

- Pass 1 Results for 87 Labs - - Pass 2 Results for 87 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	1	0.07	0.01	0.01	1	0.07	0.01	0.01
Ammoniacal Nitrogen, Other		001.99	2	0.56	0.63	0.01	2	0.56	0.63	0.01
Method Group 001.XX PCT			3	0.39	0.55	0.01	3	0.39	0.55	0.01
Nitrogen From Urea, Urease (as N)	959.03	005.00	1	0.02	0.00	0.00	1	0.02	0.00	0.00
Total Nitrogen, Modified Comprehensive	978.02	010.11	8	12.04	1.04	0.08	9	11.78	1.23	0.08
Total Nitrogen, Salicylic	955.04D	010.12	5	14.93	0.47	0.13	5	14.93	0.47	0.13
Total Nitrogen, Comprehensive	970.02	010.17	1	12.85	0.08	0.11	1	12.85	0.08	0.11
Total Nitrogen, Combustion		010.60	56	15.19	0.21	0.07	52	15.20	0.19	0.06
Total Nitrogen, Other		010.99	4	13.34	1.33	0.09	5	12.67	1.83	0.07
Method Group 010.XX PCT			79	14.56	1.34	0.08	73	14.68	1.18	0.07
Total Phosphate, Grav Quimociac	962.02	020.10	7	47.19	1.29	0.57	6	47.39	1.20	0.33
Total Phosphate, Spectrometric	958.01	020.20	18	46.97	2.10	0.44	17	47.12	2.04	0.33
Total Phosphate, Automated	978.01	020.40	5	47.82	0.28	0.15	5	47.82	0.28	0.15
Total Phosphate, ICP		020.50	9	46.37	1.27	0.60	9	46.37	1.27	0.60
Total Phosphate, Other		020.99	1	44.96	0.01	0.01	1	44.96	0.01	0.01
Method Group 020.XX PCT			41	46.93	1.69	0.51	37	47.09	1.62	0.32
Insoluble Phosphate, Grav Quimociac	963.03C	030.10	1	1.00	0.02	0.03	1	1.00	0.02	0.03
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	1.54	0.00	0.00	1	1.54	0.00	0.00
Insoluble Phosphate, Automated	978.01	030.40	2	2.07	0.12	0.03	2	2.07	0.12	0.03
Insoluble Phosphate, ICP		030.50	1	0.95	0.01	0.02	1	0.95	0.01	0.02
Insoluble Phosphate, Other		030.99	1	1.14	0.00	0.00	1	1.14	0.00	0.00
Method Group 030.XX PCT			6	1.46	0.49	0.02	6	1.46	0.49	0.02
InDir Available Phosphate, Grav Quim	960.02	040.10	1	47.08	0.03	0.04	1	47.08	0.03	0.04
InDir Available Phosphate, Spectrometri	960.02	040.20	1	47.74	0.02	0.03	1	47.74	0.02	0.03
InDir Available Phosphate, Automated	960.02	040.40	3	45.45	0.64	0.07	3	45.45	0.64	0.07
InDir Available Phosphate, ICP		040.50	1	45.08	0.68	0.96	1	45.08	0.68	0.96
InDir Available Phosphate, Other		040.99	1	46.46	0.21	0.30	1	46.46	0.21	0.30
Method Group 040.XX PCT			7	46.10	1.06	0.22	6	46.27	1.04	0.10
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	13	46.25	1.16	0.23	12	46.30	1.19	0.19
Dir Available Phosphate, Spectrometric	960.03D	041.20	2	45.82	0.45	0.32	2	45.82	0.45	0.32
Dir Available Phosphate, Automated	978.01	041.40	5	45.52	0.98	0.15	5	45.52	0.98	0.15
Dir Available Phosphate, ICP		041.50	13	45.73	1.50	0.34	12	45.69	1.55	0.27
Dir Available Phosphate, EDTA Extract	993.01	041.60	10	47.20	1.21	0.19	10	47.20	1.21	0.19
Dir Available Phosphate, Other		041.99	1	46.78	0.08	0.11	1	46.78	0.08	0.11
Method Group 041.XX PCT			44	46.22	1.35	0.25	41	46.25	1.39	0.19
Water Soluble Phosphate, Spectrometric	970.01	048.20	3	43.30	2.22	0.11	3	43.30	2.22	0.11
Water Soluble Phosphate, ICP		048.50	1	42.28	0.03	0.05	1	42.28	0.03	0.05
Water Soluble Phosphate, Other		048.99	1	42.75	0.13	0.19	1	42.75	0.13	0.19
Method Group 048.XX PCT			5	42.99	1.71	0.12	5	42.99	1.71	0.12

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Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Soluble Potash, STPB Citrate .....	969.04	050.10	1	0.29	0.08	0.12	1	0.29	0.08	0.12
Soluble Potash, AA (Oxalate) .....		050.30	1	0.15	0.01	0.02	1	0.15	0.01	0.02
Soluble Potash, ICP (Oxalate) .....		050.50	4	0.11	0.06	0.00	4	0.11	0.06	0.00
Soluble Potash, ICP (Citrate) .....		050.51	2	0.52	0.46	0.02	2	0.52	0.46	0.02
Soluble Potash, Other .....		050.99	1	0.10	0.04	0.05	1	0.10	0.04	0.05
Method Group 050.XX PCT			9	0.22	0.26	0.03	8	0.22	0.28	0.01
Free Water, Vacuum Oven .....	965.08B	060.00	4	1.01	0.81	0.03	4	1.01	0.81	0.03
Acid Soluble Calcium, AA .....	945.04	101.00	14	16.42	1.43	0.31	14	16.42	1.43	0.31
Acid Soluble Calcium, ICP .....		101.30	32	16.87	1.14	0.28	31	16.86	1.15	0.24
Acid Soluble Calcium, Other .....		101.99	2	16.74	0.73	0.92	2	16.74	0.73	0.92
Method Group 101.XX PCT			49	16.81	1.33	0.31	47	16.81	1.34	0.25
Acid Soluble Magnesium, AA .....	984.01	121.00	15	0.62	0.06	0.02	15	0.62	0.06	0.02
Acid Soluble Magnesium, ICP .....		121.30	36	0.61	0.03	0.01	34	0.61	0.03	0.01
Acid Soluble Magnesium, Titrimetric ...	964.01	121.70	1	0.65	0.00	0.00	1	0.65	0.00	0.00
Acid Soluble Magnesium, Other .....		121.99	2	0.56	0.05	0.07	2	0.56	0.05	0.07
Method Group 121.XX PCT			55	0.62	0.05	0.02	53	0.62	0.05	0.01
Water Soluble Magnesium, AA .....		131.00	3	0.61	0.07	0.03	3	0.61	0.07	0.03
Water Soluble Magnesium, ICP .....		131.30	2	0.72	0.33	0.02	2	0.72	0.33	0.02
Water Soluble Magnesium, Titrimetric ..		131.70	1	0.59	0.01	0.01	1	0.59	0.01	0.01
Method Group 131.XX PCT			6	0.64	0.19	0.02	5	0.65	0.20	0.01
Sulfur, Gravimetric .....	980.02a	144.01	16	1.07	0.06	0.02	16	1.07	0.06	0.02
Sulfur, Gravimetric .....	980.02b	144.02	2	1.02	0.02	0.02	2	1.02	0.02	0.02
Sulfur, Other .....		144.99	26	1.06	0.12	0.04	26	1.06	0.12	0.04
Method Group 144.XX PCT			45	1.07	0.10	0.03	42	1.07	0.08	0.03
Arsenic, Atomic Absorption .....		151.00	2	9.23	1.20	1.45	2	9.23	1.20	1.45
Arsenic, ICP .....		151.30	10	8.54	2.81	0.48	10	8.54	2.81	0.48
Arsenic, Other .....		151.99	2	8.94	2.59	0.14	2	8.94	2.59	0.14
Method Group 151.XX PPM			14	8.69	2.56	0.57	13	8.61	2.61	0.41
Acid Soluble Boron, Spectrometric .....	982.01	165.00	1	0.041	0.000	0.000	1	0.041	0.000	0.000
Acid Soluble Boron, Other .....		165.99	6	0.020	0.025	0.002	6	0.020	0.025	0.002
Method Group 165.XX PCT			7	0.023	0.024	0.002	6	0.018	0.022	0.001
Cadmium, Atomic Absorption .....		181.00	2	16.73	0.49	0.55	2	16.73	0.49	0.55
Cadmium, ICP .....		181.30	13	15.05	1.10	0.44	13	15.05	1.10	0.44
Cadmium, Other .....		181.99	2	17.44	0.78	0.27	2	17.44	0.78	0.27
Method Group 181.XX PPM			17	15.53	1.34	0.44	17	15.53	1.34	0.44
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	1	0.15	0.01	0.02	1	0.15	0.01	0.02
Chromium, Atomic Absorption .....		191.00	1	315.00	5.66	8.00	1	315.00	5.66	8.00
Chromium, ICP .....		191.30	11	270.49	28.13	5.00	11	270.49	28.13	5.00
Chromium, Other .....		191.99	2	294.55	31.30	2.94	2	294.55	31.30	2.94

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Method Group 191.XX PPM			14	277.11	30.21	4.92	14	277.11	30.21	4.92
Acid Soluble Cobalt, ICP .....	965.11	202.30	8	1.79	0.71	0.16	8	1.79	0.71	0.16
Acid Soluble Cobalt, Other .....		202.99	2	1.26	0.11	0.04	2	1.26	0.11	0.04
Method Group 202.XX PPM			11	1.80	0.87	0.39	10	1.69	0.67	0.13
Acid Soluble Copper, Atomic Absorption	975.01	221.00	3	0.0033	0.0006	0.0000	3	0.0033	0.0006	0.0000
Acid Soluble Copper, ICP .....		221.30	17	0.0032	0.0008	0.0002	15	0.0031	0.0007	0.0001
Acid Soluble Copper, Other .....		221.99	2	0.0032	0.0004	0.0003	2	0.0032	0.0004	0.0003
Method Group 221.XX PCT			22	0.0032	0.0007	0.0002	18	0.0033	0.0005	0.0001
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	11	0.16	0.01	0.01	11	0.16	0.01	0.01
Acid Soluble Iron, ICP .....		241.30	34	0.15	0.02	0.01	32	0.15	0.02	0.01
Acid Soluble Iron, Other .....		241.99	2	0.12	0.01	0.01	2	0.12	0.01	0.01
Method Group 241.XX PCT			48	0.15	0.02	0.01	45	0.15	0.01	0.01
Lead, ICP .....		251.30	7	2.28	1.44	0.37	7	2.28	1.44	0.37
Lead, Other .....		251.99	2	2.31	0.40	0.37	2	2.31	0.40	0.37
Method Group 251.XX PPM			9	2.28	1.27	0.37	9	2.28	1.27	0.37
Acid Soluble Manganese, ICP .....	972.02a	261.30	13	3.227	6.431	0.036	11	1.638	5.296	0.000
Acid Soluble Manganese, Other .....		261.99	1	17.700	0.000	0.000	1	17.700	0.000	0.000
Method Group 261.XX PCT			14	4.261	7.260	0.034	12	2.976	6.795	0.000
Mercury, ICP .....		281.30	2	0.01	0.01	0.00	2	0.01	0.01	0.00
Molybdenum, ICP .....		289.30	11	3.15	0.89	0.25	10	3.02	0.80	0.17
Molybdenum, Other .....		289.99	2	3.93	0.59	0.22	2	3.93	0.59	0.22
Method Group 289.XX PPM			13	3.27	0.89	0.24	12	3.17	0.84	0.18
Nickel, Atomic Absorption .....		291.00	2	31.50	5.45	8.00	2	31.50	5.45	8.00
Nickel, ICP .....		291.30	10	27.40	5.52	0.77	9	27.06	5.70	0.51
Nickel, Other .....		291.99	1	28.75	0.07	0.10	1	28.75	0.07	0.10
Method Group 291.XX PPM			13	28.14	5.38	1.83	12	27.73	5.11	0.99
Selenium, ICP .....		301.30	3	0.51	0.35	0.34	3	0.51	0.35	0.34
Selenium, Other .....		301.99	3	1.69	0.93	0.11	3	1.69	0.93	0.11
Method Group 301.XX PPM			6	1.10	0.91	0.23	5	1.22	0.93	0.07
Sodium, Other .....		311.99	7	0.45	0.04	0.01	7	0.45	0.04	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	2	0.036	0.002	0.001	2	0.036	0.002	0.001
Acid Soluble Zinc, ICP .....		321.30	18	0.036	0.004	0.001	17	0.036	0.003	0.001
Method Group 321.XX PCT			20	0.036	0.004	0.001	19	0.036	0.003	0.001

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.10 PCT			Meth: 010.12 PCT			Meth: 010.60 PCT			Meth: 010.60 PCT			Meth: 010.XX PCT		
Ammoniacal Nitrogen			Total Nitrogen			Total Nitrogen			Total Nitrogen			Total Nitrogen		
<u>MgO Distillation</u>			<u>Salicylic</u>			<u>Combustion</u>			<u>Combustion</u>			<u>Combustion</u>		
372	0.07	.71	117	15.60	1.45	025	15.26	.28	444	12.30 s	-15.34	162	15.27	.50
			185	15.10	.39	028	15.24	.17	422	10.90 s	-22.71	102	15.26	.49
Meth: 001.99 PCT			Avg 14.93			361 15.21 .11			393 10.41 s -25.30			037 15.26 .49		
Ammoniacal Nitrogen			254 14.93 -.10			096 15.21 .11			Meth: 010.99 PCT			025 15.26 .49		
<u>Other</u>			397 14.75 -.39			Avg 15.20			Total Nitrogen			028 15.24 .47		
027	1.10	.87	416 14.26 -1.45			324 15.20 -.02			Other			361 15.21 .45		
Avg	0.56		Meth: 010.17 PCT			372 15.18 -.15			420 14.59 1.05			360 15.20 .44		
096	0.02	-.87	Total Nitrogen			055 15.19 -.16			354 14.58 1.04			324 15.20 .44		
Meth: 001.XX PCT			<u>Comprehensive</u>			453 15.18 -.20			Avg 13.34			029 15.19 .44		
<u>Ammoniacal Nitrogen</u>			220 12.85 .71			360 15.20 -.21			027 12.13 -.30			055 15.19 .43		
027	1.10	1.29	Meth: 010.60 PCT			136 15.17 -.21			255 12.07 -.33			453 15.18 .43		
Avg	0.39		Total Nitrogen			292 15.17 -.21			455 10.01 S -1.46			372 15.18 .42		
372	0.07	-.60	<u>Combustion</u>			402 15.15 -.30			030 9.87 S -1.53			042 15.15 R .42		
096	0.02	-.69	325 16.20 s 5.26			040 15.15 -.36			Meth: 010.XX PCT			292 15.17 .41		
Meth: 005.00 PCT			351 15.71 2.69			029 15.19 -.38			Total Nitrogen			136 15.17 .41		
Nitrogen From Urea			095 15.55 1.83			035 15.14 -.38			325 16.20 1.29			262 15.15 .40		
<u>Urease (as N)</u>			043 15.53 1.74			262 15.15 -.38			325 16.20 1.29			007 15.15 .40		
372	0.02	.00	049 15.43 R 1.47			007 15.15 -.38			351 15.71 .88			402 15.15 .40		
Meth: 010.11 PCT			406 15.48 1.46			041 15.11 -.49			117 15.60 .78			040 15.15 .40		
Total Nitrogen			291 15.47 1.38			390 15.10 -.54			095 15.55 .74			035 15.14 .39		
<u>Modified Comprehensi</u>			291 15.47 1.38			451 15.08 X -.65			043 15.53 .72			041 15.11 .37		
029	13.36	1.28	425 15.41 1.10			233 15.08 -.68			406 15.48 .68			185 15.10 .36		
211	13.03 X	1.01	369 15.36 .97			426 15.07 -.70			291 15.47 .67			390 15.10 .36		
220	12.74	.78	034 15.38 .94			177 15.06 -.78			409 15.43 R .65			451 15.08 X .34		
114	12.46	.55	231 15.37 .89			042 15.15 R -.84			425 15.41 .62			233 15.08 .34		
456	12.21	.34	157 15.37 .89			009 15.02 -.99			034 15.38 .60			426 15.07 .33		
Avg	12.04		296 15.37 .89			057 15.04 -1.04			157 15.37 .59			177 15.06 .32		
090	11.28	-.42	049 15.34 .75			443 15.02 -1.09			231 15.37 .59			057 15.04 .32		
405	10.93	-.70	377 15.33 .67			072 15.00 R -1.30			296 15.37 .58			072 15.00 R .30		
322	10.34	-1.17	247 15.32 .64			027 14.95 -1.36			369 15.36 .58			443 15.02 .29		
309	9.73 S	-1.67	452 15.27 .55			368 14.94 -1.46			049 15.34 .56			009 15.02 .29		
			450 15.30 .51			023 14.93 -1.47			377 15.33 .55			368 14.94 .23		
			018 15.30 .51			073 14.90 -1.60			247 15.32 .54			027 14.95 .23		
			037 15.26 .36			234 14.85 -1.87			018 15.30 .53			254 14.93 .21		
			162 15.27 .36			232 14.72 -2.58			450 15.30 .53			023 14.93 .21		
			102 15.26 .34			230 14.60 A -3.22			452 15.27 .51			073 14.90 .19		
						131 12.87 s -12.34						234 14.85 .15		

\* 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: 020.20 PCT			Meth: 020.50 PCT			Meth: 020.XX PCT			Meth: 030.40 PCT		
<u>Total Nitrogen</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Insoluble Phosphate</u>		
397	14.75	.07	<u>Spectrometric</u>			<u>ICP</u>			369 47.41 .22			<u>Automated</u>		
232	14.72	.04	420	51.64	2.22	453	46.85	.47	425	47.30	.14	Avg 2.07		
Avg	14.68		428	49.09	.97	Avg	46.37		262	47.20	.07	096 1.96 -.86		
420	14.59	-.08	406	48.35	.60	393	45.80	-.45	041	47.16	.06	Meth: 030.50 PCT		
354	14.58	-.10	372	48.29	.57	255	46.02	-.46	Avg	47.09		Insoluble Phosphate		
230	14.60	-.11	220	48.09	.47	422	45.59	-.62	453	46.85	-.27	<u>ICP</u>		
416	14.26	-.37	371	47.84	.35	390	45.15	-.98	232	46.43	-.41	255 0.95 -.71		
029	13.36	-1.12	416	47.79	.33	330	44.55	-1.60	255	46.02	-.72	Meth: 030.99 PCT		
211	13.03	X -1.40	450	47.70	.30	Meth: 020.99 PCT			393	45.80	-.79	Insoluble Phosphate		
131	12.87	-1.54	369	47.41	.16	<u>Total Phosphate</u>			030	45.82	-.80	Meth: 030.99 PCT		
220	12.85	-1.55	425	47.30	.09	<u>Other</u>			234	45.76	-.82	Insoluble Phosphate		
220	12.74	R -1.65	262	47.20	.04	455 44.96 .71			451	45.83	X -.89	<u>Other</u>		
114	12.46	-1.88	Avg	47.12		Avg 44.96			042	47.00	R -.93	247 1.14 .00		
444	12.30	-2.02	232	46.43	-.34	443 36.14 S1250.33			422	45.59	-.93	Meth: 030.XX PCT		
456	12.21	-2.10	030	45.82	-.65	Meth: 020.XX PCT			117	45.97	R -.94	Insoluble Phosphate		
027	12.13	-2.16	234	45.76	-.67	<u>Total Phosphate</u>			390	45.15	-1.20	409 2.17 1.44		
255	12.07	-2.21	451	45.83	X -.72	420 51.64 2.81			405	45.03	-1.27	096 1.96 1.01		
090	11.28	-2.88	324	44.40	-1.37	428 49.09 1.24			455	44.96	-1.31	220 1.54 .17		
405	10.93	-3.18	193	44.48	R -1.42	157 48.29 .86			330	44.55	R -1.66	Avg 1.46		
422	10.90	-3.20	309	42.13	-2.45	406 48.35 .78			324	44.40	-1.71	247 1.14 -.64		
393	10.41	A -3.62	Meth: 020.40 PCT			372 48.29 .74			193	44.48	R -1.76	090 1.00 -.94		
322	10.34	A -3.67	<u>Total Phosphate</u>			444 48.20 .69			309	42.13	s -3.06	255 0.95 -1.04		
455	10.01	s -3.96	<u>Automated</u>			456 48.14 .65			443	36.14	s -6.76	Meth: 040.10 PCT		
030	9.87	s -4.08	456	48.14	1.14	220 48.09 .62			Meth: 030.10 PCT			InDir Available Phos		
309	9.73	s -4.19	409	48.06	.87	090 48.08 .61			Insoluble Phosphate			<u>Grav Quim</u>		
Meth: 020.10 PCT			Avg 47.82			409 48.06 .60			090 1.00 .71			090 47.08 .71		
<u>Total Phosphate</u>			096 47.81 -.07			057 47.96 .54			Meth: 030.20 PCT			Meth: 040.20 PCT		
<u>Grav Quimociac</u>			247 47.60 -.94			371 47.84 .46			Insoluble Phosphate			InDir Available Phos		
157	48.29	.95	035	47.49	-1.24	114 47.83 .46			<u>Spectrometric</u>			<u>Spectrometri</u>		
090	48.08	.57	042	47.00	s -6.09	096 47.81 .44			220 1.54 .00			372 47.74 .71		
057	47.96	.47	Meth: 020.50 PCT			416 47.79 .43			Meth: 030.40 PCT			Meth: 040.40 PCT		
114	47.83	.37	<u>Total Phosphate</u>			450 47.70 .39			Insoluble Phosphate			InDir Available Phos		
Avg	47.39		<u>ICP</u>			402 47.65 .35			<u>Automated</u>			<u>Automated</u>		
041	47.16	-.20	444	48.20	1.43	426 47.54 .33			409 2.17 .87			409 45.89 .68		
117	45.97	R -1.46	402	47.65	1.01	247 47.60 .33								
405	45.03	-1.97	426	47.54	.94	035 47.49 .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
<u>Meth: 040.40 PCT</u>			<u>Meth: 041.10 PCT</u>			<u>Meth: 041.50 PCT</u>			<u>Meth: 041.XX PCT</u>			<u>Meth: 041.XX PCT</u>		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>		
<u>Automated</u>			<u>Grav Quimociac</u>			<u>ICP</u>			<u>354 47.44 .85</u>			<u>397 19.55 s -19.27</u>		
096	45.85	.61	009	45.69 R	-.61	009	44.31	-.90	043	47.26	.73			
Avg	45.45		131	45.55	-.63	291	44.11	-1.02	072	47.13	.63	<u>Meth: 048.20 PCT</u>		
027	44.63	-1.29	029	45.02	-1.08	393	43.50	-1.42	037	47.09	.61	<u>Water Soluble Phosph</u>		
			102	44.55	-1.47	361	43.43	-1.46	073	47.03	.56	<u>Spectrometric</u>		
<u>Meth: 040.50 PCT</u>			<u>Meth: 041.20 PCT</u>			<u>Meth: 041.60 PCT</u>			<u>351 46.99 .54</u>			<u>420 45.64 1.05</u>		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>072 46.86 .44</u>			<u>096 43.58 .13</u>		
<u>ICP</u>			<u>Spectrometric</u>			<u>EDTA Extract</u>			<u>200 46.78 .38</u>			<u>Avg 43.30</u>		
255	45.08	.71	231	46.15	.76	018	49.25	1.69	452	46.59	.24	<u>372 40.69 -1.18</u>		
			Avg	45.82		028	48.55	1.14	049	46.57	.23	<u>Meth: 048.50 PCT</u>		
<u>Meth: 040.99 PCT</u>			<u>Meth: 041.40 PCT</u>			<u>Meth: 041.99 PCT</u>			<u>057 46.82 .41</u>			<u>Water Soluble Phosph</u>		
<u>InDir Available Phos</u>			<u>Dir Available Phosph</u>			<u>Dir Available Phosph</u>			<u>200 46.78 .38</u>			<u>ICP</u>		
<u>Other</u>			<u>Automated</u>			<u>Other</u>			<u>452 46.59 .24</u>			<u>393 42.28 .71</u>		
247	46.46	.71	072	46.86	1.37	034	47.58	.38	049	46.57	.23	<u>Meth: 048.99 PCT</u>		
			Avg	45.52		Avg	47.20		055	46.47	.22	<u>Water Soluble Phosph</u>		
			131	45.50	-.02	037	47.09	-.12	057	46.36	.09	<u>Other</u>		
			025	44.83	-.70	Avg	47.09	-.12	177	46.34	.09	<u>247 42.75 -.71</u>		
			029	44.25	-1.30	073	47.03	-.14	Avg	46.25		<u>Meth: 048.XX PCT</u>		
						351	46.99	-.19	023	46.25	-.05	<u>Water Soluble Phosph</u>		
						049	46.57	-.52	231	46.15	-.08	<u>Other</u>		
						057	46.36	-.69	095	46.15	-.11	<u>247 42.75 -.71</u>		
						177	44.74	-2.03	377	46.15	-.13	<u>Meth: 048.99 PCT</u>		
									040	45.93	-.31	<u>Water Soluble Phosph</u>		
									454	46.15 R	-.42	<u>Other</u>		
									007	45.85 R	-.44	<u>247 42.75 -.15</u>		
									009	45.69	-.50	<u>393 42.28 -.41</u>		
									131	45.55	-.51	<u>372 40.69 -1.34</u>		
									131	45.50	-.54	<u>Meth: 050.10 PCT</u>		
									055	45.48	-.59	<u>Soluble Potash</u>		
									325	45.35 R	-.73	<u>STPB Citrate</u>		
									029	45.02	-.90	<u>444 0.29 .71</u>		
									025	44.83	-1.03	<u>Meth: 050.30 PCT</u>		
									177	44.74	-1.09	<u>Soluble Potash</u>		
									102	44.55	-1.23	<u>AA (Oxalate)</u>		
									254	44.50	-1.26	<u>450 0.15 -.71</u>		
									009	44.31	-1.41			
									029	44.25	-1.45			
									291	44.11	-1.55			
									393	43.50	-1.99			
									361	43.43	-2.04			
									230	41.35 s	-3.78			

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 050.50 PCT			Meth: 060.00 PCT			Meth: 101.30 PCT			Meth: 101.99 PCT			Meth: 101.XX PCT		
Soluble Potash			Free Water			Acid Soluble Calcium			Acid Soluble Calcium			Acid Soluble Calcium		
<u>ICP (Oxalate)</u>			<u>Vacuum Oven</u>			<u>ICP</u>			<u>Other</u>					
422	0.21	1.59	247	2.33	1.62	095	17.79	.81	409	16.86	.17	102	16.60	-.16
Avg	0.11		Avg	1.01		090	17.55	.60	Avg	16.74		450	16.56	-.20
454	0.09	-.32	007	0.62	-.49	454	17.05 R	.59	042	16.62	-1.21	444	16.55	-.22
420	0.08	-.47	416	0.60	-.50	037	17.48	.54				028	16.50	-.24
292	0.06	-.80	456	0.51	-.63	452	17.37	.45	Meth: 101.XX PCT			041	16.80	-.30
						009	17.28	.41	<u>Acid Soluble Calcium</u>			023	16.49	-.37
Meth: 050.51 PCT			Meth: 101.00 PCT			433	17.26	.35	247	22.71 s	4.39	360	16.29	-.42
Soluble Potash			Acid Soluble Calcium			131	17.25	.35	372	22.32 s	4.10	043	16.18	-.48
<u>ICP (Citrate)</u>			<u>AA</u>			231	17.16	.27	422	20.55	2.78	255	16.11	-.52
453	0.92	.87	193	18.86	1.72	324	16.90	.26	117	19.46	1.97	262	15.94	-.65
Avg	0.52		200	18.57	1.50	330	17.03	.16	193	18.86	1.54	233	15.97	-.66
393	0.13	-.87	177	17.14	.51	291	16.97	.10	200	18.57	1.31	042	16.62 R	-.67
			034	16.93	.35	Avg	16.86		354	18.26	1.08	157	15.92	-.67
Meth: 050.99 PCT			397	16.90	.33	057	16.66	-.19	232	18.14	.99	390	15.90	-.68
Soluble Potash			371	16.88	.32	102	16.60	-.23	453	18.04	.94	114	15.81	-.76
<u>Other</u>			296	16.82	.31	450	16.56	-.28	361	17.94	.84	040	15.77	-.84
322	45.47	S1283.53	028	16.50	.09	444	16.55	-.30	420	17.90	.81	393	14.96	-1.38
325	0.10	.71	Avg	16.42		041	16.80	-.35	095	17.79	.73	230	14.75	-1.54
Avg	0.10		043	16.18	-.19	023	16.49	-.46	090	17.55	.55	030	13.92	-2.16
			262	15.94	-.35	360	16.29	-.54	454	17.05 R	.52	055	13.62	-2.38
Meth: 050.XX PCT			157	15.92	-.37	255	16.11	-.65	037	17.48	.50	292	13.60	-2.39
<u>Soluble Potash</u>			040	15.77	-.56	233	15.97	-.81	452	17.37	.42	065	10.95 s	-4.37
322	45.47	s 163.31	030	13.92	-1.76	390	15.90	-.84	009	17.28	.38	351	5.23 s	-8.62
453	0.92	2.53	055	13.62	-1.97	114	15.81	-.93	433	17.26	.34	Meth: 121.00 PCT		
444	0.29 R	.34	351	5.23 s	-7.84	393	14.96	-1.66	131	17.25	.33	Acid Soluble Magnesi		
Avg	0.22					230	14.75	-1.84	231	17.16	.27	<u>AA</u>		
422	0.21	-.02	Meth: 101.30 PCT			292	13.60	-2.85	177	17.14	.26	200	0.73	1.83
450	0.15	-.24	Acid Soluble Calcium			065	10.95 s	-5.15	324	16.90	.23	309	0.70	1.38
393	0.13	-.33	<u>ICP</u>			Meth: 101.70 PCT			330	17.03	.18	028	0.67	.84
325	0.10	-.45	247	22.71 s	5.09	Acid Soluble Calcium			296	16.82	.16	397	0.66	.63
454	0.09	-.45	422	20.55 s	3.21	<u>Titrimetric</u>			291	16.97	.12	157	0.64	.34
420	0.08	-.49	117	19.46	2.26				034	16.93	.09	177	0.64	.32
292	0.06	-.56	354	18.26	1.21	372	22.32 S	.00	371	16.88	.09	043	0.63	.22
			232	18.14	1.11				397	16.90	.07	034	0.63	.17
			453	18.04	1.05				409	16.86	.05	Avg	0.62	
			361	17.94	.93				Avg	16.81		040	0.60	-.37
			420	17.90	.90				057	16.66	-.12	296	0.60	-.39

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 121.00 PCT			Meth: 121.30 PCT			Meth: 121.XX PCT			Meth: 121.XX PCT			Meth: 131.XX PCT		
<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>			<u>Acid Soluble Magnesi</u>			<u>Water Soluble Magnes</u>		
<u>AA</u>			<u>ICP</u>											
193	0.61	-.39	433	0.59	-.61	452	0.66	1.00	055	0.59	-.76	372	0.59	-.34
262	0.59	-.69	360	0.60	-.64	330	0.63 R	.94	095	0.58	-.82	029	0.59 R	-.38
055	0.59	-.73	454	0.59	-.76	397	0.66	.92	009	0.58	-.85	220	0.55	-.51
220	0.57	-1.01	361	0.59	-.78	372	0.65	.75	393	0.57	-1.01	452	0.44	-1.08
351	0.49	-2.32	291	0.59	-.78	177	0.64	.55	390	0.57	-1.11	Meth: 144.01 PCT		
030	0.42 s	-3.71	114	0.59	-.78	157	0.64	.53	220	0.57	-1.11	Sulfur		
			422	0.59	-.78	453	0.63	.41	042	0.58 R	-1.33	<u>Gravimetric</u>		
			095	0.58	-.95	043	0.63	.38	065	0.54	-1.63	041	1.63 s	10.07
Meth: 121.30 PCT			009			354			234			405		
<u>Acid Soluble Magnesi</u>			393			131			351			397		
<u>ICP</u>			390			027			030			043		
247	1.03 s	12.36	065	0.54	-2.03	102	0.63	.23	230	0.23 s	-8.62	095	1.15	1.30
117	0.74 s	3.86	230	0.23 s	-11.47	409	0.63	.23	Meth: 131.00 PCT			055	1.14	1.12
041	0.70	2.69	Meth: 121.70 PCT			324	0.63	.23	<u>Water Soluble Magnes</u>			114	1.12	.76
231	0.67	1.69	<u>Acid Soluble Magnesi</u>			420	0.62	.12	<u>AA</u>			371	1.10	.60
090	0.67	1.63	<u>Titrimetric</u>			057	0.62	.06	309			070	1.16	
444	0.66	1.51	372			037	0.62	.01	Avg			061		
452	0.66	1.51	0.65			Avg	0.62		029			0.59	-.65	
330	0.63 R	1.33	Meth: 121.99 PCT			023	0.62	-.09	220			0.55	-.85	
450	0.62 R	.76	<u>Acid Soluble Magnesi</u>			426	0.61	-.11	Meth: 131.30 PCT					
453	0.63	.67	<u>Other</u>			040	0.60	-.32	<u>Water Soluble Magnes</u>					
354	0.63	.63	042			296	0.60	-.32	<u>ICP</u>					
027	0.63	.58	Avg			233	0.60	-.34	230			1.00	.87	
131	0.62	.54	234			292	0.60	-.36	Avg			0.72		
102	0.63	.48	Meth: 121.XX PCT			193	0.61	-.43	452			0.44	-.87	
324	0.63	.46	<u>Acid Soluble Magnesi</u>			232	0.60	-.47	Meth: 131.70 PCT					
409	0.63	.46	200			096	0.60	-.48	<u>Water Soluble Magnes</u>					
420	0.62	.33	041			255	0.59	-.52	<u>Titrimetric</u>					
057	0.62	.21	041			450	0.62	-.55	372			0.59	.71	
023	0.62	.20	309			360	0.60	-.57	Meth: 131.XX PCT					
037	0.62	.18	028			433	0.59	-.58	<u>Water Soluble Magnes</u>					
426	0.61	.01	231			454	0.59	-.68	230			1.00	1.70	
Avg	0.61		231			114	0.59	-.70	Avg			0.65		
292	0.60	-.31	090			361	0.59	-.70	309			0.70	.23	
233	0.60	-.33	444			291	0.59	-.70	Avg			0.65		
232	0.60	-.46				422	0.59	-.70						
096	0.60	-.49				262	0.59	-.73						
255	0.59	-.54												

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 144.99 PCT			Meth: 144.XX PCT			Meth: 144.XX PCT			Meth: 151.XX PPM			Meth: 165.XX PCT		
Sulfur			Sulfur			Sulfur			Arsenic			Acid Soluble Boron		
<u>Other</u>			<u>Other</u>			<u>Other</u>			<u>Other</u>			<u>Other</u>		
230	1.44	S 3.19	397	1.30	R 3.07	450	0.98	-1.09	393	11.92	1.26	409	0.004	-0.63
422	1.36	2.50	157	1.30	R 2.84	096	0.98	-1.10	231	11.18	.98	232	0.004	-0.65
030	1.33	S 2.41	393	1.27	2.46	444	0.96	-1.33	450	10.50	.75	433	0.003	-0.66
157	1.30	2.04	043	1.16	1.17	390	0.95	-1.39	037	10.55	.74	422	0.002	-0.73
393	1.27	1.77	023	1.15	1.06	368	0.94	-1.51	220	9.70	R .65	Meth: 181.00 PPM		
023	1.15	.76	009	1.14	1.00	291	0.94	-1.57	233	10.01	.54	Cadmium		
009	1.14	.72	102	1.15	.98	090	0.84	R -2.85	009	9.80	.45	<u>Atomic Absorption</u>		
102	1.15	.71	095	1.15	.96	Meth: 151.00 PPM			065	8.71	.29	136	16.95	.47
220	1.14	.66	220	1.14	.91	Arsenic			136	8.75	.08	Avg	16.73	
255	1.10	.36	055	1.14	.84	<u>Atomic Absorption</u>			Avg	8.61		220	16.50	-1.13
453	1.08	.10	114	1.12	.60	220	9.70	1.15	247	8.50	-.04			
Avg	1.06		255	1.10	.50	Avg	9.23		102	7.98	-.24	Meth: 181.30 PPM		
136	1.06	-.09	371	1.10	.47	136	8.75	-.41	409	6.70	-.73	Cadmium		
360	1.05	-.13	057	1.10	.42	Meth: 151.30 PPM			444	5.03	-1.39	<u>ICP</u>		
232	1.05	-.16	296	1.07	.37	Arsenic			230	2.37	-2.39	096	16.50	1.39
037	1.05	-.21	193	1.10	.36	<u>ICP</u>			Meth: 165.00 PCT			102	16.44	1.27
409	1.04	-.26	262	1.07	.13	393	11.92	1.20	Acid Soluble Boron			247	16.35	1.19
361	1.04	-.26	200	1.08	.13	450	10.50	.72	<u>Spectrometric</u>			037	16.25	1.10
351	1.03	-.27	453	1.08	.13	Avg	10.55	.72	393	0.041	.71	065	15.16	.47
452	1.03	-.34	Avg	1.07		037	10.55	.72	Meth: 165.99 PCT			393	15.38	.30
330	1.05	-.45	136	1.06	-.14	233	10.01	.53	Acid Soluble Boron			390	15.15	.24
027	1.01	-.47	360	1.05	-.18	009	9.80	.45	<u>Other</u>			Avg	15.05	
354	1.01	-.47	029	1.05	-.18	065	8.71	.28	009	0.055	1.41	233	14.47	-.55
450	0.98	-.77	232	1.05	-.23	Avg	8.54		454	0.052	1.30	232	14.50	-.68
096	0.98	-.78	037	1.05	-.30	247	8.50	-.01	Avg	0.020		450	14.30	-.71
390	0.95	-.99	028	1.04	-.33	102	7.98	-.20	409	0.004	-.65	009	14.10	-.87
368	0.94	-1.07	409	1.04	-.37	444	5.03	-1.27	232	0.004	-.65	452	13.52	-1.39
291	0.94	-1.12	361	1.04	-.37	230	2.37	-2.20	433	0.003	-.67	444	13.56	-1.41
090	0.84	-2.03	351	1.03	-.38	Meth: 151.99 PPM			422	0.002	-.73	372	7.21	s -7.14
Meth: 144.XX PCT			452	1.03	-.49	Arsenic			Meth: 165.XX PCT			230	5.78	s -8.45
Sulfur			220	1.03	-.52	<u>Other</u>			Acid Soluble Boron			Meth: 181.99 PPM		
041	1.63	s 6.84	330	1.05	-.63	231	11.18	.87	<u>Other</u>			Cadmium		
405	1.61	s 6.56	027	1.01	-.67	Avg	8.94		009	0.055	R 1.71	<u>Other</u>		
230	1.44	s 4.46	354	1.01	-.67	409	6.70	-.87	454	0.052	1.59	231	18.09	.90
422	1.36	3.49	233	1.01	-.71				393	0.041	1.09	Avg	17.44	
030	1.33	s 3.37	292	1.01	-.73				Avg	0.018		409	16.80	-.83
			372	1.01	-.73									

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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.XX PPM <u>Cadmium</u>			Meth: 191.30 PPM <u>Chromium</u>			Meth: 202.00 PPM <u>Acid Soluble Cobalt</u>			Meth: 202.XX PPM <u>Acid Soluble Cobalt</u>			Meth: 221.99 PCT <u>Acid Soluble Copper</u>		
231	18.09	1.92	ICP			AA			231	1.17	-.78	Other		
136	16.95	1.06	009	286.50	.57	136	7.75 S	.00				231	0.0035	.99
409	16.80	.95	452	275.83	.19				Meth: 221.00 PCT <u>Acid Soluble Copper</u>			Avg	0.0032	
096	16.50	.82	102	271.12	.04	Meth: 202.30 PPM <u>Acid Soluble Cobalt</u>			<u>Atomic Absorption</u>			409	0.0029	-.73
220	16.50	.82	Avg	270.49		ICP			043	0.0041	1.29	Meth: 221.XX PCT <u>Acid Soluble Copper</u>		
102	16.44	.68	096	264.50	-.21	393	2.92 S	2.64	Avg	0.0033		422	0.0100 S	13.73
247	16.35	.62	065	262.10	-.35	452	3.40	2.27	028	0.0030	-.61	402	0.0060 S	5.57
037	16.25	.55	232	243.50	-.96	450	2.30	.77	220	0.0029	-.69	444	0.0050 S	4.08
Avg	15.53		444	200.15	-2.51	Avg	1.79		262	0.0000 S	-5.46	354	0.0045 R	2.71
393	15.38	-.11	230	105.00 S	-5.88	009	1.60	-.27	Meth: 221.30 PCT <u>Acid Soluble Copper</u>			247	0.0045	2.41
390	15.15	-.34	Meth: 191.99 PPM <u>Chromium</u>			065	1.55	-.34	ICP			393	0.0040	1.58
065	15.16	-.47	Other			057	1.48	-.48	422	0.0100 S	9.25	433	0.0037	.87
233	14.47	-.80	231	321.60	.87	037	1.44	-.50	402	0.0060 S	3.86	231	0.0035 R	.77
232	14.50	-.86	Avg	294.55		247	1.40	-.57	444	0.0050 S	2.85	450	0.0034 R	.67
450	14.30	-.93	409	267.50	-.86	102	1.18	-.87	354	0.0045 R	1.96	057	0.0034	.44
009	14.10	-1.07	Meth: 191.XX PPM <u>Chromium</u>			Meth: 202.99 PPM <u>Acid Soluble Cobalt</u>			247	0.0045	1.77	324	0.0034	.19
452	13.52	-1.50	231	321.60	1.48	Other			393	0.0040	1.22	Avg	0.0033	
444	13.56	-1.50	220	315.00	1.26	409	1.36	.86	433	0.0037	.75	037	0.0032	-.18
372	7.21 S	-6.22	450	299.00	.73	Avg	1.26		450	0.0034 R	.54	095	0.0033	-.31
230	5.78 S	-7.30	247	293.50	.54	231	1.17	-.87	057	0.0034	.45	009	0.0031	-.46
Meth: 190.00 PCT <u>Water Soluble Chlori</u> <u>Titrimetric</u>			037	292.74	.52	Meth: 202.XX PPM <u>Acid Soluble Cobalt</u>			324	0.0034	.30	453	0.0030	-.55
422	0.15	-.71	390	286.50	.40	136	7.75 S	9.07	095	0.0033	.25	454	0.0030	-.55
Meth: 191.00 PPM <u>Chromium</u>			009	286.50	.31	393	2.92 R	2.90	037	0.0032	.16	102	0.0030	-.55
<u>Atomic Absorption</u>			Avg	277.11		452	3.40	2.57	Avg	0.0031		028	0.0030	-.66
220	315.00	.71	452	275.83	-.04	452	3.40	2.57	009	0.0031	-.13	220	0.0029	-.75
Meth: 191.30 PPM <u>Chromium</u>			102	271.12	-.20	450	2.30	.96	453	0.0030	-.18	232	0.0029	-.75
ICP			409	267.50	-.32	Avg	1.69		454	0.0030	-.18	065	0.0029	-.81
450	299.00	1.02	096	264.50	-.42	009	1.60	-.13	102	0.0030	-.18	409	0.0029	-.86
247	293.50	.82	065	262.10	-.52	065	1.55	-.20	232	0.0029	-.32	452	0.0028	-1.06
037	292.74	.79	232	243.50	-1.11	057	1.48	-.37	065	0.0029	-.37	230	0.0010 A	-4.63
390	286.50	.63	444	200.15	-2.56	057	1.48	-.37	452	0.0028	-.53	262	0.0000 S	-6.67
Meth: 191.30 PPM <u>Chromium</u>			230	105.00 S	-5.70	037	1.44	-.37	230	0.0010	-2.88	292	0.0000 S	-6.67
ICP						247	1.40	-.45	041	0.0000 S	-4.23	041	0.0000 S	-6.67
450	299.00	1.02				409	1.36	-.50	292	0.0000 S	-4.23			
247	293.50	.82				102	1.18	-.77						

\* 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: 241.XX PCT			Meth: 251.XX PPM		
Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron			Acid Soluble Iron			Lead		
<u>Atomic Absorption</u>			<u>ICP</u>			<u>ICP</u>			<u>Atomic Absorption</u>			<u>ICP</u>		
030	1.02 s	123.05	Avg	0.15		452	0.17	1.05	428	0.13	-1.42	231	2.55	.35
220	0.17	1.48	096	0.15	-.03	444	0.16	.95	042	0.13	-1.43	Avg	2.28	
043	0.16	.81	231	0.15	-.03	034	0.16	.72	450	0.13	-1.48	409	2.07	-.17
034	0.16	.78	131	0.15	-.19	371	0.16	.71	433	0.12	-2.38	065	2.27 X	-.22
371	0.16	.74	233	0.15	-.21	055	0.16	.64	234	0.11 A	-2.96	444	1.84	-.39
028	0.16	.72	255	0.14	-.46	028	0.16	.63	230	0.05 s	-6.88	230	0.84	-1.13
055	0.16	.58	453	0.15	-.49	043	0.16	.60	393	0.01 s	-10.21	102	0.64	-1.29
Avg	0.16		360	0.15	-.53	354	0.16	.59	Meth: 251.00 PPM			Meth: 261.30 PCT		
397	0.16	-.22	023	0.14	-.63	090	0.16	.55	Lead			Acid Soluble Mangane		
296	0.15	-.60	454	0.14	-.67	390	0.16	.54	<u>Atomic Absorption</u>			<u>ICP</u>		
157	0.15	-.85	409	0.14	-.94	102	0.16	.43	136	18.50 S	.00	247	18.000	3.09
177	0.15	-1.27	065	0.14	-.96	114	0.16	.39	Meth: 251.30 PPM			422	16.545 R	2.81
262	0.15	-1.71	041	0.14	-1.06	009	0.16	.36	Lead			393	7.390 R	1.09
428	0.13 s	-3.57	292	0.14	-1.06	397	0.16	.34	<u>ICP</u>			Avg	1.638	
Meth: 241.30 PCT			232	0.13	-1.21	296	0.15	.31	452	5.09	1.95	444	0.003	-.31
Acid Soluble Iron			450	0.13	-1.34	057	0.15	.30	450	2.50	.38	433	0.002	-.31
<u>ICP</u>			433	0.12	-2.18	426	0.15	.27	393	2.76	.34	057	0.002	-.31
422	1.03 s	57.73	230	0.05 s	-6.36	324	0.15	.25	Avg	2.28		454	0.002	-.31
330	0.20	3.24	393	0.01 s	-9.45	037	0.15	.16	065	2.27 X	-.20	102	0.002	-.31
117	0.19 R	2.46	Meth: 241.99 PCT			402	0.15	.14	444	1.84	-.34	009	0.002	-.31
368	0.17 R	1.78	Acid Soluble Iron			Avg	0.15		230	0.84	-.99	065	0.002	-.31
361	0.17	1.43	<u>Other</u>			231	0.15	-.06	102	0.64	-1.14	096	0.002	-.31
095	0.17	1.31	042	0.13	.75	096	0.15	-.06	Meth: 251.99 PPM			232	0.002	-.31
452	0.17	1.00	Avg	0.12		157	0.15	-.18	Lead			292	0.000	-.31
444	0.16	.90	234	0.11	-.97	131	0.15	-.24	<u>Other</u>			Meth: 261.99 PCT		
354	0.16	.57	Meth: 241.XX PCT			233	0.15	-.26	231	2.55	1.07	Acid Soluble Mangane		
090	0.16	.54	Acid Soluble Iron			177	0.15	-.28	Avg	2.31		<u>Other</u>		
390	0.16	.54	422	1.03 s	62.11	255	0.14	-.53	409	2.07	-.60	409	17.700	.00
102	0.16	.43	030	1.02 s	61.15	262	0.15	-.54	Meth: 251.XX PPM			Meth: 261.XX PCT		
114	0.16	.40	330	0.20	3.45	453	0.15	-.55	Lead			Acid Soluble Mangane		
009	0.16	.37	117	0.19 R	2.62	360	0.15	-.59	<u>Atomic Absorption</u>			247	18.000	2.21
057	0.15	.31	368	0.17 R	1.89	023	0.14	-.71	136	18.50 s	12.74	409	17.700	2.17
426	0.15	.28	361	0.17	1.51	454	0.14	-.75	452	5.09	2.21	422	16.545 R	2.00
324	0.15	.26	095	0.17	1.38	409	0.14	-1.04	450	2.50	.43	393	7.390 R	.65
037	0.15	.18	220	0.17	1.05	065	0.14	-1.06	393	2.76	.38	Avg	2.976	
402	0.15	.14				292	0.14	-1.17						
						041	0.14	-1.17						
						232	0.13	-1.34						

\* 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 <u>Acid Soluble Manganese</u>			Meth: 289.99 PPM Molybdenum			Meth: 291.30 PPM Nickel			Meth: 301.99 PPM Selenium			Meth: 321.30 PCT <u>Acid Soluble Zinc</u>		
444	0.003	-.44	<u>Other</u>			<u>ICP</u>			<u>Other</u>			<u>ICP</u>		
433	0.002	-.44	231	4.43	.88	102	27.07	.01	231	2.89	1.28	422	0.054 s	6.24
057	0.002	-.44	Avg	3.93		Avg	27.06		Avg	1.69		450	0.047 R	3.78
454	0.002	-.44	409	3.43	-.85	065	27.05	-.18	409	1.15	-.60	057	0.039	1.11
102	0.002	-.44	Meth: 289.XX PPM Molybdenum			372	25.13	-.34	296	1.04	-.70	096	0.039	.91
009	0.002	-.44	102	9.21 s	7.21	232	23.45	-.63	Meth: 301.XX PPM Selenium			409	0.038	.83
065	0.002	-.44	450	4.50 R	1.70	393	15.41	-2.04	231	2.89	1.79	247	0.038	.78
096	0.002	-.44	231	4.43	1.52	Meth: 291.99 PPM Nickel			Avg	1.22		037	0.038	.67
232	0.002	-.44	247	4.00	.99	<u>Other</u>			409	1.15	-.16	131	0.038	.65
292	0.000	-.44	220	3.60	.51	409	28.75	.71	296	1.04	-.20	454	0.037	.52
Meth: 281.30 PPM Mercury			057	3.57	.48	Meth: 291.XX PPM Nickel			230	0.69	-.57	452	0.036	.34
<u>ICP</u>			409	3.43	.32	444	37.25	1.86	450	0.50 R	-.94	065	0.036	.31
230	0.01	.87	393	3.41	.32	220	33.00 R	1.56	393	0.34	-.95	444	0.037	.28
Avg	0.01		232	3.25	.31	037	30.47	.62	Meth: 311.99 PCT Sodium			390	0.036	.18
450	0.00	-.86	065	3.34	.20	136	30.00	.59	<u>Other</u>			009	0.036	.12
Meth: 289.30 PPM Molybdenum			Avg	3.17		247	30.40	.52	009	0.49	.99	453	0.036	.05
<u>ICP</u>			433	3.04	-.16	009	29.30	.32	422	0.49	.92	Avg	0.036	
102	9.21 s	7.70	452	2.52	-.86	409	28.75	.20	102	0.48	.57	102	0.035	-.49
450	4.50 R	1.94	009	2.25	-1.10	450	28.50	.18	454	0.47	.42	232	0.032	-1.35
247	4.00	1.22	230	1.23	-2.32	Avg			057	0.45	-.14	292	0.030	-1.98
220	3.60	.72	Meth: 291.00 PPM Nickel			102	27.07	-.13	Avg	0.45		433	0.029	-2.39
057	3.57	.69	<u>Atomic Absorption</u>			065	27.05	-.24	296	0.47	-.72	027	0.013 s	-7.74
393	3.41	.51	220	33.00 X	1.14	372	25.13	-.51	057	0.45	-.14	393	0.002 s	-11.35
232	3.25	.42	Avg	31.50		232	23.45	-.84	232	0.42	-.72	Meth: 321.XX PCT <u>Acid Soluble Zinc</u>		
065	3.34	.40	136	30.00	-.46	393	15.41	-2.41	292	0.37	-1.90	422	0.054 s	6.50
433	3.04	.03	Meth: 291.30 PPM Nickel			Meth: 301.30 PPM Selenium			Avg	0.45		450	0.047 A	3.93
Avg	3.02		<u>ICP</u>			<u>ICP</u>			057	0.45	-.14	057	0.039	1.14
452	2.52	-.73	444	37.25	1.79	230	0.69	.51	232	0.42	-.72	450	0.047 A	3.93
009	2.25	-.96	037	30.47 R	.66	Avg	0.51		296	0.47	-.72	057	0.039	1.14
230	1.23	-2.23	247	30.40	.59	393	0.34	-.48	Avg	0.036		096	0.039	.94
			009	29.30	.40	450	0.50	-1.42	220	0.035	-.87	409	0.038	.86
			450	28.50	.27				Meth: 321.00 PCT Acid Soluble Zinc			247	0.038	.81
									<u>Atomic Absorption</u>			037	0.038	.69
												131	0.038	.66
												296	0.038	.60
												454	0.037	.53
												452	0.036	.36
												065	0.036	.32

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

Laboratory Averages & Accuracy Indexes

<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>	<u>Lab</u>	<u>Average*</u>	<u>Index</u>
Meth: 321.XX PCT											
<u>Acid Soluble Zinc</u>											
444	0.037	.28									
390	0.036	.18									
009	0.036	.12									
453	0.036	.05									
Avg	0.036										
220	0.035	-.44									
102	0.035	-.52									
232	0.032	-1.41									
292	0.030	-2.08									
433	0.029	-2.50									
027	0.013	s -8.08									
393	0.002	s -11.84									

\* 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	2	0.00	1.22	0.01	121.XX	58	- 0.08	1.99	0.30
001.XX	3	0.00	1.12	0.01	131.00	3	0.00	1.04	0.33
010.11	9	0.00	1.03	0.05	131.30	2	0.00	1.22	0.03
010.12	5	0.00	1.05	0.15	131.XX	6	- 0.05	0.96	0.09
010.60	61	- 1.21	5.07	0.28	144.01	19	1.24	3.27	0.68
010.99	6	- 0.26	1.14	0.05	144.02	2	0.00	0.82	0.65
010.XX	79	- 0.21	1.34	0.17	144.99	28	0.20	1.20	0.25
020.10	7	- 0.17	1.03	0.39	144.XX	48	0.49	1.89	0.41
020.20	18	- 0.07	1.02	0.19	151.00	2	0.00	0.56	0.77
020.40	6	- 0.49	1.49	2.20	151.30	10	0.00	1.02	0.13
020.50	9	0.00	0.98	0.31	151.99	2	0.00	1.22	0.03
020.99	2	- 623.3	881.50	68.00	151.XX	14	0.03	0.98	0.18
020.XX	42	- 0.25	1.43	0.28	165.99	6	0.000	1.046	0.074
030.40	2	0.00	1.21	0.13	165.XX	7	0.243	1.152	0.079
030.XX	6	0.00	1.05	0.02	181.00	2	0.00	0.66	0.73
040.40	3	0.00	1.11	0.07	181.30	15	- 1.04	2.90	0.25
040.XX	7	- 0.16	1.05	0.19	181.99	2	0.00	1.17	0.25
041.10	13	- 0.04	0.98	0.14	181.XX	19	- 0.71	2.33	0.20
041.20	3	- 19.58	33.92	0.36	191.30	12	- 0.49	1.96	0.12
041.40	5	0.00	1.06	0.08	191.99	2	0.00	1.22	0.06
041.50	13	0.02	0.97	0.16	191.XX	15	- 0.38	1.77	0.11
041.60	10	0.00	1.02	0.11	202.30	9	0.18	1.09	0.71
041.99	2	- 34.87	49.32	16.83	202.99	2	0.00	1.20	0.16
041.XX	38	- 0.58	3.31	0.30	202.XX	12	0.91	2.78	0.66
048.20	3	0.00	1.12	0.03	221.00	4	- 1.363	2.8758	0.0411
048.XX	5	0.00	1.06	0.04	221.30	22	0.4255	2.7293	0.3410
050.50	4	0.00	1.08	0.00	221.99	2	0.0000	1.0254	0.4735
050.51	2	0.00	1.22	0.02	221.XX	28	0.0516	3.9004	0.4723
050.99	2	641.76	907.59	0.50	241.00	13	9.18	34.20	1.64
050.XX	10	16.36	51.64	0.08	241.30	37	1.23	9.78	0.40
060.00	4	0.00	1.08	0.03	241.99	2	0.00	0.99	0.51
060.XX	4	0.00	1.08	0.03	241.XX	52	2.06	12.19	0.56
101.00	15	- 0.52	2.25	0.13	251.30	7	0.00	1.03	0.17
101.30	35	0.09	1.65	0.16	251.99	2	0.00	0.85	0.63
101.99	2	0.00	0.23	0.85	251.XX	10	1.27	4.14	0.22
101.XX	53	- 0.08	1.83	0.16	261.30	13	0.300	1.239	0.009
121.00	16	- 0.23	1.32	0.27	261.XX	14	0.189	1.089	0.007
121.30	39	0.14	2.95	0.31	281.30	2	0.00	1.22	0.06
121.99	2	0.00	0.51	0.79	281.XX	2	0.00	1.22	0.06

## Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
289.30	12	0.79	2.42	0.23					
289.99	2	0.00	1.19	0.20					
289.XX	14	0.63	2.15	0.21					
291.00	2	0.00	0.39	0.82					
291.30	10	0.06	0.99	0.11					
291.XX	13	0.08	1.01	0.36					
301.30	3	0.00	0.50	0.82					
301.99	3	0.00	1.11	0.08					
301.XX	6	- 0.13	1.00	0.23					
311.99	7	0.00	1.03	0.15					
311.XX	7	0.00	1.03	0.15					
321.00	2	0.000	1.144	0.309					
321.30	21	- 0.437	3.554	0.289					
321.XX	22	- 0.455	3.619	0.290					