u>			255	44.71	-1.63	029	46.00	-1.23	027	47.33	1.61	102	45.15	-2.13
090	47.16	-.71	Meth: 041.10 PCT			Meth: 041.50 PCT			211	47.21	1.41	009	45.03 R	-2.44
Meth: 040.20 PCT			Dir Available Phosph			Dir Available Phosph			254	47.05	1.14	230	41.90 s	-7.74
InDir Available Phos			<u>Grav Quimociac</u>			<u>ICP</u>			131	47.01	1.07	Meth: 048.20 PCT		
<u>Spectrometri</u>			185	47.42	1.54	377	46.18	1.09	105	46.91	.92	Water Soluble Phosph		
372	47.53	.71	211	47.21	1.15	291	46.08	.91	131	46.92	.91	<u>Spectrometric</u>		
Meth: 040.40 PCT			254	47.05	.87	360	45.88	.69	055	46.83	.76	372	43.82	1.26
InDir Available Phos			131	47.01	.78	Avg	45.61		028	46.76	.69	Avg	42.57	
<u>Automated</u>			105	46.91	.64	023	45.35	-.65	041	46.71	.68	096	42.19	-.38
409	46.59	1.27	041	46.71	.49	325	45.15	-.87	177	46.70	.54	420	41.70	-.88
Avg	46.33		055	46.83	.46	009	45.03	-1.35	040	46.70	.53	Meth: 048.99 PCT		
394	46.22	-.53	177	46.70	.22	Meth: 041.60 PCT			022	46.64	.45	Water Soluble Phosph		
096	46.19	-.79	040	46.70	.21	Dir Available Phosph			105	46.64	.44	<u>Other</u>		
Meth: 040.50 PCT			049	46.61	.18	EDTA Extract			049	46.61	.41	394	41.48	-.71
InDir Available Phos			022	46.64	.17	034	47.34	2.04	260	46.52	.39	Meth: 048.XX PCT		
<u>ICP</u>			Avg	46.58		028	46.76	.70	106	46.53	.25	<u>Water Soluble Phosph</u>		
423	45.37	.80	260	46.52	-.35	105	46.64	.32	043	46.52	.23	372	43.82	1.55
Avg	45.04		136	46.22	-.65	029	46.08	-.97	177	46.50	.20	Avg	42.30	
255	44.71	-.92	029	46.08	-.97	105	46.30	-.24	Avg	46.38		096	42.19	-.11
Meth: 040.99 PCT			009	46.37 R	-.99	106	46.53	.07	136	46.22	-.28	420	41.70	-.61
InDir Available Phos			296	46.06	-1.03	043	46.52	.02	073	46.32	-.31	394	41.48	-.84
<u>Other</u>			102	45.15	-2.63	Avg	46.51		377	46.18	-.42	Meth: 050.00 PCT		
405	45.61	.71	Meth: 041.20 PCT			177	46.50	-.04	351	46.13	-.46	Soluble Potash		
Meth: 041.20 PCT			Dir Available Phosph			073	46.32	-.63	291	46.08	-.54	<u>STPB Oxalate</u>		
<u>Spectrometric</u>			<u>Spectrometric</u>			351	46.13	-.96	322	46.05	-.58	296	0.03	-.71
Avg			030	46.09	1.30	296	45.99 R	-1.46	029	46.08	-.60	A=Analysis beyond 3-s limits		
Avg			Avg	45.79		137	45.88	-1.55	030	46.09	-.64			
* X=Excluded from lab performance			S/s=Screened Outlier			R=Duplicate Range too large			296	46.06	-.67			

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.XX PCT			Meth: 060.XX PCT			Meth: 101.XX PCT			Meth: 121.30 PCT		
Soluble Potash			<u>Soluble Potash</u>			<u>Free Water</u>			<u>Acid Soluble Calcium</u>			Acid Soluble Magnesi		
<u>STPB Citrate</u>			025	46.23 s	641.83	096	1.15	-1.05	423	0.23	1.06	<u>ICP</u>		
444	0.35	.71	262	1.16 s	14.12	Meth: 101.00 PCT			420	0.23	.79	106	0.77	-1.82
Meth: 050.30 PCT			444	0.35 R	2.81	Acid Soluble Calcium			288	0.23	.78	Meth: 121.99 PCT		
Soluble Potash			422	0.28	1.77	<u>AA</u>			106	0.22	.73	Acid Soluble Magnesi		
<u>AA (Oxalate)</u>			255	0.25	1.39	105	0.09 S	.00	096	0.22	.06	<u>Other</u>		
262	1.16 S	.00	325	0.22	.94	Meth: 101.30 PCT			Avg	0.22	-.24	022	0.76	.71
Meth: 050.50 PCT			Avg	0.15		Acid Soluble Calcium			307	0.22	-.32	Meth: 121.XX PCT		
Soluble Potash			389	0.15	-.08	<u>ICP</u>			035	0.22	-.74	Acid Soluble Magnesi		
<u>ICP (Oxalate)</u>			377	0.15	-.08	422	1.26 s	75.24	131	0.21	-.89	422	1.18 s	9.39
422	0.28	1.28	409	0.14	-.19	065	0.24	1.75	009	0.21	-.98	420	0.89	1.54
Avg	0.16		330	0.14	-.30	390	0.24	1.28	433	0.20	-1.43	423	0.89	1.53
307	0.12	-.47	307	0.12	-.46	423	0.23	1.06	105	0.09 s	-9.56	105	0.86 R	1.34
324	0.08	-.80	009	0.10	-.67	420	0.23	.79	Meth: 121.00 PCT			433	0.88	1.23
Meth: 050.51 PCT			324	0.08	-.88	288	0.23	.78	Acid Soluble Magnesi			288	0.86	.68
Soluble Potash			402	0.11 R	-.92	106	0.22	.73	<u>AA</u>			389	0.84	.41
<u>ICP (Citrate)</u>			296	0.03	-1.73	096	0.22	.06	105	0.86	-.71	307	0.84	.23
377	0.15	.67	Meth: 060.00 PCT			Avg			131	0.84	.14	Avg		
389	0.15	.67	Free Water			307	0.22	-.24	Meth: 121.30 PCT			390	0.83	-.18
Avg	0.13		<u>Vacuum Oven</u>			035	0.22	-.32	Acid Soluble Magnesi			009	0.81	-.60
Meth: 050.61 PCT			193	1.71 R	5.51	131	0.21	-.74	<u>ICP</u>			065	0.83	-.62
Soluble Potash			105	1.33	1.28	009	0.21	-.89	422	1.18 s	9.33	102	0.80	-.90
<u>Flame (Citrate)</u>			Avg	1.22		389	0.21	-.98	420	0.89	1.49	096	0.80	-.95
025	46.23 S	.00	007	1.17	-.51	102	0.20	-1.18	423	0.89	1.47	035	0.81	-.98
Meth: 050.99 PCT			096	1.15	-.78	Meth: 101.99 PCT			433	0.88	1.18	106	0.77	-1.76
Soluble Potash			Meth: 060.10 PCT			Acid Soluble Calcium			288	0.86	.63	022	0.76 R	-2.49
<u>Other</u>			Free Water			<u>Other</u>			307	0.84	.19	Meth: 144.01 PCT		
255	0.25	1.27	<u>Vacuum Desiccate</u>			022	0.22	.71	Avg			Sulfur		
325	0.22	.74	372	1.35	.71	Meth: 101.XX PCT			131	0.84	-.14	<u>Gravimetric</u>		
Avg	0.17		Meth: 060.XX PCT			Acid Soluble Calcium			390	0.83	-.23	288	1.24	.65
409	0.14	-.56	Free Water			<u>Acid Soluble Calcium</u>			389	0.84	-.41	193	1.23	.36
330	0.14	-.57	193	1.71 R	4.71	422	1.26 s	75.24	065	0.83	-.65	Avg		
402	0.11	-1.30	372	1.35	1.03	065	0.24	1.75	102	0.80	-.95	105	1.20	-1.39
* X=Excluded from lab performance			Avg	1.25		022	0.22 R	1.45	096	0.80	-1.00	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			288	1.24	.65	Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	193	1.23	.36	Avg		
			105	1.33	.83	065	0.24	1.75	105	1.20	-1.39	Meth: 144.01 PCT		
			Avg	1.25		022	0.22 R	1.45	Avg			Sulfur		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			<u>Gravimetric</u>		
			Free Water			Acid Soluble Calcium			Avg			Sulfur		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			<u>Gravimetric</u>		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03	422	1.26 s	75.24	288	1.24	.65	Sulfur		
			105	1.33	.83	065	0.24	1.75	193	1.23	.36	Avg		
			Avg	1.25		022	0.22 R	1.45	105	1.20	-1.39	Meth: 144.01 PCT		
			007	1.17	-.81	Meth: 101.XX PCT			Avg			Sulfur		
			Free Water			Acid Soluble Calcium			Avg			<u>Gravimetric</u>		
			193	1.71 R	4.71	<u>Acid Soluble Calcium</u>			Avg			Sulfur		
			372	1.35	1.03									

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 144.99 PCT			Meth: 151.30 PPM			Meth: 165.99 PCT			Meth: 181.XX PPM			Meth: 191.30 PPM		
<u>Sulfur</u>			<u>Arsenic</u>			<u>Acid Soluble Boron</u>			<u>Cadmium</u>			<u>Chromium</u>		
<u>Other</u>			<u>ICP</u>			<u>Other</u>						<u>ICP</u>		
102	1.19	1.68	065	16.56	1.50	Avg	0.022		102	2.86	.65	037	116.64	.26
390	1.16	.85	106	15.00	.83	106	0.020	-.17	324	2.80	.53	009	115.75	.20
423	1.16	.80	Avg	12.94		423	0.005	-1.34	394	2.65	.23	Avg	112.87	
389	1.14	.51	096	12.70	-.10	409	0.003	-1.46	Avg	2.55		096	112.50	-.11
009	1.13	.18	037	12.14	-.57	Meth: 181.00 PPM			136	2.55	-.11	444	109.22	-.34
Avg	1.12		102	11.66	-.64	<u>Cadmium</u>			390	2.55	-.14	372	93.90	-1.33
307	1.09	-.60	009	9.60	-1.35	<u>Atomic Absorption</u>			409	2.34	-.47	324	78.75	-2.39
035	1.07	-1.07	Meth: 151.99 PPM			394	2.65	.91	193	2.25	-.65	Meth: 191.99 PPM		
096	1.07	-1.07	<u>Arsenic</u>			136	2.55	.43	372	2.20	-.75	<u>Chromium</u>		
422	1.07	-1.16	<u>Other</u>			Avg	2.48		106	2.00	-1.18	<u>Other</u>		
Meth: 144.XX PCT			372	9.45	.87	193	2.25	-1.22	009	1.65	-2.00	409	89.20	.71
<u>Sulfur</u>			Avg	9.23		Meth: 181.30 PPM			Meth: 190.00 PCT			Meth: 191.XX PPM		
288	1.24	1.66	409	9.02	-.86	<u>Cadmium</u>			<u>Water Soluble Chlori</u>			<u>Chromium</u>		
193	1.23	1.41	Meth: 151.XX PPM			<u>ICP</u>			<u>Titrimetric</u>					
105	1.20 R	1.27	<u>Arsenic</u>			035	3.30	1.33	422	0.15	-.71	065	128.25	1.08
102	1.19	.94	065	16.56	1.66	096	3.15	1.04	Meth: 190.99 PCT			394	124.00	.82
390	1.16	.35	394	15.10	1.06	037	2.91	.60	<u>Water Soluble Chlori</u>			035	123.50	.80
423	1.16	.27	106	15.00	1.02	102	2.86	.47	<u>Other</u>			106	120.00	.56
389	1.14	.16	136	12.40	.16	324	2.80	.36	009 0.02 .71			102	119.01	.50
Avg	1.14		096	12.70	.13	Avg	2.60		Meth: 190.XX PCT			037	116.64	.35
009	1.13	-.20	Avg	12.36		390	2.55	-.16	<u>Water Soluble Chlori</u>			009	115.75	.30
307	1.09	-.77	102	11.66	-.46	372	2.20	-.73	422 0.15 .87			096	112.50	.13
096	1.07	-1.13	037	12.14	-.46	106	2.00	-1.09	Avg 0.08			Avg	111.05	
035	1.07	-1.13	009	9.60	-1.07	009	1.65	-1.79	009 0.02 -.87			444	109.22 R	-.23
422	1.07	-1.20	372	9.45	-1.13	065	1.83 S	-2.08	Meth: 191.30 PPM			372	93.90	-1.08
Meth: 151.00 PPM			409	9.02	-1.30	Meth: 181.99 PPM			<u>Chromium</u>			409	89.20	-1.38
<u>Arsenic</u>			Meth: 165.99 PCT			<u>Cadmium</u>			<u>ICP</u>			324	78.75	-2.04
<u>Atomic Absorption</u>			<u>Acid Soluble Boron</u>			<u>Other</u>						Meth: 202.30 PPM		
394	15.10	.85	<u>Other</u>			409	2.34	.71	Meth: 191.30 PPM			<u>Acid Soluble Cobalt</u>		
Avg	13.75		009	0.044	1.72	Meth: 181.XX PPM			<u>Chromium</u>			<u>ICP</u>		
136	12.40	-.88	433	0.030	.62	<u>Cadmium</u>			065 128.25 1.08			065	4.02 R	2.63
* X=Excluded from lab performance			307	0.026	.32	035	3.30	1.66	394 124.00 .78			096	3.60	1.04
S/s=Screened Outlier			288	0.025	.23	106	120.00	.50	035 123.50 .76			102	3.54	.96
R=Duplicate Range too large			422	0.024	.16	102	119.01	.43	106 120.00 .50			037	3.53	.90
A=Analysis beyond 3-s limits						096	3.15	1.31	102 119.01 .43			009	3.30	.43

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 202.30 PPM			Meth: 221.30 PCT			Meth: 241.30 PCT			Meth: 241.XX PCT			Meth: 261.30 PCT		
<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Iron</u>			<u>Acid Soluble Manganese</u>		
<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>		
Avg	3.09		422	0.0115 R	-.21	065	1.12 R	1.52	423	0.99	-.98	065	0.030	1.71
106	3.00	-.19	307	0.0008	-.46	288	1.13	1.20	433	0.97	-1.17	106	0.030	1.48
035	3.02	-.25	433	0.0001	-.48	422	1.12	1.05	402	0.96	-1.36	423	0.029	.80
372	2.40	-1.42	041	0.0000	-.48	102	1.12	1.02	420	0.94	-1.67	288	0.028	.59
324	2.35	-1.55	330	0.0000	-.48	106	1.08	.35				102	0.028	.45
						131	1.06	.21	Meth: 251.30 PPM			Avg	0.027	
Meth: 202.99 PPM			Meth: 221.99 PCT			307			Lead			035	0.027	-.10
<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			Avg			<u>ICP</u>			009	0.027	-.12
<u>Other</u>			<u>Other</u>			390			324			131	0.027	-.27
409	2.56	.71	409	0.1500	.87	009	1.05	-.15	Avg	1.88		389	0.027	-.41
			Avg	0.0773		372	1.03	-.50	102	0.79	-.55	096	0.026	-.82
Meth: 202.XX PPM			402			096			372			420	0.026	-.87
<u>Acid Soluble Cobalt</u>			Meth: 221.XX PCT			423			Meth: 251.99 PPM			307	0.027 R	-.90
065	4.02 R	2.71	<u>Acid Soluble Copper</u>			433			Lead			433	0.025	-.99
096	3.60	1.16	409	0.1500 R	4.31	420			<u>Other</u>			422	0.024	-1.88
102	3.54	1.07	372	0.1000	2.73	Meth: 241.99 PCT			394			Meth: 261.99 PCT		
037	3.53	1.01	Avg	0.0130		<u>Acid Soluble Iron</u>			Avg			<u>Acid Soluble Manganese</u>		
009	3.30	.54	422	0.0115	-.05	<u>Other</u>			409			<u>Other</u>		
Avg	3.03		402	0.0045	-.29	402			2.14			022	0.030	1.00
106	3.00	-.07	307	0.0008	-.39	Meth: 241.XX PCT			Meth: 251.XX PPM			402	0.027	.20
035	3.02	-.20	043	0.0004	-.40	<u>Acid Soluble Iron</u>			Lead			Avg	0.026	
409	2.56	-.98	428	0.0002	-.40	389			324			409	0.022	-1.20
372	2.40	-1.29	433	0.0001	-.41	11.00 s			4.45			Meth: 261.XX PCT		
324	2.35	-1.43	330	0.0000	-.41	151.02			2.75			<u>Acid Soluble Manganese</u>		
			041	0.0000	-.41	035			1.98			193	0.062 s	14.85
Meth: 221.00 PCT			Meth: 241.00 PCT			065			409			065		
<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>			288			102			106		
<u>Atomic Absorption</u>			<u>Atomic Absorption</u>			422			372			022		
043	0.0004	.83	102	1.12	1.07	105			0.40			105		
Avg	0.0003		106	1.12	1.04	106			Meth: 261.00 PCT			029		
428	0.0002	-.90	131	1.10	.90	106			<u>Acid Soluble Manganese</u>			029		
			307	1.06	.38	131			AA			423		
Meth: 221.30 PCT			Meth: 241.30 PCT			307			193			288		
<u>Acid Soluble Copper</u>			<u>Acid Soluble Iron</u>			Avg			105			102		
<u>ICP</u>			<u>ICP</u>			390			0.029			035		
372	0.1000	1.90	389	11.00 s	155.05	009			0.029			027		
Avg	0.0202		035	1.17	1.76	372			Avg			027		
* 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.XX PCT			Meth: 289.XX PPM			Meth: 291.XX PPM			Meth: 321.30 PCT			Meth: 321.XX PCT		
<u>Acid Soluble Manganese</u>			<u>Molybdenum</u>			<u>Nickel</u>			<u>Acid Soluble Zinc</u>			<u>Acid Soluble Zinc</u>		
009	0.027	-.09	255	12.12 s	4.62	009	10.95	-1.31	ICP			105	0.004	.08
131	0.027	-.22	288	8.50	1.30	106	11.00	-1.36	288	0.005	.57	Avg	0.004	
389	0.027	-.33	037	8.34	1.07	Meth: 301.30 PPM			330	0.005	.48	433	0.004	-.13
096	0.026	-.67	035	7.97	.72	<u>Selenium</u>			389	0.005	.43	037	0.004	-.21
420	0.026	-.72	102	7.72	.52	<u>ICP</u>			102	0.004	.22	296	0.004	-.22
307	0.027 R	-.75	433	7.62	.40	372	1.00	.71	065	0.004	.07	009	0.004	-.38
433	0.025	-.81	065	7.33	.38	Meth: 311.99 PCT			Avg	0.004		307	0.004	-.38
422	0.024	-1.56	009	7.30	.21	<u>Sodium</u>			105	0.004	-.20	428	0.004	-.60
409	0.022	-2.30	Avg	7.18		<u>Other</u>			433	0.004	-.39	409	0.004	-.69
Meth: 281.00 PPM			409	7.10	-.09	422	0.34	2.29	037	0.004	-.42	422	0.004	-.92
<u>Mercury</u>			106	6.50	-.78	Avg	0.18		307	0.004	-.66	324	0.003	-1.89
<u>Atomic Absorption</u>			372	5.50	-1.55	307	0.17	-.16	009	0.004	-.67	372	0.002	-2.71
193	0.00	.00	324	5.15	-1.87	102	0.17	-.18	422	0.004	-1.24	402	0.002 s	-2.74
Meth: 289.30 PPM			Meth: 291.00 PPM			Meth: 321.00 PCT			Meth: 321.99 PCT					
<u>Molybdenum</u>			<u>Nickel</u>			<u>Acid Soluble Zinc</u>			<u>Acid Soluble Zinc</u>					
<u>ICP</u>			<u>Atomic Absorption</u>			<u>Atomic Absorption</u>			<u>Other</u>					
255	12.12 s	4.39	136	14.00	.71	029	0.004 R	2.76	Avg	0.004		409	0.004	-.71
288	8.50	1.23	Meth: 291.30 PPM			043	0.005	1.08	409	0.004	-.71	402	0.002 S	-51.58
037	8.34	1.01	<u>Nickel</u>			Meth: 321.00 PCT			Meth: 321.XX PCT					
035	7.97	.68	<u>ICP</u>			<u>Acid Soluble Zinc</u>			<u>Acid Soluble Zinc</u>					
102	7.72	.49	065	13.73	1.04	<u>Atomic Absorption</u>			<u>Other</u>					
433	7.62	.37	035	13.40	1.02	029	0.004 R	2.76	409	0.004	-.71	423	0.006	1.94
065	7.33	.36	102	13.03	.43	043	0.005	1.08	402	0.002 S	-51.58	035	0.005 R	1.37
009	7.30	.20	037	12.58	.10	028	0.004	.69	255	0.005	1.30	029	0.004 R	1.24
Avg	7.19		Avg	12.45		Avg	0.004		428	0.004	-1.29	394	0.005	.87
106	6.50	-.75	009	10.95	-1.23	296	0.004	-.45	035	0.005 R	1.37	255	0.005	1.30
372	5.50	-1.49	106	11.00	-1.29	428	0.004	-1.29	029	0.004 R	1.24	029	0.004 R	1.24
324	5.15	-1.79	Meth: 291.XX PPM			Meth: 321.30 PCT			394	0.005	.87	420	0.005	.74
Meth: 289.99 PPM			<u>Nickel</u>			<u>Acid Soluble Zinc</u>			288	0.005	.68	288	0.005	.68
<u>Molybdenum</u>			136	14.00	1.17	<u>ICP</u>			330	0.005	.64	330	0.005	.64
<u>Other</u>			035	13.40	.87	423	0.006	1.94	389	0.005	.59	389	0.005	.59
409	7.10	.71	065	13.73	.86	035	0.005 R	1.35	043	0.005	.47	043	0.005	.47
			102	13.03	.25	255	0.005	1.23	102	0.004	.40	102	0.004	.40
			Avg	12.67		394	0.005	.74	028	0.004	.29	028	0.004	.29
			037	12.58	-.07	420	0.005	.71	065	0.004	.26	065	0.004	.26

* 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	8	- 0.65	2.00	0.05	121.XX	17	0.46	2.52	0.49
001.99	12	0.00	1.02	0.07	144.01	3	0.00	0.53	0.80
001.XX	20	- 0.35	1.55	0.07	144.99	9	0.00	0.99	0.26
009.10	3	0.00	1.08	0.24	144.XX	12	0.08	0.99	0.33
009.XX	4	0.00	1.04	0.25	151.00	2	0.00	1.19	0.20
010.11	7	0.51	1.66	0.22	151.30	6	0.00	1.00	0.29
010.12	3	0.00	1.11	0.10	151.99	2	0.00	1.20	0.17
010.60	53	2.33	19.32	0.33	151.XX	10	0.00	1.00	0.23
010.99	6	0.00	0.98	0.33	165.99	8	0.000	1.033	0.055
010.XX	68	1.66	15.73	0.31	165.XX	8	0.000	1.033	0.055
020.10	6	- 0.76	2.06	0.79	181.00	3	0.00	1.09	0.22
020.20	11	- 3.24	10.79	0.06	181.30	10	- 0.14	1.04	0.54
020.40	6	0.00	1.01	0.26	181.XX	14	- 0.11	1.04	0.54
020.50	10	0.00	0.92	0.44	190.XX	2	0.00	1.22	0.07
020.99	4	0.00	0.88	0.54	191.30	11	0.00	1.02	0.10
020.XX	36	- 1.42	7.62	0.35	191.XX	12	- 0.01	0.98	0.09
030.40	2	0.00	1.20	0.17	202.30	9	0.21	1.15	0.62
030.XX	5	0.00	1.06	0.05	202.XX	10	0.20	1.15	0.59
040.40	3	0.00	1.07	0.28	221.00	2	0.0000	1.1785	0.2357
040.50	2	0.00	1.02	0.48	221.30	6	- 0.034	0.9524	0.0049
040.XX	8	0.00	1.02	0.14	221.99	2	0.0000	1.2183	0.0887
041.10	18	- 0.02	0.97	0.30	221.XX	10	0.4297	1.6702	0.1052
041.20	3	0.00	0.92	0.52	241.30	16	9.76	38.76	0.31
041.40	3	0.00	1.11	0.09	241.XX	18	8.45	35.59	0.32
041.50	6	0.00	0.93	0.44	251.30	3	0.00	1.12	0.04
041.60	10	- 0.13	1.03	0.29	251.99	2	0.00	1.22	0.10
041.99	2	- 14.14	20.00	2.33	251.XX	5	0.00	1.06	0.05
041.XX	34	- 0.28	1.65	0.40	261.00	2	19.033	26.917	2.142
048.20	3	0.00	1.12	0.02	261.30	14	- 0.015	0.970	0.276
048.XX	4	0.00	1.08	0.03	261.99	3	0.000	1.118	0.008
050.50	3	0.00	1.12	0.05	261.XX	19	0.771	3.529	0.322
050.51	3	0.00	1.10	0.17	289.30	11	0.39	1.61	0.33
050.99	5	0.00	0.95	0.41	289.XX	12	0.38	1.62	0.33
050.XX	15	43.88	165.46	0.36	291.30	6	0.00	0.88	0.52
060.00	4	1.35	2.85	0.53	291.XX	7	0.00	0.87	0.53
060.XX	5	0.92	2.26	0.44	311.99	7	0.00	1.04	0.04
101.30	15	5.02	19.45	0.43	311.XX	7	0.00	1.04	0.04
101.XX	17	3.87	18.56	0.54	321.00	5	0.081	0.933	1.232
121.30	15	0.57	2.60	0.29	321.30	18	- 0.126	1.234	0.334

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
321.99	2	- 21.56	30.500	20.006					
321.XX	24	- 0.044	1.101	0.433					