

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 181111

Grade 17-6-18

### Statistical Summary

# Methods: 143

# Labs Reporting: 94

Issue Date : 12/31/2018

Method Code	Analyte & Method Sample # 181111	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Method Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Method IA Ratio	Average Range (R-bar)	Hornitz %RSD
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	9	9	8.051	3.088	8.823		1.182	0.4926	13.40%		0.1077	2.88%
001.99	Ammoniacal Nitrogen, Other (%)	25	24	9.512	0.2221	9.522		0.2129	0.0543	2.24%		0.1013	2.85%
002.10	Nitrate Nitrogen, Robertson (%)	1		0.6000									
002.20	Nitrate Nitrogen, Jones Modified (%)	2	2	5.420	6.180								
002.99	Nitrate Nitrogen, Other (%)	17	16	7.749	0.3190	7.747		0.3585	0.1120	4.63%		0.0832	2.94%
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	4	4	17.28	0.2164	17.28		0.2164	0.1353	1.25%		0.1761	2.60%
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	1		17.19									
010.11	Total Nitrogen, Modified Comprehensive (17%)	8	8	17.29	0.8076	17.37	0.6906	0.5993	0.2649	3.45%	2.02	0.1382	2.60%
010.12	Total Nitrogen, Salicylic (17%)	3	3	17.22	0.0669	17.22	0.6884	0.0669	0.0483	0.39%	0.23	0.0635	2.61%
010.60	Total Nitrogen, Combustion (17%)	60	58	17.50	0.3488	17.52	0.6928	0.2924	0.0480	1.67%	0.98	0.0959	2.60%
010.99	Total Nitrogen, Other (17%)	8	7	17.19	0.3983	17.19	0.6878	0.4517	0.2134	2.63%	1.53	0.0456	2.61%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ..	3	3	6.850	0.0527	6.850		0.0527	0.0380	0.77%		0.1733	2.99%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb	20	19	6.874	0.2997	6.842		0.2118	0.0607	3.10%		0.0852	2.99%
020.40	Total Phosphorus as P2O5, Automated (%)	3	3	6.948	0.1468	6.948		0.1468	0.1060	2.11%		0.0500	2.99%
020.50	Total Phosphorus as P2O5, ICP (%)	28	28	6.916	0.4131	6.910		0.4380	0.1035	6.34%		0.1225	2.99%
020.99	Total Phosphorus as P2O5, Other (%)	3	3	6.419	0.5638	6.419		0.5638	0.4069	8.78%		0.1894	3.02%
030.20	Citrate Insoluble Phosphorus as P2O5, Spectrophoto..	1		0.3450									
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t...	1		0.3850									
040.20	Indirect Available Phosphorus as P2O5, Spectrophot...	2	2	6.453	0.1591								
040.40	Indirect Available Phosphorus as P2O5, Automated (6	1		6.590									
040.99	Indirect Available Phosphorus as P2O5, Other (6%)	1		6.246									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q..	6	6	6.657	0.2418	6.657	0.6766	0.2742	0.1399	4.12%	0.94	0.0935	3.01%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q..	4	4	6.815	0.1287	6.815	0.6782	0.1287	0.0804	1.89%	0.44	0.0850	3.00%
041.21	Direct Available Phosphorus as P2O5, Spectrophotom	2	2	6.938	0.4561								
041.50	Direct Available Phosphorus as P2O5, ICP (6%)	3	3	6.385	0.3570	6.385	0.6739	0.3570	0.2576	5.59%	1.23	0.1700	3.03%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-...	9	8	6.801	0.1890	6.811	0.6781	0.1915	0.0846	2.81%	0.66	0.0751	3.00%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ..	15	15	6.680	0.3646	6.741	0.6774	0.2090	0.0675	3.10%	0.72	0.0621	3.00%
041.99	Direct Available Phosphorus as P2O5, Other (6%)	7	7	6.134	0.1780	6.103	0.6710	0.1208	0.0571	1.98%	0.42	0.0686	3.05%
048.20	Water Soluble Phosphorus as P2O5, Spectrophotome	1		3.512									
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		3.985									
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	1		3.889									

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048.99	Water Soluble Phosphorus as P2O5, Other (%)	1		3.565									
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	11	10	18.11	0.1631	18.11	1.0139	0.1850	0.0731	1.02%	0.43	0.0440	2.59%
050.30	Soluble Potassium as K2O, AA (Oxalate) (18%)	4	4	17.81	0.7132	17.81	1.0033	0.7132	0.4458	4.00%	1.66	0.4875	2.59%
050.31	Soluble Potassium as K2O, AA (Citrate) (18%)	1		17.72									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	10	10	18.22	0.8405	18.15	1.0152	0.7744	0.3061	4.27%	1.78	0.6105	2.59%
050.51	Soluble Potassium as K2O, ICP (Citrate) (18%)	5	5	18.15	0.5391	18.15	1.0152	0.5391	0.3014	2.97%	1.24	0.3420	2.59%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	11	11	17.38	1.114	17.52	0.9933	0.8927	0.3364	5.09%	2.09	0.4593	2.60%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala	5	5	17.67	0.4047	17.67	0.9985	0.4047	0.2263	2.29%	0.94	0.1862	2.60%
050.61	Soluble Potassium as K2O, Flame Photometric (Citra..	2	2	18.22	0.1803								
050.62	Soluble Potassium as K2O, Flame Photometric (Citra..	4	4	17.81	0.2335	17.81	1.0033	0.2335	0.1460	1.31%	0.54	0.2050	2.59%
050.99	Soluble Potassium as K2O, Other (18%)	36	36	17.84	0.9289	17.95	1.0083	0.4511	0.0940	2.51%	1.04	0.2810	2.59%
060.00	Water (Free), Vacuum Oven (%)	3	3	0.8972	0.2509	0.8972		0.2509	0.1811	27.97%		0.1482	4.07%
060.99	Water (Free), Other (%)	2	2	1.322	0.5558								
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	1		2.833									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	10	10	2.347	0.0875	2.347	0.3174	0.0992	0.0392	4.23%	0.73	0.0565	3.52%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	2	2	2.307	0.1100								
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	4	4	2.307	0.0913	2.307	0.3153	0.0913	0.0571	3.96%	0.67	0.0350	3.53%
101.99	Acid Soluble Calcium, Other (%)	2	2	2.215	0.2687								
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.2%)	8	8	1.747	0.2682	1.678	0.2839	0.1046	0.0462	6.24%	0.86	0.1044	3.70%
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2...	1		1.586									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (	21	20	1.614	0.0821	1.610	0.2805	0.0752	0.0210	4.67%	0.62	0.0347	3.72%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A...	4	4	1.570	0.0469	1.570	0.2785	0.0469	0.0293	2.99%	0.39	0.0217	3.74%
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	13	12	1.552	0.1330	1.566	0.2783	0.1144	0.0413	7.30%	0.96	0.0560	3.74%
121.99	Acid Soluble Magnesium, Other (1.2%)	10	10	1.576	0.1041	1.570	0.2785	0.0755	0.0298	4.81%	0.63	0.0487	3.74%
131.30	Water Soluble Magnesium, ICP (%)	3	3	0.7473	0.4725	0.7473		0.4725	0.3410	63.23%		0.0540	4.18%
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	1		1.951									
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon disu... (%)	1		0.6160									
143.99	Elemental Sulfur, Other (%)	7	7	1.285	0.5151	1.432		0.1746	0.0825	12.19%		0.0329	3.79%
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	8	8	1.517	0.2606	1.560		0.1818	0.0803	11.65%		0.0331	3.74%
145.99	Sulfate Sulfur, HCl soluble, Other (%)	4	4	1.580	0.0881	1.580		0.0881	0.0551	5.58%		0.0500	3.73%
148.00	Total Sulfur, Combustion (1.6%)	7	7	1.659	0.5176	1.558	0.2779	0.3269	0.1544	20.98%	2.74	0.0916	3.74%
148.01	Total Sulfur, Gravimetric - sulfate and elemental... (1.6	8	8	1.616	0.0964	1.611	0.2806	0.0992	0.0438	6.16%	0.82	0.1088	3.72%
148.07	Total Sulfur, ICP, test portion as in 2017.02 (1.6%)	17	16	1.563	0.1589	1.584	0.2792	0.0911	0.0285	5.75%	0.76	0.0385	3.73%
148.99	Total Sulfur, Other (1.6%)	11	11	1.568	0.1036	1.573	0.2786	0.0959	0.0361	6.10%	0.80	0.0315	3.74%
149.04	Sulfur - HNO3 soluble, ICP (%)	3	3	1.548	0.0618	1.548		0.0618	0.0446	3.99%		0.0547	3.75%
151.30	Acid Soluble Arsenic , ICP (ppm)	4	4	2.850	0.6493	2.850		0.6493	0.4058	22.79%		0.1208	13.66%
151.32	Acid Soluble Arsenic , ICP, 2006.03 (ppm)	1		3.183									
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	5	5	4.969	3.687	4.969		3.687	2.061	74.20%		1.200	12.57%
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	1		2.560									
151.99	Acid Soluble Arsenic , Other (ppm)	3	3	2.533	0.2318	2.533		0.2318	0.1673	9.15%		0.2267	13.91%
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	11	10	0.2060	0.0210	0.2091	0.0344	0.0154	0.0061	7.34%	1.04	0.0070	5.06%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 ... (0.2	13	13	0.2225	0.0130	0.2225	0.0364	0.0146	0.0051	6.56%	0.93	0.0058	5.01%

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165.99	Acid Soluble Boron , Other (0.2%)	19	18	0.2237	0.0285	0.2202	0.0360	0.0214	0.0063	9.70%	1.38	0.0070	5.02%
171.10	Water Soluble Boron , Spectrophotometric (%)	3	3	0.2065	0.0176	0.2065		0.0176	0.0127	8.52%		0.0103	5.07%
171.99	Water Soluble Boron , Other (%)	5	5	0.2107	0.0118	0.2107		0.0118	0.0066	5.61%		0.0038	5.06%
181.00	Acid Soluble Cadmium , AA, test portion 2006.03 m...	1		0.0370									
181.30	Acid Soluble Cadmium , ICP (ppm)	9	9	0.7269	0.3477	0.7574		0.3201	0.1334	42.27%		0.0536	16.68%
181.32	Acid Soluble Cadmium , ICP, 2006.03 (ppm)	1		0.7830									
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	3	3	2.550	3.078	2.550		3.078	2.221	120.71%		0.7809	13.89%
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppn	1		2.878									
181.99	Acid Soluble Cadmium , Other (ppm)	2	2	0.9025	0.3500								
190.00	Water Soluble Chlorine, Titrimetric (%)	1		11.88									
191.00	Acid Soluble Chromium , AA, test portion 2006.03 ... (	1		55.48									
191.30	Acid Soluble Chromium , ICP (ppm)	7	6	26.36	13.49	29.23		8.026	4.096	27.46%		0.2833	9.63%
191.32	Acid Soluble Chromium , ICP, 2006.03 (ppm)	1		35.29									
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	4	4	37.10	4.376	37.10		4.376	2.735	11.79%		1.873	9.29%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppi	1		40.55									
191.99	Acid Soluble Chromium , Other (ppm)	2	2	37.22	1.729								
202.30	Acid Soluble Cobalt , ICP (ppm)	7	6	4.383	3.072	4.171	2.2512	2.978	1.520	71.41%	3.08	0.1830	12.90%
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	2	2	5.069	0.9178								
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	6	6	5.169	2.781	5.177	2.5530	2.078	1.061	40.15%	1.90	0.4545	12.49%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	1		8.676									
202.99	Acid Soluble Cobalt , Other (ppm)	3	3	3.830	0.7495	3.830	2.1490	0.7495	0.5409	19.57%	0.81	0.4183	13.07%
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	1		0.0037									
221.30	Acid Soluble Copper , ICP, test portion inorganic... (%)	3	3	0.0286	0.0405	0.0286	0.0079	0.0405	0.0292	141.71%	12.01	0.0367	6.83%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-... (%)	1		3.450									
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	4	4	0.0006	0.0008	0.0006	0.0051	0.0008	0.0005	125.39%	0.36	0.0002	12.14%
221.99	Acid Soluble Copper , Other (%)	4	4	0.0008	0.0009	0.0008	0.0051	0.0009	0.0006	114.26%	0.41	0.0004	11.75%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (%)	2	2	0.2375	0.0262								
241.30	Acid Soluble Iron , ICP, test portion inorganic 96... (%)	10	9	0.2384	0.0119	0.2381	0.0288	0.0128	0.0053	5.36%	1.03	0.0069	4.96%
241.32	Acid Soluble Iron , ICP, test portion 2006.03A-C (%)	2	2	0.2263	0.0053								
241.33	Acid Soluble Iron , ICP, 2017.02 (%)	4	4	0.2341	0.0408	0.2341	0.0284	0.0408	0.0255	17.41%	3.34	0.0133	4.98%
241.99	Acid Soluble Iron , Other (%)	4	4	0.1711	0.1138	0.1711	0.0221	0.1138	0.0711	66.51%	11.99	0.0104	5.22%
251.00	Acid Soluble Lead , AA, test portion 2006.03 modi... (f	1		4.444									
251.30	Acid Soluble Lead , ICP (ppm)	10	9	4.775	1.370	4.775		1.554	0.6475	32.54%		0.1994	12.64%
251.32	Acid Soluble Lead , ICP, 2006.03 (ppm)	1		5.779									
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	4	4	6.203	1.602	6.203		1.602	1.001	25.82%		1.185	12.15%
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	1		10.99									
251.99	Acid Soluble Lead , Other (ppm)	2	2	4.845	1.280								
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	1		0.0084									
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (c	4	4	0.0085	0.0010	0.0085	0.0059	0.0010	0.0006	11.63%	0.39	0.0002	8.19%
261.31	Acid Soluble Manganese , ICP, test portion 972.02b (c	1		0.0100									
261.32	Acid Soluble Manganese , ICP, test portion inorga... (c	2	2	0.0462	0.0549								
261.34	Acid Soluble Manganese , ICP, test portion 2006.0... (	2	2	0.0078	0.0003								

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261.35	Acid Soluble Manganese , ICP, 2017.02 (%)	4	4	0.0134	0.0134	0.0134	0.0063	0.0134	0.0084	99.90%	4.91	0.0049	7.66%
261.99	Acid Soluble Manganese , Other (%)	3	3	0.0079	0.0005	0.0079	0.0058	0.0005	0.0004	6.52%	0.21	0.0008	8.29%
281.30	Acid Soluble Mercury , ICP (ppm)	2	1	0.0499									
289.00	Acid Soluble Molybdenum , AA, test portion 2006.0...	1		11.35									
289.30	Acid Soluble Molybdenum , ICP (ppm)	7	6	3.111	0.6250	3.111	1.9333	0.7088	0.3617	22.78%	0.85	0.3328	13.48%
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (ppm)	1		2.668									
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	6	6	3.652	2.303	2.940	1.8821	0.7255	0.3702	24.67%	0.90	0.4144	13.60%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (I	1		7.210									
289.99	Acid Soluble Molybdenum , Other (ppm)	2	2	2.275	0.0354								
291.30	Acid Soluble Nickel , ICP (ppm)	9	9	11.67	4.364	11.54		4.666	1.944	40.44%		0.8646	11.07%
291.32	Acid Soluble Nickel , ICP, 2006.03 (ppm)	1		13.48									
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	4	4	14.89	3.027	14.89		3.027	1.892	20.33%		0.9489	10.65%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	1		16.70									
291.99	Acid Soluble Nickel , Other (ppm)	3	3	11.63	4.229	11.63		4.229	3.052	36.37%		1.492	11.06%
301.30	Acid Soluble Selenium , ICP (ppm)	2	2	0.6493	0.4289								
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	2	2	4.747	3.528								
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	1		5.995									
301.99	Acid Soluble Selenium , Other (ppm)	3	3	2.376	2.042	2.376		2.042	1.474	85.96%		0.5783	14.04%
311.32	Sodium, ICP, 2006.03 test portion (%)	1		0.4790									
311.33	Sodium, ICP, test portion as in 2017.02 (%)	4	4	0.4433	0.0218	0.4433	0.0493	0.0218	0.0136	4.91%	1.03	0.0127	4.52%
311.99	Sodium, Other (%)	3	3	0.4783	0.0104	0.4783	0.0528	0.0104	0.0075	2.18%	0.46	0.0033	4.47%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	7	7	0.1404	0.0067	0.1395	0.0189	0.0052	0.0025	3.75%	0.64	0.0084	5.38%
321.30	Acid Soluble Zinc , ICP, test portion inorganic 9... (0.1	22	21	0.1408	0.0141	0.1412	0.0191	0.0098	0.0027	6.98%	1.20	0.0037	5.37%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C ... (0.	3	3	0.1378	0.0161	0.1378	0.0188	0.0161	0.0116	11.72%	2.00	0.0020	5.39%
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	13	13	0.1428	0.0174	0.1408	0.0191	0.0148	0.0051	10.50%	1.80	0.0053	5.37%
321.99	Acid Soluble Zinc , Other (0.1%)	12	11	0.1324	0.0147	0.1334	0.0183	0.0140	0.0053	10.51%	1.78	0.0042	5.42%
325.00	Water Soluble Zinc , AA (%)	2	2	0.0815	0.0177								
325.30	Water Soluble Zinc , ICP (%)	1		0.1130									

The Method IA Ratio = 2.33 \* Robust SD / IA at the Method Assigned Value. IA ratios of 1 and less indicate participant data dispersion is as good or less than the IA. Red indicates the IA ratio is significantly greater than 1, Orange indicates marginally greater than 1, Green indicates IA ratio is not significantly greater than 1 and Grey indicates < 6 labs reporting.

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 181111

Grade 17-6-18

Method Precision Report

Issue Date : 12/31/2018

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility SR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
001.99	Ammoniacal Nitrogen, Other (%)	25	22	9.528	0.2222	0.2164	0.0715	0.2279	2.27%	0.75%	2.39%	3.189
002.99	Nitrate Nitrogen, Other (%)	17	15	7.749	0.3302	0.3271	0.0645	0.3334	4.22%	0.83%	4.30%	5.170
010.11	Total Nitrogen, Modified Comprehensive (17%)	8	8	17.29	0.8076	0.8031	0.1203	0.8121	4.64%	0.70%	4.70%	6.751
010.60	Total Nitrogen, Combustion (17%)	60	54	17.53	0.2722	0.2665	0.0785	0.2778	1.52%	0.45%	1.59%	3.538
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	20	18	6.899	0.2888	0.2848	0.0673	0.2927	4.13%	0.98%	4.24%	4.348
020.50	Total Phosphorus as P2O5, ICP (%)	28	26	6.919	0.4123	0.4077	0.0866	0.4168	5.89%	1.25%	6.02%	4.814
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-EDTA Ext. (6%)	9	8	6.801	0.1890	0.1845	0.0582	0.1935	2.71%	0.86%	2.84%	3.325
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (6%)	15	14	6.764	0.1688	0.1653	0.0482	0.1722	2.44%	0.71%	2.55%	3.574
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	11	10	18.11	0.1631	0.1602	0.0437	0.1660	0.88%	0.24%	0.92%	3.799
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	10	10	18.22	0.8405	0.7297	0.5900	0.9384	4.00%	3.24%	5.15%	1.591
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	11	10	17.66	0.6851	0.6110	0.4383	0.7520	3.46%	2.48%	4.26%	1.716
050.99	Soluble Potassium as K2O, Other (18%)	36	32	17.92	0.4373	0.4096	0.2167	0.4634	2.29%	1.21%	2.59%	2.138
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09 (%)	10	9	2.357	0.0869	0.0836	0.0333	0.0900	3.55%	1.41%	3.82%	2.701
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (1.2%)	21	19	1.602	0.0662	0.0607	0.0372	0.0712	3.79%	2.32%	4.44%	1.915
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	13	10	1.580	0.0940	0.0894	0.0413	0.0984	5.66%	2.62%	6.23%	2.382
121.99	Acid Soluble Magnesium, Other (1.2%)	10	9	1.574	0.1103	0.1081	0.0309	0.1125	6.87%	1.96%	7.14%	3.639
148.01	Total Sulfur, Gravimetric - sulfate and elemental (1.6%)	8	8	1.616	0.0964	0.0533	0.1136	0.1254	3.30%	7.03%	7.76%	1.105
148.07	Total Sulfur, ICP, test portion as in 2017.02 (1.6%)	17	15	1.598	0.0837	0.0795	0.0372	0.0878	4.97%	2.33%	5.49%	2.358
148.99	Total Sulfur, Other (1.6%)	11	11	1.568	0.1036	0.1014	0.0303	0.1058	6.47%	1.93%	6.75%	3.494
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	11	9	0.2117	0.0116	0.0105	0.0070	0.0127	4.98%	3.31%	5.98%	1.807
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (0.2%)	13	13	0.2225	0.0130	0.0124	0.0051	0.0134	5.59%	2.30%	6.05%	2.630
165.99	Acid Soluble Boron , Other (0.2%)	19	17	0.2183	0.0176	0.0173	0.0045	0.0179	7.92%	2.06%	8.18%	3.979
181.30	Acid Soluble Cadmium , ICP (ppm)	9	9	0.7269	0.3477	0.3461	0.0471	0.3493	47.62%	6.48%	48.06%	7.419
241.30	Acid Soluble Iron , ICP, test portion inorganic 965.09 (%)	10	8	0.2363	0.0108	0.0107	0.0023	0.0109	4.52%	0.98%	4.62%	4.712
251.30	Acid Soluble Lead , ICP (ppm)	10	8	4.751	1.463	1.460	0.1197	1.465	30.74%	2.52%	30.84%	12.24
291.30	Acid Soluble Nickel , ICP (ppm)	9	9	11.67	4.364	4.322	0.8492	4.405	37.05%	7.28%	37.76%	5.187
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (0.1%)	22	19	0.1411	0.0079	0.0074	0.0036	0.0083	5.27%	2.58%	5.87%	2.273
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	13	11	0.1401	0.0125	0.0121	0.0046	0.0129	8.63%	3.26%	9.22%	2.833
321.99	Acid Soluble Zinc , Other (0.1%)	12	10	0.1326	0.0155	0.0153	0.0036	0.0157	11.51%	2.69%	11.82%	4.391

Notes: Precision data calculated when 8 or more Tests included.

sR/sr	Reproducibility %RSD	Within Labs %rstd	Between Labs %RSD	Reproducibility sR	Within Labs sr	Between Labs sL	SD	Mean	# Tests Used in Precision Calcs	# Tests Submitted	Analyte & Method	Method Code
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# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

# Methods: 143

Sample # 181111

Lab Values

# Labs Reporting: 94

Grade 17-6-18

Issue Date : 12/31/2018

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0000	0.1000	0.0000	8.823	1.182	0.1077	9	-6.81	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0169	7.370	0.0600	8.823	1.182	0.1077	9	-1.13	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0230	8.150	0.1000	8.823	1.182	0.1077	9	-0.53	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0117	9.000	0.4000	8.823	1.182	0.1077	9	0.14	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0177	9.304	0.0391	8.823	1.182	0.1077	9	0.38	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0486	9.375	0.0500	8.823	1.182	0.1077	9	0.43	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	9.690	0.2400	8.823	1.182	0.1077	9	0.68	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0536	9.695	0.0300	8.823	1.182	0.1077	9	0.68	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0531	9.775	0.0500	8.823	1.182	0.1077	9	0.74	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	9.002	0.2430	9.522	0.2129	0.1013	24	-2.44	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0513	9.085	0.0500	9.522	0.2129	0.1013	24	-2.05	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0546	9.210	0.4000	9.522	0.2129	0.1013	24	-1.46	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	9.265	0.2300	9.522	0.2129	0.1013	24	-1.20	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0476	9.369	0.0351	9.522	0.2129	0.1013	24	-0.72	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	9.372	0.0328	9.522	0.2129	0.1013	24	-0.70	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0549	9.440	0.0800	9.522	0.2129	0.1013	24	-0.38	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0371	9.465	0.0100	9.522	0.2129	0.1013	24	-0.27	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0527	9.480	0.4000	9.522	0.2129	0.1013	24	-0.19	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0481	9.500	0.1400	9.522	0.2129	0.1013	24	-0.10	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0220	9.510	0.1600	9.522	0.2129	0.1013	24	-0.05	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0405	9.515	0.0300	9.522	0.2129	0.1013	24	-0.03	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0522	9.520	0.0200	9.522	0.2129	0.1013	24	-0.01	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0540	9.530	0.0600	9.522	0.2129	0.1013	24	0.04	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	9.565	0.0100	9.522	0.2129	0.1013	24	0.20	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0544	9.590	0.0200	9.522	0.2129	0.1013	24	0.32	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0300	9.599	0.0420	9.522	0.2129	0.1013	24	0.36	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0537	9.655	0.1300	9.522	0.2129	0.1013	24	0.63	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0553	9.661	0.0780	9.522	0.2129	0.1013	24	0.66	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0536	9.690	0.0400	9.522	0.2129	0.1013	24	0.79	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0531	9.720	0.0400	9.522	0.2129	0.1013	24	0.93	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0550	9.775	0.0100	9.522	0.2129	0.1013	24	1.19	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0532	9.855	0.1500	9.522	0.2129	0.1013	24	1.57	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0524	9.924	0.0195	9.522	0.2129	0.1013	24	1.89	NA	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.99	Ammoniacal Nitrogen, Other (%)	0000	1.500	1.000	9.522	0.2129	0.1013	24	-37.68	NA	2
002.10	Nitrate Nitrogen, Robertson (%)	0000	0.6000	0.8000				1			0
002.20	Nitrate Nitrogen, Jones Modified (%)	0000	1.050	1.900				2			0
002.20	Nitrate Nitrogen, Jones Modified (%)	0230	9.790	0.1200				2			0
002.99	Nitrate Nitrogen, Other (%)	0536	7.285	0.0500	7.747	0.3585	0.0832	16	-1.29	NA	0
002.99	Nitrate Nitrogen, Other (%)	0531	7.375	0.0500	7.747	0.3585	0.0832	16	-1.04	NA	0
002.99	Nitrate Nitrogen, Other (%)	0549	7.395	0.0100	7.747	0.3585	0.0832	16	-0.98	NA	0
002.99	Nitrate Nitrogen, Other (%)	0476	7.426	0.0575	7.747	0.3585	0.0832	16	-0.90	NA	0
002.99	Nitrate Nitrogen, Other (%)	0532	7.485	0.1500	7.747	0.3585	0.0832	16	-0.73	NA	0
002.99	Nitrate Nitrogen, Other (%)	0553	7.566	0.1010	7.747	0.3585	0.0832	16	-0.51	NA	0
002.99	Nitrate Nitrogen, Other (%)	0550	7.695	0.0900	7.747	0.3585	0.0832	16	-0.15	NA	0
002.99	Nitrate Nitrogen, Other (%)	0540	7.740	0.2800	7.747	0.3585	0.0832	16	-0.02	NA	0
002.99	Nitrate Nitrogen, Other (%)	0394	7.745	0.1820	7.747	0.3585	0.0832	16	-0.01	NA	0
002.99	Nitrate Nitrogen, Other (%)	0029	7.760	0.1800	7.747	0.3585	0.0832	16	0.04	NA	0
002.99	Nitrate Nitrogen, Other (%)	0486	7.765	0.0100	7.747	0.3585	0.0832	16	0.05	NA	0
002.99	Nitrate Nitrogen, Other (%)	0027	8.079	0.0010	7.747	0.3585	0.0832	16	0.92	NA	0
002.99	Nitrate Nitrogen, Other (%)	0371	8.085	0.0300	7.747	0.3585	0.0832	16	0.94	NA	0
002.99	Nitrate Nitrogen, Other (%)	0513	8.115	0.0100	7.747	0.3585	0.0832	16	1.03	NA	0
002.99	Nitrate Nitrogen, Other (%)	0527	8.155	0.0500	7.747	0.3585	0.0832	16	1.14	NA	0
002.99	Nitrate Nitrogen, Other (%)	0231	8.310	0.0800	7.747	0.3585	0.0832	16	1.57	NA	0
002.99	Nitrate Nitrogen, Other (%)	0481	7.375	0.4700	7.747	0.3585	0.0832	16	-1.04	NA	1
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0537	16.96	0.0700	17.28	0.2164	0.1761	4	-1.49		0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0444	17.35	0.4500	17.28	0.2164	0.1761	4	0.31		0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0169	17.40	0.0400	17.28	0.2164	0.1761	4	0.57		0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0397	17.41	0.1443	17.28	0.2164	0.1761	4	0.60		0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0513	17.19	0.0100				1			0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0510	15.63	0.2753	17.37	0.5993	0.1382	8	-2.66	Low	0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0309	16.93	0.0600	17.37	0.5993	0.1382	8	-0.68	OK	0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0531	17.18	0.0500	17.37	0.5993	0.1382	8	-0.30	OK	0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0540	17.40	0.0900	17.37	0.5993	0.1382	8	0.03	OK	0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0522	17.52	0.3000	17.37	0.5993	0.1382	8	0.22	OK	0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0105	17.59	0.1700	17.37	0.5993	0.1382	8	0.32	OK	0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0220	17.64	0.0100	17.37	0.5993	0.1382	8	0.40	OK	0
010.11	Total Nitrogen, Modified Comprehensive (17%)	0546	18.48	0.1500	17.37	0.5993	0.1382	8	1.68	High	0
010.12	Total Nitrogen, Salicylic (17%)	0534	17.15	0.1000	17.22	0.0669	0.0635	3	-1.12		0
010.12	Total Nitrogen, Salicylic (17%)	0416	17.25	0.0100	17.22	0.0669	0.0635	3	0.30		0
010.12	Total Nitrogen, Salicylic (17%)	0397	17.28	0.0804	17.22	0.0669	0.0635	3	0.81		0
010.60	Total Nitrogen, Combustion (17%)	0230	16.35	0.1000	17.52	0.2924	0.0959	58	-4.01	Low	0
010.60	Total Nitrogen, Combustion (17%)	0356	16.39	0.0800	17.52	0.2924	0.0959	58	-3.87	Low	0
010.60	Total Nitrogen, Combustion (17%)	0117	16.80	0.0000	17.52	0.2924	0.0959	58	-2.47	Low	0
010.60	Total Nitrogen, Combustion (17%)	0542	17.02	0.0600	17.52	0.2924	0.0959	58	-1.70	OK	0
010.60	Total Nitrogen, Combustion (17%)	0501	17.08	0.0500	17.52	0.2924	0.0959	58	-1.53	OK	0
010.60	Total Nitrogen, Combustion (17%)	0523	17.10	0.0000	17.52	0.2924	0.0959	58	-1.44	OK	0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (17%)	0483	17.13	0.1000	17.52	0.2924	0.0959	58	-1.34	OK	0
010.60	Total Nitrogen, Combustion (17%)	0307	17.20	0.1900	17.52	0.2924	0.0959	58	-1.12	OK	0
010.60	Total Nitrogen, Combustion (17%)	0423	17.24	0.0400	17.52	0.2924	0.0959	58	-0.96	OK	0
010.60	Total Nitrogen, Combustion (17%)	0234	17.25	0.1000	17.52	0.2924	0.0959	58	-0.93	OK	0
010.60	Total Nitrogen, Combustion (17%)	0185	17.30	0.0900	17.52	0.2924	0.0959	58	-0.78	OK	0
010.60	Total Nitrogen, Combustion (17%)	0472	17.30	0.0500	17.52	0.2924	0.0959	58	-0.78	OK	0
010.60	Total Nitrogen, Combustion (17%)	0451	17.31	0.1300	17.52	0.2924	0.0959	58	-0.74	OK	0
010.60	Total Nitrogen, Combustion (17%)	0035	17.31	0.2400	17.52	0.2924	0.0959	58	-0.73	OK	0
010.60	Total Nitrogen, Combustion (17%)	0525	17.35	0.0210	17.52	0.2924	0.0959	58	-0.60	OK	0
010.60	Total Nitrogen, Combustion (17%)	0325	17.35	0.3000	17.52	0.2924	0.0959	58	-0.59	OK	0
010.60	Total Nitrogen, Combustion (17%)	0095	17.36	0.1500	17.52	0.2924	0.0959	58	-0.57	OK	0
010.60	Total Nitrogen, Combustion (17%)	0086	17.37	0.1190	17.52	0.2924	0.0959	58	-0.51	OK	0
010.60	Total Nitrogen, Combustion (17%)	0072	17.39	0.0100	17.52	0.2924	0.0959	58	-0.47	OK	0
010.60	Total Nitrogen, Combustion (17%)	0042	17.41	0.0100	17.52	0.2924	0.0959	58	-0.40	OK	0
010.60	Total Nitrogen, Combustion (17%)	0073	17.41	0.0400	17.52	0.2924	0.0959	58	-0.38	OK	0
010.60	Total Nitrogen, Combustion (17%)	0547	17.42	0.0100	17.52	0.2924	0.0959	58	-0.37	OK	0
010.60	Total Nitrogen, Combustion (17%)	0114	17.45	0.0800	17.52	0.2924	0.0959	58	-0.25	OK	0
010.60	Total Nitrogen, Combustion (17%)	0324	17.45	0.1000	17.52	0.2924	0.0959	58	-0.25	OK	0
010.60	Total Nitrogen, Combustion (17%)	0482	17.45	0.1000	17.52	0.2924	0.0959	58	-0.25	OK	0
010.60	Total Nitrogen, Combustion (17%)	0096	17.47	0.1100	17.52	0.2924	0.0959	58	-0.20	OK	0
010.60	Total Nitrogen, Combustion (17%)	0177	17.47	0.0900	17.52	0.2924	0.0959	58	-0.20	OK	0
010.60	Total Nitrogen, Combustion (17%)	0389	17.49	0.0800	17.52	0.2924	0.0959	58	-0.11	OK	0
010.60	Total Nitrogen, Combustion (17%)	0292	17.51	0.0100	17.52	0.2924	0.0959	58	-0.06	OK	0
010.60	Total Nitrogen, Combustion (17%)	0360	17.52	0.0200	17.52	0.2924	0.0959	58	-0.01	OK	0
010.60	Total Nitrogen, Combustion (17%)	0231	17.53	0.0600	17.52	0.2924	0.0959	58	0.03	OK	0
010.60	Total Nitrogen, Combustion (17%)	0421	17.55	0.1000	17.52	0.2924	0.0959	58	0.10	OK	0
010.60	Total Nitrogen, Combustion (17%)	0029	17.57	0.0300	17.52	0.2924	0.0959	58	0.15	OK	0
010.60	Total Nitrogen, Combustion (17%)	0486	17.57	0.1000	17.52	0.2924	0.0959	58	0.16	OK	0
010.60	Total Nitrogen, Combustion (17%)	0402	17.63	0.0300	17.52	0.2924	0.0959	58	0.35	OK	0
010.60	Total Nitrogen, Combustion (17%)	0043	17.65	0.0300	17.52	0.2924	0.0959	58	0.42	OK	0
010.60	Total Nitrogen, Combustion (17%)	0377	17.67	0.0300	17.52	0.2924	0.0959	58	0.49	OK	0
010.60	Total Nitrogen, Combustion (17%)	0105	17.69	0.1500	17.52	0.2924	0.0959	58	0.56	OK	0
010.60	Total Nitrogen, Combustion (17%)	0444	17.69	0.0300	17.52	0.2924	0.0959	58	0.56	OK	0
010.60	Total Nitrogen, Combustion (17%)	0027	17.69	0.0260	17.52	0.2924	0.0959	58	0.56	OK	0
010.60	Total Nitrogen, Combustion (17%)	0405	17.70	0.0300	17.52	0.2924	0.0959	58	0.59	OK	0
010.60	Total Nitrogen, Combustion (17%)	0527	17.70	0.4900	17.52	0.2924	0.0959	58	0.62	OK	0
010.60	Total Nitrogen, Combustion (17%)	0037	17.72	0.0440	17.52	0.2924	0.0959	58	0.66	OK	0
010.60	Total Nitrogen, Combustion (17%)	0055	17.73	0.1200	17.52	0.2924	0.0959	58	0.71	OK	0
010.60	Total Nitrogen, Combustion (17%)	0136	17.74	0.0000	17.52	0.2924	0.0959	58	0.74	OK	0
010.60	Total Nitrogen, Combustion (17%)	0452	17.74	0.0200	17.52	0.2924	0.0959	58	0.74	OK	0
010.60	Total Nitrogen, Combustion (17%)	0040	17.75	0.1000	17.52	0.2924	0.0959	58	0.78	OK	0
010.60	Total Nitrogen, Combustion (17%)	0007	17.80	0.2000	17.52	0.2924	0.0959	58	0.95	OK	0
010.60	Total Nitrogen, Combustion (17%)	0354	17.80	0.0000	17.52	0.2924	0.0959	58	0.95	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (17%)	0041	17.81	0.1700	17.52	0.2924	0.0959	58	0.97	OK	0
010.60	Total Nitrogen, Combustion (17%)	0049	17.81	0.0500	17.52	0.2924	0.0959	58	0.97	OK	0
010.60	Total Nitrogen, Combustion (17%)	0494	17.83	0.2500	17.52	0.2924	0.0959	58	1.04	OK	0
010.60	Total Nitrogen, Combustion (17%)	0550	17.87	0.0000	17.52	0.2924	0.0959	58	1.19	OK	0
010.60	Total Nitrogen, Combustion (17%)	0025	17.89	0.1700	17.52	0.2924	0.0959	58	1.24	OK	0
010.60	Total Nitrogen, Combustion (17%)	0131	18.01	0.0170	17.52	0.2924	0.0959	58	1.67	OK	0
010.60	Total Nitrogen, Combustion (17%)	0291	18.03	0.0100	17.52	0.2924	0.0959	58	1.72	OK	0
010.60	Total Nitrogen, Combustion (17%)	0443	18.11	0.5200	17.52	0.2924	0.0959	58	2.01	OK	0
010.60	Total Nitrogen, Combustion (17%)	0543	18.19	0.3040	17.52	0.2924	0.0959	58	2.27	OK	0
010.60	Total Nitrogen, Combustion (17%)	0255	16.48	0.9980	17.52	0.2924	0.0959	58	-3.56	Low	1
010.60	Total Nitrogen, Combustion (17%)	0422	2.760	0.1000	17.52	0.2924	0.0959	58	-50.48	Low	2
010.99	Total Nitrogen, Other (17%)	0544	16.77	0.0300	17.19	0.4517	0.0456	7	-0.84	OK	0
010.99	Total Nitrogen, Other (17%)	0476	16.82	0.0115	17.19	0.4517	0.0456	7	-0.73	OK	0
010.99	Total Nitrogen, Other (17%)	0537	16.99	0.0800	17.19	0.4517	0.0456	7	-0.39	OK	0
010.99	Total Nitrogen, Other (17%)	0481	17.04	0.0100	17.19	0.4517	0.0456	7	-0.30	OK	0
010.99	Total Nitrogen, Other (17%)	0493	17.25	0.1000	17.19	0.4517	0.0456	7	0.13	OK	0
010.99	Total Nitrogen, Other (17%)	0524	17.70	0.0178	17.19	0.4517	0.0456	7	1.03	OK	0
010.99	Total Nitrogen, Other (17%)	0300	17.75	0.0700	17.19	0.4517	0.0456	7	1.12	OK	0
010.99	Total Nitrogen, Other (17%)	0394	16.75	0.4250	17.19	0.4517	0.0456	7	-0.88	OK	1
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0114	6.795	0.3900	6.850	0.0527	0.1733	3	-1.04		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0105	6.855	0.0300	6.850	0.0527	0.1733	3	0.09		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0493	6.900	0.1000	6.850	0.0527	0.1733	3	0.95		0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0416	6.385	0.0300	6.842	0.2118	0.0852	19	-2.16	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0027	6.440	0.4000	6.842	0.2118	0.0852	19	-1.90	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0553	6.682	0.0750	6.842	0.2118	0.0852	19	-0.76	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	6.703	0.2597	6.842	0.2118	0.0852	19	-0.66	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0493	6.720	0.0200	6.842	0.2118	0.0852	19	-0.58	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0476	6.737	0.0719	6.842	0.2118	0.0852	19	-0.50	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	6.770	0.0600	6.842	0.2118	0.0852	19	-0.34	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0513	6.770	0.0200	6.842	0.2118	0.0852	19	-0.34	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0394	6.799	0.1030	6.842	0.2118	0.0852	19	-0.21	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0300	6.805	0.0300	6.842	0.2118	0.0852	19	-0.18	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	6.850	0.1400	6.842	0.2118	0.0852	19	0.04	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	6.905	0.1100	6.842	0.2118	0.0852	19	0.30	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0169	6.915	0.0300	6.842	0.2118	0.0852	19	0.34	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	6.935	0.0100	6.842	0.2118	0.0852	19	0.44	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	6.935	0.0100	6.842	0.2118	0.0852	19	0.44	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0371	6.950	0.0200	6.842	0.2118	0.0852	19	0.51	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	7.215	0.0500	6.842	0.2118	0.0852	19	1.76	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0550	7.520	0.0000	6.842	0.2118	0.0852	19	3.20	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0522	7.580	0.1800	6.842	0.2118	0.0852	19	3.48	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	6.995	0.5700	6.842	0.2118	0.0852	19	0.72	NA	1
020.40	Total Phosphorus as P2O5, Automated (%)	0035	6.790	0.0600	6.948	0.1468	0.0500	3	-1.08		0

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020.40	Total Phosphorus as P2O5, Automated (%)	0096	6.975	0.0500	6.948	0.1468	0.0500	3	0.18		0
020.40	Total Phosphorus as P2O5, Automated (%)	0105	7.080	0.0400	6.948	0.1468	0.0500	3	0.90		0
020.50	Total Phosphorus as P2O5, ICP (%)	0501	6.190	0.0000	6.910	0.4380	0.1225	28	-1.64	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0255	6.214	0.1140	6.910	0.4380	0.1225	28	-1.59	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0291	6.335	0.0100	6.910	0.4380	0.1225	28	-1.31	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0552	6.410	0.1400	6.910	0.4380	0.1225	28	-1.14	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	6.425	0.0700	6.910	0.4380	0.1225	28	-1.11	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	6.455	0.5100	6.910	0.4380	0.1225	28	-1.04	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0543	6.456	0.0160	6.910	0.4380	0.1225	28	-1.04	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0527	6.738	0.0093	6.910	0.4380	0.1225	28	-0.39	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0300	6.769	0.0090	6.910	0.4380	0.1225	28	-0.32	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	6.770	0.1600	6.910	0.4380	0.1225	28	-0.32	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0516	6.839	0.1480	6.910	0.4380	0.1225	28	-0.16	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	6.855	0.1700	6.910	0.4380	0.1225	28	-0.13	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	6.885	0.0900	6.910	0.4380	0.1225	28	-0.06	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0307	6.895	0.3300	6.910	0.4380	0.1225	28	-0.03	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	6.950	0.1000	6.910	0.4380	0.1225	28	0.09	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0546	6.975	0.0060	6.910	0.4380	0.1225	28	0.15	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0547	6.985	0.1300	6.910	0.4380	0.1225	28	0.17	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0423	7.065	0.0300	6.910	0.4380	0.1225	28	0.35	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0421	7.150	0.1000	6.910	0.4380	0.1225	28	0.55	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0433	7.150	0.0400	6.910	0.4380	0.1225	28	0.55	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0523	7.200	0.0000	6.910	0.4380	0.1225	28	0.66	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	7.240	0.1000	6.910	0.4380	0.1225	28	0.75	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0524	7.299	0.4536	6.910	0.4380	0.1225	28	0.89	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0542	7.350	0.1000	6.910	0.4380	0.1225	28	1.00	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0390	7.365	0.2100	6.910	0.4380	0.1225	28	1.04	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0402	7.365	0.1700	6.910	0.4380	0.1225	28	1.04	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0525	7.479	0.1450	6.910	0.4380	0.1225	28	1.30	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	7.845	0.0700	6.910	0.4380	0.1225	28	2.14	NA	0
020.99	Total Phosphorus as P2O5, Other (%)	0443	5.775	0.0700	6.419	0.5638	0.1894	3	-1.14		0
020.99	Total Phosphorus as P2O5, Other (%)	0515	6.656	0.4881	6.419	0.5638	0.1894	3	0.42		0
020.99	Total Phosphorus as P2O5, Other (%)	0513	6.825	0.0100	6.419	0.5638	0.1894	3	0.72		0
030.20	Citrate Insoluble Phosphorus as P2O5, Spectro... (%)	0405	0.3450	0.0100				1			0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.3850	0.0500				1			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (6%)	0300	6.340	0.1000				2			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (6%)	0405	6.565	0.1100				2			0
040.40	Indirect Available Phosphorus as P2O5, Automa... (6%)	0096	6.590	0.0000				1			0
040.99	Indirect Available Phosphorus as P2O5, Other (6%)	0394	6.246	0.1030				1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0177	6.429	0.0442	6.657	0.2742	0.0935	6	-0.74	OK	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0086	6.476	0.1269	6.657	0.2742	0.0935	6	-0.59	OK	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0049	6.530	0.0400	6.657	0.2742	0.0935	6	-0.41	OK	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0494	6.585	0.2900	6.657	0.2742	0.0935	6	-0.23	OK	0

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041.10	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0055	6.925	0.0300	6.657	0.2742	0.0935	6	0.87	OK	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0041	6.995	0.0300	6.657	0.2742	0.0935	6	1.10	OK	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0513	6.690	0.0200	6.815	0.1287	0.0850	4	-0.97		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0185	6.740	0.0200	6.815	0.1287	0.0850	4	-0.58		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0105	6.850	0.2600	6.815	0.1287	0.0850	4	0.27		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (6%)	0220	6.980	0.0400	6.815	0.1287	0.0850	4	1.28		0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (6%)	0106	6.615	0.0900				2			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (6%)	0522	7.260	0.1400				2			0
041.50	Direct Available Phosphorus as P2O5, ICP (6%)	0325	6.000	0.2000	6.385	0.3570	0.1700	3	-1.08		0
041.50	Direct Available Phosphorus as P2O5, ICP (6%)	0007	6.450	0.3000	6.385	0.3570	0.1700	3	0.18		0
041.50	Direct Available Phosphorus as P2O5, ICP (6%)	0452	6.705	0.0100	6.385	0.3570	0.1700	3	0.90		0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0423	6.445	0.0700	6.811	0.1915	0.0751	8	-1.75	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0037	6.704	0.0910	6.811	0.1915	0.0751	8	-0.51	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0040	6.750	0.1000	6.811	0.1915	0.0751	8	-0.29	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0377	6.780	0.0400	6.811	0.1915	0.0751	8	-0.15	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0043	6.815	0.1100	6.811	0.1915	0.0751	8	0.02	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0360	6.870	0.0200	6.811	0.1915	0.0751	8	0.28	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0025	6.960	0.1200	6.811	0.1915	0.0751	8	0.71	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0072	7.085	0.0500	6.811	0.1915	0.0751	8	1.31	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (6%)	0494	6.765	0.5100	6.811	0.1915	0.0751	8	-0.22	OK	1
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0230	5.500	0.1600	6.741	0.2090	0.0621	15	-5.94	Low	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0095	6.475	0.0900	6.741	0.2090	0.0621	15	-1.27	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0231	6.545	0.0300	6.741	0.2090	0.0621	15	-0.94	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0397	6.567	0.0868	6.741	0.2090	0.0621	15	-0.84	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0472	6.570	0.1200	6.741	0.2090	0.0621	15	-0.82	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0177	6.722	0.0436	6.741	0.2090	0.0621	15	-0.09	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0394	6.750	0.0030	6.741	0.2090	0.0621	15	0.04	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0486	6.755	0.0100	6.741	0.2090	0.0621	15	0.06	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0105	6.835	0.0700	6.741	0.2090	0.0621	15	0.45	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0055	6.855	0.0100	6.741	0.2090	0.0621	15	0.54	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0043	6.865	0.1100	6.741	0.2090	0.0621	15	0.59	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0029	6.875	0.0100	6.741	0.2090	0.0621	15	0.64	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0073	6.910	0.0800	6.741	0.2090	0.0621	15	0.81	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0354	6.935	0.0900	6.741	0.2090	0.0621	15	0.93	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (6%)	0072	7.036	0.0184	6.741	0.2090	0.0621	15	1.41	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (6%)	0549	5.950	0.1000	6.103	0.1208	0.0686	7	-1.14	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (6%)	0536	6.010	0.0800	6.103	0.1208	0.0686	7	-0.69	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (6%)	0537	6.085	0.0700	6.103	0.1208	0.0686	7	-0.13	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (6%)	0540	6.110	0.0200	6.103	0.1208	0.0686	7	0.05	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (6%)	0532	6.130	0.1000	6.103	0.1208	0.0686	7	0.20	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (6%)	0531	6.150	0.1000	6.103	0.1208	0.0686	7	0.35	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (6%)	0405	6.505	0.0100	6.103	0.1208	0.0686	7	3.01	OK	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0394	3.512	0.1310				1			0

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048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	3.985	0.0500				1			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0546	3.889	0.0250				1			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0513	3.565	0.0100				1			0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0416	17.89	0.0000	18.11	0.1850	0.0440	10	-1.11	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0231	17.92	0.0000	18.11	0.1850	0.0440	10	-0.96	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0544	17.98	0.0100	18.11	0.1850	0.0440	10	-0.68	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0522	18.04	0.0800	18.11	0.1850	0.0440	10	-0.36	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0049	18.05	0.1400	18.11	0.1850	0.0440	10	-0.31	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0220	18.11	0.0100	18.11	0.1850	0.0440	10	-0.03	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0055	18.22	0.0200	18.11	0.1850	0.0440	10	0.55	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0550	18.26	0.0800	18.11	0.1850	0.0440	10	0.75	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0114	18.30	0.0400	18.11	0.1850	0.0440	10	0.95	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0405	18.35	0.0600	18.11	0.1850	0.0440	10	1.20	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (18%)	0494	17.96	0.8000	18.11	0.1850	0.0440	10	-0.76	OK	1
050.30	Soluble Potassium as K2O, AA (Oxalate) (18%)	0309	16.76	0.4000	17.81	0.7132	0.4875	4	-1.47		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (18%)	0356	17.99	0.8000	17.81	0.7132	0.4875	4	0.25		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (18%)	0040	18.15	0.5000	17.81	0.7132	0.4875	4	0.48		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (18%)	0073	18.34	0.2500	17.81	0.7132	0.4875	4	0.74		0
050.31	Soluble Potassium as K2O, AA (Citrate) (18%)	0472	17.72	0.0400				1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0390	17.10	1.870	18.15	0.7744	0.6105	10	-1.26	Low	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0292	17.23	0.6000	18.15	0.7744	0.6105	10	-1.10	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0106	17.91	0.1800	18.15	0.7744	0.6105	10	-0.28	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0055	17.93	0.1900	18.15	0.7744	0.6105	10	-0.27	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0086	18.01	0.4777	18.15	0.7744	0.6105	10	-0.16	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0444	18.04	0.3200	18.15	0.7744	0.6105	10	-0.13	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0324	18.60	1.400	18.15	0.7744	0.6105	10	0.54	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0397	18.65	0.2370	18.15	0.7744	0.6105	10	0.60	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0230	18.70	0.0000	18.15	0.7744	0.6105	10	0.66	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (18%)	0422	20.04	0.8300	18.15	0.7744	0.6105	10	2.27	High	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (18%)	0007	17.55	0.7000	18.15	0.5391	0.3420	5	-1.11		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (18%)	0483	17.65	0.6000	18.15	0.5391	0.3420	5	-0.93		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (18%)	0291	18.22	0.0100	18.15	0.5391	0.3420	5	0.12		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (18%)	0547	18.57	0.4000	18.15	0.5391	0.3420	5	0.78		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (18%)	0452	18.76	0.0000	18.15	0.5391	0.3420	5	1.13		0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0543	14.65	1.052	17.52	0.8927	0.4593	11	-3.01	Low	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0072	16.20	0.7800	17.52	0.8927	0.4593	11	-1.39	Low	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0423	17.20	0.0600	17.52	0.8927	0.4593	11	-0.34	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0037	17.23	0.1600	17.52	0.8927	0.4593	11	-0.31	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0025	17.25	1.500	17.52	0.8927	0.4593	11	-0.29	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0043	17.87	0.5200	17.52	0.8927	0.4593	11	0.36	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0377	17.94	0.0100	17.52	0.8927	0.4593	11	0.43	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0354	18.05	0.1000	17.52	0.8927	0.4593	11	0.55	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0494	18.13	0.0400	17.52	0.8927	0.4593	11	0.64	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0360	18.14	0.0100	17.52	0.8927	0.4593	11	0.64	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (18%)	0486	18.56	0.8200	17.52	0.8927	0.4593	11	1.09	High	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (18%)	0510	17.00	0.0212	17.67	0.4047	0.1862	5	-1.67		0
050.60	Soluble Potassium as K2O, Flame Photometric (... (18%)	0443	17.65	0.2400	17.67	0.4047	0.1862	5	-0.06		0
050.60	Soluble Potassium as K2O, Flame Photometric (... (18%)	0105	17.77	0.2700	17.67	0.4047	0.1862	5	0.23		0
050.60	Soluble Potassium as K2O, Flame Photometric (... (18%)	0041	17.92	0.3000	17.67	0.4047	0.1862	5	0.61		0
050.60	Soluble Potassium as K2O, Flame Photometric (... (18%)	0169	18.03	0.1000	17.67	0.4047	0.1862	5	0.88		0
050.61	Soluble Potassium as K2O, Flame Photometric (... (18%)	0035	18.10	0.2100				2			0
050.61	Soluble Potassium as K2O, Flame Photometric (... (18%)	0535	18.35	0.1000				2			0
050.62	Soluble Potassium as K2O, Flame Photometric (... (18%)	0029	17.54	0.0100	17.81	0.2335	0.2050	4	-1.17		0
050.62	Soluble Potassium as K2O, Flame Photometric (... (18%)	0095	17.76	0.5900	17.81	0.2335	0.2050	4	-0.22		0
050.62	Soluble Potassium as K2O, Flame Photometric (... (18%)	0105	17.84	0.1400	17.81	0.2335	0.2050	4	0.14		0
050.62	Soluble Potassium as K2O, Flame Photometric (... (18%)	0513	18.10	0.0800	17.81	0.2335	0.2050	4	1.25		0
050.99	Soluble Potassium as K2O, Other (18%)	0255	13.98	0.5290	17.95	0.4511	0.2810	36	-8.81	Low	0
050.99	Soluble Potassium as K2O, Other (18%)	0552	16.07	0.9500	17.95	0.4511	0.2810	36	-4.18	Low	0
050.99	Soluble Potassium as K2O, Other (18%)	0451	16.41	0.8100	17.95	0.4511	0.2810	36	-3.43	Low	0
050.99	Soluble Potassium as K2O, Other (18%)	0481	17.14	0.1300	17.95	0.4511	0.2810	36	-1.81	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0553	17.23	0.3600	17.95	0.4511	0.2810	36	-1.60	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0027	17.51	0.0660	17.95	0.4511	0.2810	36	-0.99	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0421	17.55	0.1000	17.95	0.4511	0.2810	36	-0.89	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0524	17.66	0.5896	17.95	0.4511	0.2810	36	-0.64	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0527	17.70	0.1110	17.95	0.4511	0.2810	36	-0.57	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0516	17.73	0.2640	17.95	0.4511	0.2810	36	-0.48	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0096	17.76	0.0700	17.95	0.4511	0.2810	36	-0.44	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0394	17.77	0.4240	17.95	0.4511	0.2810	36	-0.41	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0402	17.79	0.0900	17.95	0.4511	0.2810	36	-0.37	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0325	17.85	0.3000	17.95	0.4511	0.2810	36	-0.23	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0546	17.89	0.1370	17.95	0.4511	0.2810	36	-0.13	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0493	17.95	0.1000	17.95	0.4511	0.2810	36	0.00	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0482	17.95	0.3000	17.95	0.4511	0.2810	36	0.00	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0177	18.00	0.0057	17.95	0.4511	0.2810	36	0.11	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0476	18.04	0.0406	17.95	0.4511	0.2810	36	0.20	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0523	18.05	0.1000	17.95	0.4511	0.2810	36	0.22	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0535	18.05	0.1000	17.95	0.4511	0.2810	36	0.22	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0549	18.05	0.1000	17.95	0.4511	0.2810	36	0.22	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0433	18.07	0.0900	17.95	0.4511	0.2810	36	0.25	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0444	18.07	0.0400	17.95	0.4511	0.2810	36	0.26	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0234	18.15	0.3000	17.95	0.4511	0.2810	36	0.44	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0536	18.15	0.0800	17.95	0.4511	0.2810	36	0.44	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0540	18.15	0.3000	17.95	0.4511	0.2810	36	0.44	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0532	18.23	0.1100	17.95	0.4511	0.2810	36	0.61	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0531	18.25	0.1000	17.95	0.4511	0.2810	36	0.66	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0501	18.29	0.4200	17.95	0.4511	0.2810	36	0.75	OK	0

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050.99	Soluble Potassium as K2O, Other (18%)	0537	18.45	0.6300	17.95	0.4511	0.2810	36	1.09	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0389	18.47	0.4700	17.95	0.4511	0.2810	36	1.14	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0371	18.48	0.4900	17.95	0.4511	0.2810	36	1.16	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0307	18.60	0.9600	17.95	0.4511	0.2810	36	1.44	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0300	18.64	0.2700	17.95	0.4511	0.2810	36	1.51	OK	0
050.99	Soluble Potassium as K2O, Other (18%)	0542	20.17	0.1800	17.95	0.4511	0.2810	36	4.92	High	0
060.00	Water (Free), Vacuum Oven (%)	0007	0.6500	0.0000	0.8972	0.2509	0.1482	3	-0.99		0
060.00	Water (Free), Vacuum Oven (%)	0096	0.8900	0.4000	0.8972	0.2509	0.1482	3	-0.03		0
060.00	Water (Free), Vacuum Oven (%)	0416	1.152	0.0446	0.8972	0.2509	0.1482	3	1.01		0
060.99	Water (Free), Other (%)	0510	0.9290	0.0360				2			0
060.99	Water (Free), Other (%)	0513	1.715	0.0100				2			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0105	2.833	0.0550				1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0451	2.260	0.2000	2.347	0.0992	0.0565	10	-0.82	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	2.275	0.0900	2.347	0.0992	0.0565	10	-0.68	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	2.280	0.0200	2.347	0.0992	0.0565	10	-0.63	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	2.290	0.0000	2.347	0.0992	0.0565	10	-0.54	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	2.305	0.0500	2.347	0.0992	0.0565	10	-0.40	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	2.315	0.0500	2.347	0.0992	0.0565	10	-0.30	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0049	2.353	0.0247	2.347	0.0992	0.0565	10	0.05	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	2.415	0.0500	2.347	0.0992	0.0565	10	0.63	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0041	2.485	0.0300	2.347	0.0992	0.0565	10	1.29	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0324	2.495	0.0500	2.347	0.0992	0.0565	10	1.38	OK	0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0300	2.230	0.1130				2			0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0423	2.385	0.0500				2			0
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	0421	2.215	0.0100	2.307	0.0913	0.0350	4	-1.00		0
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	0494	2.257	0.0812	2.307	0.0913	0.0350	4	-0.54		0
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	0106	2.331	0.0176	2.307	0.0913	0.0350	4	0.27		0
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	0527	2.423	0.0312	2.307	0.0913	0.0350	4	1.28		0
101.99	Acid Soluble Calcium, Other (%)	0389	2.025	0.0100				2			0
101.99	Acid Soluble Calcium, Other (%)	0552	2.405	0.0300				2			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0105	1.576	0.1190	1.678	0.1046	0.1044	8	-0.90	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0309	1.595	0.0500	1.678	0.1046	0.1044	8	-0.72	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0040	1.600	0.0600	1.678	0.1046	0.1044	8	-0.68	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0029	1.631	0.3110	1.678	0.1046	0.1044	8	-0.41	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0169	1.705	0.0500	1.678	0.1046	0.1044	8	0.24	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0513	1.725	0.0100	1.678	0.1046	0.1044	8	0.41	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0553	1.758	0.0550	1.678	0.1046	0.1044	8	0.70	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0550	2.390	0.1800	1.678	0.1046	0.1044	8	6.22	High	0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (1.2%)	0546	1.586	0.0082				1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0433	1.476	0.0000	1.610	0.0752	0.0347	20	-1.79	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0255	1.481	0.0020	1.610	0.0752	0.0347	20	-1.72	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0377	1.525	0.0500	1.610	0.0752	0.0347	20	-1.13	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0444	1.545	0.0100	1.610	0.0752	0.0347	20	-0.87	OK	0

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121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0451	1.560	0.1200	1.610	0.0752	0.0347	20	-0.67	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0291	1.565	0.0100	1.610	0.0752	0.0347	20	-0.60	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0371	1.565	0.0300	1.610	0.0752	0.0347	20	-0.60	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0360	1.610	0.0200	1.610	0.0752	0.0347	20	0.00	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0231	1.615	0.0100	1.610	0.0752	0.0347	20	0.06	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0035	1.620	0.0800	1.610	0.0752	0.0347	20	0.13	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0354	1.620	0.0200	1.610	0.0752	0.0347	20	0.13	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0041	1.625	0.0500	1.610	0.0752	0.0347	20	0.20	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0096	1.625	0.0100	1.610	0.0752	0.0347	20	0.20	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0049	1.633	0.0798	1.610	0.0752	0.0347	20	0.30	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0324	1.645	0.0900	1.610	0.0752	0.0347	20	0.46	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0234	1.650	0.1000	1.610	0.0752	0.0347	20	0.53	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0482	1.660	0.0000	1.610	0.0752	0.0347	20	0.66	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0390	1.704	0.0130	1.610	0.0752	0.0347	20	1.24	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0483	1.720	0.0000	1.610	0.0752	0.0347	20	1.46	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0472	1.830	0.0000	1.610	0.0752	0.0347	20	2.92	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0114	1.355	0.2100	1.610	0.0752	0.0347	20	-3.40	OK	1
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0394	1.525	0.0119	1.570	0.0469	0.0217	4	-0.95		0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0423	1.535	0.0300	1.570	0.0469	0.0217	4	-0.74		0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0300	1.600	0.0050	1.570	0.0469	0.0217	4	0.63		0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0292	1.620	0.0400	1.570	0.0469	0.0217	4	1.07		0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0527	1.227	0.0074	1.566	0.1144	0.0560	12	-2.96	Low	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0486	1.450	0.0000	1.566	0.1144	0.0560	12	-1.01	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0397	1.460	0.0394	1.566	0.1144	0.0560	12	-0.92	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0543	1.475	0.1350	1.566	0.1144	0.0560	12	-0.80	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0525	1.560	0.0400	1.566	0.1144	0.0560	12	-0.05	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0043	1.575	0.0500	1.566	0.1144	0.0560	12	0.08	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0515	1.596	0.2154	1.566	0.1144	0.0560	12	0.26	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0106	1.612	0.0213	1.566	0.1144	0.0560	12	0.41	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0177	1.634	0.0436	1.566	0.1144	0.0560	12	0.60	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0037	1.643	0.0400	1.566	0.1144	0.0560	12	0.68	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0494	1.660	0.0796	1.566	0.1144	0.0560	12	0.82	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0055	1.730	0.0000	1.566	0.1144	0.0560	12	1.44	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.2%)	0421	97.97	192.1	1.566	0.1144	0.0560	12	842.93	High	2
121.99	Acid Soluble Magnesium, Other (1.2%)	0476	1.395	0.0300	1.570	0.0755	0.0487	10	-2.16	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0501	1.485	0.0300	1.570	0.0755	0.0487	10	-1.05	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0516	1.542	0.0290	1.570	0.0755	0.0487	10	-0.36	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0389	1.550	0.0810	1.570	0.0755	0.0487	10	-0.26	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0515	1.569	0.0582	1.570	0.0755	0.0487	10	-0.02	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0552	1.590	0.0400	1.570	0.0755	0.0487	10	0.24	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0042	1.591	0.1550	1.570	0.0755	0.0487	10	0.25	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0481	1.605	0.0100	1.570	0.0755	0.0487	10	0.43	OK	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0524	1.633	0.0539	1.570	0.0755	0.0487	10	0.77	OK	0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
121.99	Acid Soluble Magnesium, Other (1.2%)	0523	1.800	0.0000	1.570	0.0755	0.0487	10	2.83	OK	0
131.30	Water Soluble Magnesium, ICP (%)	0444	0.4550	0.0700	0.7473	0.4725	0.0540	3	-0.62		0
131.30	Water Soluble Magnesium, ICP (%)	0546	0.4945	0.0350	0.7473	0.4725	0.0540	3	-0.54		0
131.30	Water Soluble Magnesium, ICP (%)	0027	1.293	0.0570	0.7473	0.4725	0.0540	3	1.15		0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0510	1.951	0.0506				1			0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0405	0.6160	0.0460				1			0
143.99	Elemental Sulfur, Other (%)	0095	0.1400	0.1000	1.432	0.1746	0.0329	7	-6.69	NA	0
143.99	Elemental Sulfur, Other (%)	0291	1.325	0.0100	1.432	0.1746	0.0329	7	-0.56	NA	0
143.99	Elemental Sulfur, Other (%)	0255	1.399	0.0320	1.432	0.1746	0.0329	7	-0.17	NA	0
143.99	Elemental Sulfur, Other (%)	0472	1.435	0.0100	1.432	0.1746	0.0329	7	0.01	NA	0
143.99	Elemental Sulfur, Other (%)	0389	1.500	0.0330	1.432	0.1746	0.0329	7	0.35	NA	0
143.99	Elemental Sulfur, Other (%)	0481	1.575	0.0100	1.432	0.1746	0.0329	7	0.74	NA	0
143.99	Elemental Sulfur, Other (%)	0390	1.623	0.0350	1.432	0.1746	0.0329	7	0.98	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0405	0.9400	0.0400	1.560	0.1818	0.0331	8	-3.12	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0444	1.385	0.1100	1.560	0.1818	0.0331	8	-0.88	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0106	1.540	0.0600	1.560	0.1818	0.0331	8	-0.10	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0550	1.600	0.0000	1.560	0.1818	0.0331	8	0.20	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0510	1.603	0.0020	1.560	0.1818	0.0331	8	0.22	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0544	1.615	0.0100	1.560	0.1818	0.0331	8	0.27	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0522	1.645	0.0100	1.560	0.1818	0.0331	8	0.43	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0397	1.807	0.0327	1.560	0.1818	0.0331	8	1.24	NA	0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0095	1.475	0.0300	1.580	0.0881	0.0500	4	-1.19		0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0444	1.555	0.0900	1.580	0.0881	0.0500	4	-0.28		0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0231	1.605	0.0100	1.580	0.0881	0.0500	4	0.28		0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0169	1.685	0.0700	1.580	0.0881	0.0500	4	1.19		0
148.00	Total Sulfur, Combustion (1.6%)	0114	1.235	0.0500	1.558	0.3269	0.0916	7	-0.89	Low	0
148.00	Total Sulfur, Combustion (1.6%)	0131	1.365	0.0300	1.558	0.3269	0.0916	7	-0.54	OK	0
148.00	Total Sulfur, Combustion (1.6%)	0049	1.370	0.1200	1.558	0.3269	0.0916	7	-0.52	OK	0
148.00	Total Sulfur, Combustion (1.6%)	0451	1.450	0.0260	1.558	0.3269	0.0916	7	-0.30	OK	0
148.00	Total Sulfur, Combustion (1.6%)	0029	1.630	0.0230	1.558	0.3269	0.0916	7	0.20	OK	0
148.00	Total Sulfur, Combustion (1.6%)	0025	1.811	0.1320	1.558	0.3269	0.0916	7	0.70	OK	0
148.00	Total Sulfur, Combustion (1.6%)	0360	2.750	0.2600	1.558	0.3269	0.0916	7	3.30	High	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0444	1.515	0.0900	1.611	0.0992	0.1088	8	-0.89	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0324	1.545	0.3100	1.611	0.0992	0.1088	8	-0.61	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0405	1.560	0.0000	1.611	0.0992	0.1088	8	-0.47	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0513	1.565	0.0100	1.611	0.0992	0.1088	8	-0.43	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0029	1.605	0.0300	1.611	0.0992	0.1088	8	-0.06	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0095	1.615	0.1300	1.611	0.0992	0.1088	8	0.03	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0055	1.725	0.0100	1.611	0.0992	0.1088	8	1.05	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (1.6%)	0230	1.795	0.2900	1.611	0.0992	0.1088	8	1.69	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0543	1.051	0.0250	1.584	0.0911	0.0385	16	-5.86	Low	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0486	1.465	0.0100	1.584	0.0911	0.0385	16	-1.31	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0394	1.479	0.0038	1.584	0.0911	0.0385	16	-1.15	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0043	1.520	0.0200	1.584	0.0911	0.0385	16	-0.70	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0421	1.550	0.1000	1.584	0.0911	0.0385	16	-0.37	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0444	1.555	0.0900	1.584	0.0911	0.0385	16	-0.32	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0177	1.567	0.0436	1.584	0.0911	0.0385	16	-0.19	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0037	1.583	0.0310	1.584	0.0911	0.0385	16	-0.02	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0483	1.590	0.0400	1.584	0.0911	0.0385	16	0.07	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0040	1.600	0.0000	1.584	0.0911	0.0385	16	0.18	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0494	1.609	0.0210	1.584	0.0911	0.0385	16	0.28	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0525	1.645	0.0500	1.584	0.0911	0.0385	16	0.67	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0402	1.660	0.0200	1.584	0.0911	0.0385	16	0.83	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0292	1.670	0.0200	1.584	0.0911	0.0385	16	0.94	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0546	1.684	0.1195	1.584	0.0911	0.0385	16	1.10	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0527	1.788	0.0217	1.584	0.0911	0.0385	16	2.24	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (1.6%)	0515	1.287	0.2029	1.584	0.0911	0.0385	16	-3.26	Low	1
148.99	Total Sulfur, Other (1.6%)	0220	1.350	0.0000	1.573	0.0959	0.0315	11	-2.17	OK	0
148.99	Total Sulfur, Other (1.6%)	0300	1.472	0.0850	1.573	0.0959	0.0315	11	-0.99	OK	0
148.99	Total Sulfur, Other (1.6%)	0096	1.500	0.0000	1.573	0.0959	0.0315	11	-0.71	OK	0
148.99	Total Sulfur, Other (1.6%)	0377	1.550	0.0600	1.573	0.0959	0.0315	11	-0.22	OK	0
148.99	Total Sulfur, Other (1.6%)	0433	1.565	0.0060	1.573	0.0959	0.0315	11	-0.07	OK	0
148.99	Total Sulfur, Other (1.6%)	0354	1.570	0.0600	1.573	0.0959	0.0315	11	-0.02	OK	0
148.99	Total Sulfur, Other (1.6%)	0516	1.588	0.0330	1.573	0.0959	0.0315	11	0.15	OK	0
148.99	Total Sulfur, Other (1.6%)	0371	1.605	0.0300	1.573	0.0959	0.0315	11	0.32	OK	0
148.99	Total Sulfur, Other (1.6%)	0523	1.645	0.0100	1.573	0.0959	0.0315	11	0.71	OK	0
148.99	Total Sulfur, Other (1.6%)	0476	1.659	0.0029	1.573	0.0959	0.0315	11	0.84	OK	0
148.99	Total Sulfur, Other (1.6%)	0482	1.740	0.0600	1.573	0.0959	0.0315	11	1.63	OK	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0524	1.494	0.1040	1.548	0.0618	0.0547	3	-0.88		0
149.04	Sulfur - HNO3 soluble, ICP (%)	0423	1.535	0.0300	1.548	0.0618	0.0547	3	-0.21		0
149.04	Sulfur - HNO3 soluble, ICP (%)	0501	1.615	0.0300	1.548	0.0618	0.0547	3	1.09		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0255	1.950	0.3310	2.850	0.6493	0.1208	4	-1.39		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0096	2.950	0.1000	2.850	0.6493	0.1208	4	0.15		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0405	3.000	0.0000	2.850	0.6493	0.1208	4	0.23		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0524	3.499	0.0523	2.850	0.6493	0.1208	4	1.00		0
151.32	Acid Soluble Arsenic , ICP, 2006.03 (ppm)	0300	3.183	0.1030				1			0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0527	2.493	0.0926	4.969	3.687	1.200	5	-0.67		0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0037	3.527	0.6460	4.969	3.687	1.200	5	-0.39		0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0525	3.582	0.3460	4.969	3.687	1.200	5	-0.38		0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0494	3.738	0.1543	4.969	3.687	1.200	5	-0.33		0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0515	11.51	4.762	4.969	3.687	1.200	5	1.77		0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	2.560	0.1160				1			0
151.99	Acid Soluble Arsenic , Other (ppm)	0476	2.320	0.1800	2.533	0.2318	0.2267	3	-0.92		0
151.99	Acid Soluble Arsenic , Other (ppm)	0220	2.500	0.4000	2.533	0.2318	0.2267	3	-0.14		0
151.99	Acid Soluble Arsenic , Other (ppm)	0534	2.780	0.1000	2.533	0.2318	0.2267	3	1.06		0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0309	0.1550	0.0100	0.2091	0.0154	0.0070	10	-3.28	Low	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0534	0.2000	0.0000	0.2091	0.0154	0.0070	10	-0.55	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0540	0.2000	0.0200	0.2091	0.0154	0.0070	10	-0.55	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0055	0.2010	0.0060	0.2091	0.0154	0.0070	10	-0.49	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0397	0.2072	0.0179	0.2091	0.0154	0.0070	10	-0.12	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0220	0.2100	0.0000	0.2091	0.0154	0.0070	10	0.06	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0405	0.2100	0.0000	0.2091	0.0154	0.0070	10	0.06	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0169	0.2195	0.0010	0.2091	0.0154	0.0070	10	0.63	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0481	0.2250	0.0100	0.2091	0.0154	0.0070	10	0.96	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0535	0.2325	0.0050	0.2091	0.0154	0.0070	10	1.42	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.2%)	0550	0.1605	0.0990	0.2091	0.0154	0.0070	10	-2.94	Low	1
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0234	0.2000	0.0000	0.2225	0.0146	0.0058	13	-1.54	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0324	0.2040	0.0000	0.2225	0.0146	0.0058	13	-1.27	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0389	0.2146	0.0062	0.2225	0.0146	0.0058	13	-0.54	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0043	0.2150	0.0100	0.2225	0.0146	0.0058	13	-0.51	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0354	0.2150	0.0100	0.2225	0.0146	0.0058	13	-0.51	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0494	0.2187	0.0047	0.2225	0.0146	0.0058	13	-0.26	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0377	0.2250	0.0100	0.2225	0.0146	0.0058	13	0.17	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0433	0.2250	0.0020	0.2225	0.0146	0.0058	13	0.17	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0394	0.2265	0.0049	0.2225	0.0146	0.0058	13	0.27	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0444	0.2300	0.0000	0.2225	0.0146	0.0058	13	0.51	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0037	0.2360	0.0140	0.2225	0.0146	0.0058	13	0.93	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0106	0.2382	0.0056	0.2225	0.0146	0.0058	13	1.08	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.2%)	0390	0.2440	0.0080	0.2225	0.0146	0.0058	13	1.47	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0476	0.1900	0.0000	0.2202	0.0214	0.0070	18	-1.41	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0255	0.1925	0.0010	0.2202	0.0214	0.0070	18	-1.30	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0486	0.1950	0.0100	0.2202	0.0214	0.0070	18	-1.18	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0472	0.2000	0.0000	0.2202	0.0214	0.0070	18	-0.95	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0524	0.2069	0.0049	0.2202	0.0214	0.0070	18	-0.62	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0042	0.2105	0.0090	0.2202	0.0214	0.0070	18	-0.45	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0423	0.2115	0.0010	0.2202	0.0214	0.0070	18	-0.41	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0515	0.2173	0.0128	0.2202	0.0214	0.0070	18	-0.14	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0546	0.2201	0.0019	0.2202	0.0214	0.0070	18	-0.01	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0421	0.2250	0.0100	0.2202	0.0214	0.0070	18	0.23	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0300	0.2255	0.0010	0.2202	0.0214	0.0070	18	0.25	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0360	0.2260	0.0000	0.2202	0.0214	0.0070	18	0.27	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0482	0.2300	0.0000	0.2202	0.0214	0.0070	18	0.46	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0483	0.2305	0.0030	0.2202	0.0214	0.0070	18	0.48	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0516	0.2405	0.0010	0.2202	0.0214	0.0070	18	0.95	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0231	0.2450	0.0100	0.2202	0.0214	0.0070	18	1.16	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0291	0.2450	0.0100	0.2202	0.0214	0.0070	18	1.16	OK	0
165.99	Acid Soluble Boron , Other (0.2%)	0552	0.3150	0.0500	0.2202	0.0214	0.0070	18	4.44	High	0
165.99	Acid Soluble Boron , Other (0.2%)	0527	0.2368	0.0697	0.2202	0.0214	0.0070	18	0.78	OK	1
171.10	Water Soluble Boron , Spectrophotometric (%)	0553	0.1900	0.0140	0.2065	0.0176	0.0103	3	-0.94		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
171.10	Water Soluble Boron , Spectrophotometric (%)	0535	0.2045	0.0070	0.2065	0.0176	0.0103	3	-0.11		0
171.10	Water Soluble Boron , Spectrophotometric (%)	0537	0.2250	0.0100	0.2065	0.0176	0.0103	3	1.05		0
171.99	Water Soluble Boron , Other (%)	0543	0.1945	0.0050	0.2107	0.0118	0.0038	5	-1.37		0
171.99	Water Soluble Boron , Other (%)	0501	0.2050	0.0100	0.2107	0.0118	0.0038	5	-0.48		0
171.99	Water Soluble Boron , Other (%)	0444	0.2100	0.0000	0.2107	0.0118	0.0038	5	-0.06		0
171.99	Water Soluble Boron , Other (%)	0402	0.2200	0.0000	0.2107	0.0118	0.0038	5	0.79		0
171.99	Water Soluble Boron , Other (%)	0027	0.2240	0.0040	0.2107	0.0118	0.0038	5	1.13		0
181.00	Acid Soluble Cadmium , AA, test portion 2006... (ppm)	0550	0.0370	0.0005				1			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0524	0.0032	0.0028	0.7574	0.3201	0.0536	9	-2.17	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0255	0.4605	0.0650	0.7574	0.3201	0.0536	9	-0.86	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0444	0.5100	0.0000	0.7574	0.3201	0.0536	9	-0.71	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0482	0.8300	0.1000	0.7574	0.3201	0.0536	9	0.21	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0394	0.8350	0.0100	0.7574	0.3201	0.0536	9	0.22	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0405	0.8750	0.0700	0.7574	0.3201	0.0536	9	0.34	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	0.8955	0.1170	0.7574	0.3201	0.0536	9	0.40	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	0.9610	0.0560	0.7574	0.3201	0.0536	9	0.59	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0525	1.172	0.0620	0.7574	0.3201	0.0536	9	1.20	NA	0
181.32	Acid Soluble Cadmium , ICP, 2006.03 (ppm)	0300	0.7830	0.0240				1			0
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	0494	0.7477	0.0275	2.550	3.078	0.7809	3	-0.59		0
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	0527	0.7981	0.1546	2.550	3.078	0.7809	3	-0.57		0
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	0515	6.104	2.161	2.550	3.078	0.7809	3	1.15		0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	2.878	2.862				1			0
181.99	Acid Soluble Cadmium , Other (ppm)	0476	0.6550	0.0100				2			0
181.99	Acid Soluble Cadmium , Other (ppm)	0220	1.150	0.1000				2			0
190.00	Water Soluble Chlorine, Titrimetric (%)	0546	11.88	0.2930				1			0
191.00	Acid Soluble Chromium , AA, test portion 200... (ppm)	0550	55.48	1.880				1			0
191.30	Acid Soluble Chromium , ICP (ppm)	0027	0.0023	0.0000	29.23	8.026	0.2833	6	-3.24	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	27.38	0.1000	29.23	8.026	0.2833	6	-0.21	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	27.80	0.2000	29.23	8.026	0.2833	6	-0.16	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0394	30.60	0.4000	29.23	8.026	0.2833	6	0.15	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0405	35.50	1.000	29.23	8.026	0.2833	6	0.70	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	36.90	0.0000	29.23	8.026	0.2833	6	0.85	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	31.05	4.900	29.23	8.026	0.2833	6	0.20	NA	1
191.32	Acid Soluble Chromium , ICP, 2006.03 (ppm)	0300	35.29	0.3000				1			0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0494	31.71	1.878	37.10	4.376	1.873	4	-1.23		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0037	36.21	0.7720	37.10	4.376	1.873	4	-0.20		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0527	38.24	1.409	37.10	4.376	1.873	4	0.26		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0515	42.23	3.435	37.10	4.376	1.873	4	1.17		0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0515	40.55	3.744				1			0
191.99	Acid Soluble Chromium , Other (ppm)	0220	36.00	6.000				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0476	38.45	3.790				2			0
202.30	Acid Soluble Cobalt , ICP (ppm)	0525	1.327	0.0440	4.171	2.978	0.1830	6	-0.85	Low	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0524	1.814	0.3039	4.171	2.978	0.1830	6	-0.70	Low	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	3.750	0.3000	4.171	2.978	0.1830	6	-0.13	OK	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	4.595	0.2500	4.171	2.978	0.1830	6	0.13	OK	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0405	4.900	0.0000	4.171	2.978	0.1830	6	0.22	OK	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	9.910	0.2000	4.171	2.978	0.1830	6	1.72	High	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	3.390	1.440	4.171	2.978	0.1830	6	-0.23	OK	1
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	0423	4.420	0.2400				2			0
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	0300	5.718	0.0240				2			0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0550	0.7730	0.2500	5.177	2.078	0.4545	6	-1.89	Low	0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0527	4.908	0.0182	5.177	2.078	0.4545	6	-0.11	OK	0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0546	5.020	1.060	5.177	2.078	0.4545	6	-0.07	OK	0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0494	5.179	0.2217	5.177	2.078	0.4545	6	0.00	OK	0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0037	5.599	0.1600	5.177	2.078	0.4545	6	0.18	OK	0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0515	9.537	1.017	5.177	2.078	0.4545	6	1.87	High	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	8.676	0.2790				1			0
202.99	Acid Soluble Cobalt , Other (ppm)	0255	2.965	0.1050	3.830	0.7495	0.4183	3	-1.15		0
202.99	Acid Soluble Cobalt , Other (ppm)	0220	4.250	0.7000	3.830	0.7495	0.4183	3	0.56		0
202.99	Acid Soluble Cobalt , Other (ppm)	0476	4.275	0.4500	3.830	0.7495	0.4183	3	0.59		0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0550	0.0037	0.0056				1			0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0035	0.0007	0.0000	0.0286	0.0405	0.0367	3	-0.69		0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0354	0.0100	0.0000	0.0286	0.0405	0.0367	3	-0.46		0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0552	0.0750	0.1100	0.0286	0.0405	0.0367	3	1.15		0
221.32	Acid Soluble Copper , ICP, test portion 2006... (%)	0394	3.450	0.1000				1			0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0527	0.0002	0.0000	0.0006	0.0008	0.0002	4	-0.54		0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0525	0.0003	0.0001	0.0006	0.0008	0.0002	4	-0.48		0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0546	0.0003	0.0001	0.0006	0.0008	0.0002	4	-0.48		0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0515	0.0018	0.0004	0.0006	0.0008	0.0002	4	1.50		0
221.99	Acid Soluble Copper , Other (%)	0524	0.0002	0.0001	0.0008	0.0009	0.0004	4	-0.71		0
221.99	Acid Soluble Copper , Other (%)	0476	0.0002	0.0000	0.0008	0.0009	0.0004	4	-0.65		0
221.99	Acid Soluble Copper , Other (%)	0389	0.0007	0.0002	0.0008	0.0009	0.0004	4	-0.08		0
221.99	Acid Soluble Copper , Other (%)	0515	0.0021	0.0013	0.0008	0.0009	0.0004	4	1.44		0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (%)	0535	0.2190	0.0020				2			0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (%)	0105	0.2560	0.0180				2			0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0049	0.2259	0.0090	0.2381	0.0128	0.0069	9	-0.88	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0483	0.2290	0.0020	0.2381	0.0128	0.0069	9	-0.66	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0472	0.2300	0.0000	0.2381	0.0128	0.0069	9	-0.58	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0035	0.2320	0.0000	0.2381	0.0128	0.0069	9	-0.44	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0324	0.2335	0.0010	0.2381	0.0128	0.0069	9	-0.33	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0041	0.2400	0.0000	0.2381	0.0128	0.0069	9	0.14	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0096	0.2400	0.0000	0.2381	0.0128	0.0069	9	0.14	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0354	0.2550	0.0500	0.2381	0.0128	0.0069	9	1.22	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0482	0.2600	0.0000	0.2381	0.0128	0.0069	9	1.59	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0552	0.2800	0.1000	0.2381	0.0128	0.0069	9	3.03	High	1
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (%)	0423	0.2225	0.0050				2			0

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			Value	Range	Rob Mean	Rob SD	R-bar				
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (%)	0300	0.2300	0.0000				2			0
241.33	Acid Soluble Iron , ICP, 2017.02 (%)	0527	0.1751	0.0020	0.2341	0.0408	0.0133	4	-1.45		0
241.33	Acid Soluble Iron , ICP, 2017.02 (%)	0106	0.2403	0.0043	0.2341	0.0408	0.0133	4	0.15		0
241.33	Acid Soluble Iron , ICP, 2017.02 (%)	0421	0.2550	0.0100	0.2341	0.0408	0.0133	4	0.51		0
241.33	Acid Soluble Iron , ICP, 2017.02 (%)	0515	0.2662	0.0370	0.2341	0.0408	0.0133	4	0.79		0
241.99	Acid Soluble Iron , Other (%)	0027	0.0020	0.0000	0.1711	0.1138	0.0104	4	-1.49		0
241.99	Acid Soluble Iron , Other (%)	0524	0.2061	0.0051	0.1711	0.1138	0.0104	4	0.31		0
241.99	Acid Soluble Iron , Other (%)	0389	0.2340	0.0120	0.1711	0.1138	0.0104	4	0.55		0
241.99	Acid Soluble Iron , Other (%)	0515	0.2423	0.0246	0.1711	0.1138	0.0104	4	0.63		0
251.00	Acid Soluble Lead , AA, test portion 2006.03... (ppm)	0550	4.444	0.4760				1			0
251.30	Acid Soluble Lead , ICP (ppm)	0255	2.742	0.0850	4.775	1.554	0.1994	9	-1.21	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0444	3.455	0.0500	4.775	1.554	0.1994	9	-0.78	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0524	3.856	0.0468	4.775	1.554	0.1994	9	-0.55	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	4.200	0.0000	4.775	1.554	0.1994	9	-0.34	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0482	4.965	0.8300	4.775	1.554	0.1994	9	0.11	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0405	5.150	0.1000	4.775	1.554	0.1994	9	0.22	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0096	5.250	0.3000	4.775	1.554	0.1994	9	0.28	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0035	6.280	0.3400	4.775	1.554	0.1994	9	0.89	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	7.078	0.0430	4.775	1.554	0.1994	9	1.37	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0525	6.417	1.956	4.775	1.554	0.1994	9	0.98	NA	1
251.32	Acid Soluble Lead , ICP, 2006.03 (ppm)	0300	5.779	0.6090				1			0
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0037	4.938	0.2820	6.203	1.602	1.185	4	-0.79		0
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0527	5.236	0.4817	6.203	1.602	1.185	4	-0.60		0
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0494	6.163	0.7438	6.203	1.602	1.185	4	-0.02		0
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0515	8.474	3.231	6.203	1.602	1.185	4	1.42		0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	10.99	1.731				1			0
251.99	Acid Soluble Lead , Other (ppm)	0476	3.940	0.0400				2			0
251.99	Acid Soluble Lead , Other (ppm)	0220	5.750	0.3000				2			0
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	0105	0.0084	0.0005				1			0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0096	0.0079	0.0004	0.0085	0.0010	0.0002	4	-0.63		0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0041	0.0080	0.0000	0.0085	0.0010	0.0002	4	-0.53		0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0035	0.0082	0.0002	0.0085	0.0010	0.0002	4	-0.33		0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0354	0.0100	0.0000	0.0085	0.0010	0.0002	4	1.49		0
261.31	Acid Soluble Manganese , ICP, test portion 9... (%)	0482	0.0100	0.0000				1			0
261.32	Acid Soluble Manganese , ICP, test portion i... (%)	0049	0.0073	0.0004				2			0
261.32	Acid Soluble Manganese , ICP, test portion i... (%)	0552	0.0850	0.1300				2			0
261.34	Acid Soluble Manganese , ICP, test portion 2... (%)	0300	0.0076	0.0000				2			0
261.34	Acid Soluble Manganese , ICP, test portion 2... (%)	0423	0.0080	0.0000				2			0
261.35	Acid Soluble Manganese , ICP, 2017.02 (%)	0527	0.0063	0.0001	0.0134	0.0134	0.0049	4	-0.53		0
261.35	Acid Soluble Manganese , ICP, 2017.02 (%)	0106	0.0064	0.0005	0.0134	0.0134	0.0049	4	-0.53		0
261.35	Acid Soluble Manganese , ICP, 2017.02 (%)	0494	0.0075	0.0000	0.0134	0.0134	0.0049	4	-0.44		0
261.35	Acid Soluble Manganese , ICP, 2017.02 (%)	0515	0.0334	0.0190	0.0134	0.0134	0.0049	4	1.50		0
261.99	Acid Soluble Manganese , Other (%)	0524	0.0073	0.0002	0.0079	0.0005	0.0008	3	-1.10		0

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			Value	Range	Rob Mean	Rob SD	R-bar				
261.99	Acid Soluble Manganese , Other (%)	0515	0.0080	0.0016	0.0079	0.0005	0.0008	3	0.26		0
261.99	Acid Soluble Manganese , Other (%)	0389	0.0083	0.0006	0.0079	0.0005	0.0008	3	0.84		0
281.30	Acid Soluble Mercury , ICP (ppm)	0527	0.0499	0.0574				1			0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000				1			4
289.00	Acid Soluble Molybdenum , AA, test portion 2... (ppm)	0550	11.35	22.11				1			0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0524	2.156	0.0257	3.111	0.7088	0.3328	6	-1.20	OK	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0405	2.940	0.0600	3.111	0.7088	0.3328	6	-0.21	OK	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0389	3.024	0.1180	3.111	0.7088	0.3328	6	-0.11	OK	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0096	3.200	0.2000	3.111	0.7088	0.3328	6	0.11	OK	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0255	3.247	1.253	3.111	0.7088	0.3328	6	0.17	OK	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0035	4.100	0.3400	3.111	0.7088	0.3328	6	1.24	OK	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0525	15.52	14.25	3.111	0.7088	0.3328	6	15.59	High	1
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (ppm)	0300	2.668	0.0030				1			0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0546	2.045	0.7700	2.940	0.7255	0.4144	6	-1.10	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0037	2.711	0.0610	2.940	0.7255	0.4144	6	-0.28	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0423	2.885	0.0700	2.940	0.7255	0.4144	6	-0.07	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0527	2.973	0.0638	2.940	0.7255	0.4144	6	0.04	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0106	3.000	0.0000	2.940	0.7255	0.4144	6	0.07	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0515	8.296	1.522	2.940	0.7255	0.4144	6	6.58	High	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (ppm)	0515	7.210	1.401				1			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0476	2.250	0.0600				2			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0220	2.300	0.4000				2			0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	6.930	0.1400	11.54	4.666	0.8646	9	-0.91	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0525	8.407	1.946	11.54	4.666	0.8646	9	-0.62	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0524	8.665	0.1028	11.54	4.666	0.8646	9	-0.57	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	9.400	0.2000	11.54	4.666	0.8646	9	-0.42	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	10.45	0.1000	11.54	4.666	0.8646	9	-0.22	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	10.72	2.160	11.54	4.666	0.8646	9	-0.16	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0405	13.00	0.2000	11.54	4.666	0.8646	9	0.29	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	17.75	1.700	11.54	4.666	0.8646	9	1.23	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0389	19.67	1.232	11.54	4.666	0.8646	9	1.61	NA	0
291.32	Acid Soluble Nickel , ICP, 2006.03 (ppm)	0300	13.48	0.3100				1			0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0494	12.27	0.7494	14.89	3.027	0.9489	4	-0.86		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0037	13.39	0.1540	14.89	3.027	0.9489	4	-0.49		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0527	14.71	0.6195	14.89	3.027	0.9489	4	-0.06		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0515	19.18	2.273	14.89	3.027	0.9489	4	1.42		0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	16.70	0.3200				1			0
291.99	Acid Soluble Nickel , Other (ppm)	0255	7.033	0.8450	11.63	4.229	1.492	3	-1.09		0
291.99	Acid Soluble Nickel , Other (ppm)	0220	12.50	3.000	11.63	4.229	1.492	3	0.21		0
291.99	Acid Soluble Nickel , Other (ppm)	0476	15.36	0.6300	11.63	4.229	1.492	3	0.88		0
301.30	Acid Soluble Selenium , ICP (ppm)	0525	0.3460	0.4960				2			0
301.30	Acid Soluble Selenium , ICP (ppm)	0524	0.9525	0.0250				2			0
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	0527	2.253	0.5770				2			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	0515	7.242	2.512				2			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0515	5.995	1.343				1			0
301.99	Acid Soluble Selenium , Other (ppm)	0220	0.4500	0.1000	2.376	2.042	0.5783	3	-0.94		0
301.99	Acid Soluble Selenium , Other (ppm)	0476	2.160	0.0600	2.376	2.042	0.5783	3	-0.11		0
301.99	Acid Soluble Selenium , Other (ppm)	0255	4.518	1.575	2.376	2.042	0.5783	3	1.05		0
311.32	Sodium, ICP, 2006.03 test portion (%)	0324	0.4790	0.0000				1			0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0043	0.4150	0.0100	0.4433	0.0218	0.0127	4	-1.30		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.4415	0.0130	0.4433	0.0218	0.0127	4	-0.08		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.4490	0.0268	0.4433	0.0218	0.0127	4	0.26		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0423	0.4675	0.0010	0.4433	0.0218	0.0127	4	1.11		0
311.99	Sodium, Other (%)	0096	0.4700	0.0000	0.4783	0.0104	0.0033	3	-0.80		0
311.99	Sodium, Other (%)	0482	0.4750	0.0100	0.4783	0.0104	0.0033	3	-0.32		0
311.99	Sodium, Other (%)	0354	0.4900	0.0000	0.4783	0.0104	0.0033	3	1.12		0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	0029	0.1346	0.0119	0.1395	0.0052	0.0084	7	-0.85	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	0535	0.1350	0.0100	0.1395	0.0052	0.0084	7	-0.77	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	0169	0.1365	0.0030	0.1395	0.0052	0.0084	7	-0.52	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	0513	0.1400	0.0000	0.1395	0.0052	0.0084	7	0.09	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	0534	0.1400	0.0000	0.1395	0.0052	0.0084	7	0.09	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	0040	0.1430	0.0020	0.1395	0.0052	0.0084	7	0.61	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.1%)	0550	0.1540	0.0320	0.1395	0.0052	0.0084	7	2.51	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0234	0.1000	0.0000	0.1412	0.0098	0.0037	21	-4.18	Low	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0114	0.1250	0.0060	0.1412	0.0098	0.0037	21	-1.64	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0157	0.1295	0.0030	0.1412	0.0098	0.0037	21	-1.19	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0049	0.1335	0.0082	0.1412	0.0098	0.0037	21	-0.78	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0255	0.1340	0.0000	0.1412	0.0098	0.0037	21	-0.73	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0360	0.1350	0.0040	0.1412	0.0098	0.0037	21	-0.63	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0377	0.1350	0.0100	0.1412	0.0098	0.0037	21	-0.63	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0354	0.1400	0.0000	0.1412	0.0098	0.0037	21	-0.12	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0444	0.1400	0.0000	0.1412	0.0098	0.0037	21	-0.12	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0472	0.1400	0.0000	0.1412	0.0098	0.0037	21	-0.12	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0482	0.1400	0.0000	0.1412	0.0098	0.0037	21	-0.12	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0096	0.1419	0.0033	0.1412	0.0098	0.0037	21	0.07	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0433	0.1440	0.0020	0.1412	0.0098	0.0037	21	0.28	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0035	0.1440	0.0100	0.1412	0.0098	0.0037	21	0.28	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0324	0.1460	0.0060	0.1412	0.0098	0.0037	21	0.49	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0483	0.1470	0.0000	0.1412	0.0098	0.0037	21	0.59	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0041	0.1500	0.0000	0.1412	0.0098	0.0037	21	0.89	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0231	0.1500	0.0000	0.1412	0.0098	0.0037	21	0.89	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0390	0.1515	0.0051	0.1412	0.0098	0.0037	21	1.04	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0402	0.1550	0.0100	0.1412	0.0098	0.0037	21	1.40	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0291	0.1750	0.0100	0.1412	0.0098	0.0037	21	3.43	High	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.1%)	0552	0.1700	0.0600	0.1412	0.0098	0.0037	21	2.92	High	1
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.1%)	0394	0.1213	0.0001	0.1378	0.0161	0.0020	3	-1.02		0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.1%)	0300	0.1385	0.0010	0.1378	0.0161	0.0020	3	0.05		0
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.1%)	0423	0.1535	0.0050	0.1378	0.0161	0.0020	3	0.98		0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0397	0.1238	0.0015	0.1408	0.0148	0.0053	13	-1.15	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0486	0.1280	0.0060	0.1408	0.0148	0.0053	13	-0.87	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0043	0.1300	0.0200	0.1408	0.0148	0.0053	13	-0.73	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0494	0.1302	0.0004	0.1408	0.0148	0.0053	13	-0.72	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0106	0.1340	0.0013	0.1408	0.0148	0.0053	13	-0.46	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0546	0.1346	0.0008	0.1408	0.0148	0.0053	13	-0.42	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0177	0.1361	0.0007	0.1408	0.0148	0.0053	13	-0.32	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0527	0.1410	0.0018	0.1408	0.0148	0.0053	13	0.01	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0037	0.1445	0.0050	0.1408	0.0148	0.0053	13	0.25	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0055	0.1477	0.0047	0.1408	0.0148	0.0053	13	0.46	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0421	0.1550	0.0100	0.1408	0.0148	0.0053	13	0.96	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0515	0.1660	0.0163	0.1408	0.0148	0.0053	13	1.70	High	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.1%)	0525	0.1856	0.0001	0.1408	0.0148	0.0053	13	3.03	High	0
321.99	Acid Soluble Zinc , Other (0.1%)	0027	0.1005	0.0010	0.1334	0.0140	0.0042	11	-2.35	Low	0
321.99	Acid Soluble Zinc , Other (0.1%)	0476	0.1200	0.0000	0.1334	0.0140	0.0042	11	-0.96	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0501	0.1200	0.0000	0.1334	0.0140	0.0042	11	-0.96	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0220	0.1300	0.0200	0.1334	0.0140	0.0042	11	-0.24	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0481	0.1300	0.0000	0.1334	0.0140	0.0042	11	-0.24	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0524	0.1369	0.0026	0.1334	0.0140	0.0042	11	0.25	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0389	0.1370	0.0000	0.1334	0.0140	0.0042	11	0.25	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0516	0.1385	0.0030	0.1334	0.0140	0.0042	11	0.36	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0042	0.1430	0.0020	0.1334	0.0140	0.0042	11	0.68	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0523	0.1475	0.0030	0.1334	0.0140	0.0042	11	1.00	OK	0
321.99	Acid Soluble Zinc , Other (0.1%)	0405	0.1525	0.0150	0.1334	0.0140	0.0042	11	1.36	High	0
321.99	Acid Soluble Zinc , Other (0.1%)	0515	0.2003	0.0407	0.1334	0.0140	0.0042	11	4.76	High	1
325.00	Water Soluble Zinc , AA (%)	0027	0.0690	0.0060				2			0
325.00	Water Soluble Zinc , AA (%)	0540	0.0940	0.0060				2			0
325.30	Water Soluble Zinc , ICP (%)	0543	0.1130	0.0020				1			0

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier, 3 = removed from stats, 4 = rejected due to 0s submitted and 5 = LOD. A 9 flag indicates a data problem - scores not calculated. Robust statistics not used if < 6 labs used in calculations, in this case the Z Scores are grey and included for information only. IA Status describes where your result is relative to the Assigned Value ± IA. Red indicates Higher or Lower, Green indicates within the IA range. Method codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.