

- Pass 1 Results for 83 Labs - - Pass 2 Results for 83 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	4.77	0.12	0.04	7	4.77	0.12	0.04
Ammoniacal Nitrogen, Other		001.99	6	4.75	0.39	0.06	6	4.75	0.39	0.06
Method Group 001.XX PCT			14	4.72	0.32	0.05	14	4.72	0.32	0.05
Nitrate Nitrogen, Other		002.99	1	0.04	0.00	0.00	1	0.04	0.00	0.00
Water Insoluble Nitrogen, Meth I	945.01	003.10	5	3.48	0.96	0.23	5	3.48	0.96	0.23
Water Insoluble Nitrogen, Other		003.99	2	3.10	0.02	0.02	2	3.10	0.02	0.02
Method Group 003.XX PCT			7	3.37	0.82	0.17	6	3.42	0.87	0.09
Nitrogen From Urea, Urease (as N)	959.03	005.00	2	8.12	0.12	0.10	2	8.12	0.12	0.10
Nitrogen From Urea, Other		005.99	2	13.64	1.23	0.00	2	13.64	1.23	0.00
Method Group 005.XX PCT			4	10.88	3.06	0.05	4	10.88	3.06	0.05
Ammon & Nitrate N, Devarda	892.01	009.10	2	4.71	0.34	0.02	2	4.71	0.34	0.02
Total Nitrogen, Modified Comprehensive	978.02	010.11	9	22.47	0.25	0.16	8	22.47	0.22	0.08
Total Nitrogen, Salicylic	955.04D	010.12	2	22.42	0.11	0.07	2	22.42	0.11	0.07
Total Nitrogen, Raney	970.03	010.16	1	22.31	0.14	0.20	1	22.31	0.14	0.20
Total Nitrogen, Combustion		010.60	48	22.76	0.16	0.12	46	22.75	0.15	0.10
Total Nitrogen, Other		010.99	2	22.17	0.18	0.06	2	22.17	0.18	0.06
Method Group 010.XX PCT			66	22.70	0.27	0.14	62	22.70	0.25	0.10
Total Phosphate, Grav Quimociac	962.02	020.10	3	1.30	0.15	0.05	3	1.30	0.15	0.05
Total Phosphate, Spectrometric	958.01	020.20	7	1.35	0.19	0.04	7	1.35	0.19	0.04
Total Phosphate, Automated	978.01	020.40	2	1.36	0.09	0.02	2	1.36	0.09	0.02
Total Phosphate, ICP		020.50	6	1.37	0.05	0.08	6	1.37	0.05	0.08
Total Phosphate, Other		020.99	1	1.39	0.01	0.02	1	1.39	0.01	0.02
Method Group 020.XX PCT			19	1.35	0.13	0.05	18	1.37	0.09	0.05
Insoluble Phosphate, ICP		030.50	1	0.02	0.00	0.00	1	0.02	0.00	0.00
InDir Available Phosphate, ICP		040.50	1	1.38	0.02	0.03	1	1.38	0.02	0.03
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	1	1.44	0.08	0.12	1	1.44	0.08	0.12
Dir Available Phosphate, ICP		041.50	6	1.37	0.08	0.04	6	1.37	0.08	0.04
Dir Available Phosphate, EDTA Extract	993.01	041.60	5	1.31	0.08	0.01	5	1.31	0.08	0.01
Dir Available Phosphate, Other		041.99	2	1.20	0.21	0.05	2	1.20	0.21	0.05
Method Group 041.XX PCT			14	1.33	0.12	0.04	13	1.35	0.08	0.03
Water Soluble Phosphate, Spectrometric	970.01	048.20	1	0.64	0.01	0.02	1	0.64	0.01	0.02
Soluble Potash, STPB Oxalate	958.02	050.00	13	9.96	0.16	0.05	13	9.96	0.16	0.05
Soluble Potash, STPB Citrate	969.04	050.10	1	10.63	0.07	0.10	1	10.63	0.07	0.10
Soluble Potash, AA (Oxalate)		050.30	9	9.95	0.28	0.20	8	10.02	0.18	0.14
Soluble Potash, AA (Citrate)		050.31	2	9.73	0.37	0.07	2	9.73	0.37	0.07
Soluble Potash, ICP (Oxalate)		050.50	7	9.59	0.54	0.13	7	9.59	0.54	0.13
Soluble Potash, ICP (Citrate)		050.51	11	10.00	0.26	0.08	11	10.00	0.26	0.08
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	7	9.89	0.28	0.09	7	9.89	0.28	0.09
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	8	9.73	0.23	0.15	8	9.73	0.23	0.15

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Soluble Potash, Other		050.99	17	9.84	0.43	0.13	16	9.80	0.42	0.10
Method Group 050.XX PCT			77	9.85	0.37	0.11	75	9.85	0.37	0.10
Free Water, Vacuum Oven	965.08B	060.00	5	0.88	0.23	0.04	4	0.80	0.17	0.02
Acid Soluble Calcium, AA	945.04	101.00	3	2.54	0.25	0.07	3	2.54	0.25	0.07
Acid Soluble Calcium, ICP		101.30	17	2.60	0.08	0.03	16	2.61	0.08	0.02
Method Group 101.XX PCT			20	2.60	0.12	0.04	18	2.62	0.09	0.03
Acid Soluble Magnesium, AA	984.01	121.00	2	1.60	0.03	0.03	2	1.60	0.03	0.03
Acid Soluble Magnesium, ICP		121.30	20	1.59	0.07	0.03	19	1.59	0.06	0.02
Acid Soluble Magnesium, Other		121.99	1	1.91	0.01	0.01	1	1.91	0.01	0.01
Method Group 121.XX PCT			23	1.61	0.09	0.03	21	1.59	0.06	0.02
Sulfur, Gravimetric	980.02a	144.01	20	8.58	0.16	0.06	20	8.58	0.16	0.06
Sulfur, Gravimetric	980.02b	144.02	2	8.87	0.42	0.05	2	8.87	0.42	0.05
Sulfur, Spectrometric		144.70	1	8.18	0.04	0.06	1	8.18	0.04	0.06
Sulfur, Other		144.99	22	8.53	0.29	0.10	20	8.54	0.29	0.07
Method Group 144.XX PCT			46	8.57	0.27	0.08	43	8.60	0.23	0.06
Arsenic, Atomic Absorption		151.00	2	0.44	0.05	0.03	2	0.44	0.05	0.03
Arsenic, ICP		151.30	2	0.55	0.10	0.10	2	0.55	0.10	0.10
Method Group 151.XX PPM			4	0.50	0.09	0.06	4	0.50	0.09	0.06
Acid Soluble Boron, Spectrometric	982.01	165.00	1	0.020	0.008	0.011	1	0.020	0.008	0.011
Acid Soluble Boron, Other		165.99	6	0.834	1.267	0.000	5	1.001	1.333	0.000
Method Group 165.XX PCT			7	0.718	1.202	0.002	6	0.834	1.267	0.000
Cadmium, Atomic Absorption		181.00	1	0.30	0.00	0.00	1	0.30	0.00	0.00
Cadmium, ICP		181.30	8	0.54	0.40	0.12	8	0.54	0.40	0.12
Method Group 181.XX PPM			9	0.51	0.38	0.10	9	0.51	0.38	0.10
Water Soluble Chlorine, Titrimetric	928.02	190.00	2	0.16	0.02	0.01	2	0.16	0.02	0.01
Water Soluble Chlorine, Other		190.99	2	0.17	0.03	0.00	2	0.17	0.03	0.00
Method Group 190.XX PCT			4	0.17	0.03	0.00	4	0.17	0.03	0.00
Chromium, ICP		191.30	14	53.02	5.88	2.01	14	53.02	5.88	2.01
Acid Soluble Cobalt, ICP	965.11	202.30	13	4.92	0.99	0.41	13	4.92	0.99	0.41
Method Group 202.XX PPM			13	4.92	0.99	0.41	13	4.92	0.99	0.41
Acid Soluble Copper, Atomic Absorption	975.01	221.00	7	0.0007	0.0004	0.0001	7	0.0007	0.0004	0.0001
Acid Soluble Copper, ICP		221.30	20	0.0008	0.0002	0.0001	18	0.0008	0.0002	0.0001
Acid Soluble Copper, Other		221.99	1	0.0010	0.0000	0.0000	1	0.0010	0.0000	0.0000
Method Group 221.XX PCT			28	0.0008	0.0003	0.0001	26	0.0008	0.0003	0.0001
Acid Soluble Iron, Atomic Absorption	980.01	241.00	14	0.25	0.02	0.01	14	0.25	0.02	0.01
Acid Soluble Iron, ICP		241.30	32	0.26	0.01	0.01	30	0.27	0.01	0.01
Acid Soluble Iron, Other		241.99	2	0.26	0.01	0.00	2	0.26	0.01	0.00
Method Group 241.XX PCT			48	0.26	0.02	0.01	45	0.26	0.02	0.01
Lead, Atomic Absorption		251.00	1	10.50	0.71	1.00	1	10.50	0.71	1.00

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Lead, ICP		251.30	5	0.91	0.57	0.29	4	0.68	0.26	0.11
Method Group 251.XX PPM			7	4.58	6.31	0.40	7	4.58	6.31	0.40
Acid Soluble Manganese, AA	972.02a	261.00	11	0.075	0.004	0.001	10	0.075	0.003	0.001
Acid Soluble Manganese, AA	972.02b	261.11	2	0.077	0.003	0.002	2	0.077	0.003	0.002
Acid Soluble Manganese, ICP	972.02a	261.30	27	0.078	0.004	0.002	25	0.078	0.004	0.002
Acid Soluble Manganese, ICP	972.02b	261.31	3	0.076	0.002	0.003	3	0.076	0.002	0.003
Acid Soluble Manganese, Other		261.99	3	0.076	0.002	0.002	3	0.076	0.002	0.002
Method Group 261.XX PCT			46	0.077	0.004	0.002	43	0.077	0.003	0.002
Water Soluble Manganese, Atomic Abs ...	972.03	271.00	1	0.033	0.000	0.000	1	0.033	0.000	0.000
Water Soluble Manganese, ICP	972.03	271.30	2	0.018	0.000	0.001	2	0.018	0.000	0.001
Method Group 271.XX PCT			4	0.025	0.009	0.005	3	0.023	0.008	0.000
Molybdenum, ICP		289.30	13	5.23	0.67	0.51	12	5.25	0.60	0.36
Nickel, Atomic Absorption		291.00	1	33.50	0.71	1.00	1	33.50	0.71	1.00
Nickel, ICP		291.30	9	29.41	2.49	1.64	9	29.41	2.49	1.64
Method Group 291.XX PPM			10	29.82	2.67	1.58	10	29.82	2.67	1.58
Selenium, ICP		301.30	3	3.25	4.91	0.04	3	3.25	4.91	0.04
Sodium, Other		311.99	8	0.06	0.02	0.00	8	0.06	0.02	0.00
Method Group 311.XX PCT			9	0.07	0.04	0.00	9	0.07	0.04	0.00
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	7	0.004	0.001	0.000	7	0.004	0.001	0.000
Acid Soluble Zinc, ICP		321.30	21	0.004	0.001	0.000	19	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			29	0.004	0.001	0.000	26	0.004	0.001	0.000
Water Soluble Zinc, ICP		325.30	1	31.420	0.113	0.160	1	31.420	0.113	0.160

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: 005.00 PCT			Meth: 010.11 PCT			Meth: 010.60 PCT		
<u>Ammoniacal Nitrogen</u>			<u>Ammoniacal Nitrogen</u>			<u>Nitrogen From Urea</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
<u>MgO Distillation</u>			<u>Urease (as N)</u>			<u>Modified Comprehensi</u>			<u>Combustion</u>					
419	4.90	1.09	027	4.60	-.38	232	8.22	.77	405	22.30	-.80	027	22.85	.68
444	4.89	1.09	324	4.57	-.45	Avg	8.12		073	22.43 R	-1.77	037	22.81	.64
090	4.86	.75	420	4.40	-.98	351	8.03	-.95	309	22.05	-1.93	034	22.79	.62
Avg	4.77		105	4.35	-1.18	Meth: 005.99 PCT			Meth: 010.12 PCT			351	22.83	.61
230	4.76	-.21	309	4.11	-1.93	<u>Nitrogen From Urea</u>			<u>Total Nitrogen</u>			291	22.83	.60
029	4.74	-.33	Meth: 002.99 PCT			<u>Other</u>			<u>Salicylic</u>			162	22.80	.50
232	4.69	-.72	<u>Nitrate Nitrogen</u>			309	14.70	.87	185	22.50	.95	247	22.76	.42
324	4.57	-1.71	<u>Other</u>			Avg	13.64		Avg	22.42		106	22.80	.36
309	4.11 s	-5.73	232	0.04	.00	027	12.57	-.87	254	22.33	-.78	390	22.80	.36
Meth: 001.99 PCT			Meth: 003.10 PCT			Meth: 005.XX PCT			Meth: 010.16 PCT			Meth: 010.60 PCT		
<u>Ammoniacal Nitrogen</u>			<u>Water Insoluble Nitr</u>			<u>Nitrogen From Urea</u>			<u>Total Nitrogen</u>			<u>Combustion</u>		
<u>Other</u>			<u>Meth I</u>			<u>Raney</u>								
262	22.55 s	45.11	232	5.28	1.87	309	14.70	1.25	419	22.31	-.71	007	22.75	.34
372	6.84 s	5.28	Avg	3.48		027	12.57	.55	070			426	22.80	.34
371	5.44	1.74	090	3.07	-.44	Avg	10.88		296			025	22.76	.11
096	5.02	.70	029	3.05	-.46	232	8.22	-.87	Avg	22.75		255	22.75	-.04
Avg	4.75		230	3.10	-.53	351	8.03	-.93	369	22.73	-.19	114	22.72	-.23
255	4.70	-.14	057	2.93	-.58	Meth: 009.10 PCT			422	24.11 s	9.38	231	22.69	-.41
027	4.60	-.39	Meth: 003.99 PCT			<u>Ammon & Nitrate N</u>			095	23.56 s	5.57	035	22.74	-.42
420	4.40	-.88	<u>Water Insoluble Nitr</u>			<u>Devarda</u>			043	23.43 s	4.67	086	22.66	-.64
105	4.35	-1.03	<u>Other</u>			200	5.00	.87	028	23.33 s	4.06	040	22.65	-.72
Meth: 001.XX PCT			372	3.12	.82	Avg	4.71		102	23.14 s	3.76	136	22.64	-.75
<u>Ammoniacal Nitrogen</u>			Avg	3.10		420	4.42	-.87	157	22.83 R	2.88	325	22.65	-.76
262	22.55 s	56.43	027	3.08	-.91	Meth: 010.11 PCT			406	23.12	2.63	055	22.68	-.83
372	6.84 s	6.70	Meth: 003.XX PCT			<u>Total Nitrogen</u>			234	23.01 R	2.27	022	22.72	-.92
371	5.44	2.28	<u>Water Insoluble Nitr</u>			<u>Modified Comprehensi</u>			057	23.03	1.94	377	22.61	-.97
096	5.02	.98	232	5.28	2.13	322	24.44 s	8.97	307	22.90	1.73	131	22.61	-.99
419	4.90	.58	Avg	3.42		029	22.74	1.26	450	22.88	1.49	232	22.60	-1.04
444	4.89	.57	372	3.12	-.35	105	22.64	.85	324	22.90	1.25	009	22.64	-1.06
090	4.86	.46	027	3.08	-.39	288	22.60	.59	423	22.84	1.11	372	22.59	-1.13
230	4.76	.15	090	3.07	-.41	090	22.55	.40	096	22.90	1.06	023	22.59	-1.21
029	4.74	.10	029	3.05	-.44	416	22.52	.20	177	22.81	.76	029	22.53	-1.57
Avg	4.72		230	3.10 R	-.53	Avg	22.47		041	22.76	.76	425	22.52	-1.59
255	4.70	-.07	057	2.93	-.56	371	22.38	-.53	233	22.86	.74	452	22.46	-2.11
232	4.69	-.09							292	22.86	.74	360	22.40 s	-3.21

* 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: 010.60 PCT			Meth: 010.XX PCT			Meth: 010.XX PCT			Meth: 020.40 PCT			Meth: 020.XX PCT		
Total Nitrogen			Total Nitrogen			Total Nitrogen			Total Phosphate			Total Phosphate		
<u>Combustion</u>			037 22.81 .52			452 22.46 -1.04			<u>Automated</u>			432 1.37 -.59		
444	21.77 s	-6.74	041	22.76	.50	371	22.38	-1.32	247	1.44	.87	444	1.33	-.63
230	21.40 s	-10.17	034	22.79	.48	254	22.33	-1.48	Avg	1.36		444	1.34	-.63
Meth: 010.99 PCT			162 22.80 .44			402 22.32 -1.52			035 1.28 -.86			035 1.28 -.99		
Total Nitrogen			106 22.80 .40			419 22.31 -1.60			Meth: 020.50 PCT			420 1.29 -1.01		
<u>Other</u>			390 22.80 .40			405 22.30 -1.62			Total Phosphate			405 1.13 -2.67		
354	24.42 S	12.47	426 22.80 .38			360 22.40 R -1.72			<u>ICP</u>			262 0.95 A -4.54		
402	22.32	.85	247 22.76 .34			073 22.43 R -1.89			307 1.37 1.10			450 0.60 s -8.21		
Avg	22.17		035 22.74 .29			309 22.05 -2.60			390 1.42 .92			422 0.02 s -14.38		
420	22.02	-.88	029 22.74 .29			420 22.02 -2.74			255 1.39 .49			Meth: 030.50 PCT		
105	21.09 S	-6.08	007 22.75 .28			444 21.77 s -3.71			Avg 1.37			Insoluble Phosphate		
Meth: 010.XX PCT			389 22.75 .28			230 21.40 s -5.71			389 1.35 -1.01			<u>ICP</u>		
Total Nitrogen			070 22.77 .26			105 21.09 s -6.47			432 1.37 -1.02			255 0.02 .71		
322	24.44 s	6.94	296 22.76 .24			Meth: 020.10 PCT			444 1.34 -1.07			Meth: 040.50 PCT		
354	24.42 s	6.86	025 22.76 .22			Total Phosphate			422 0.02 S -24.87			InDir Available Phos		
422	24.11 s	5.61	255 22.75 .18			<u>Grav Quimociac</u>			Meth: 020.99 PCT			<u>ICP</u>		
095	23.56 s	3.41	369 22.73 .12			090 1.45 .98			Total Phosphate			255 1.38 .71		
043	23.43	2.89	114 22.72 .06			444 1.33 .33			<u>Other</u>			Meth: 041.10 PCT		
028	23.33	2.54	Avg 22.70			Avg 1.30			402 1.39 .71			Dir Available Phosph		
102	23.14 R	2.31	231 22.69 -.06			405 1.13 -1.19			Meth: 020.XX PCT			<u>Grav Quimociac</u>		
157	22.83 R	1.71	086 22.66 -.22			Meth: 020.20 PCT			Total Phosphate			185 1.49 S 3.87		
406	23.12	1.71	040 22.65 -.23			Total Phosphate			428 4.30 s 31.18			296 1.44 .71		
234	23.01	1.46	136 22.64 -.24			<u>Spectrometric</u>			292 1.55 1.88			Avg 1.44		
057	23.03	1.32	325 22.65 -.28			428 4.30 s 15.73			232 1.47 1.05			Meth: 041.50 PCT		
307	22.90	1.13	377 22.61 -.38			292 1.55 1.08			090 1.45 .82			Dir Available Phosph		
450	22.88	.99	131 22.61 -.38			292 1.55 1.08			247 1.44 .68			<u>ICP</u>		
324	22.90	.89	105 22.64 -.40			232 1.47 .67			307 1.37 .63			377 1.49 1.72		
096	22.90	.80	288 22.60 -.40			372 1.42 .41			372 1.42 .54			007 1.40 .42		
423	22.84	.76	055 22.68 -.41			324 1.38 .18			390 1.42 .52			291 1.39 .41		
233	22.86	.62	232 22.60 -.42			288 1.37 .14			255 1.39 .27			Avg 1.37		
292	22.86	.62	372 22.59 -.46			Avg 1.35			402 1.39 .21			009 1.32 -.64		
027	22.85	.58	009 22.64 -.50			420 1.29 -.38			324 1.38 .07			325 1.30 -.89		
177	22.81	.56	023 22.59 -.53			262 0.95 -2.13			Avg 1.37			452 1.31 -1.00		
291	22.83	.53	090 22.55 -.62			450 0.60 S -3.96			288 1.37 -.11					
351	22.83	.53	029 22.53 -.72						389 1.35 -.59					
022	22.72	.52	425 22.52 -.74											
			416 22.52 -.74											
			185 22.50 -.83											

* 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: 041.60 PCT			Meth: 048.20 PCT			Meth: 050.30 PCT			Meth: 050.51 PCT			Meth: 050.99 PCT								
Dir Available Phosph			Water Soluble Phosph			Soluble Potash			Soluble Potash			Soluble Potash								
<u>EDTA Extract</u>			<u>Spectrometric</u>			<u>AA (Oxalate)</u>			<u>ICP (Citrate)</u>			<u>Other</u>								
296	1.40	1.04	420	0.64	.71	351	9.86	-.90	423	9.66	-1.29	027	10.01	.50						
073	1.38	.86				073	9.84	-1.31	444	9.57	-1.65	114	9.97	.41						
Avg	1.31		Meth: 050.00 PCT			185	9.40 A	-3.80	419	9.22 s	-3.01	177	9.95	.36						
024	1.30	-.14	Soluble Potash			425	9.00 s	-5.60				247	9.89	.21						
288	1.30	-.14	<u>STPB Oxalate</u>						Meth: 050.60 PCT			360	9.86	.20						
028	1.18	-1.62	230	10.30	2.13	Meth: 050.31 PCT			Soluble Potash			307	9.84	.11						
			022	10.25	1.84	Soluble Potash			<u>Flame (Oxalate)</u>			009	9.84	.10						
Meth: 041.99 PCT			095	10.02	.37	<u>AA (Citrate)</u>			406	10.33	1.56	Avg	9.80							
Dir Available Phosph			090	10.00	.30	095			10.06	.86	131	10.06	-.17	255	9.73	-.17				
<u>Other</u>			372	9.97	.20	Avg			9.73		200	9.98	-.56	402	9.57	-.56				
009	1.38	.85	Avg	9.96		254			9.41	-.87	055	9.98	-1.22	322	9.29	-1.22				
Avg	1.20		211	9.93	-.17	Meth: 050.50 PCT			Avg			9.89		022	9.10	-1.69				
230	1.02	-.88	055	9.93	-.19	Soluble Potash			105			9.77	-.54	390	8.88	-2.20				
322	0.12 S	-5.04	231	9.94	-.23	<u>ICP (Oxalate)</u>			169			9.60	-1.00							
			057	9.89	-.53	324			10.54	1.77	Meth: 050.61 PCT			Meth: 050.XX PCT						
Meth: 041.XX PCT			416	9.87	-.58	106			10.00	.78	Soluble Potash			<u>Soluble Potash</u>						
Dir Available Phosph			296	9.85	-.71	426			9.68	.28	Flame (Citrate)			428			21.65 s	32.06		
185	1.49 s	4.32	043	9.81	-1.08	420			9.64	.21	024			10.08	1.52	444	10.63	2.12		
377	1.49	1.77	029	9.75	-1.38	Avg			9.59		041			9.89	.96	023	10.56	1.91		
296	1.44	1.31	102	8.62 s	-8.82	405			9.11	-.89	105			9.83	.76	324	10.54	1.87		
007	1.40	.56	Meth: 050.10 PCT			422			9.08	-.94	035			9.78	.31	193	10.46	1.67		
296	1.40	.53	Soluble Potash			354			9.06	-.98	Avg			9.73		300	10.37 R	1.56		
291	1.39	.53	<u>STPB Citrate</u>			Meth: 050.51 PCT			028			9.69	-.29	325			10.40	1.51		
073	1.38	.37	444	10.63	.71	Soluble Potash			029			9.69	-.61	406			10.33	1.30		
009	1.38	.34	Meth: 050.30 PCT			<u>ICP (Citrate)</u>			034			9.47	-1.24	230			10.30	1.21		
Avg	1.35		Soluble Potash			023			10.56	2.12	025			9.45	-1.27	234			10.23	1.10
009	1.32	-.41	AA (Oxalate)			432			10.20	.86	Meth: 050.99 PCT			432			10.20	.98		
325	1.30	-.64	428	21.65 s	63.75	007			10.13	.50	Soluble Potash			262			10.20	.94		
288	1.30	-.64	234	10.23	1.40	009			10.08	.31	Other			157			10.18	.89		
024	1.30	-.64	262	10.20	.97	389			10.00	.01	193			10.46	1.58	007			10.13	.75
452	1.31	-.79	157	10.18	.90	Avg			10.00		300			10.37 R	1.47	040			10.07	.65
028	1.18	-2.12	040	10.07	.67	377			9.97	-.16	325			10.40	1.44	009			10.08	.61
230	1.02 A	-4.19	Avg	10.02		291			9.96	-.21	232			10.07	.64	024			10.08	.60
322	0.12 s	-15.16	369	9.92	-.61	452			9.99	-.37	131			10.00	.56	232			10.07	.59
			136	9.90	-.68	043			9.87	-.56						131			10.06	.57
																095			10.06	.55

* 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: 101.00 PCT			Meth: 101.XX PCT			Meth: 121.30 PCT		
<u>Soluble Potash</u>			<u>Soluble Potash</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>		
131	10.00	.53	423	9.66	-.53	AA			035	2.71	1.01	ICP		
452	9.99	.46	029	9.69	-.57	193	2.26	-1.13	027	2.68	.77	420	1.62	.51
095	10.02	.45	426	9.68	-.59	Meth: 101.30 PCT			106	2.68	.72	423	1.62	.51
027	10.01	.43	420	9.64	-.66	<u>Acid Soluble Calcium</u>			433	2.65	.34	Avg	1.59	
106	10.00	.43	169	9.60	-.69	<u>ICP</u>			Avg	2.62		131	1.58	-.15
041	9.89	.43	402	9.57	-.78	422	3.57 s	12.67	389	2.60	-.19	065	1.57	-.48
389	10.00	.40	444	9.57	-.79	420	2.73	1.61	288	2.60	-.19	247	1.55	-.62
090	10.00	.40	309	9.48	-1.04	390	2.71	1.34	065	2.58	-.46	096	1.55	-.62
200	9.98	.36	034	9.47	-1.08	035	2.71	1.27	423	2.58	-.51	307	1.57	-.62
114	9.97	.35	025	9.45	-1.11	027	2.68	1.00	009	2.61	-.54	433	1.54	-.70
055	9.98	.34	254	9.41	-1.21	106	2.68	.93	247	2.55	-.77	009	1.53	-.93
372	9.97	.33	185	9.40 R	-1.48	433	2.65	.50	232	2.54	-.88	106	1.53	-.95
377	9.97	.33	322	9.29	-1.53	Avg	2.61		086	2.55	-.98	102	1.53	-.96
291	9.96	.31	419	9.22	-1.76	389	2.60	-.12	102	2.54	-.99	232	1.52	-1.02
177	9.95	.28	405	9.11	-2.02	288	2.60	-.12	131	2.50	-1.29	288	1.50	-1.44
231	9.94	.25	022	9.10	-2.07	065	2.58	-.43	307	2.50	-1.33	Meth: 121.99 PCT		
055	9.93	.22	422	9.08	-2.10	423	2.58	-.49	057	2.54 R	-1.43	<u>Acid Soluble Magnesi</u>		
211	9.93	.22	354	9.06	-2.16	009	2.61	-.62	193	2.26 A	-4.09	<u>Other</u>		
369	9.92	.21	425	9.00	-2.31	247	2.55	-.79	Meth: 121.00 PCT			022	1.91	.71
043	9.87	.20	390	8.88	-2.65	232	2.54	-.91	<u>Acid Soluble Magnesi</u>			Meth: 121.XX PCT		
136	9.90	.17	102	8.62 s	-3.53	102	2.54	-1.05	<u>AA</u>			<u>Acid Soluble Magnesi</u>		
360	9.86	.16	Meth: 060.00 PCT			131	2.50	-1.39	193	1.61	.39	405	3.21 s	28.56
057	9.89	.13	Free Water			307	2.50	-1.43	Avg	1.60		422	2.18 s	10.50
247	9.89	.10	<u>Vacuum Oven</u>			057	2.54 R	-1.60	105	1.59	-1.16	022	1.91 A	5.63
351	9.86	.08	096	1.21 R	2.40	Meth: 101.99 PCT			Meth: 121.30 PCT			057	1.73 R	2.64
416	9.87	.04	105	1.00	1.16	<u>Acid Soluble Calcium</u>			<u>Acid Soluble Magnesi</u>			027	1.72	2.41
Avg	9.85		416	0.85	.32	<u>Other</u>			<u>ICP</u>			444	1.68	1.59
296	9.85	-.03	Avg	0.80		022	3.18 S	.00	405	3.21 s	27.40	390	1.64	1.01
307	9.84	-.08	007	0.79	-.07	Meth: 101.XX PCT			422	2.18 s	10.09	389	1.63	.82
009	9.84	-.08	193	0.55	-1.43	<u>Acid Soluble Calcium</u>			057	1.73 R	2.54	035	1.63	.79
035	9.78	-.24	Meth: 101.00 PCT			422	3.57 s	10.84	027	1.72	2.33	452	1.62	.53
043	9.81	-.25	<u>Acid Soluble Calcium</u>			022	3.18 s	6.46	444	1.68	1.54	420	1.62	.52
029	9.75	-.30	<u>AA</u>			105	2.81	2.21	390	1.64	.99	423	1.62	.52
255	9.73	-.33	105	2.81	1.08	105	2.81	2.21	389	1.63	.80	105	1.59	.50
105	9.77	-.35	086	2.55	.22	420	2.73	1.30	035	1.63	.78	193	1.61	.34
105	9.83	-.39	Avg	2.54		390	2.71	1.06	452	1.62	.52	Avg	1.59	
073	9.84	-.40												
028	9.69	-.47												

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 121.XX PCT <u>Acid Soluble Magnesi</u>			Meth: 144.02 PCT Sulfur			Meth: 144.XX PCT Sulfur			Meth: 144.XX PCT Sulfur			Meth: 165.00 PCT Acid Soluble Boron		
131	1.58	-.17	<u>Gravimetric</u>			419	11.23 s	11.20	055	8.45	-.72	<u>Spectrometric</u>		
065	1.57	-.52	260	9.23	.87	090	10.48 s	7.99	106	8.34	-1.11	105	0.020	.71
307	1.57	-.66	Avg	8.87		260	9.23	2.69	422	8.30	-1.29	Meth: 165.99 PCT		
096	1.55	-.66	029	8.50	-.86	405	9.13	2.26	086	8.43 R	-1.30	Acid Soluble Boron		
247	1.55	-.66	Meth: 144.70 PCT			300	8.98	1.66	009	8.29	-1.32	<u>Other</u>		
433	1.54	-.75	Sulfur			360	8.98	1.65	230	8.39 R	-1.36	405	3.000	1.50
009	1.53	-.99	<u>Spectrometric</u>			043	8.96	1.53	444	8.27	-1.43	232	2.000	.75
106	1.53	-1.01	452	8.18	-.71	023	8.95	1.50	389	8.25	-1.50	Avg	1.001	
102	1.53	-1.01	Meth: 144.99 PCT			423	8.76	.70	035	8.25	-1.51	288	0.002	-.75
232	1.52	-1.08	Sulfur			390	8.73	.67	452	8.18	-1.80	444	0.001 R	-.75
288	1.50	-1.52	<u>Other</u>			324	8.74	.60	255	7.76 A	-3.58	422	0.001	-.75
Meth: 144.01 PCT			419	11.23 s	9.29	262	8.73	.56	Meth: 151.00 PPM			433	0.001	-.75
Sulfur			090	10.48 s	6.69	157	8.70	.54	Arsenic			Meth: 165.XX PCT		
<u>Gravimetric</u>			300	8.98	1.54	288	8.71	.47	<u>Atomic Absorption</u>			Acid Soluble Boron		
405	9.13 s	3.50	360	8.98	1.54	232	8.68	.35	300	0.48	.95	405	3.000	1.71
043	8.96	2.41	023	8.95	1.42	029	8.65	.30	Avg	0.44		232	2.000	.92
324	8.74	1.00	423	8.76	.77	136	8.66	.24	136	0.41	-.78	Avg	0.834	
262	8.73	.93	040	8.64	.16	041	8.63	.15	Meth: 151.30 PPM			105	0.020 R	-.64
157	8.70	.89	041	8.63	.15	296	8.63	.14	Arsenic			288	0.002	-.66
288	8.71	.81	390	8.73	.72	102	8.62	.12	<u>ICP</u>			444	0.001	-.66
029	8.65	.53	232	8.68	.49	177	8.62	.09	247	0.60	1.12	422	0.001	-.66
040	8.64	.34	136	8.66	.40	Avg	8.60		Avg	0.55		433	0.001	-.66
041	8.63	.30	177	8.62	.26	057	8.59	-.06	096	0.50	-.50	Meth: 181.00 PPM		
296	8.63	.30	351	8.57	.11	351	8.57	-.12	450	0.50 S	-5.02	Cadmium		
102	8.62	.25	027	8.57	.10	027	8.57	-.16	Meth: 151.XX PPM			<u>Atomic Absorption</u>		
057	8.59	.07	354	8.56	.08	027	8.57	-.16	Arsenic			300	0.30	.00
Avg	8.58		Avg	8.54		354	8.56	-.20	450	0.50 s	5.38	Meth: 181.30 PPM		
114	8.54	-.36	131	8.50	-.16	114	8.54	-.30	247	0.60	1.56	Cadmium		
073	8.55	-.39	372	8.48	-.21	073	8.55	-.30	096	0.50	.05	<u>ICP</u>		
200	8.52	-.48	450	8.51	-.23	105	8.54	-.36	Avg	0.50		452	2.55 s	5.06
105	8.54	-.48	291	8.44	-.38	200	8.52	-.38	300	0.48	-.34	324	1.25	1.80
193	8.47	-.77	422	8.30	-.84	029	8.50	-.43	136	0.41	-.97	450	1.05	1.35
095	8.46	-.83	009	8.29	-.87	131	8.50	-.43	Meth: 181.30 PPM			035	0.56	.33
055	8.45	-1.01	086	8.43 R	-.96	450	8.51	-.46	Cadmium			Avg	0.54	
106	8.34	-1.58	230	8.39 R	-.98	372	8.48	-.51	<u>ICP</u>			Meth: 181.30 PPM		
444	8.27	-2.06	389	8.25	-1.02	193	8.47	-.57	452	2.55 s	5.06	Cadmium		
			035	8.25	-1.02	095	8.46	-.62	324	1.25	1.80	<u>ICP</u>		
			255	7.76	-2.70	291	8.44	-.70	450	1.05	1.35	Meth: 181.30 PPM		

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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.XX PCT			Meth: 202.30 PPM			Meth: 221.00 PCT			Meth: 221.XX PCT		
<u>Cadmium</u>			<u>Water Soluble Chlori</u>			<u>Acid Soluble Cobalt</u>			<u>Acid Soluble Copper</u>			<u>Acid Soluble Copper</u>		
<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>Atomic Absorption</u>					
419	0.45	-.31	009	0.20	1.34	247	5.50	.78	095	0.0009	.47	200	0.0150 s	50.38
009	0.32	-.55	105	0.18	.43	057	5.65	.74	Avg	0.0007		354	0.0040 s	11.39
230	0.26	-.69	Avg	0.17		035	5.43	.53	043	0.0007	-.19	420	0.0020 s	4.30
102	0.25	-.72	102	0.15	-.71	Avg	4.92		105	0.0004	-.88	452	0.0013	1.66
065	0.15 X	-.97	288	0.14	-1.01	065	4.50	-.48	262	0.0000	-1.73	450	0.0012	1.30
						390	4.45	-.48				428	0.0011	1.17
			Meth: 191.30 PPM			419	4.50	-.66	Meth: 221.30 PCT			035	0.0011	1.11
			<u>Chromium</u>			102	4.05	-.90	<u>Acid Soluble Copper</u>			402	0.0010	.76
			<u>ICP</u>			230	3.95	-.99	<u>ICP</u>			419	0.0010	.76
452	2.55 s	5.35	452	65.39	2.10	232	3.85	-1.11	354	0.0040 s	14.38	255	0.0010	.76
324	1.25	1.95	390	59.20	1.07	324	3.60	-1.37	420	0.0020 s	5.39	086	0.0008 R	.75
450	1.05	1.47	450	58.00	.86				452	0.0013	2.03	288	0.0009	.58
035	0.56	.36	009	55.55	.47	Meth: 202.XX PPM			035	0.0011	1.34	389	0.0009	.54
Avg	0.51		065	54.82	.41	<u>Acid Soluble Cobalt</u>			255	0.0010	.89	095	0.0009	.41
419	0.45	-.28	419	54.00	.24	136	11.00 s	6.24	419	0.0010	.89	102	0.0008	.36
009	0.32	-.50	096	54.10	.23	450	6.75	1.86	288	0.0009 R	.71	247	0.0008	.36
300	0.30	-.55	037	53.68	.11	037	5.94	1.05	389	0.0009	.61	065	0.0008	.20
230	0.26	-.65	035	53.40	.11	009	5.75	.86	065	0.0008	.18	009	0.0008	.16
102	0.25	-.68	Avg	53.02		247	5.50	.78	009	0.0008	.13	433	0.0008	.07
065	0.15 X	-.94	102	50.36	-.59	057	5.65	.74	433	0.0008	.03	230	0.0008	.05
			247	49.00	-.71	035	5.43	.53	Avg	0.0008		232	0.0008	.05
			230	45.65	-1.26	Avg	4.92		232	0.0008	-.01	Avg	0.0008	
			232	45.25	-1.33	065	4.50	-.48	230	0.0008	-.01	324	0.0008	-.04
			324	43.95	-1.56	390	4.45	-.48	324	0.0008	-.11	422	0.0007	-.32
			027	16.87 s	-6.15	419	4.50	-.66	102	0.0008	-.45	043	0.0007	-.51
			444	10.24 s	-7.28	102	4.05	-.90	247	0.0008	-.45	307	0.0007	-.51
						230	3.95	-.99	422	0.0007	-.47	057	0.0007 R	-.70
			Meth: 202.00 PPM			232	3.85	-1.11	307	0.0007	-.72	444	0.0005	-1.00
			<u>Acid Soluble Cobalt</u>			324	3.60	-1.37	057	0.0007 R	-.92	423	0.0005	-1.08
			<u>AA</u>						444	0.0005	-1.33	105	0.0004	-1.55
			136	11.00 S	.00	Meth: 221.00 PCT			423	0.0005	-1.44	300	0.0003	-1.63
						<u>Acid Soluble Copper</u>			300	0.0003	-2.13	262	0.0000	-2.78
						<u>Atomic Absorption</u>						Meth: 241.00 PCT		
						200	0.0150 s	34.90	Meth: 221.99 PCT			<u>Acid Soluble Iron</u>		
						450	0.0012	1.09	<u>Acid Soluble Copper</u>			<u>Atomic Absorption</u>		
						428	0.0011	.99	<u>Other</u>			428	0.61 s	17.26
						086	0.0008	.57	402	0.0010	.00	086	0.30	2.12

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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: 241.XX PCT			Meth: 261.00 PCT			
Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Manganese			
<u>Atomic Absorption</u>			<u>ICP</u>			<u>Atomic Absorption</u>			<u>Atomic Absorption</u>			<u>AA</u>			
055	0.28	1.16	027	0.26	-.30	057	0.28	1.12	105	0.24	-1.42	028	0.081	1.84	
296	0.27	.67	023	0.26	-.33	055	0.28	.95	450	0.26 R	-1.45	086	0.077 R	1.09	
371	0.27	.62	452	0.26	-.33	035	0.28	.83	029	0.24	-1.60	177	0.078	.99	
095	0.26	.44	419	0.27	-.44	131	0.28	.77	028	0.23 R	-1.92	095	0.077	.78	
177	0.26	.33	041	0.27	-.44	255	0.27	.62	262	0.22	-2.59	055	0.075	.59	
351	0.25	.03	324	0.26	-.54	009	0.27	.53	300	0.22	-2.66	Avg	0.075		
Avg	0.25		114	0.26	-.54	307	0.27	.52	433	0.14 s	-10.25	351	0.074	-.11	
043	0.25	-.15	096	0.26	-.54	426	0.27	.51	Meth: 251.00 PPM			296	0.074	-.16	
040	0.25	-.60	065	0.26	-.55	360	0.27	.50	Lead			043	0.074	-.34	
136	0.24	-.70	288	0.26	-.72	234	0.27	.46	<u>Atomic Absorption</u>			450	0.073	-.41	
105	0.24	-.76	444	0.26	-1.01	247	0.27	.46	136	10.50	.71	262	0.070	-1.31	
029	0.24	-.91	420	0.25	-1.04	296	0.27	.41	Meth: 251.30 PPM			105	0.070	-1.46	
028	0.23	-1.18	102	0.25	-1.05	419	0.27	.34	Lead			Meth: 261.11 PCT			
262	0.22	-1.69	230	0.25	-1.78	041	0.27	.34	<u>ICP</u>			Acid Soluble Manganese			
			450	0.26 R	-2.08	065	0.26	.33	452	17.00 s	62.47	<u>AA</u>			
			232	0.24	-2.14	371	0.27	.33	419	1.80 R	4.69	040	0.080	.93	
			300	0.22 A	-3.99	231	0.27	.29	450	1.00	1.22	Avg	0.077		
			433	0.14 s	-14.35	095	0.26	.21	230	0.77	.48	029	0.074	-.80	
						452	0.26	.13	Avg	0.68		Meth: 261.30 PCT			
						027	0.26	.07	247	0.60	-.50	Acid Soluble Manganese			
						423	0.26	.07	102	0.36	-1.24	<u>ICP</u>			
						023	0.26	.03	Meth: 251.XX PPM			041	0.472 s	150.37	
						Avg	0.26		Lead			432	0.150 s	19.82	
						177	0.26	-.08	452	17.00	1.97	422	0.102 s	6.47	
						114	0.26	-.15	136	10.50	.94	354	0.083	1.82	
						324	0.26	-.15	Avg	4.58		426	0.084	1.71	
						096	0.26	-.15	419	1.80	-.45	452	0.083	1.44	
						288	0.26	-.32	450	1.00	-.57	102	0.083	1.39	
						351	0.25	-.48	230	0.77	-.60	390	0.080	.77	
						444	0.26	-.52	247	0.60	-.63	433	0.080	.63	
						420	0.25	-.52	102	0.36	-.67	106	0.080	.60	
						102	0.25	-.53	Meth: 251.30 PPM			090	0.080	.60	
						402	0.25	-.55	Lead			389	0.080	.60	
						043	0.25	-.63	452	17.00	1.97	023	0.079	.43	
						040	0.25 R	-1.01	136	10.50	.94	057	0.078	.32	
						230	0.25	-1.06	Avg	4.58					
						232	0.24	-1.31	419	1.80	-.45				
						136	0.24	-1.37	450	1.00	-.57				
									230	0.77	-.60				
									247	0.60	-.63				
									102	0.36	-.67				

* 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: 261.30 PCT			Meth: 261.XX PCT			Meth: 261.XX PCT			Meth: 289.30 PPM			Meth: 291.XX PPM		
Acid Soluble Manganese			Acid Soluble Manganese			Acid Soluble Manganese			Molybdenum			Nickel		
<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>		
009	0.078	.30	041	0.472 s	159.46	296	0.074	-.73	324	6.40	2.10	136	33.50	1.39
444	0.078	.28	432	0.150 s	21.34	307	0.074	-.79	450	6.00	1.25	009	32.95	1.31
423	0.079	.23	422	0.102 s	7.21	288	0.074	-.89	057	5.50	.79	035	30.95	.53
Avg	0.078		022	0.095 s	5.50	043	0.074	-.89	232	5.30	.67	065	29.98	.48
360	0.077	-.22	354	0.083 R	2.24	255	0.074	-.93	035	5.54	.52	390	31.05	.48
131	0.077	-.31	426	0.084	2.16	420	0.074	-.93	Avg	5.25		450	30.50	.31
096	0.075	-.74	452	0.083	1.88	450	0.073	-.98	419	5.20	-.34	Avg	29.82	
247	0.075	-.81	102	0.083	1.82	300	0.073	-1.24	247	5.00	-.42	037	28.68	-.47
035	0.075	-.86	028	0.081	1.28	419	0.077 R	-1.30	433	4.90	-.59	102	28.23	-.76
065	0.076	-.87	390	0.080	1.09	232	0.072	-1.38	065	5.23	-.65	247	27.50	-.89
307	0.074	-1.09	433	0.080	1.02	114	0.075 R	-1.51	230	4.70	-.94	232	24.90	-1.86
420	0.074	-1.17	106	0.080	.99	262	0.070	-1.89	102	4.64	-1.03	444	6.52 s	-8.72
288	0.074	-1.18	090	0.080	.99	105	0.070	-2.04	009	4.60	-1.09	Meth: 301.30 PPM		
419	0.077 R	-1.27	389	0.080	.99	Meth: 271.00 PCT			444	5.03 R	-1.99	Selenium		
300	0.073	-1.50	040	0.080	.95	Water Soluble Mangan			255	3.42 s	-3.26	<u>ICP</u>		
114	0.075 R	-1.56	086	0.077	.89	<u>Atomic Abs</u>			Meth: 291.00 PPM			027	9.59	1.29
232	0.072	-1.64	023	0.079	.76	029	0.033	.71	Nickel			Avg	3.25	
Meth: 261.31 PCT			057	0.078	.60	Meth: 271.30 PCT			<u>Atomic Absorption</u>			065	0.16	-.63
Acid Soluble Manganese			423	0.079	.58	Water Soluble Mangan			136	33.50	.71	450	0.00	-.66
<u>ICP</u>			009	0.078	.56	<u>ICP</u>			Meth: 291.30 PPM			Meth: 311.30 PCT		
324	0.076	1.05	444	0.078	.51	432	0.030 s	30.86	Nickel			Sodium		
230	0.077	.51	177	0.078	.42	300	0.019	1.12	<u>ICP</u>			<u>Flame Photometric</u>		
Avg	0.076		402	0.078	.31	Avg	0.018		009	32.95	1.55	405	4.44 S	.00
231	0.075	-1.07	095	0.077	.21	452	0.018	-.50	035	30.95	.71	Meth: 311.99 PCT		
Meth: 261.99 PCT			360	0.077	.13	Meth: 271.XX PCT			390	31.05	.67	Sodium		
Acid Soluble Manganese			131	0.077	.03	Water Soluble Mangan			065	29.98	.56	<u>Other</u>		
<u>Other</u>			Avg	0.077		432	0.030 R	1.55	450	30.50	.48	422	0.18 s	6.02
022	0.095 s	9.67	230	0.077	-.14	029	0.033	1.29	Avg	29.41		288	0.11	2.53
402	0.078	.92	037	0.076	-.34	Avg	0.023		037	28.68	-.36	Avg	0.06	
Avg	0.076		096	0.075	-.50	300	0.019	-.62	102	28.23	-.69	035	0.06	-.16
037	0.076	-.26	247	0.075	-.51	452	0.018	-.68	247	27.50	-.80	102	0.05	-.29
255	0.074	-1.26	324	0.076	-.54	Meth: 271.30 PPM			232	24.90	-1.83	307	0.05	-.30
			035	0.075	-.56	Nickel			444	6.52 s	-9.20	009	0.05	-.36
			029	0.074	-.62	<u>ICP</u>						232	0.05	-.48
			351	0.074	-.66							057	0.05	-.50
			065	0.076	-.73									
			055	0.075	-.73									
			231	0.075	-.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: 311.99 PCT			Meth: 321.30 PCT			Meth: 321.XX PCT								
Sodium			Acid Soluble Zinc			Acid Soluble Zinc								
<u>Other</u>			<u>ICP</u>			<u>ICP</u>								
423	0.05	-.55	065	0.004 R	1.94	402	0.004	.89						
			035	0.004	1.32	419	0.004	.89						
			037	0.004	.85	354	0.004	.89						
Meth: 311.XX PCT			354 0.004 .82			371 0.004 .80								
Sodium			419 0.004 .82			433 0.004 .63								
405	4.44 s	101.57	433 0.004 .60			450 0.004 .54								
422	0.18	2.48	423 0.004 .38			423 0.004 .39								
288	0.11	.86	009 0.004 .28			009 0.004 .29								
Avg	0.07		009 0.004 .28			296 0.004 .13								
035	0.06	-.36	Avg 0.004			Avg 0.004								
307	0.05	-.44	102 0.004 -.17			102 0.004 -.20								
102	0.05	-.44	324 0.003 -.49			095 0.003 -.43								
009	0.05	-.48	232 0.003 -.49			193 0.003 -.49								
232	0.05	-.53	057 0.003 -.65			324 0.003 -.57								
057	0.05	-.54	422 0.004 -.85			232 0.003 -.57								
423	0.05	-.56	288 0.003 -.87			105 0.003 -.65								
Meth: 321.00 PCT			230 0.003 -.87			057 0.003 -.74								
Acid Soluble Zinc			307 0.003 -.87			422 0.004 -.94								
<u>Atomic Absorption</u>			420 0.003 -.87			288 0.003 -1.00								
200	0.009 S	5.37	444 0.003 -.97			420 0.003 -1.00								
428	0.009 S	4.95	247 0.002 -2.01			307 0.003 -1.00								
086	0.008 S	4.70	Meth: 321.99 PCT			230 0.003 -1.00								
043	0.006	2.26	Acid Soluble Zinc			444 0.003 -1.09								
371	0.004	.10	<u>Other</u>			247 0.002 -2.27								
Avg	0.004		402 0.004 .00			262 0.000 s -6.64								
296	0.004	-.27	Meth: 321.XX PCT			Meth: 325.30 PCT								
450	0.004	-.38	Acid Soluble Zinc			Water Soluble Zinc								
193	0.003	-.58	<u>ICP</u>			<u>ICP</u>								
095	0.003	-.59	200 0.009 s 10.39			027 31.420 -.71								
105	0.003	-.70	428 0.009 s 9.64											
262	0.000 S	-4.00	086 0.008 s 9.10											
Meth: 321.30 PCT			043 0.006 A 4.75											
Acid Soluble Zinc			096 0.005 2.31											
<u>ICP</u>			300 0.004 R 2.29											
096	0.005	2.11	065 0.004 R 2.13											
300	0.004 R	2.08	035 0.004 1.44											
			037 0.004 .92											

* 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	- 0.72	2.23	0.19	101.XX	22	0.56	2.98	0.35
001.99	8	6.30	15.81	0.09	121.00	2	0.00	0.48	0.80
001.XX	16	3.95	14.13	0.10	121.30	22	1.81	6.18	0.31
003.10	5	0.00	1.04	0.17	121.XX	25	1.89	6.10	0.32
003.99	2	0.00	1.12	0.36	144.01	21	0.17	1.23	0.23
003.XX	7	- 0.05	0.97	0.15	144.02	2	0.00	1.22	0.08
005.00	2	0.00	1.05	0.44	144.99	24	0.63	2.48	0.29
005.99	2	0.00	1.22	0.00	144.XX	47	0.30	2.29	0.28
005.XX	4	0.00	1.08	0.01	151.00	2	0.00	1.09	0.40
009.10	2	0.00	1.22	0.04	151.30	3	- 0.17	0.58	2.94
009.XX	2	0.00	1.22	0.04	151.XX	5	0.01	0.75	2.46
010.11	10	0.88	2.98	0.59	165.99	6	- 0.125	0.997	0.000
010.12	2	0.00	1.09	0.39	165.XX	7	- 0.092	0.988	0.002
010.60	56	0.18	2.48	0.94	181.30	9	0.56	1.93	0.19
010.99	4	1.63	7.79	0.60	181.XX	10	0.53	1.94	0.19
010.XX	71	0.16	1.89	0.65	190.00	2	0.00	1.18	0.22
020.10	3	0.00	1.09	0.20	190.99	2	0.00	1.22	0.04
020.20	9	1.31	5.63	0.13	190.XX	4	0.00	1.07	0.11
020.40	2	0.00	1.21	0.12	191.30	16	- 0.84	2.48	0.18
020.50	7	- 3.55	9.41	0.76	191.XX	16	- 0.84	2.48	0.18
020.XX	21	0.22	8.00	0.32	202.30	13	0.00	0.99	0.26
041.10	2	0.27	0.37	2.75	202.XX	14	0.44	1.90	0.37
041.50	6	0.00	0.97	0.36	221.00	8	4.3627	12.375	0.2139
041.60	5	0.00	1.06	0.08	221.30	22	0.8909	3.3474	0.2982
041.99	3	- 1.68	3.03	0.12	221.XX	31	2.1258	9.2565	0.2531
041.XX	14	- 1.32	4.26	1.12	241.00	15	1.15	4.56	0.28
050.00	14	- 0.61	2.46	0.68	241.30	36	6.80	38.45	1.88
050.30	11	4.98	19.60	0.70	241.99	2	0.00	1.22	0.04
050.31	2	0.00	1.22	0.10	241.XX	53	3.78	23.21	1.14
050.50	7	0.00	1.03	0.14	251.30	6	11.12	25.22	0.86
050.51	12	- 0.25	1.28	0.24	251.XX	7	0.00	1.04	0.04
050.60	7	0.00	1.02	0.19	261.00	11	0.057	0.968	0.342
050.61	8	0.00	0.93	0.42	261.11	2	0.000	1.130	0.333
050.99	17	0.08	1.03	0.20	261.30	30	4.401	19.760	19.294
050.XX	70	0.40	3.98	0.36	261.31	3	0.000	0.590	0.776
060.00	5	0.47	1.41	0.20	261.99	4	2.340	4.731	1.315
060.XX	5	0.47	1.41	0.20	261.XX	50	2.978	16.319	15.827
101.00	3	0.00	1.10	0.15	271.30	3	7.833	13.577	11.561
101.30	18	0.65	3.15	0.37	271.XX	4	0.216	1.009	0.643

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	14	- 0.25	1.18	0.72					
289.XX	14	- 0.25	1.18	0.72					
291.30	10	- 0.92	3.05	0.35					
291.XX	11	- 0.79	2.78	0.32					
301.30	3	0.00	1.12	0.01					
301.XX	3	0.00	1.12	0.01					
311.99	9	0.67	2.23	0.10					
311.XX	10	10.16	32.13	0.06					
321.00	11	0.943	2.869	0.728					
321.30	21	0.145	0.987	0.562					
321.XX	33	0.893	3.221	0.913					