

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Analytes: 37

Sample # 180211

Lab Values

Labs Reporting: 100

Grade 14-14-14

Issue Date : 03/31/2018

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001	Ammoniacal Nitrogen (%)	0117	12.14	0.1000	13.73	0.3762	0.0900	34	-4.22	001.10	0
001	Ammoniacal Nitrogen (%)	0309	12.68	0.1400	13.73	0.3762	0.0900	34	-2.79	001.10	0
001	Ammoniacal Nitrogen (%)	0368	13.06	0.1000	13.73	0.3762	0.0900	34	-1.78	001.99	0
001	Ammoniacal Nitrogen (%)	0524	13.24	0.1100	13.73	0.3762	0.0900	34	-1.31	001.99	0
001	Ammoniacal Nitrogen (%)	0444	13.38	0.2200	13.73	0.3762	0.0900	34	-0.93	001.10	0
001	Ammoniacal Nitrogen (%)	0544	13.39	0.0100	13.73	0.3762	0.0900	34	-0.91	001.99	0
001	Ammoniacal Nitrogen (%)	0546	13.42	0.0900	13.73	0.3762	0.0900	34	-0.83	001.99	0
001	Ammoniacal Nitrogen (%)	0177	13.42	0.0022	13.73	0.3762	0.0900	34	-0.82	001.10	0
001	Ammoniacal Nitrogen (%)	0486	13.44	0.0500	13.73	0.3762	0.0900	34	-0.78	001.10	0
001	Ammoniacal Nitrogen (%)	0169	13.52	0.0000	13.73	0.3762	0.0900	34	-0.56	001.10	0
001	Ammoniacal Nitrogen (%)	0027	13.53	0.2500	13.73	0.3762	0.0900	34	-0.54	001.99	0
001	Ammoniacal Nitrogen (%)	0394	13.54	0.2190	13.73	0.3762	0.0900	34	-0.51	001.99	0
001	Ammoniacal Nitrogen (%)	0255	13.63	0.2900	13.73	0.3762	0.0900	34	-0.28	001.99	0
001	Ammoniacal Nitrogen (%)	0405	13.66	0.0500	13.73	0.3762	0.0900	34	-0.20	001.99	0
001	Ammoniacal Nitrogen (%)	0451	13.67	0.0900	13.73	0.3762	0.0900	34	-0.17	001.10	0
001	Ammoniacal Nitrogen (%)	0096	13.69	0.1500	13.73	0.3762	0.0900	34	-0.12	001.99	0
001	Ammoniacal Nitrogen (%)	0416	13.70	0.0100	13.73	0.3762	0.0900	34	-0.09	001.99	0
001	Ammoniacal Nitrogen (%)	0533	13.72	0.1200	13.73	0.3762	0.0900	34	-0.02	001.99	0
001	Ammoniacal Nitrogen (%)	0522	13.78	0.0400	13.73	0.3762	0.0900	34	0.14	001.99	0
001	Ammoniacal Nitrogen (%)	0541	13.83	0.3200	13.73	0.3762	0.0900	34	0.27	001.99	0
001	Ammoniacal Nitrogen (%)	0531	13.91	0.0100	13.73	0.3762	0.0900	34	0.47	001.10	0
001	Ammoniacal Nitrogen (%)	0531	13.93	0.0200	13.73	0.3762	0.0900	34	0.53	001.99	0
001	Ammoniacal Nitrogen (%)	0538	13.93	0.0400	13.73	0.3762	0.0900	34	0.53	001.99	0
001	Ammoniacal Nitrogen (%)	0536	13.96	0.0800	13.73	0.3762	0.0900	34	0.61	001.10	0
001	Ammoniacal Nitrogen (%)	0536	13.97	0.0600	13.73	0.3762	0.0900	34	0.64	001.99	0
001	Ammoniacal Nitrogen (%)	0535	13.98	0.0500	13.73	0.3762	0.0900	34	0.65	001.10	0
001	Ammoniacal Nitrogen (%)	0550	13.98	0.0100	13.73	0.3762	0.0900	34	0.65	001.99	0
001	Ammoniacal Nitrogen (%)	0537	14.01	0.1300	13.73	0.3762	0.0900	34	0.73	001.99	0
001	Ammoniacal Nitrogen (%)	0535	14.02	0.0600	13.73	0.3762	0.0900	34	0.77	001.99	0
001	Ammoniacal Nitrogen (%)	0539	14.08	0.0500	13.73	0.3762	0.0900	34	0.92	001.99	0
001	Ammoniacal Nitrogen (%)	0519	14.21	0.0100	13.73	0.3762	0.0900	34	1.27	001.99	0
001	Ammoniacal Nitrogen (%)	0532	14.25	0.1300	13.73	0.3762	0.0900	34	1.37	001.99	0
001	Ammoniacal Nitrogen (%)	0545	14.61	0.0500	13.73	0.3762	0.0900	34	2.33	001.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001	Ammoniacal Nitrogen (%)	0506	14.90	0.0000	13.73	0.3762	0.0900	34	3.11	001.99	0
001	Ammoniacal Nitrogen (%)	0230	14.40	1.000	13.73	0.3762	0.0900	34	1.78	001.10	1
001	Ammoniacal Nitrogen (%)	0511	7.690	0.0000	13.73	0.3762	0.0900	34	-16.05	001.99	2
002	Nitrate Nitrogen (%)	0511	0.0500	0.0000				1		002.99	0
003	Water Insoluble Nitrogen (%)	0511	0.0000	0.0000				0		003.10	4
010	Total Nitrogen (14%)	0309	12.44†	0.2100	13.85	0.2124	0.1115	76	-6.66	010.11	0
010	Total Nitrogen (14%)	0117	13.00†	0.2000	13.85	0.2124	0.1115	76	-4.00	010.12	0
010	Total Nitrogen (14%)	0521	13.31	0.0000	13.85	0.2124	0.1115	76	-2.55	010.60	0
010	Total Nitrogen (14%)	0493	13.40	0.1000	13.85	0.2124	0.1115	76	-2.11	010.99	0
010	Total Nitrogen (14%)	0027	13.45	0.4000	13.85	0.2124	0.1115	76	-1.88	010.60	0
010	Total Nitrogen (14%)	0029	13.46	0.0500	13.85	0.2124	0.1115	76	-1.85	010.60	0
010	Total Nitrogen (14%)	0421	13.52	0.1900	13.85	0.2124	0.1115	76	-1.57	010.60	0
010	Total Nitrogen (14%)	0041	13.59	0.0800	13.85	0.2124	0.1115	76	-1.22	010.60	0
010	Total Nitrogen (14%)	0043	13.61	0.0700	13.85	0.2124	0.1115	76	-1.15	010.60	0
010	Total Nitrogen (14%)	0034	13.62	0.0900	13.85	0.2124	0.1115	76	-1.10	010.60	0
010	Total Nitrogen (14%)	0157	13.65	0.1000	13.85	0.2124	0.1115	76	-0.94	010.60	0
010	Total Nitrogen (14%)	0397	13.67	0.1370	13.85	0.2124	0.1115	76	-0.82	010.12	0
010	Total Nitrogen (14%)	0368	13.67	0.2230	13.85	0.2124	0.1115	76	-0.82	010.60	0
010	Total Nitrogen (14%)	0389	13.69	0.0100	13.85	0.2124	0.1115	76	-0.77	010.60	0
010	Total Nitrogen (14%)	0055	13.69	0.5400	13.85	0.2124	0.1115	76	-0.75	010.60	0
010	Total Nitrogen (14%)	0095	13.69	0.0400	13.85	0.2124	0.1115	76	-0.75	010.60	0
010	Total Nitrogen (14%)	0300	13.70	0.0100	13.85	0.2124	0.1115	76	-0.72	010.99	0
010	Total Nitrogen (14%)	0543	13.71	0.0240	13.85	0.2124	0.1115	76	-0.65	010.60	0
010	Total Nitrogen (14%)	0231	13.72	0.0600	13.85	0.2124	0.1115	76	-0.61	010.60	0
010	Total Nitrogen (14%)	0177	13.74	0.0300	13.85	0.2124	0.1115	76	-0.54	010.60	0
010	Total Nitrogen (14%)	0105	13.74	0.0200	13.85	0.2124	0.1115	76	-0.51	010.11	0
010	Total Nitrogen (14%)	0007	13.75	0.1000	13.85	0.2124	0.1115	76	-0.46	010.60	0
010	Total Nitrogen (14%)	0482	13.75	0.1000	13.85	0.2124	0.1115	76	-0.46	010.60	0
010	Total Nitrogen (14%)	0102	13.76	0.0500	13.85	0.2124	0.1115	76	-0.44	010.60	0
010	Total Nitrogen (14%)	0105	13.76	0.0100	13.85	0.2124	0.1115	76	-0.44	010.60	0
010	Total Nitrogen (14%)	0451	13.77	0.0200	13.85	0.2124	0.1115	76	-0.37	010.60	0
010	Total Nitrogen (14%)	0472	13.78	0.0700	13.85	0.2124	0.1115	76	-0.35	010.60	0
010	Total Nitrogen (14%)	0049	13.78	0.0800	13.85	0.2124	0.1115	76	-0.32	010.60	0
010	Total Nitrogen (14%)	0073	13.79	0.0100	13.85	0.2124	0.1115	76	-0.30	010.60	0
010	Total Nitrogen (14%)	0483	13.79	0.0000	13.85	0.2124	0.1115	76	-0.28	010.60	0
010	Total Nitrogen (14%)	0324	13.80	0.2000	13.85	0.2124	0.1115	76	-0.23	010.60	0
010	Total Nitrogen (14%)	0405	13.80	0.0200	13.85	0.2124	0.1115	76	-0.23	010.60	0
010	Total Nitrogen (14%)	0516	13.80	0.0000	13.85	0.2124	0.1115	76	-0.23	010.60	0
010	Total Nitrogen (14%)	0542	13.80	0.1380	13.85	0.2124	0.1115	76	-0.22	010.60	0
010	Total Nitrogen (14%)	0136	13.83	0.0100	13.85	0.2124	0.1115	76	-0.11	010.60	0
010	Total Nitrogen (14%)	0042	13.84	0.1900	13.85	0.2124	0.1115	76	-0.06	010.60	0
010	Total Nitrogen (14%)	0360	13.84	0.0500	13.85	0.2124	0.1115	76	-0.06	010.60	0
010	Total Nitrogen (14%)	0096	13.84	0.0200	13.85	0.2124	0.1115	76	-0.04	010.60	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010	Total Nitrogen (14%)	0234	13.84	0.0400	13.85	0.2124	0.1115	76	-0.04	010.60	0
010	Total Nitrogen (14%)	0547	13.84	0.0600	13.85	0.2124	0.1115	76	-0.04	010.60	0
010	Total Nitrogen (14%)	0325	13.85	0.3000	13.85	0.2124	0.1115	76	0.01	010.60	0
010	Total Nitrogen (14%)	0040	13.85	0.1000	13.85	0.2124	0.1115	76	0.01	010.60	0
010	Total Nitrogen (14%)	0230	13.85	0.1000	13.85	0.2124	0.1115	76	0.01	010.60	0
010	Total Nitrogen (14%)	0390	13.86	0.0000	13.85	0.2124	0.1115	76	0.05	010.60	0
010	Total Nitrogen (14%)	0356	13.88	0.1800	13.85	0.2124	0.1115	76	0.15	010.60	0
010	Total Nitrogen (14%)	0037	13.88	0.1700	13.85	0.2124	0.1115	76	0.16	010.60	0
010	Total Nitrogen (14%)	0549	13.89	0.0300	13.85	0.2124	0.1115	76	0.17	010.11	0
010	Total Nitrogen (14%)	0292	13.89	0.0300	13.85	0.2124	0.1115	76	0.17	010.60	0
010	Total Nitrogen (14%)	0494	13.89	0.1300	13.85	0.2124	0.1115	76	0.17	010.60	0
010	Total Nitrogen (14%)	0035	13.89	0.2400	13.85	0.2124	0.1115	76	0.19	010.60	0
010	Total Nitrogen (14%)	0377	13.90	0.0400	13.85	0.2124	0.1115	76	0.24	010.60	0
010	Total Nitrogen (14%)	0523	13.90	0.0000	13.85	0.2124	0.1115	76	0.24	010.60	0
010	Total Nitrogen (14%)	0524	13.90	0.0200	13.85	0.2124	0.1115	76	0.24	010.99	0
010	Total Nitrogen (14%)	0531	13.92	0.0100	13.85	0.2124	0.1115	76	0.31	010.11	0
010	Total Nitrogen (14%)	0423	13.94	0.0100	13.85	0.2124	0.1115	76	0.41	010.60	0
010	Total Nitrogen (14%)	0501	13.95	0.0700	13.85	0.2124	0.1115	76	0.45	010.60	0
010	Total Nitrogen (14%)	0307	13.97	0.0600	13.85	0.2124	0.1115	76	0.57	010.60	0
010	Total Nitrogen (14%)	0025	13.99	0.0700	13.85	0.2124	0.1115	76	0.64	010.60	0
010	Total Nitrogen (14%)	0527	13.99	0.0320	13.85	0.2124	0.1115	76	0.65	010.60	0
010	Total Nitrogen (14%)	0291	14.00	0.0100	13.85	0.2124	0.1115	76	0.69	010.60	0
010	Total Nitrogen (14%)	0452	14.00	0.1000	13.85	0.2124	0.1115	76	0.71	010.10	0
010	Total Nitrogen (14%)	0114	14.04	0.1400	13.85	0.2124	0.1115	76	0.90	010.11	0
010	Total Nitrogen (14%)	0185	14.05	0.1800	13.85	0.2124	0.1115	76	0.95	010.60	0
010	Total Nitrogen (14%)	0518	14.07	0.2600	13.85	0.2124	0.1115	76	1.04	010.99	0
010	Total Nitrogen (14%)	0485	14.08	0.4546	13.85	0.2124	0.1115	76	1.08	010.60	0
010	Total Nitrogen (14%)	0535	14.15	0.1000	13.85	0.2124	0.1115	76	1.42	010.11	0
010	Total Nitrogen (14%)	0354	14.15	0.1000	13.85	0.2124	0.1115	76	1.42	010.60	0
010	Total Nitrogen (14%)	0519	14.17	0.1000	13.85	0.2124	0.1115	76	1.51	010.99	0
010	Total Nitrogen (14%)	0534	14.20	0.0900	13.85	0.2124	0.1115	76	1.63	010.60	0
010	Total Nitrogen (14%)	0550	14.22	0.1300	13.85	0.2124	0.1115	76	1.72	010.60	0
010	Total Nitrogen (14%)	0511	14.22	0.0000	13.85	0.2124	0.1115	76	1.75	010.60	0
010	Total Nitrogen (14%)	0402	14.32	0.3200	13.85	0.2124	0.1115	76	2.22	010.60	0
010	Total Nitrogen (14%)	0443	14.39	0.1400	13.85	0.2124	0.1115	76	2.55	010.60	0
010	Total Nitrogen (14%)	0255	14.47	0.5740	13.85	0.2124	0.1115	76	2.91	010.60	0
010	Total Nitrogen (14%)	0476	14.54‡	0.0309	13.85	0.2124	0.1115	76	3.25	010.99	0
010	Total Nitrogen (14%)	0506	14.70‡	0.4000	13.85	0.2124	0.1115	76	4.01	010.99	0
010	Total Nitrogen (14%)	0023	14.48‡	0.7470	13.85	0.2124	0.1115	76	2.97	010.60	1
020	Total Phosphorus as P2O5 (%)	0389	13.68	0.2100	14.75	0.5464	0.1995	52	-1.96	020.50	0
020	Total Phosphorus as P2O5 (%)	0521	13.68	0.0000	14.75	0.5464	0.1995	52	-1.95	020.50	0
020	Total Phosphorus as P2O5 (%)	0472	13.83	0.0400	14.75	0.5464	0.1995	52	-1.68	020.50	0
020	Total Phosphorus as P2O5 (%)	0476	13.98	0.2246	14.75	0.5464	0.1995	52	-1.40	020.20	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
020	Total Phosphorus as P2O5 (%)	0501	14.01	0.0800	14.75	0.5464	0.1995	52	-1.35	020.50	0
020	Total Phosphorus as P2O5 (%)	0542	14.03	0.3428	14.75	0.5464	0.1995	52	-1.31	020.50	0
020	Total Phosphorus as P2O5 (%)	0523	14.10	0.2000	14.75	0.5464	0.1995	52	-1.18	020.50	0
020	Total Phosphorus as P2O5 (%)	0527	14.13	0.0700	14.75	0.5464	0.1995	52	-1.14	020.50	0
020	Total Phosphorus as P2O5 (%)	0534	14.21	0.1200	14.75	0.5464	0.1995	52	-0.98	020.20	0
020	Total Phosphorus as P2O5 (%)	0444	14.26	0.0900	14.75	0.5464	0.1995	52	-0.90	020.50	0
020	Total Phosphorus as P2O5 (%)	0444	14.35	0.0500	14.75	0.5464	0.1995	52	-0.74	020.10	0
020	Total Phosphorus as P2O5 (%)	0027	14.39	0.0300	14.75	0.5464	0.1995	52	-0.66	020.20	0
020	Total Phosphorus as P2O5 (%)	0415	14.40	0.0045	14.75	0.5464	0.1995	52	-0.63	020.20	0
020	Total Phosphorus as P2O5 (%)	0234	14.41	0.6800	14.75	0.5464	0.1995	52	-0.62	020.50	0
020	Total Phosphorus as P2O5 (%)	0096	14.44	0.0000	14.75	0.5464	0.1995	52	-0.56	020.40	0
020	Total Phosphorus as P2O5 (%)	0550	14.48	0.1000	14.75	0.5464	0.1995	52	-0.49	020.20	0
020	Total Phosphorus as P2O5 (%)	0421	14.50	0.2000	14.75	0.5464	0.1995	52	-0.45	020.50	0
020	Total Phosphorus as P2O5 (%)	0547	14.55	0.1000	14.75	0.5464	0.1995	52	-0.36	020.20	0
020	Total Phosphorus as P2O5 (%)	0105	14.63	0.0800	14.75	0.5464	0.1995	52	-0.21	020.40	0
020	Total Phosphorus as P2O5 (%)	0105	14.64	0.2200	14.75	0.5464	0.1995	52	-0.20	020.10	0
020	Total Phosphorus as P2O5 (%)	0291	14.68	0.0100	14.75	0.5464	0.1995	52	-0.13	020.50	0
020	Total Phosphorus as P2O5 (%)	0455	14.69	0.0700	14.75	0.5464	0.1995	52	-0.11	020.99	0
020	Total Phosphorus as P2O5 (%)	0169	14.70	0.0400	14.75	0.5464	0.1995	52	-0.09	020.20	0
020	Total Phosphorus as P2O5 (%)	0356	14.71	0.1700	14.75	0.5464	0.1995	52	-0.08	020.20	0
020	Total Phosphorus as P2O5 (%)	0451	14.72	0.3400	14.75	0.5464	0.1995	52	-0.05	020.50	0
020	Total Phosphorus as P2O5 (%)	0042	14.74	0.3300	14.75	0.5464	0.1995	52	-0.02	020.50	0
020	Total Phosphorus as P2O5 (%)	0231	14.74	0.0400	14.75	0.5464	0.1995	52	-0.01	020.20	0
020	Total Phosphorus as P2O5 (%)	0493	14.75	0.1000	14.75	0.5464	0.1995	52	0.01	020.10	0
020	Total Phosphorus as P2O5 (%)	0324	14.80	0.4000	14.75	0.5464	0.1995	52	0.10	020.20	0
020	Total Phosphorus as P2O5 (%)	0292	14.81	0.0700	14.75	0.5464	0.1995	52	0.11	020.20	0
020	Total Phosphorus as P2O5 (%)	0516	14.81	0.1300	14.75	0.5464	0.1995	52	0.11	020.20	0
020	Total Phosphorus as P2O5 (%)	0390	14.83	0.3200	14.75	0.5464	0.1995	52	0.15	020.50	0
020	Total Phosphorus as P2O5 (%)	0482	14.85	0.1000	14.75	0.5464	0.1995	52	0.19	020.50	0
020	Total Phosphorus as P2O5 (%)	0394	14.89	0.0860	14.75	0.5464	0.1995	52	0.26	020.20	0
020	Total Phosphorus as P2O5 (%)	0035	14.91	0.3300	14.75	0.5464	0.1995	52	0.29	020.40	0
020	Total Phosphorus as P2O5 (%)	0114	14.95	0.0500	14.75	0.5464	0.1995	52	0.36	020.10	0
020	Total Phosphorus as P2O5 (%)	0300	14.96	0.1200	14.75	0.5464	0.1995	52	0.39	020.20	0
020	Total Phosphorus as P2O5 (%)	0522	15.02	0.1500	14.75	0.5464	0.1995	52	0.49	020.20	0
020	Total Phosphorus as P2O5 (%)	0402	15.04	0.3000	14.75	0.5464	0.1995	52	0.54	020.50	0
020	Total Phosphorus as P2O5 (%)	0546	15.12	0.0280	14.75	0.5464	0.1995	52	0.68	020.50	0
020	Total Phosphorus as P2O5 (%)	0423	15.13	0.1500	14.75	0.5464	0.1995	52	0.69	020.50	0
020	Total Phosphorus as P2O5 (%)	0309	15.21	0.0400	14.75	0.5464	0.1995	52	0.85	020.20	0
020	Total Phosphorus as P2O5 (%)	0541	15.24	0.2600	14.75	0.5464	0.1995	52	0.90	020.20	0
020	Total Phosphorus as P2O5 (%)	0511	15.28	0.0000	14.75	0.5464	0.1995	52	0.97	020.50	0
020	Total Phosphorus as P2O5 (%)	0416	15.31	0.0400	14.75	0.5464	0.1995	52	1.03	020.20	0
020	Total Phosphorus as P2O5 (%)	0433	15.41	0.1000	14.75	0.5464	0.1995	52	1.21	020.50	0
020	Total Phosphorus as P2O5 (%)	0368	15.50	0.4322	14.75	0.5464	0.1995	52	1.37	020.50	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
020	Total Phosphorus as P2O5 (%)	0255	15.89	1.417	14.75	0.5464	0.1995	52	2.09	020.50	0
020	Total Phosphorus as P2O5 (%)	0483	15.92	1.450	14.75	0.5464	0.1995	52	2.14	020.50	0
020	Total Phosphorus as P2O5 (%)	0524	16.14	0.1604	14.75	0.5464	0.1995	52	2.56	020.50	0
020	Total Phosphorus as P2O5 (%)	0307	16.33	0.3000	14.75	0.5464	0.1995	52	2.90	020.50	0
020	Total Phosphorus as P2O5 (%)	0443	17.54	0.0000	14.75	0.5464	0.1995	52	5.11	020.99	0
020	Total Phosphorus as P2O5 (%)	0515	13.83	2.946	14.75	0.5464	0.1995	52	-1.68	020.99	1
030	Citrate Insoluble Phosphorus as P2O5 (%)	0096	0.0700	0.0600				2		030.40	0
030	Citrate Insoluble Phosphorus as P2O5 (%)	0506	14.25	0.7000				2		030.20	0
040	Indirect Available Phosphorus as P2O5 (14%)	0096	14.38	0.0700	14.71	0.3003	0.0937	3	-1.10	040.40	0
040	Indirect Available Phosphorus as P2O5 (14%)	0394	14.79	0.0910	14.71	0.3003	0.0937	3	0.26	040.99	0
040	Indirect Available Phosphorus as P2O5 (14%)	0300	14.96	0.1200	14.71	0.3003	0.0937	3	0.84	040.20	0
041	Direct Available Phosphorus as P2O5 (14%)	0423	12.98†	0.2600	14.40	0.3396	0.1381	54	-4.19	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0230	13.60†	0.0000	14.40	0.3396	0.1381	54	-2.36	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0472	13.64†	0.0200	14.40	0.3396	0.1381	54	-2.25	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0519	13.91	0.0200	14.40	0.3396	0.1381	54	-1.45	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0539	14.00	0.0400	14.40	0.3396	0.1381	54	-1.19	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0511	14.02	0.0000	14.40	0.3396	0.1381	54	-1.13	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0526	14.03	0.0000	14.40	0.3396	0.1381	54	-1.10	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0532	14.07	0.1900	14.40	0.3396	0.1381	54	-1.00	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0522	14.07	0.1000	14.40	0.3396	0.1381	54	-0.98	041.21	0
041	Direct Available Phosphorus as P2O5 (14%)	0043	14.11	0.0300	14.40	0.3396	0.1381	54	-0.88	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0531	14.14	0.0600	14.40	0.3396	0.1381	54	-0.77	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0522	14.16	0.0200	14.40	0.3396	0.1381	54	-0.72	041.11	0
041	Direct Available Phosphorus as P2O5 (14%)	0377	14.17	0.0400	14.40	0.3396	0.1381	54	-0.69	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0549	14.18	0.0500	14.40	0.3396	0.1381	54	-0.67	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0397	14.18	0.2170	14.40	0.3396	0.1381	54	-0.67	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0518	14.20	0.2000	14.40	0.3396	0.1381	54	-0.60	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0185	14.22	0.2400	14.40	0.3396	0.1381	54	-0.54	041.11	0
041	Direct Available Phosphorus as P2O5 (14%)	0535	14.25	0.1000	14.40	0.3396	0.1381	54	-0.45	041.20	0
041	Direct Available Phosphorus as P2O5 (14%)	0535	14.25	0.1000	14.40	0.3396	0.1381	54	-0.45	041.21	0
041	Direct Available Phosphorus as P2O5 (14%)	0535	14.25	0.1000	14.40	0.3396	0.1381	54	-0.45	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0538	14.25	0.2000	14.40	0.3396	0.1381	54	-0.45	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0117	14.33	0.2700	14.40	0.3396	0.1381	54	-0.23	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0533	14.34	0.2700	14.40	0.3396	0.1381	54	-0.20	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0537	14.34	0.2000	14.40	0.3396	0.1381	54	-0.19	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0494	14.35	0.4100	14.40	0.3396	0.1381	54	-0.17	041.10	0
041	Direct Available Phosphorus as P2O5 (14%)	0536	14.35	0.1600	14.40	0.3396	0.1381	54	-0.16	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0354	14.35	0.1000	14.40	0.3396	0.1381	54	-0.16	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0073	14.37	0.4300	14.40	0.3396	0.1381	54	-0.11	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0041	14.39	0.2900	14.40	0.3396	0.1381	54	-0.05	041.10	0
041	Direct Available Phosphorus as P2O5 (14%)	0023	14.40	0.0300	14.40	0.3396	0.1381	54	-0.02	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0325	14.45	0.1000	14.40	0.3396	0.1381	54	0.14	041.50	0
041	Direct Available Phosphorus as P2O5 (14%)	0055	14.46	0.2000	14.40	0.3396	0.1381	54	0.17	041.60	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
041	Direct Available Phosphorus as P2O5 (14%)	0105	14.48	0.2600	14.40	0.3396	0.1381	54	0.23	041.11	0
041	Direct Available Phosphorus as P2O5 (14%)	0040	14.50	0.2000	14.40	0.3396	0.1381	54	0.29	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0177	14.50	0.0124	14.40	0.3396	0.1381	54	0.30	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0105	14.52	0.1400	14.40	0.3396	0.1381	54	0.34	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0486	14.55	0.1000	14.40	0.3396	0.1381	54	0.43	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0049	14.58	0.3600	14.40	0.3396	0.1381	54	0.52	041.10	0
041	Direct Available Phosphorus as P2O5 (14%)	0231	14.59	0.0800	14.40	0.3396	0.1381	54	0.55	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0025	14.64	0.0700	14.40	0.3396	0.1381	54	0.68	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0055	14.69	0.0200	14.40	0.3396	0.1381	54	0.84	041.10	0
041	Direct Available Phosphorus as P2O5 (14%)	0394	14.69	0.1540	14.40	0.3396	0.1381	54	0.85	041.21	0
041	Direct Available Phosphorus as P2O5 (14%)	0177	14.72	0.2173	14.40	0.3396	0.1381	54	0.92	041.10	0
041	Direct Available Phosphorus as P2O5 (14%)	0545	14.73	0.0500	14.40	0.3396	0.1381	54	0.95	041.99	0
041	Direct Available Phosphorus as P2O5 (14%)	0360	14.73	0.2400	14.40	0.3396	0.1381	54	0.96	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0029	14.74	0.1400	14.40	0.3396	0.1381	54	0.99	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0027	14.75	0.3000	14.40	0.3396	0.1381	54	1.02	041.20	0
041	Direct Available Phosphorus as P2O5 (14%)	0544	14.80	0.1300	14.40	0.3396	0.1381	54	1.15	041.21	0
041	Direct Available Phosphorus as P2O5 (14%)	0034	14.82	0.0490	14.40	0.3396	0.1381	54	1.22	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0452	14.89	0.0100	14.40	0.3396	0.1381	54	1.42	041.50	0
041	Direct Available Phosphorus as P2O5 (14%)	0037	14.94	0.2600	14.40	0.3396	0.1381	54	1.58	041.51	0
041	Direct Available Phosphorus as P2O5 (14%)	0485	14.97	0.0710	14.40	0.3396	0.1381	54	1.68	041.11	0
041	Direct Available Phosphorus as P2O5 (14%)	0136	15.01	0.1100	14.40	0.3396	0.1381	54	1.77	041.60	0
041	Direct Available Phosphorus as P2O5 (14%)	0368	15.41‡	0.0360	14.40	0.3396	0.1381	54	2.97	041.50	0
041	Direct Available Phosphorus as P2O5 (14%)	0494	14.51	0.8100	14.40	0.3396	0.1381	54	0.30	041.51	1
048	Water Soluble Phosphorus as P2O5 (%)	0444	13.07	0.1100	13.20	0.1827	0.1460	5	-0.65	048.50	0
048	Water Soluble Phosphorus as P2O5 (%)	0096	13.09	0.1900	13.20	0.1827	0.1460	5	-0.55	048.40	0
048	Water Soluble Phosphorus as P2O5 (%)	0444	13.13	0.1700	13.20	0.1827	0.1460	5	-0.36	048.10	0
048	Water Soluble Phosphorus as P2O5 (%)	0309	13.22	0.0400	13.20	0.1827	0.1460	5	0.09	048.20	0
048	Water Soluble Phosphorus as P2O5 (%)	0522	13.51	0.2200	13.20	0.1827	0.1460	5	1.48	048.20	0
048	Water Soluble Phosphorus as P2O5 (%)	0543	13.84	1.133	13.20	0.1827	0.1460	5	3.03	048.50	1
050	Soluble Potassium as K2O (14%)	0472	10.50†	0.7900	14.55	0.5313	0.1695	92	-7.63	050.31	0
050	Soluble Potassium as K2O (14%)	0390	13.68	0.1500	14.55	0.5313	0.1695	92	-1.65	050.50	0
050	Soluble Potassium as K2O (14%)	0114	13.74	0.1100	14.55	0.5313	0.1695	92	-1.53	050.00	0
050	Soluble Potassium as K2O (14%)	0486	13.74	0.2300	14.55	0.5313	0.1695	92	-1.53	050.52	0
050	Soluble Potassium as K2O (14%)	0506	13.75	0.3000	14.55	0.5313	0.1695	92	-1.51	050.99	0
050	Soluble Potassium as K2O (14%)	0521	13.77	0.0000	14.55	0.5313	0.1695	92	-1.48	050.99	0
050	Soluble Potassium as K2O (14%)	0522	13.86	0.1100	14.55	0.5313	0.1695	92	-1.31	050.00	0
050	Soluble Potassium as K2O (14%)	0523	13.90	0.4000	14.55	0.5313	0.1695	92	-1.22	050.99	0
050	Soluble Potassium as K2O (14%)	0518	13.91	0.2100	14.55	0.5313	0.1695	92	-1.21	050.99	0
050	Soluble Potassium as K2O (14%)	0519	13.94	0.0700	14.55	0.5313	0.1695	92	-1.16	050.99	0
050	Soluble Potassium as K2O (14%)	0485	13.95	0.2200	14.55	0.5313	0.1695	92	-1.13	050.52	0
050	Soluble Potassium as K2O (14%)	0040	14.00	0.0000	14.55	0.5313	0.1695	92	-1.04	050.30	0
050	Soluble Potassium as K2O (14%)	0535	14.00	0.0000	14.55	0.5313	0.1695	92	-1.04	050.99	0
050	Soluble Potassium as K2O (14%)	0533	14.01	0.0800	14.55	0.5313	0.1695	92	-1.02	050.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
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050	Soluble Potassium as K2O (14%)	0501	14.05	0.3000	14.55	0.5313	0.1695	92	-0.94	050.99	0
050	Soluble Potassium as K2O (14%)	0309	14.06	0.3300	14.55	0.5313	0.1695	92	-0.93	050.30	0
050	Soluble Potassium as K2O (14%)	0531	14.08	0.0500	14.55	0.5313	0.1695	92	-0.89	050.99	0
050	Soluble Potassium as K2O (14%)	0539	14.09	0.0300	14.55	0.5313	0.1695	92	-0.88	050.99	0
050	Soluble Potassium as K2O (14%)	0532	14.09	0.0400	14.55	0.5313	0.1695	92	-0.87	050.99	0
050	Soluble Potassium as K2O (14%)	0549	14.09	0.0200	14.55	0.5313	0.1695	92	-0.87	050.99	0
050	Soluble Potassium as K2O (14%)	0547	14.13	0.0500	14.55	0.5313	0.1695	92	-0.80	050.51	0
050	Soluble Potassium as K2O (14%)	0234	14.15	0.0900	14.55	0.5313	0.1695	92	-0.76	050.99	0
050	Soluble Potassium as K2O (14%)	0389	14.18	0.1100	14.55	0.5313	0.1695	92	-0.71	050.99	0
050	Soluble Potassium as K2O (14%)	0536	14.18	0.0500	14.55	0.5313	0.1695	92	-0.71	050.99	0
050	Soluble Potassium as K2O (14%)	0494	14.20	0.3800	14.55	0.5313	0.1695	92	-0.66	050.52	0
050	Soluble Potassium as K2O (14%)	0325	14.20	0.8000	14.55	0.5313	0.1695	92	-0.66	050.99	0
050	Soluble Potassium as K2O (14%)	0511	14.21	0.0000	14.55	0.5313	0.1695	92	-0.64	050.51	0
050	Soluble Potassium as K2O (14%)	0292	14.23	0.0100	14.55	0.5313	0.1695	92	-0.61	050.50	0
050	Soluble Potassium as K2O (14%)	0538	14.25	0.1000	14.55	0.5313	0.1695	92	-0.57	050.99	0
050	Soluble Potassium as K2O (14%)	0136	14.32	0.0800	14.55	0.5313	0.1695	92	-0.43	050.30	0
050	Soluble Potassium as K2O (14%)	0356	14.33	0.1200	14.55	0.5313	0.1695	92	-0.41	050.30	0
050	Soluble Potassium as K2O (14%)	0037	14.34	0.0600	14.55	0.5313	0.1695	92	-0.40	050.52	0
050	Soluble Potassium as K2O (14%)	0117	14.34	0.4800	14.55	0.5313	0.1695	92	-0.40	050.52	0
050	Soluble Potassium as K2O (14%)	0105	14.34	0.0600	14.55	0.5313	0.1695	92	-0.40	050.60	0
050	Soluble Potassium as K2O (14%)	0096	14.38	0.1200	14.55	0.5313	0.1695	92	-0.32	050.99	0
050	Soluble Potassium as K2O (14%)	0394	14.41	0.0020	14.55	0.5313	0.1695	92	-0.26	050.99	0
050	Soluble Potassium as K2O (14%)	0055	14.44	0.2100	14.55	0.5313	0.1695	92	-0.22	050.50	0
050	Soluble Potassium as K2O (14%)	0537	14.45	0.0500	14.55	0.5313	0.1695	92	-0.20	050.99	0
050	Soluble Potassium as K2O (14%)	0482	14.45	0.1000	14.55	0.5313	0.1695	92	-0.19	050.99	0
050	Soluble Potassium as K2O (14%)	0544	14.46	0.0200	14.55	0.5313	0.1695	92	-0.17	050.00	0
050	Soluble Potassium as K2O (14%)	0416	14.47	0.0500	14.55	0.5313	0.1695	92	-0.16	050.00	0
050	Soluble Potassium as K2O (14%)	0023	14.48	0.7900	14.55	0.5313	0.1695	92	-0.14	050.52	0
050	Soluble Potassium as K2O (14%)	0405	14.50	0.0500	14.55	0.5313	0.1695	92	-0.10	050.00	0
050	Soluble Potassium as K2O (14%)	0360	14.52	0.0700	14.55	0.5313	0.1695	92	-0.07	050.52	0
050	Soluble Potassium as K2O (14%)	0043	14.54	0.0300	14.55	0.5313	0.1695	92	-0.03	050.52	0
050	Soluble Potassium as K2O (14%)	0476	14.54	0.1937	14.55	0.5313	0.1695	92	-0.02	050.99	0
050	Soluble Potassium as K2O (14%)	0324	14.55	0.7000	14.55	0.5313	0.1695	92	0.00	050.50	0
050	Soluble Potassium as K2O (14%)	0535	14.55	0.1000	14.55	0.5313	0.1695	92	0.00	050.61	0
050	Soluble Potassium as K2O (14%)	0231	14.57	0.0500	14.55	0.5313	0.1695	92	0.03	050.00	0
050	Soluble Potassium as K2O (14%)	0220	14.58	0.0100	14.55	0.5313	0.1695	92	0.05	050.00	0
050	Soluble Potassium as K2O (14%)	0105	14.58	0.0500	14.55	0.5313	0.1695	92	0.05	050.62	0
050	Soluble Potassium as K2O (14%)	0377	14.59	0.1300	14.55	0.5313	0.1695	92	0.07	050.52	0
050	Soluble Potassium as K2O (14%)	0055	14.61	0.0800	14.55	0.5313	0.1695	92	0.11	050.00	0
050	Soluble Potassium as K2O (14%)	0444	14.64	0.0100	14.55	0.5313	0.1695	92	0.16	050.50	0
050	Soluble Potassium as K2O (14%)	0034	14.64	0.0270	14.55	0.5313	0.1695	92	0.16	050.62	0
050	Soluble Potassium as K2O (14%)	0550	14.66	0.0500	14.55	0.5313	0.1695	92	0.20	050.00	0
050	Soluble Potassium as K2O (14%)	0545	14.66	0.0000	14.55	0.5313	0.1695	92	0.21	050.99	0

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050	Soluble Potassium as K2O (14%)	0027	14.67	0.2600	14.55	0.5313	0.1695	92	0.23	050.99	0
050	Soluble Potassium as K2O (14%)	0029	14.72	0.4200	14.55	0.5313	0.1695	92	0.32	050.62	0
050	Soluble Potassium as K2O (14%)	0041	14.72	0.1600	14.55	0.5313	0.1695	92	0.32	050.60	0
050	Soluble Potassium as K2O (14%)	0169	14.74	0.1000	14.55	0.5313	0.1695	92	0.36	050.60	0
050	Soluble Potassium as K2O (14%)	0433	14.74	0.0600	14.55	0.5313	0.1695	92	0.36	050.99	0
050	Soluble Potassium as K2O (14%)	0177	14.74	0.0668	14.55	0.5313	0.1695	92	0.37	050.99	0
050	Soluble Potassium as K2O (14%)	0493	14.75	0.1000	14.55	0.5313	0.1695	92	0.38	050.99	0
050	Soluble Potassium as K2O (14%)	0035	14.82	0.0200	14.55	0.5313	0.1695	92	0.51	050.61	0
050	Soluble Potassium as K2O (14%)	0527	14.83	0.0700	14.55	0.5313	0.1695	92	0.52	050.99	0
050	Soluble Potassium as K2O (14%)	0354	14.85	0.1000	14.55	0.5313	0.1695	92	0.56	050.52	0
050	Soluble Potassium as K2O (14%)	0049	14.86	0.0100	14.55	0.5313	0.1695	92	0.57	050.00	0
050	Soluble Potassium as K2O (14%)	0402	14.89	0.0400	14.55	0.5313	0.1695	92	0.64	050.99	0
050	Soluble Potassium as K2O (14%)	0157	14.95	0.1000	14.55	0.5313	0.1695	92	0.75	050.30	0
050	Soluble Potassium as K2O (14%)	0451	14.96	0.0900	14.55	0.5313	0.1695	92	0.76	050.99	0
050	Soluble Potassium as K2O (14%)	0494	15.00	0.0100	14.55	0.5313	0.1695	92	0.84	050.00	0
050	Soluble Potassium as K2O (14%)	0095	15.05	0.6300	14.55	0.5313	0.1695	92	0.93	050.62	0
050	Soluble Potassium as K2O (14%)	0415	15.05	0.0483	14.55	0.5313	0.1695	92	0.94	050.30	0
050	Soluble Potassium as K2O (14%)	0455	15.05	0.1000	14.55	0.5313	0.1695	92	0.94	050.60	0
050	Soluble Potassium as K2O (14%)	0421	15.05	0.3000	14.55	0.5313	0.1695	92	0.94	050.99	0
050	Soluble Potassium as K2O (14%)	0185	15.11	0.0500	14.55	0.5313	0.1695	92	1.04	050.32	0
050	Soluble Potassium as K2O (14%)	0444	15.11	0.1200	14.55	0.5313	0.1695	92	1.05	050.99	0
050	Soluble Potassium as K2O (14%)	0255	15.14	0.9060	14.55	0.5313	0.1695	92	1.11	050.99	0
050	Soluble Potassium as K2O (14%)	0452	15.16	0.0100	14.55	0.5313	0.1695	92	1.14	050.51	0
050	Soluble Potassium as K2O (14%)	0291	15.17	0.0100	14.55	0.5313	0.1695	92	1.16	050.51	0
050	Soluble Potassium as K2O (14%)	0368	15.19	0.0717	14.55	0.5313	0.1695	92	1.20	050.99	0
050	Soluble Potassium as K2O (14%)	0300	15.21	0.1100	14.55	0.5313	0.1695	92	1.23	050.99	0
050	Soluble Potassium as K2O (14%)	0516	15.25	0.3750	14.55	0.5313	0.1695	92	1.31	050.99	0
050	Soluble Potassium as K2O (14%)	0025	15.39	0.3600	14.55	0.5313	0.1695	92	1.58	050.52	0
050	Soluble Potassium as K2O (14%)	0546	15.49‡	0.2870	14.55	0.5313	0.1695	92	1.77	050.99	0
050	Soluble Potassium as K2O (14%)	0073	15.63‡	0.5000	14.55	0.5313	0.1695	92	2.03	050.30	0
050	Soluble Potassium as K2O (14%)	0042	15.83‡	0.8600	14.55	0.5313	0.1695	92	2.41	050.99	0
050	Soluble Potassium as K2O (14%)	0524	16.05‡	0.0121	14.55	0.5313	0.1695	92	2.83	050.99	0
050	Soluble Potassium as K2O (14%)	0483	16.38‡	0.0000	14.55	0.5313	0.1695	92	3.44	050.51	0
050	Soluble Potassium as K2O (14%)	0443	17.51‡	0.2900	14.55	0.5313	0.1695	92	5.56	050.60	0
050	Soluble Potassium as K2O (14%)	0423	18.24‡	0.2200	14.55	0.5313	0.1695	92	6.94	050.52	0
050	Soluble Potassium as K2O (14%)	0543	14.22	1.119	14.55	0.5313	0.1695	92	-0.63	050.50	1
050	Soluble Potassium as K2O (14%)	0541	15.61‡	1.940	14.55	0.5313	0.1695	92	1.99	050.99	1
060	Water (Free) (%)	0007	0.4850	0.2100	1.271	1.089	0.2242	6	-0.64	060.00	0
060	Water (Free) (%)	0055	0.7200	0.4600	1.271	1.089	0.2242	6	-0.45	060.99	0
060	Water (Free) (%)	0416	0.7620	0.0250	1.271	1.089	0.2242	6	-0.42	060.00	0
060	Water (Free) (%)	0096	0.7700	0.1200	1.271	1.089	0.2242	6	-0.41	060.00	0
060	Water (Free) (%)	0518	1.985	0.2300	1.271	1.089	0.2242	6	0.58	060.30	0
060	Water (Free) (%)	0055	3.450	0.3000	1.271	1.089	0.2242	6	1.78	060.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
101	Acid Soluble Calcium (%)	0472	0.2350	0.0100	0.3004	0.0446	0.0208	13	-1.47	101.30	0
101	Acid Soluble Calcium (%)	0389	0.2600	0.0000	0.3004	0.0446	0.0208	13	-0.91	101.99	0
101	Acid Soluble Calcium (%)	0482	0.2750	0.0100	0.3004	0.0446	0.0208	13	-0.57	101.30	0
101	Acid Soluble Calcium (%)	0521	0.2796	0.0000	0.3004	0.0446	0.0208	13	-0.47	101.32	0
101	Acid Soluble Calcium (%)	0494	0.2810	0.0051	0.3004	0.0446	0.0208	13	-0.44	101.33	0
101	Acid Soluble Calcium (%)	0117	0.2829	0.0014	0.3004	0.0446	0.0208	13	-0.39	101.33	0
101	Acid Soluble Calcium (%)	0511	0.2900	0.0000	0.3004	0.0446	0.0208	13	-0.23	101.30	0
101	Acid Soluble Calcium (%)	0096	0.2955	0.0190	0.3004	0.0446	0.0208	13	-0.11	101.30	0
101	Acid Soluble Calcium (%)	0354	0.3150	0.0100	0.3004	0.0446	0.0208	13	0.33	101.30	0
101	Acid Soluble Calcium (%)	0035	0.3235	0.0970	0.3004	0.0446	0.0208	13	0.52	101.30	0
101	Acid Soluble Calcium (%)	0527	0.3330	0.0060	0.3004	0.0446	0.0208	13	0.73	101.33	0
101	Acid Soluble Calcium (%)	0423	0.4780	0.0240	0.3004	0.0446	0.0208	13	3.98	101.32	0
101	Acid Soluble Calcium (%)	0483	0.5670	0.0880	0.3004	0.0446	0.0208	13	5.98	101.30	0
101	Acid Soluble Calcium (%)	0324	0.3285	0.2170	0.3004	0.0446	0.0208	13	0.63	101.30	1
121	Acid Soluble Magnesium (1%)	0506	0.05000†	0.0000	0.5800	0.0525	0.0161	48	-10.10	121.99	0
121	Acid Soluble Magnesium (1%)	0230	0.4490	0.0100	0.5800	0.0525	0.0161	48	-2.50	121.30	0
121	Acid Soluble Magnesium (1%)	0476	0.4549	0.0057	0.5800	0.0525	0.0161	48	-2.39	121.99	0
121	Acid Soluble Magnesium (1%)	0486	0.4950	0.0100	0.5800	0.0525	0.0161	48	-1.62	121.33	0
121	Acid Soluble Magnesium (1%)	0035	0.5015	0.0190	0.5800	0.0525	0.0161	48	-1.50	121.30	0
121	Acid Soluble Magnesium (1%)	0451	0.5280	0.0140	0.5800	0.0525	0.0161	48	-0.99	121.30	0
121	Acid Soluble Magnesium (1%)	0394	0.5325	0.0090	0.5800	0.0525	0.0161	48	-0.91	121.32	0
121	Acid Soluble Magnesium (1%)	0360	0.5355	0.0090	0.5800	0.0525	0.0161	48	-0.85	121.30	0
121	Acid Soluble Magnesium (1%)	0541	0.5400	0.0000	0.5800	0.0525	0.0161	48	-0.76	121.32	0
121	Acid Soluble Magnesium (1%)	0524	0.5400	0.0000	0.5800	0.0525	0.0161	48	-0.76	121.99	0
121	Acid Soluble Magnesium (1%)	0516	0.5456	0.0180	0.5800	0.0525	0.0161	48	-0.66	121.00	0
121	Acid Soluble Magnesium (1%)	0324	0.5565	0.0070	0.5800	0.0525	0.0161	48	-0.45	121.30	0
121	Acid Soluble Magnesium (1%)	0389	0.5570	0.0100	0.5800	0.0525	0.0161	48	-0.44	121.99	0
121	Acid Soluble Magnesium (1%)	0023	0.5620	0.0040	0.5800	0.0525	0.0161	48	-0.34	121.33	0
121	Acid Soluble Magnesium (1%)	0521	0.5624	0.0000	0.5800	0.0525	0.0161	48	-0.34	121.32	0
121	Acid Soluble Magnesium (1%)	0102	0.5626	0.0323	0.5800	0.0525	0.0161	48	-0.33	121.30	0
121	Acid Soluble Magnesium (1%)	0354	0.5650	0.0100	0.5800	0.0525	0.0161	48	-0.29	121.30	0
121	Acid Soluble Magnesium (1%)	0444	0.5650	0.0100	0.5800	0.0525	0.0161	48	-0.29	121.30	0
121	Acid Soluble Magnesium (1%)	0482	0.5650	0.0100	0.5800	0.0525	0.0161	48	-0.29	121.30	0
121	Acid Soluble Magnesium (1%)	0177	0.5662	0.0112	0.5800	0.0525	0.0161	48	-0.26	121.33	0
121	Acid Soluble Magnesium (1%)	0494	0.5679	0.0100	0.5800	0.0525	0.0161	48	-0.23	121.33	0
121	Acid Soluble Magnesium (1%)	0040	0.5700	0.0000	0.5800	0.0525	0.0161	48	-0.19	121.00	0
121	Acid Soluble Magnesium (1%)	0096	0.5700	0.0200	0.5800	0.0525	0.0161	48	-0.19	121.30	0
121	Acid Soluble Magnesium (1%)	0055	0.5700	0.0200	0.5800	0.0525	0.0161	48	-0.19	121.33	0
121	Acid Soluble Magnesium (1%)	0433	0.5735	0.0010	0.5800	0.0525	0.0161	48	-0.12	121.30	0
121	Acid Soluble Magnesium (1%)	0368	0.5737	0.0206	0.5800	0.0525	0.0161	48	-0.12	121.99	0
121	Acid Soluble Magnesium (1%)	0421	0.5750	0.0100	0.5800	0.0525	0.0161	48	-0.10	121.33	0
121	Acid Soluble Magnesium (1%)	0231	0.5800	0.0000	0.5800	0.0525	0.0161	48	0.00	121.30	0
121	Acid Soluble Magnesium (1%)	0423	0.5895	0.0030	0.5800	0.0525	0.0161	48	0.18	121.32	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
121	Acid Soluble Magnesium (1%)	0117	0.5899	0.0093	0.5800	0.0525	0.0161	48	0.19	121.33	0
121	Acid Soluble Magnesium (1%)	0390	0.5900	0.0020	0.5800	0.0525	0.0161	48	0.19	121.30	0
121	Acid Soluble Magnesium (1%)	0472	0.5900	0.0000	0.5800	0.0525	0.0161	48	0.19	121.30	0
121	Acid Soluble Magnesium (1%)	0511	0.5900	0.0000	0.5800	0.0525	0.0161	48	0.19	121.30	0
121	Acid Soluble Magnesium (1%)	0523	0.6000	0.0000	0.5800	0.0525	0.0161	48	0.38	121.99	0
121	Acid Soluble Magnesium (1%)	0255	0.6005	0.0210	0.5800	0.0525	0.0161	48	0.39	121.30	0
121	Acid Soluble Magnesium (1%)	0029	0.6028	0.0311	0.5800	0.0525	0.0161	48	0.43	121.00	0
121	Acid Soluble Magnesium (1%)	0234	0.6100	0.0200	0.5800	0.0525	0.0161	48	0.57	121.30	0
121	Acid Soluble Magnesium (1%)	0043	0.6100	0.0000	0.5800	0.0525	0.0161	48	0.57	121.32	0
121	Acid Soluble Magnesium (1%)	0527	0.6120	0.0020	0.5800	0.0525	0.0161	48	0.61	121.33	0
121	Acid Soluble Magnesium (1%)	0546	0.6230	0.0100	0.5800	0.0525	0.0161	48	0.82	121.33	0
121	Acid Soluble Magnesium (1%)	0169	0.6550	0.0300	0.5800	0.0525	0.0161	48	1.43	121.00	0
121	Acid Soluble Magnesium (1%)	0220	0.6550	0.0300	0.5800	0.0525	0.0161	48	1.43	121.31	0
121	Acid Soluble Magnesium (1%)	0307	0.6950	0.0000	0.5800	0.0525	0.0161	48	2.19	121.30	0
121	Acid Soluble Magnesium (1%)	0550	0.7000	0.0400	0.5800	0.0525	0.0161	48	2.29	121.00	0
121	Acid Soluble Magnesium (1%)	0483	0.7075	0.0530	0.5800	0.0525	0.0161	48	2.43	121.30	0
121	Acid Soluble Magnesium (1%)	0519	0.8600‡	0.0400	0.5800	0.0525	0.0161	48	5.34	121.99	0
121	Acid Soluble Magnesium (1%)	0309	0.9000‡	0.0200	0.5800	0.0525	0.0161	48	6.10	121.00	0
121	Acid Soluble Magnesium (1%)	0515	1.033‡	0.1887	0.5800	0.0525	0.0161	48	8.64	121.99	0
121	Acid Soluble Magnesium (1%)	0515	2.571‡	1.439	0.5800	0.0525	0.0161	48	37.96	121.33	2
131	Water Soluble Magnesium (%)	0506	0.0500	0.0000	0.3267	0.1768	0.0236	9	-1.45	131.99	0
131	Water Soluble Magnesium (%)	0394	0.1915	0.0070	0.3267	0.1768	0.0236	9	-0.71	131.30	0
131	Water Soluble Magnesium (%)	0231	0.2750	0.0100	0.3267	0.1768	0.0236	9	-0.27	131.30	0
131	Water Soluble Magnesium (%)	0117	0.2882	0.0203	0.3267	0.1768	0.0236	9	-0.20	131.30	0
131	Water Soluble Magnesium (%)	0444	0.3000	0.0600	0.3267	0.1768	0.0236	9	-0.14	131.30	0
131	Water Soluble Magnesium (%)	0029	0.3363	0.0562	0.3267	0.1768	0.0236	9	0.05	131.00	0
131	Water Soluble Magnesium (%)	0027	0.4210	0.0360	0.3267	0.1768	0.0236	9	0.49	131.30	0
131	Water Soluble Magnesium (%)	0220	0.4750	0.0100	0.3267	0.1768	0.0236	9	0.77	131.99	0
131	Water Soluble Magnesium (%)	0543	0.6435	0.0130	0.3267	0.1768	0.0236	9	1.65	131.30	0
131	Water Soluble Magnesium (%)	0550	0.3700	0.3400	0.3267	0.1768	0.0236	9	0.23	131.00	1
143	Elemental Sulfur (%)	0095	0.3650	0.0100	8.291	4.456	0.0420	5	-1.55	143.00	0
143	Elemental Sulfur (%)	0472	9.500	0.0800	8.291	4.456	0.0420	5	0.24	143.99	0
143	Elemental Sulfur (%)	0390	10.28	0.0800	8.291	4.456	0.0420	5	0.39	143.99	0
143	Elemental Sulfur (%)	0291	10.58	0.0100	8.291	4.456	0.0420	5	0.45	143.99	0
143	Elemental Sulfur (%)	0389	10.74	0.0300	8.291	4.456	0.0420	5	0.48	143.99	0
143	Elemental Sulfur (%)	0255	10.07	0.3990	8.291	4.456	0.0420	5	0.35	143.99	1
145	Sulfate Sulfur, HCl soluble (%)	0518	7.820	0.0400	10.46	0.4606	0.1320	11	-5.36	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0444	9.780	0.2600	10.46	0.4606	0.1320	11	-1.38	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0444	10.14	0.0200	10.46	0.4606	0.1320	11	-0.65	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0544	10.45	0.0100	10.46	0.4606	0.1320	11	-0.03	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0522	10.48	0.0500	10.46	0.4606	0.1320	11	0.03	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0095	10.49	0.0900	10.46	0.4606	0.1320	11	0.05	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0511	10.68	0.0000	10.46	0.4606	0.1320	11	0.45	145.00	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
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145	Sulfate Sulfur, HCl soluble (%)	0550	10.75	0.5000	10.46	0.4606	0.1320	11	0.59	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0043	10.77	0.1400	10.46	0.4606	0.1320	11	0.63	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0027	10.78	0.2600	10.46	0.4606	0.1320	11	0.65	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0397	10.99	0.0820	10.46	0.4606	0.1320	11	1.07	145.00	0
148	Total Sulfur (7.75%)	0102	7.996†	0.4731	10.48	0.4015	0.1959	45	-6.18	148.07	0
148	Total Sulfur (7.75%)	0023	9.099†	1.695	10.48	0.4015	0.1959	45	-3.44	148.07	0
148	Total Sulfur (7.75%)	0523	9.250†	0.1000	10.48	0.4015	0.1959	45	-3.06	148.99	0
148	Total Sulfur (7.75%)	0444	9.435†	0.2100	10.48	0.4015	0.1959	45	-2.60	148.07	0
148	Total Sulfur (7.75%)	0541	9.865	0.0100	10.48	0.4015	0.1959	45	-1.53	148.99	0
148	Total Sulfur (7.75%)	0506	9.980	0.2400	10.48	0.4015	0.1959	45	-1.24	148.99	0
148	Total Sulfur (7.75%)	0394	10.01	0.1900	10.48	0.4015	0.1959	45	-1.18	148.07	0
148	Total Sulfur (7.75%)	0117	10.15	0.0500	10.48	0.4015	0.1959	45	-0.83	148.07	0
148	Total Sulfur (7.75%)	0534	10.17	0.0300	10.48	0.4015	0.1959	45	-0.78	148.01	0
148	Total Sulfur (7.75%)	0494	10.30	0.7526	10.48	0.4015	0.1959	45	-0.45	148.07	0
148	Total Sulfur (7.75%)	0231	10.30	0.0000	10.48	0.4015	0.1959	45	-0.44	148.01	0
148	Total Sulfur (7.75%)	0368	10.31	0.3813	10.48	0.4015	0.1959	45	-0.43	148.99	0
148	Total Sulfur (7.75%)	0114	10.38	0.0100	10.48	0.4015	0.1959	45	-0.26	148.01	0
148	Total Sulfur (7.75%)	0177	10.38	0.1776	10.48	0.4015	0.1959	45	-0.24	148.07	0
148	Total Sulfur (7.75%)	0486	10.39	0.1500	10.48	0.4015	0.1959	45	-0.23	148.07	0
148	Total Sulfur (7.75%)	0037	10.39	0.0750	10.48	0.4015	0.1959	45	-0.23	148.07	0
148	Total Sulfur (7.75%)	0444	10.39	0.0200	10.48	0.4015	0.1959	45	-0.22	148.01	0
148	Total Sulfur (7.75%)	0402	10.39	0.0800	10.48	0.4015	0.1959	45	-0.22	148.07	0
148	Total Sulfur (7.75%)	0157	10.40	0.0000	10.48	0.4015	0.1959	45	-0.20	148.00	0
148	Total Sulfur (7.75%)	0354	10.40	0.0000	10.48	0.4015	0.1959	45	-0.20	148.99	0
148	Total Sulfur (7.75%)	0105	10.41	0.0100	10.48	0.4015	0.1959	45	-0.18	148.01	0
148	Total Sulfur (7.75%)	0292	10.41	0.0600	10.48	0.4015	0.1959	45	-0.17	148.07	0
148	Total Sulfur (7.75%)	0405	10.42	0.1200	10.48	0.4015	0.1959	45	-0.15	148.01	0
148	Total Sulfur (7.75%)	0419	10.43	0.0000	10.48	0.4015	0.1959	45	-0.12	148.04	0
148	Total Sulfur (7.75%)	0451	10.45	0.1000	10.48	0.4015	0.1959	45	-0.07	148.00	0
148	Total Sulfur (7.75%)	0029	10.49	0.0600	10.48	0.4015	0.1959	45	0.03	148.01	0
148	Total Sulfur (7.75%)	0040	10.50	0.2000	10.48	0.4015	0.1959	45	0.05	148.99	0
148	Total Sulfur (7.75%)	0096	10.52	0.1200	10.48	0.4015	0.1959	45	0.10	148.99	0
148	Total Sulfur (7.75%)	0025	10.54	0.0500	10.48	0.4015	0.1959	45	0.14	148.00	0
148	Total Sulfur (7.75%)	0230	10.55	0.1000	10.48	0.4015	0.1959	45	0.18	148.01	0
148	Total Sulfur (7.75%)	0029	10.58	0.2300	10.48	0.4015	0.1959	45	0.24	148.00	0
148	Total Sulfur (7.75%)	0433	10.63	0.0300	10.48	0.4015	0.1959	45	0.37	148.99	0
148	Total Sulfur (7.75%)	0049	10.66	0.3000	10.48	0.4015	0.1959	45	0.45	148.00	0
148	Total Sulfur (7.75%)	0476	10.67	0.0706	10.48	0.4015	0.1959	45	0.48	148.01	0
148	Total Sulfur (7.75%)	0421	10.75	0.3000	10.48	0.4015	0.1959	45	0.68	148.07	0
148	Total Sulfur (7.75%)	0055	10.82	0.0100	10.48	0.4015	0.1959	45	0.84	148.01	0
148	Total Sulfur (7.75%)	0095	10.85	0.0800	10.48	0.4015	0.1959	45	0.93	148.01	0
148	Total Sulfur (7.75%)	0136	10.92	0.3100	10.48	0.4015	0.1959	45	1.09	148.00	0
148	Total Sulfur (7.75%)	0324	10.95	0.3000	10.48	0.4015	0.1959	45	1.17	148.01	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
148	Total Sulfur (7.75%)	0482	10.95	0.1000	10.48	0.4015	0.1959	45	1.17	148.99	0
148	Total Sulfur (7.75%)	0220	11.05	0.0900	10.48	0.4015	0.1959	45	1.41	148.99	0
148	Total Sulfur (7.75%)	0546	11.25‡	0.0060	10.48	0.4015	0.1959	45	1.92	148.07	0
148	Total Sulfur (7.75%)	0483	11.30‡	1.200	10.48	0.4015	0.1959	45	2.05	148.07	0
148	Total Sulfur (7.75%)	0527	12.36‡	0.0750	10.48	0.4015	0.1959	45	4.69	148.07	0
148	Total Sulfur (7.75%)	0307	12.87‡	0.2500	10.48	0.4015	0.1959	45	5.94	148.99	0
148	Total Sulfur (7.75%)	0515	8.339†	3.090	10.48	0.4015	0.1959	45	-5.33	148.07	1
149	Sulfur - HNO3 soluble (%)	0519	7.860	0.0800	10.01	1.644	0.0375	4	-1.31	149.04	0
149	Sulfur - HNO3 soluble (%)	0521	9.998	0.0000	10.01	1.644	0.0375	4	-0.01	149.04	0
149	Sulfur - HNO3 soluble (%)	0423	10.33	0.0500	10.01	1.644	0.0375	4	0.19	149.04	0
149	Sulfur - HNO3 soluble (%)	0524	11.85	0.0200	10.01	1.644	0.0375	4	1.12	149.04	0
151	Acid Soluble Arsenic (ppm)	0476	45.43	0.3364	157.4	17.36	6.333	20	-6.45	151.99	0
151	Acid Soluble Arsenic (ppm)	0550	89.50	3.270	157.4	17.36	6.333	20	-3.91	151.00	0
151	Acid Soluble Arsenic (ppm)	0444	126.5	3.000	157.4	17.36	6.333	20	-1.78	151.30	0
151	Acid Soluble Arsenic (ppm)	0394	141.3	3.200	157.4	17.36	6.333	20	-0.93	151.30	0
151	Acid Soluble Arsenic (ppm)	0136	145.0	4.000	157.4	17.36	6.333	20	-0.72	151.00	0
151	Acid Soluble Arsenic (ppm)	0220	148.0	12.00	157.4	17.36	6.333	20	-0.54	151.99	0
151	Acid Soluble Arsenic (ppm)	0515	149.2	5.280	157.4	17.36	6.333	20	-0.47	151.34	0
151	Acid Soluble Arsenic (ppm)	0515	154.4	9.017	157.4	17.36	6.333	20	-0.17	151.33	0
151	Acid Soluble Arsenic (ppm)	0368	155.0	10.00	157.4	17.36	6.333	20	-0.14	151.30	0
151	Acid Soluble Arsenic (ppm)	0096	161.7	7.300	157.4	17.36	6.333	20	0.24	151.30	0
151	Acid Soluble Arsenic (ppm)	0255	161.9	3.681	157.4	17.36	6.333	20	0.26	151.30	0
151	Acid Soluble Arsenic (ppm)	0389	164.9	0.1400	157.4	17.36	6.333	20	0.43	151.30	0
151	Acid Soluble Arsenic (ppm)	0541	166.0	30.00	157.4	17.36	6.333	20	0.49	151.30	0
151	Acid Soluble Arsenic (ppm)	0519	167.7	0.6500	157.4	17.36	6.333	20	0.59	151.99	0
151	Acid Soluble Arsenic (ppm)	0511	170.0	0.0000	157.4	17.36	6.333	20	0.73	151.30	0
151	Acid Soluble Arsenic (ppm)	0527	170.4	0.5060	157.4	17.36	6.333	20	0.75	151.33	0
151	Acid Soluble Arsenic (ppm)	0117	172.7	6.000	157.4	17.36	6.333	20	0.88	151.33	0
151	Acid Soluble Arsenic (ppm)	0037	172.8	8.634	157.4	17.36	6.333	20	0.89	151.33	0
151	Acid Soluble Arsenic (ppm)	0102	173.6	12.08	157.4	17.36	6.333	20	0.93	151.30	0
151	Acid Soluble Arsenic (ppm)	0494	179.8	7.566	157.4	17.36	6.333	20	1.29	151.33	0
151	Acid Soluble Arsenic (ppm)	0230	149.0	36.00	157.4	17.36	6.333	20	-0.49	151.34	1
165	Acid Soluble Boron (0.2%)	0537	0.1025†	0.0030	0.2058	0.0165	0.0068	47	-6.27	165.00	0
165	Acid Soluble Boron (0.2%)	0230	0.1655†	0.0030	0.2058	0.0165	0.0068	47	-2.45	165.99	0
165	Acid Soluble Boron (0.2%)	0476	0.1698†	0.0007	0.2058	0.0165	0.0068	47	-2.19	165.99	0
165	Acid Soluble Boron (0.2%)	0309	0.1750	0.0100	0.2058	0.0165	0.0068	47	-1.87	165.00	0
165	Acid Soluble Boron (0.2%)	0524	0.1850	0.0100	0.2058	0.0165	0.0068	47	-1.26	165.99	0
165	Acid Soluble Boron (0.2%)	0324	0.1860	0.0000	0.2058	0.0165	0.0068	47	-1.20	165.30	0
165	Acid Soluble Boron (0.2%)	0029	0.1870	0.0020	0.2058	0.0165	0.0068	47	-1.14	165.00	0
165	Acid Soluble Boron (0.2%)	0397	0.1880	0.0042	0.2058	0.0165	0.0068	47	-1.08	165.00	0
165	Acid Soluble Boron (0.2%)	0521	0.1897	0.0000	0.2058	0.0165	0.0068	47	-0.98	165.30	0
165	Acid Soluble Boron (0.2%)	0486	0.1900	0.0000	0.2058	0.0165	0.0068	47	-0.96	165.99	0
165	Acid Soluble Boron (0.2%)	0506	0.1950	0.0100	0.2058	0.0165	0.0068	47	-0.66	165.00	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
165	Acid Soluble Boron (0.2%)	0539	0.1950	0.0300	0.2058	0.0165	0.0068	47	-0.66	165.00	0
165	Acid Soluble Boron (0.2%)	0055	0.1960	0.0100	0.2058	0.0165	0.0068	47	-0.59	165.00	0
165	Acid Soluble Boron (0.2%)	0527	0.1995	0.0030	0.2058	0.0165	0.0068	47	-0.38	165.99	0
165	Acid Soluble Boron (0.2%)	0531	0.2000	0.0200	0.2058	0.0165	0.0068	47	-0.35	165.00	0
165	Acid Soluble Boron (0.2%)	0472	0.2000	0.0000	0.2058	0.0165	0.0068	47	-0.35	165.99	0
165	Acid Soluble Boron (0.2%)	0421	0.2005	0.0010	0.2058	0.0165	0.0068	47	-0.32	165.99	0
165	Acid Soluble Boron (0.2%)	0394	0.2032	0.0033	0.2058	0.0165	0.0068	47	-0.16	165.30	0
165	Acid Soluble Boron (0.2%)	0169	0.2040	0.0100	0.2058	0.0165	0.0068	47	-0.11	165.00	0
165	Acid Soluble Boron (0.2%)	0368	0.2042	0.0013	0.2058	0.0165	0.0068	47	-0.10	165.99	0
165	Acid Soluble Boron (0.2%)	0220	0.2050	0.0100	0.2058	0.0165	0.0068	47	-0.05	165.00	0
165	Acid Soluble Boron (0.2%)	0535	0.2050	0.0100	0.2058	0.0165	0.0068	47	-0.05	165.00	0
165	Acid Soluble Boron (0.2%)	0234	0.2050	0.0100	0.2058	0.0165	0.0068	47	-0.05	165.30	0
165	Acid Soluble Boron (0.2%)	0519	0.2050	0.0100	0.2058	0.0165	0.0068	47	-0.05	165.99	0
165	Acid Soluble Boron (0.2%)	0040	0.2075	0.0010	0.2058	0.0165	0.0068	47	0.10	165.30	0
165	Acid Soluble Boron (0.2%)	0023	0.2090	0.0000	0.2058	0.0165	0.0068	47	0.19	165.30	0
165	Acid Soluble Boron (0.2%)	0389	0.2097	0.0018	0.2058	0.0165	0.0068	47	0.24	165.30	0
165	Acid Soluble Boron (0.2%)	0354	0.2100	0.0000	0.2058	0.0165	0.0068	47	0.25	165.30	0
165	Acid Soluble Boron (0.2%)	0444	0.2100	0.0000	0.2058	0.0165	0.0068	47	0.25	165.30	0
165	Acid Soluble Boron (0.2%)	0482	0.2100	0.0000	0.2058	0.0165	0.0068	47	0.25	165.99	0
165	Acid Soluble Boron (0.2%)	0511	0.2100	0.0000	0.2058	0.0165	0.0068	47	0.25	165.99	0
165	Acid Soluble Boron (0.2%)	0136	0.2100	0.0200	0.2058	0.0165	0.0068	47	0.25	165.30	0
165	Acid Soluble Boron (0.2%)	0360	0.2110	0.0020	0.2058	0.0165	0.0068	47	0.32	165.99	0
165	Acid Soluble Boron (0.2%)	0423	0.2115	0.0010	0.2058	0.0165	0.0068	47	0.35	165.99	0
165	Acid Soluble Boron (0.2%)	0515	0.2136	0.0255	0.2058	0.0165	0.0068	47	0.47	165.99	0
165	Acid Soluble Boron (0.2%)	0117	0.2149	0.0011	0.2058	0.0165	0.0068	47	0.55	165.99	0
165	Acid Soluble Boron (0.2%)	0255	0.2175	0.0090	0.2058	0.0165	0.0068	47	0.71	165.99	0
165	Acid Soluble Boron (0.2%)	0390	0.2176	0.0069	0.2058	0.0165	0.0068	47	0.71	165.30	0
165	Acid Soluble Boron (0.2%)	0494	0.2186	0.0010	0.2058	0.0165	0.0068	47	0.78	165.30	0
165	Acid Soluble Boron (0.2%)	0433	0.2240	0.0020	0.2058	0.0165	0.0068	47	1.10	165.30	0
165	Acid Soluble Boron (0.2%)	0546	0.2240	0.0080	0.2058	0.0165	0.0068	47	1.10	165.99	0
165	Acid Soluble Boron (0.2%)	0550	0.2250	0.0100	0.2058	0.0165	0.0068	47	1.17	165.00	0
165	Acid Soluble Boron (0.2%)	0042	0.2295	0.0130	0.2058	0.0165	0.0068	47	1.44	165.99	0
165	Acid Soluble Boron (0.2%)	0231	0.2400‡	0.0000	0.2058	0.0165	0.0068	47	2.08	165.99	0
165	Acid Soluble Boron (0.2%)	0307	0.2415‡	0.0110	0.2058	0.0165	0.0068	47	2.17	165.30	0
165	Acid Soluble Boron (0.2%)	0534	0.2450‡	0.0300	0.2058	0.0165	0.0068	47	2.38	165.00	0
165	Acid Soluble Boron (0.2%)	0483	0.2490‡	0.0140	0.2058	0.0165	0.0068	47	2.62	165.99	0
171	Water Soluble Boron (%)	0533	0.1005	0.0050	0.1404	0.0426	0.0168	8	-0.86	171.10	0
171	Water Soluble Boron (%)	0536	0.1095	0.0210	0.1404	0.0426	0.0168	8	-0.66	171.10	0
171	Water Soluble Boron (%)	0538	0.1100	0.0040	0.1404	0.0426	0.0168	8	-0.65	171.10	0
171	Water Soluble Boron (%)	0532	0.1140	0.0320	0.1404	0.0426	0.0168	8	-0.57	171.10	0
171	Water Soluble Boron (%)	0220	0.1550	0.0100	0.1404	0.0426	0.0168	8	0.31	171.10	0
171	Water Soluble Boron (%)	0444	0.1550	0.0100	0.1404	0.0426	0.0168	8	0.31	171.99	0
171	Water Soluble Boron (%)	0550	0.1750	0.0500	0.1404	0.0426	0.0168	8	0.74	171.10	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
171	Water Soluble Boron (%)	0402	0.2120	0.0020	0.1404	0.0426	0.0168	8	1.54	171.99	0
181	Acid Soluble Cadmium (ppm)	0506	126.5	27.00	188.6	16.98	12.92	23	-3.66	181.99	0
181	Acid Soluble Cadmium (ppm)	0444	137.5	3.000	188.6	16.98	12.92	23	-3.01	181.30	0
181	Acid Soluble Cadmium (ppm)	0476	152.3	0.8220	188.6	16.98	12.92	23	-2.14	181.99	0
181	Acid Soluble Cadmium (ppm)	0035	171.0	16.00	188.6	16.98	12.92	23	-1.04	181.30	0
181	Acid Soluble Cadmium (ppm)	0255	173.3	4.369	188.6	16.98	12.92	23	-0.90	181.30	0
181	Acid Soluble Cadmium (ppm)	0519	173.5	0.9700	188.6	16.98	12.92	23	-0.89	181.99	0
181	Acid Soluble Cadmium (ppm)	0368	182.5	3.000	188.6	16.98	12.92	23	-0.36	181.30	0
181	Acid Soluble Cadmium (ppm)	0389	185.0	6.000	188.6	16.98	12.92	23	-0.21	181.30	0
181	Acid Soluble Cadmium (ppm)	0230	187.0	70.00	188.6	16.98	12.92	23	-0.10	181.34	0
181	Acid Soluble Cadmium (ppm)	0541	188.0	14.00	188.6	16.98	12.92	23	-0.04	181.30	0
181	Acid Soluble Cadmium (ppm)	0117	188.9	7.900	188.6	16.98	12.92	23	0.01	181.33	0
181	Acid Soluble Cadmium (ppm)	0515	190.1	33.57	188.6	16.98	12.92	23	0.09	181.33	0
181	Acid Soluble Cadmium (ppm)	0220	191.5	25.00	188.6	16.98	12.92	23	0.17	181.99	0
181	Acid Soluble Cadmium (ppm)	0096	192.0	18.10	188.6	16.98	12.92	23	0.20	181.30	0
181	Acid Soluble Cadmium (ppm)	0524	192.0	6.070	188.6	16.98	12.92	23	0.20	181.30	0
181	Acid Soluble Cadmium (ppm)	0037	199.0	11.02	188.6	16.98	12.92	23	0.61	181.33	0
181	Acid Soluble Cadmium (ppm)	0136	200.0	2.000	188.6	16.98	12.92	23	0.67	181.00	0
181	Acid Soluble Cadmium (ppm)	0515	200.2	1.210	188.6	16.98	12.92	23	0.68	181.34	0
181	Acid Soluble Cadmium (ppm)	0527	203.0	1.306	188.6	16.98	12.92	23	0.85	181.33	0
181	Acid Soluble Cadmium (ppm)	0482	204.5	15.00	188.6	16.98	12.92	23	0.94	181.30	0
181	Acid Soluble Cadmium (ppm)	0102	206.2	13.00	188.6	16.98	12.92	23	1.03	181.30	0
181	Acid Soluble Cadmium (ppm)	0494	207.0	17.91	188.6	16.98	12.92	23	1.08	181.33	0
181	Acid Soluble Cadmium (ppm)	0511	216.5	0.0000	188.6	16.98	12.92	23	1.64	181.30	0
181	Acid Soluble Cadmium (ppm)	0550	179.5	135.4	188.6	16.98	12.92	23	-0.53	181.00	1
190	Water Soluble Chlorine (%)	0185	2.335	0.0100				2		190.00	0
190	Water Soluble Chlorine (%)	0511	12.33	0.0000				2		190.99	0
191	Acid Soluble Chromium (ppm)	0506	10.51	1.980	589.4	75.71	30.47	20	-7.65	191.99	0
191	Acid Soluble Chromium (ppm)	0096	315.4	21.40	589.4	75.71	30.47	20	-3.62	191.30	0
191	Acid Soluble Chromium (ppm)	0444	467.0	12.00	589.4	75.71	30.47	20	-1.62	191.30	0
191	Acid Soluble Chromium (ppm)	0476	532.4	6.975	589.4	75.71	30.47	20	-0.75	191.99	0
191	Acid Soluble Chromium (ppm)	0482	549.5	37.00	589.4	75.71	30.47	20	-0.53	191.30	0
191	Acid Soluble Chromium (ppm)	0102	552.3	34.90	589.4	75.71	30.47	20	-0.49	191.30	0
191	Acid Soluble Chromium (ppm)	0230	561.5	57.00	589.4	75.71	30.47	20	-0.37	191.34	0
191	Acid Soluble Chromium (ppm)	0035	585.0	18.00	589.4	75.71	30.47	20	-0.06	191.30	0
191	Acid Soluble Chromium (ppm)	0220	587.0	26.00	589.4	75.71	30.47	20	-0.03	191.99	0
191	Acid Soluble Chromium (ppm)	0368	590.0	12.00	589.4	75.71	30.47	20	0.01	191.30	0
191	Acid Soluble Chromium (ppm)	0389	592.5	3.000	589.4	75.71	30.47	20	0.04	191.30	0
191	Acid Soluble Chromium (ppm)	0527	593.3	3.204	589.4	75.71	30.47	20	0.05	191.33	0
191	Acid Soluble Chromium (ppm)	0494	603.8	16.94	589.4	75.71	30.47	20	0.19	191.33	0
191	Acid Soluble Chromium (ppm)	0037	630.0	12.96	589.4	75.71	30.47	20	0.54	191.33	0
191	Acid Soluble Chromium (ppm)	0515	633.5	102.6	589.4	75.71	30.47	20	0.58	191.33	0
191	Acid Soluble Chromium (ppm)	0117	637.2	10.60	589.4	75.71	30.47	20	0.63	191.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
191	Acid Soluble Chromium (ppm)	0511	655.0	0.0000	589.4	75.71	30.47	20	0.87	191.30	0
191	Acid Soluble Chromium (ppm)	0519	667.1	0.9500	589.4	75.71	30.47	20	1.03	191.99	0
191	Acid Soluble Chromium (ppm)	0541	687.5	107.0	589.4	75.71	30.47	20	1.30	191.30	0
191	Acid Soluble Chromium (ppm)	0515	758.4	124.8	589.4	75.71	30.47	20	2.23	191.34	0
191	Acid Soluble Chromium (ppm)	0550	502.1	274.0	589.4	75.71	30.47	20	-1.15	191.00	1
202	Acid Soluble Cobalt (ppm)	0550	29.12	6.770	375.8	26.12	8.595	21	-13.28	202.33	0
202	Acid Soluble Cobalt (ppm)	0476	309.0	20.43	375.8	26.12	8.595	21	-2.56	202.99	0
202	Acid Soluble Cobalt (ppm)	0482	315.5	23.00	375.8	26.12	8.595	21	-2.31	202.30	0
202	Acid Soluble Cobalt (ppm)	0423	350.5	5.000	375.8	26.12	8.595	21	-0.97	202.32	0
202	Acid Soluble Cobalt (ppm)	0515	355.4	1.880	375.8	26.12	8.595	21	-0.78	202.33	0
202	Acid Soluble Cobalt (ppm)	0389	367.0	2.100	375.8	26.12	8.595	21	-0.34	202.30	0
202	Acid Soluble Cobalt (ppm)	0255	367.5	6.643	375.8	26.12	8.595	21	-0.32	202.99	0
202	Acid Soluble Cobalt (ppm)	0527	368.4	0.8720	375.8	26.12	8.595	21	-0.29	202.33	0
202	Acid Soluble Cobalt (ppm)	0546	374.5	25.00	375.8	26.12	8.595	21	-0.05	202.33	0
202	Acid Soluble Cobalt (ppm)	0220	375.0	6.000	375.8	26.12	8.595	21	-0.03	202.99	0
202	Acid Soluble Cobalt (ppm)	0368	375.5	21.00	375.8	26.12	8.595	21	-0.01	202.30	0
202	Acid Soluble Cobalt (ppm)	0515	377.1	16.79	375.8	26.12	8.595	21	0.05	202.34	0
202	Acid Soluble Cobalt (ppm)	0524	381.8	0.1700	375.8	26.12	8.595	21	0.23	202.30	0
202	Acid Soluble Cobalt (ppm)	0096	387.1	4.600	375.8	26.12	8.595	21	0.43	202.30	0
202	Acid Soluble Cobalt (ppm)	0511	395.0	0.0000	375.8	26.12	8.595	21	0.73	202.30	0
202	Acid Soluble Cobalt (ppm)	0037	395.3	9.700	375.8	26.12	8.595	21	0.75	202.33	0
202	Acid Soluble Cobalt (ppm)	0494	395.4	10.33	375.8	26.12	8.595	21	0.75	202.33	0
202	Acid Soluble Cobalt (ppm)	0117	395.7	9.700	375.8	26.12	8.595	21	0.76	202.33	0
202	Acid Soluble Cobalt (ppm)	0506	400.0	0.0000	375.8	26.12	8.595	21	0.93	202.99	0
202	Acid Soluble Cobalt (ppm)	0102	406.3	10.45	375.8	26.12	8.595	21	1.17	202.30	0
202	Acid Soluble Cobalt (ppm)	0519	491.0	0.0700	375.8	26.12	8.595	21	4.41	202.99	0
202	Acid Soluble Cobalt (ppm)	0035	394.5	61.00	375.8	26.12	8.595	21	0.72	202.30	1
221	Acid Soluble Copper (0.06%)	0550	0.00365†	0.0005	0.1266	0.0173	0.0072	52	-7.11	221.99	0
221	Acid Soluble Copper (0.06%)	0506	0.01000†	0.0000	0.1266	0.0173	0.0072	52	-6.74	221.99	0
221	Acid Soluble Copper (0.06%)	0550	0.02800†	0.0000	0.1266	0.0173	0.0072	52	-5.70	221.30	0
221	Acid Soluble Copper (0.06%)	0519	0.04500†	0.0100	0.1266	0.0173	0.0072	52	-4.72	221.99	0
221	Acid Soluble Copper (0.06%)	0234	0.09000†	0.0200	0.1266	0.0173	0.0072	52	-2.11	221.30	0
221	Acid Soluble Copper (0.06%)	0042	0.09150†	0.0050	0.1266	0.0173	0.0072	52	-2.03	221.99	0
221	Acid Soluble Copper (0.06%)	0027	0.1015†	0.0130	0.1266	0.0173	0.0072	52	-1.45	221.99	0
221	Acid Soluble Copper (0.06%)	0521	0.1017†	0.0000	0.1266	0.0173	0.0072	52	-1.44	221.32	0
221	Acid Soluble Copper (0.06%)	0476	0.1069†	0.0122	0.1266	0.0173	0.0072	52	-1.14	221.99	0
221	Acid Soluble Copper (0.06%)	0516	0.1074†	0.0196	0.1266	0.0173	0.0072	52	-1.11	221.00	0
221	Acid Soluble Copper (0.06%)	0230	0.1110	0.0000	0.1266	0.0173	0.0072	52	-0.90	221.30	0
221	Acid Soluble Copper (0.06%)	0324	0.1145	0.0050	0.1266	0.0173	0.0072	52	-0.70	221.30	0
221	Acid Soluble Copper (0.06%)	0389	0.1154	0.0016	0.1266	0.0173	0.0072	52	-0.65	221.99	0
221	Acid Soluble Copper (0.06%)	0527	0.1155	0.0010	0.1266	0.0173	0.0072	52	-0.64	221.33	0
221	Acid Soluble Copper (0.06%)	0472	0.1200	0.0000	0.1266	0.0173	0.0072	52	-0.38	221.30	0
221	Acid Soluble Copper (0.06%)	0523	0.1200	0.0000	0.1266	0.0173	0.0072	52	-0.38	221.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
221	Acid Soluble Copper (0.06%)	0368	0.1208	0.0033	0.1266	0.0173	0.0072	52	-0.34	221.99	0
221	Acid Soluble Copper (0.06%)	0494	0.1216	0.0095	0.1266	0.0173	0.0072	52	-0.29	221.33	0
221	Acid Soluble Copper (0.06%)	0433	0.1245	0.0010	0.1266	0.0173	0.0072	52	-0.12	221.30	0
221	Acid Soluble Copper (0.06%)	0402	0.1250	0.0020	0.1266	0.0173	0.0072	52	-0.09	221.30	0
221	Acid Soluble Copper (0.06%)	0486	0.1250	0.0100	0.1266	0.0173	0.0072	52	-0.09	221.33	0
221	Acid Soluble Copper (0.06%)	0390	0.1258	0.0135	0.1266	0.0173	0.0072	52	-0.05	221.31	0
221	Acid Soluble Copper (0.06%)	0515	0.1279	0.0103	0.1266	0.0173	0.0072	52	0.07	221.33	0
221	Acid Soluble Copper (0.06%)	0394	0.1285	0.0080	0.1266	0.0173	0.0072	52	0.11	221.32	0
221	Acid Soluble Copper (0.06%)	0220	0.1295	0.0050	0.1266	0.0173	0.0072	52	0.17	221.32	0
221	Acid Soluble Copper (0.06%)	0354	0.1300	0.0000	0.1266	0.0173	0.0072	52	0.20	221.30	0
221	Acid Soluble Copper (0.06%)	0055	0.1300	0.0000	0.1266	0.0173	0.0072	52	0.20	221.33	0
221	Acid Soluble Copper (0.06%)	0040	0.1305	0.0030	0.1266	0.0173	0.0072	52	0.23	221.00	0
221	Acid Soluble Copper (0.06%)	0360	0.1310	0.0040	0.1266	0.0173	0.0072	52	0.26	221.30	0
221	Acid Soluble Copper (0.06%)	0535	0.1325	0.0050	0.1266	0.0173	0.0072	52	0.34	221.00	0
221	Acid Soluble Copper (0.06%)	0029	0.1334	0.0067	0.1266	0.0173	0.0072	52	0.39	221.00	0
221	Acid Soluble Copper (0.06%)	0023	0.1340	0.0000	0.1266	0.0173	0.0072	52	0.43	221.03	0
221	Acid Soluble Copper (0.06%)	0546	0.1340	0.0020	0.1266	0.0173	0.0072	52	0.43	221.33	0
221	Acid Soluble Copper (0.06%)	0444	0.1350	0.0100	0.1266	0.0173	0.0072	52	0.49	221.30	0
221	Acid Soluble Copper (0.06%)	0043	0.1350	0.0100	0.1266	0.0173	0.0072	52	0.49	221.32	0
221	Acid Soluble Copper (0.06%)	0421	0.1350	0.0100	0.1266	0.0173	0.0072	52	0.49	221.33	0
221	Acid Soluble Copper (0.06%)	0035	0.1355	0.0070	0.1266	0.0173	0.0072	52	0.52	221.30	0
221	Acid Soluble Copper (0.06%)	0511	0.1360	0.0000	0.1266	0.0173	0.0072	52	0.55	221.30	0
221	Acid Soluble Copper (0.06%)	0037	0.1365	0.0110	0.1266	0.0173	0.0072	52	0.58	221.33	0
221	Acid Soluble Copper (0.06%)	0515	0.1366	0.0126	0.1266	0.0173	0.0072	52	0.58	221.99	0
221	Acid Soluble Copper (0.06%)	0117	0.1367	0.0070	0.1266	0.0173	0.0072	52	0.59	221.33	0
221	Acid Soluble Copper (0.06%)	0255	0.1375	0.0110	0.1266	0.0173	0.0072	52	0.63	221.30	0
221	Acid Soluble Copper (0.06%)	0550	0.1400	0.0200	0.1266	0.0173	0.0072	52	0.78	221.00	0
221	Acid Soluble Copper (0.06%)	0231	0.1400	0.0000	0.1266	0.0173	0.0072	52	0.78	221.03	0
221	Acid Soluble Copper (0.06%)	0482	0.1400	0.0000	0.1266	0.0173	0.0072	52	0.78	221.30	0
221	Acid Soluble Copper (0.06%)	0136	0.1400	0.0000	0.1266	0.0173	0.0072	52	0.78	221.33	0
221	Acid Soluble Copper (0.06%)	0524	0.1400	0.0400	0.1266	0.0173	0.0072	52	0.78	221.99	0
221	Acid Soluble Copper (0.06%)	0096	0.1458‡	0.0073	0.1266	0.0173	0.0072	52	1.11	221.30	0
221	Acid Soluble Copper (0.06%)	0423	0.1555‡	0.0010	0.1266	0.0173	0.0072	52	1.67	221.32	0
221	Acid Soluble Copper (0.06%)	0307	0.1565‡	0.0110	0.1266	0.0173	0.0072	52	1.73	221.30	0
221	Acid Soluble Copper (0.06%)	0483	0.1570‡	0.0240	0.1266	0.0173	0.0072	52	1.76	221.30	0
221	Acid Soluble Copper (0.06%)	0543	0.2080‡	0.0220	0.1266	0.0173	0.0072	52	4.71	221.30	0
221	Acid Soluble Copper (0.06%)	0541	1,210‡	100.0	0.1266	0.0173	0.0072	52	69971.43	221.30	2
241	Acid Soluble Iron (1%)	0506	0.00250†	0.0010	0.6342	0.1053	0.0212	56	-6.00	241.99	0
241	Acid Soluble Iron (1%)	0550	0.00410†	0.0004	0.6342	0.1053	0.0212	56	-5.98	241.99	0
241	Acid Soluble Iron (1%)	0516	0.4219†	0.0036	0.6342	0.1053	0.0212	56	-2.02	241.00	0
241	Acid Soluble Iron (1%)	0402	0.4400†	0.0000	0.6342	0.1053	0.0212	56	-1.84	241.30	0
241	Acid Soluble Iron (1%)	0519	0.4400†	0.0200	0.6342	0.1053	0.0212	56	-1.84	241.99	0
241	Acid Soluble Iron (1%)	0307	0.4550†	0.0300	0.6342	0.1053	0.0212	56	-1.70	241.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241	Acid Soluble Iron (1%)	0501	0.4750†	0.0300	0.6342	0.1053	0.0212	56	-1.51	241.99	0
241	Acid Soluble Iron (1%)	0532	0.4950†	0.0500	0.6342	0.1053	0.0212	56	-1.32	241.99	0
241	Acid Soluble Iron (1%)	0230	0.4955†	0.0030	0.6342	0.1053	0.0212	56	-1.32	241.30	0
241	Acid Soluble Iron (1%)	0389	0.5000†	0.0040	0.6342	0.1053	0.0212	56	-1.27	241.99	0
241	Acid Soluble Iron (1%)	0521	0.5101†	0.0000	0.6342	0.1053	0.0212	56	-1.18	241.32	0
241	Acid Soluble Iron (1%)	0515	0.5216†	0.0858	0.6342	0.1053	0.0212	56	-1.07	241.99	0
241	Acid Soluble Iron (1%)	0476	0.5296†	0.0138	0.6342	0.1053	0.0212	56	-0.99	241.99	0
241	Acid Soluble Iron (1%)	0472	0.5300†	0.0000	0.6342	0.1053	0.0212	56	-0.99	241.30	0
241	Acid Soluble Iron (1%)	0523	0.5850	0.0100	0.6342	0.1053	0.0212	56	-0.47	241.99	0
241	Acid Soluble Iron (1%)	0394	0.5863	0.0238	0.6342	0.1053	0.0212	56	-0.45	241.32	0
241	Acid Soluble Iron (1%)	0043	0.5950	0.0500	0.6342	0.1053	0.0212	56	-0.37	241.32	0
241	Acid Soluble Iron (1%)	0527	0.5995	0.0050	0.6342	0.1053	0.0212	56	-0.33	241.33	0
241	Acid Soluble Iron (1%)	0535	0.6100	0.0200	0.6342	0.1053	0.0212	56	-0.23	241.00	0
241	Acid Soluble Iron (1%)	0231	0.6100	0.0000	0.6342	0.1053	0.0212	56	-0.23	241.30	0
241	Acid Soluble Iron (1%)	0486	0.6150	0.0300	0.6342	0.1053	0.0212	56	-0.18	241.33	0
241	Acid Soluble Iron (1%)	0423	0.6175	0.0050	0.6342	0.1053	0.0212	56	-0.16	241.32	0
241	Acid Soluble Iron (1%)	0035	0.6360	0.0580	0.6342	0.1053	0.0212	56	0.02	241.30	0
241	Acid Soluble Iron (1%)	0550	0.6400	0.1200	0.6342	0.1053	0.0212	56	0.06	241.00	0
241	Acid Soluble Iron (1%)	0029	0.6552	0.0387	0.6342	0.1053	0.0212	56	0.20	241.00	0
241	Acid Soluble Iron (1%)	0541	0.6600	0.0000	0.6342	0.1053	0.0212	56	0.25	241.99	0
241	Acid Soluble Iron (1%)	0255	0.6620	0.0280	0.6342	0.1053	0.0212	56	0.26	241.30	0
241	Acid Soluble Iron (1%)	0177	0.6666	0.0189	0.6342	0.1053	0.0212	56	0.31	241.33	0
241	Acid Soluble Iron (1%)	0433	0.6685	0.0010	0.6342	0.1053	0.0212	56	0.33	241.30	0
241	Acid Soluble Iron (1%)	0515	0.6699	0.0669	0.6342	0.1053	0.0212	56	0.34	241.33	0
241	Acid Soluble Iron (1%)	0157	0.6740	0.0100	0.6342	0.1053	0.0212	56	0.38	241.30	0
241	Acid Soluble Iron (1%)	0102	0.6878	0.0321	0.6342	0.1053	0.0212	56	0.51	241.30	0
241	Acid Soluble Iron (1%)	0354	0.6900	0.0000	0.6342	0.1053	0.0212	56	0.53	241.30	0
241	Acid Soluble Iron (1%)	0511	0.6900	0.0000	0.6342	0.1053	0.0212	56	0.53	241.30	0
241	Acid Soluble Iron (1%)	0136	0.6900	0.0400	0.6342	0.1053	0.0212	56	0.53	241.33	0
241	Acid Soluble Iron (1%)	0027	0.6915	0.0070	0.6342	0.1053	0.0212	56	0.54	241.99	0
241	Acid Soluble Iron (1%)	0037	0.6940	0.0140	0.6342	0.1053	0.0212	56	0.57	241.33	0
241	Acid Soluble Iron (1%)	0444	0.6950	0.0100	0.6342	0.1053	0.0212	56	0.58	241.30	0
241	Acid Soluble Iron (1%)	0524	0.7000	0.0000	0.6342	0.1053	0.0212	56	0.62	241.99	0
241	Acid Soluble Iron (1%)	0494	0.7003	0.0163	0.6342	0.1053	0.0212	56	0.63	241.33	0
241	Acid Soluble Iron (1%)	0096	0.7025	0.0070	0.6342	0.1053	0.0212	56	0.65	241.30	0
241	Acid Soluble Iron (1%)	0117	0.7028‡	0.0462	0.6342	0.1053	0.0212	56	0.65	241.33	0
241	Acid Soluble Iron (1%)	0421	0.7050‡	0.0100	0.6342	0.1053	0.0212	56	0.67	241.33	0
241	Acid Soluble Iron (1%)	0360	0.7055‡	0.0010	0.6342	0.1053	0.0212	56	0.68	241.30	0
241	Acid Soluble Iron (1%)	0324	0.7075‡	0.0230	0.6342	0.1053	0.0212	56	0.70	241.30	0
241	Acid Soluble Iron (1%)	0390	0.7139‡	0.0055	0.6342	0.1053	0.0212	56	0.76	241.30	0
241	Acid Soluble Iron (1%)	0220	0.7150‡	0.0500	0.6342	0.1053	0.0212	56	0.77	241.32	0
241	Acid Soluble Iron (1%)	0451	0.7155‡	0.0310	0.6342	0.1053	0.0212	56	0.77	241.30	0
241	Acid Soluble Iron (1%)	0368	0.7184‡	0.0259	0.6342	0.1053	0.0212	56	0.80	241.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241	Acid Soluble Iron (1%)	0040	0.7200‡	0.0400	0.6342	0.1053	0.0212	56	0.81	241.00	0
241	Acid Soluble Iron (1%)	0482	0.7200‡	0.0200	0.6342	0.1053	0.0212	56	0.81	241.30	0
241	Acid Soluble Iron (1%)	0055	0.7300‡	0.0200	0.6342	0.1053	0.0212	56	0.91	241.33	0
241	Acid Soluble Iron (1%)	0023	0.7310‡	0.0180	0.6342	0.1053	0.0212	56	0.92	241.33	0
241	Acid Soluble Iron (1%)	0546	0.7390‡	0.0240	0.6342	0.1053	0.0212	56	1.00	241.33	0
241	Acid Soluble Iron (1%)	0042	0.8275‡	0.0090	0.6342	0.1053	0.0212	56	1.84	241.99	0
241	Acid Soluble Iron (1%)	0483	0.8350‡	0.0100	0.6342	0.1053	0.0212	56	1.91	241.30	0
241	Acid Soluble Iron (1%)	0234	0.9700‡	0.1800	0.6342	0.1053	0.0212	56	3.19	241.30	1
251	Acid Soluble Lead (ppm)	0476	120.3	0.6114	923.1	121.2	62.75	24	-6.62	251.99	0
251	Acid Soluble Lead (ppm)	0506	594.0	48.00	923.1	121.2	62.75	24	-2.71	251.99	0
251	Acid Soluble Lead (ppm)	0444	675.5	27.00	923.1	121.2	62.75	24	-2.04	251.30	0
251	Acid Soluble Lead (ppm)	0482	745.5	61.00	923.1	121.2	62.75	24	-1.46	251.30	0
251	Acid Soluble Lead (ppm)	0394	838.0	50.00	923.1	121.2	62.75	24	-0.70	251.30	0
251	Acid Soluble Lead (ppm)	0524	879.6	10.27	923.1	121.2	62.75	24	-0.36	251.30	0
251	Acid Soluble Lead (ppm)	0527	883.1	13.47	923.1	121.2	62.75	24	-0.33	251.33	0
251	Acid Soluble Lead (ppm)	0230	885.0	186.0	923.1	121.2	62.75	24	-0.31	251.34	0
251	Acid Soluble Lead (ppm)	0519	888.0	0.8600	923.1	121.2	62.75	24	-0.29	251.99	0
251	Acid Soluble Lead (ppm)	0035	918.0	92.00	923.1	121.2	62.75	24	-0.04	251.30	0
251	Acid Soluble Lead (ppm)	0136	927.5	21.00	923.1	121.2	62.75	24	0.04	251.00	0
251	Acid Soluble Lead (ppm)	0096	936.0	60.80	923.1	121.2	62.75	24	0.11	251.30	0
251	Acid Soluble Lead (ppm)	0494	938.1	9.368	923.1	121.2	62.75	24	0.12	251.33	0
251	Acid Soluble Lead (ppm)	0037	945.5	72.11	923.1	121.2	62.75	24	0.18	251.33	0
251	Acid Soluble Lead (ppm)	0511	947.0	0.0000	923.1	121.2	62.75	24	0.20	251.30	0
251	Acid Soluble Lead (ppm)	0389	949.5	81.00	923.1	121.2	62.75	24	0.22	251.30	0
251	Acid Soluble Lead (ppm)	0117	952.7	65.30	923.1	121.2	62.75	24	0.24	251.33	0
251	Acid Soluble Lead (ppm)	0220	969.5	11.00	923.1	121.2	62.75	24	0.38	251.99	0
251	Acid Soluble Lead (ppm)	0102	1,003	21.63	923.1	121.2	62.75	24	0.66	251.30	0
251	Acid Soluble Lead (ppm)	0255	1,013	56.11	923.1	121.2	62.75	24	0.74	251.30	0
251	Acid Soluble Lead (ppm)	0368	1,034	81.00	923.1	121.2	62.75	24	0.91	251.30	0
251	Acid Soluble Lead (ppm)	0541	1,072	103.0	923.1	121.2	62.75	24	1.22	251.30	0
251	Acid Soluble Lead (ppm)	0515	1,101	206.6	923.1	121.2	62.75	24	1.47	251.33	0
251	Acid Soluble Lead (ppm)	0515	1,158	227.9	923.1	121.2	62.75	24	1.94	251.34	0
251	Acid Soluble Lead (ppm)	0550	843.6	624.7	923.1	121.2	62.75	24	-0.66	251.00	1
261	Acid Soluble Manganese (0.16%)	0027	0.1180†	0.0040	0.1623	0.0120	0.0072	49	-3.68	261.99	0
261	Acid Soluble Manganese (0.16%)	0535	0.1225†	0.0050	0.1623	0.0120	0.0072	49	-3.31	261.12	0
261	Acid Soluble Manganese (0.16%)	0230	0.1445	0.0090	0.1623	0.0120	0.0072	49	-1.48	261.31	0
261	Acid Soluble Manganese (0.16%)	0421	0.1450	0.0100	0.1623	0.0120	0.0072	49	-1.44	261.35	0
261	Acid Soluble Manganese (0.16%)	0519	0.1450	0.0100	0.1623	0.0120	0.0072	49	-1.44	261.99	0
261	Acid Soluble Manganese (0.16%)	0521	0.1474	0.0000	0.1623	0.0120	0.0072	49	-1.24	261.34	0
261	Acid Soluble Manganese (0.16%)	0476	0.1477	0.0031	0.1623	0.0120	0.0072	49	-1.22	261.99	0
261	Acid Soluble Manganese (0.16%)	0527	0.1480	0.0020	0.1623	0.0120	0.0072	49	-1.19	261.35	0
261	Acid Soluble Manganese (0.16%)	0360	0.1545	0.0050	0.1623	0.0120	0.0072	49	-0.65	261.31	0
261	Acid Soluble Manganese (0.16%)	0029	0.1550	0.0252	0.1623	0.0120	0.0072	49	-0.61	261.12	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
261	Acid Soluble Manganese (0.16%)	0234	0.1550	0.0100	0.1623	0.0120	0.0072	49	-0.61	261.31	0
261	Acid Soluble Manganese (0.16%)	0394	0.1550	0.0040	0.1623	0.0120	0.0072	49	-0.61	261.34	0
261	Acid Soluble Manganese (0.16%)	0486	0.1550	0.0100	0.1623	0.0120	0.0072	49	-0.61	261.35	0
261	Acid Soluble Manganese (0.16%)	0389	0.1550	0.0100	0.1623	0.0120	0.0072	49	-0.61	261.99	0
261	Acid Soluble Manganese (0.16%)	0177	0.1562	0.0108	0.1623	0.0120	0.0072	49	-0.51	261.35	0
261	Acid Soluble Manganese (0.16%)	0523	0.1565	0.0030	0.1623	0.0120	0.0072	49	-0.49	261.99	0
261	Acid Soluble Manganese (0.16%)	0324	0.1570	0.0040	0.1623	0.0120	0.0072	49	-0.44	261.31	0
261	Acid Soluble Manganese (0.16%)	0451	0.1575	0.0010	0.1623	0.0120	0.0072	49	-0.40	261.32	0
261	Acid Soluble Manganese (0.16%)	0494	0.1579	0.0015	0.1623	0.0120	0.0072	49	-0.37	261.35	0
261	Acid Soluble Manganese (0.16%)	0501	0.1590	0.0020	0.1623	0.0120	0.0072	49	-0.28	261.99	0
261	Acid Soluble Manganese (0.16%)	0444	0.1600	0.0200	0.1623	0.0120	0.0072	49	-0.20	261.32	0
261	Acid Soluble Manganese (0.16%)	0483	0.1615	0.0050	0.1623	0.0120	0.0072	49	-0.07	261.32	0
261	Acid Soluble Manganese (0.16%)	0023	0.1615	0.0030	0.1623	0.0120	0.0072	49	-0.07	261.35	0
261	Acid Soluble Manganese (0.16%)	0035	0.1625	0.0110	0.1623	0.0120	0.0072	49	0.01	261.30	0
261	Acid Soluble Manganese (0.16%)	0037	0.1625	0.0010	0.1623	0.0120	0.0072	49	0.01	261.35	0
261	Acid Soluble Manganese (0.16%)	0368	0.1629	0.0024	0.1623	0.0120	0.0072	49	0.05	261.99	0
261	Acid Soluble Manganese (0.16%)	0040	0.1640	0.0020	0.1623	0.0120	0.0072	49	0.14	261.12	0
261	Acid Soluble Manganese (0.16%)	0117	0.1648	0.0052	0.1623	0.0120	0.0072	49	0.20	261.35	0
261	Acid Soluble Manganese (0.16%)	0402	0.1650	0.0100	0.1623	0.0120	0.0072	49	0.22	261.32	0
261	Acid Soluble Manganese (0.16%)	0220	0.1650	0.0100	0.1623	0.0120	0.0072	49	0.22	261.34	0
261	Acid Soluble Manganese (0.16%)	0136	0.1650	0.0100	0.1623	0.0120	0.0072	49	0.22	261.35	0
261	Acid Soluble Manganese (0.16%)	0524	0.1650	0.0100	0.1623	0.0120	0.0072	49	0.22	261.99	0
261	Acid Soluble Manganese (0.16%)	0433	0.1660	0.0020	0.1623	0.0120	0.0072	49	0.30	261.30	0
261	Acid Soluble Manganese (0.16%)	0102	0.1685	0.0159	0.1623	0.0120	0.0072	49	0.51	261.30	0
261	Acid Soluble Manganese (0.16%)	0354	0.1700	0.0000	0.1623	0.0120	0.0072	49	0.64	261.30	0
261	Acid Soluble Manganese (0.16%)	0472	0.1700	0.0000	0.1623	0.0120	0.0072	49	0.64	261.30	0
261	Acid Soluble Manganese (0.16%)	0511	0.1700	0.0000	0.1623	0.0120	0.0072	49	0.64	261.31	0
261	Acid Soluble Manganese (0.16%)	0231	0.1700	0.0000	0.1623	0.0120	0.0072	49	0.64	261.32	0
261	Acid Soluble Manganese (0.16%)	0055	0.1700	0.0000	0.1623	0.0120	0.0072	49	0.64	261.35	0
261	Acid Soluble Manganese (0.16%)	0307	0.1710	0.0020	0.1623	0.0120	0.0072	49	0.72	261.30	0
261	Acid Soluble Manganese (0.16%)	0096	0.1722	0.0069	0.1623	0.0120	0.0072	49	0.81	261.30	0
261	Acid Soluble Manganese (0.16%)	0546	0.1730	0.0040	0.1623	0.0120	0.0072	49	0.88	261.35	0
261	Acid Soluble Manganese (0.16%)	0043	0.1750	0.0100	0.1623	0.0120	0.0072	49	1.05	261.34	0
261	Acid Soluble Manganese (0.16%)	0423	0.1790	0.0020	0.1623	0.0120	0.0072	49	1.38	261.34	0
261	Acid Soluble Manganese (0.16%)	0255	0.1795	0.0270	0.1623	0.0120	0.0072	49	1.42	261.99	0
261	Acid Soluble Manganese (0.16%)	0042	0.1865‡	0.0010	0.1623	0.0120	0.0072	49	2.01	261.99	0
261	Acid Soluble Manganese (0.16%)	0390	0.1886‡	0.0217	0.1623	0.0120	0.0072	49	2.18	261.30	0
261	Acid Soluble Manganese (0.16%)	0550	0.1900‡	0.0400	0.1623	0.0120	0.0072	49	2.30	261.12	0
261	Acid Soluble Manganese (0.16%)	0482	0.1900‡	0.0000	0.1623	0.0120	0.0072	49	2.30	261.31	0
261	Acid Soluble Manganese (0.16%)	0515	0.1224†	0.0637	0.1623	0.0120	0.0072	49	-3.32	261.99	1
261	Acid Soluble Manganese (0.16%)	0515	0.1690	0.0841	0.1623	0.0120	0.0072	49	0.55	261.35	1
261	Acid Soluble Manganese (0.16%)	0506	0.00300†	0.0000	0.1623	0.0120	0.0072	49	-13.23	261.99	2
271	Water Soluble Manganese (%)	0117	0.0051	0.0006	0.0287	0.0403	0.0045	5	-0.51	271.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
271	Water Soluble Manganese (%)	0444	0.0085	0.0010	0.0287	0.0403	0.0045	5	-0.44	271.30	0
271	Water Soluble Manganese (%)	0550	0.0096	0.0001	0.0287	0.0403	0.0045	5	-0.42	271.00	0
271	Water Soluble Manganese (%)	0027	0.0205	0.0010	0.0287	0.0403	0.0045	5	-0.18	271.00	0
271	Water Soluble Manganese (%)	0532	0.1000	0.0200	0.0287	0.0403	0.0045	5	1.55	271.00	0
271	Water Soluble Manganese (%)	0543	0.2950	0.1820	0.0287	0.0403	0.0045	5	5.77	271.30	1
281	Acid Soluble Mercury (ppm)	0515	15.58	0.6300	40.98	22.76	1.584	7	-1.01	281.30	0
281	Acid Soluble Mercury (ppm)	0519	16.65	0.3900	40.98	22.76	1.584	7	-0.97	281.99	0
281	Acid Soluble Mercury (ppm)	0394	39.17	3.410	40.98	22.76	1.584	7	-0.07	281.30	0
281	Acid Soluble Mercury (ppm)	0511	40.00	0.0000	40.98	22.76	1.584	7	-0.04	281.00	0
281	Acid Soluble Mercury (ppm)	0476	45.39	0.3160	40.98	22.76	1.584	7	0.18	281.99	0
281	Acid Soluble Mercury (ppm)	0541	65.00	4.000	40.98	22.76	1.584	7	0.95	281.30	0
281	Acid Soluble Mercury (ppm)	0527	65.06	2.341	40.98	22.76	1.584	7	0.96	281.30	0
289	Acid Soluble Molybdenum (50ppm)	0543	0.1925†	0.0090	826.5	115.4	29.96	27	-7.16	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0519	48.50†	5.000	826.5	115.4	29.96	27	-6.74	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0027	66.00†	2.000	826.5	115.4	29.96	27	-6.59	289.99	0
289	Acid Soluble Molybdenum (50ppm)	0550	647.0	8.000	826.5	115.4	29.96	27	-1.56	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0521	672.7	0.0000	826.5	115.4	29.96	27	-1.33	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0042	719.6	42.50	826.5	115.4	29.96	27	-0.93	289.99	0
289	Acid Soluble Molybdenum (50ppm)	0230	753.0	110.0	826.5	115.4	29.96	27	-0.64	289.34	0
289	Acid Soluble Molybdenum (50ppm)	0476	771.5	13.96	826.5	115.4	29.96	27	-0.48	289.99	0
289	Acid Soluble Molybdenum (50ppm)	0035	785.5	1.000	826.5	115.4	29.96	27	-0.36	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0423	830.0	18.00	826.5	115.4	29.96	27	0.03	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0394	838.0	42.00	826.5	115.4	29.96	27	0.10	289.32	0
289	Acid Soluble Molybdenum (50ppm)	0389	843.6	0.3000	826.5	115.4	29.96	27	0.15	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0494	844.5	55.00	826.5	115.4	29.96	27	0.16	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0368	856.0	40.00	826.5	115.4	29.96	27	0.26	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0255	856.7	11.94	826.5	115.4	29.96	27	0.26	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0292	857.0	9.400	826.5	115.4	29.96	27	0.26	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0096	864.7	51.50	826.5	115.4	29.96	27	0.33	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0546	879.5	63.00	826.5	115.4	29.96	27	0.46	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0444	885.0	30.00	826.5	115.4	29.96	27	0.51	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0511	906.0	0.0000	826.5	115.4	29.96	27	0.69	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0524	907.6	1.850	826.5	115.4	29.96	27	0.70	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0117	910.9	87.50	826.5	115.4	29.96	27	0.73	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0527	919.2	10.08	826.5	115.4	29.96	27	0.80	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0037	930.0	0.0000	826.5	115.4	29.96	27	0.90	289.33	0
289	Acid Soluble Molybdenum (50ppm)	0220	935.0	6.000	826.5	115.4	29.96	27	0.94	289.32	0
289	Acid Soluble Molybdenum (50ppm)	0541	936.0	200.0	826.5	115.4	29.96	27	0.95	289.30	0
289	Acid Soluble Molybdenum (50ppm)	0506	1,600‡	0.0000	826.5	115.4	29.96	27	6.70	289.99	0
289	Acid Soluble Molybdenum (50ppm)	0515	684.4	448.3	826.5	115.4	29.96	27	-1.23	289.34	1
289	Acid Soluble Molybdenum (50ppm)	0515	718.5	439.5	826.5	115.4	29.96	27	-0.94	289.33	1
291	Acid Soluble Nickel (ppm)	0476	2.455	0.1265	13.41	2.824	1.343	24	-3.88	291.99	0
291	Acid Soluble Nickel (ppm)	0521	9.720	0.0000	13.41	2.824	1.343	24	-1.31	291.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
291	Acid Soluble Nickel (ppm)	0096	9.750	0.5000	13.41	2.824	1.343	24	-1.30	291.30	0
291	Acid Soluble Nickel (ppm)	0519	10.25	0.0300	13.41	2.824	1.343	24	-1.12	291.99	0
291	Acid Soluble Nickel (ppm)	0444	10.25	0.6800	13.41	2.824	1.343	24	-1.12	291.30	0
291	Acid Soluble Nickel (ppm)	0482	11.10	0.0000	13.41	2.824	1.343	24	-0.82	291.30	0
291	Acid Soluble Nickel (ppm)	0524	11.94	0.1100	13.41	2.824	1.343	24	-0.52	291.30	0
291	Acid Soluble Nickel (ppm)	0394	12.40	1.000	13.41	2.824	1.343	24	-0.36	291.30	0
291	Acid Soluble Nickel (ppm)	0220	12.50	1.000	13.41	2.824	1.343	24	-0.32	291.99	0
291	Acid Soluble Nickel (ppm)	0102	12.65	0.8830	13.41	2.824	1.343	24	-0.27	291.30	0
291	Acid Soluble Nickel (ppm)	0230	12.70	4.400	13.41	2.824	1.343	24	-0.25	291.34	0
291	Acid Soluble Nickel (ppm)	0389	13.34	0.2100	13.41	2.824	1.343	24	-0.03	291.30	0
291	Acid Soluble Nickel (ppm)	0515	13.64	1.420	13.41	2.824	1.343	24	0.08	291.34	0
291	Acid Soluble Nickel (ppm)	0527	13.75	0.2630	13.41	2.824	1.343	24	0.12	291.33	0
291	Acid Soluble Nickel (ppm)	0255	13.98	0.8850	13.41	2.824	1.343	24	0.20	291.99	0
291	Acid Soluble Nickel (ppm)	0136	15.50	1.000	13.41	2.824	1.343	24	0.74	291.00	0
291	Acid Soluble Nickel (ppm)	0515	15.56	6.635	13.41	2.824	1.343	24	0.76	291.33	0
291	Acid Soluble Nickel (ppm)	0511	15.69	0.0000	13.41	2.824	1.343	24	0.81	291.30	0
291	Acid Soluble Nickel (ppm)	0117	15.76	1.280	13.41	2.824	1.343	24	0.83	291.33	0
291	Acid Soluble Nickel (ppm)	0368	16.00	2.000	13.41	2.824	1.343	24	0.92	291.30	0
291	Acid Soluble Nickel (ppm)	0037	16.24	1.508	13.41	2.824	1.343	24	1.00	291.33	0
291	Acid Soluble Nickel (ppm)	0506	16.50	2.800	13.41	2.824	1.343	24	1.09	291.99	0
291	Acid Soluble Nickel (ppm)	0035	16.60	3.800	13.41	2.824	1.343	24	1.13	291.30	0
291	Acid Soluble Nickel (ppm)	0494	16.96	1.691	13.41	2.824	1.343	24	1.26	291.33	0
291	Acid Soluble Nickel (ppm)	0550	19.41	31.64	13.41	2.824	1.343	24	2.12	291.00	1
291	Acid Soluble Nickel (ppm)	0541	31.50	37.00	13.41	2.824	1.343	24	6.40	291.30	1
301	Acid Soluble Selenium (ppm)	0541	122.5	1.000	310.5	38.14	22.47	16	-4.93	301.30	0
301	Acid Soluble Selenium (ppm)	0524	239.1	16.85	310.5	38.14	22.47	16	-1.87	301.30	0
301	Acid Soluble Selenium (ppm)	0506	250.0	100.0	310.5	38.14	22.47	16	-1.59	301.99	0
301	Acid Soluble Selenium (ppm)	0515	285.7	39.14	310.5	38.14	22.47	16	-0.65	301.34	0
301	Acid Soluble Selenium (ppm)	0230	289.0	48.00	310.5	38.14	22.47	16	-0.56	301.34	0
301	Acid Soluble Selenium (ppm)	0220	310.5	21.00	310.5	38.14	22.47	16	0.00	301.99	0
301	Acid Soluble Selenium (ppm)	0519	311.7	0.2500	310.5	38.14	22.47	16	0.03	301.99	0
301	Acid Soluble Selenium (ppm)	0494	318.1	1.352	310.5	38.14	22.47	16	0.20	301.33	0
301	Acid Soluble Selenium (ppm)	0515	318.7	69.58	310.5	38.14	22.47	16	0.21	301.33	0
301	Acid Soluble Selenium (ppm)	0476	331.8	13.79	310.5	38.14	22.47	16	0.56	301.99	0
301	Acid Soluble Selenium (ppm)	0511	332.0	0.0000	310.5	38.14	22.47	16	0.56	301.30	0
301	Acid Soluble Selenium (ppm)	0527	338.9	2.854	310.5	38.14	22.47	16	0.75	301.33	0
301	Acid Soluble Selenium (ppm)	0368	339.5	15.00	310.5	38.14	22.47	16	0.76	301.30	0
301	Acid Soluble Selenium (ppm)	0255	341.9	1.635	310.5	38.14	22.47	16	0.82	301.99	0
301	Acid Soluble Selenium (ppm)	0117	343.8	6.800	310.5	38.14	22.47	16	0.87	301.33	0
301	Acid Soluble Selenium (ppm)	0037	346.3	22.28	310.5	38.14	22.47	16	0.94	301.33	0
311	Sodium (%)	0324	0.3890	0.0460	0.4599	0.0488	0.0223	12	-1.45	311.32	0
311	Sodium (%)	0494	0.4064	0.0456	0.4599	0.0488	0.0223	12	-1.10	311.33	0
311	Sodium (%)	0389	0.4200	0.0000	0.4599	0.0488	0.0223	12	-0.82	311.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
311	Sodium (%)	0527	0.4345	0.0090	0.4599	0.0488	0.0223	12	-0.52	311.33	0
311	Sodium (%)	0035	0.4455	0.0710	0.4599	0.0488	0.0223	12	-0.30	311.33	0
311	Sodium (%)	0521	0.4575	0.0000	0.4599	0.0488	0.0223	12	-0.05	311.32	0
311	Sodium (%)	0511	0.4700	0.0000	0.4599	0.0488	0.0223	12	0.21	311.99	0
311	Sodium (%)	0482	0.4750	0.0100	0.4599	0.0488	0.0223	12	0.31	311.99	0
311	Sodium (%)	0096	0.4850	0.0300	0.4599	0.0488	0.0223	12	0.51	311.99	0
311	Sodium (%)	0354	0.4900	0.0000	0.4599	0.0488	0.0223	12	0.62	311.99	0
311	Sodium (%)	0117	0.5129	0.0423	0.4599	0.0488	0.0223	12	1.09	311.33	0
311	Sodium (%)	0423	0.5770	0.0140	0.4599	0.0488	0.0223	12	2.40	311.33	0
321	Acid Soluble Zinc (0.13%)	0506	0.00250†	0.0010	0.1844	0.0198	0.0086	55	-9.17	321.99	0
321	Acid Soluble Zinc (0.13%)	0516	0.1122†	0.0093	0.1844	0.0198	0.0086	55	-3.64	321.00	0
321	Acid Soluble Zinc (0.13%)	0042	0.1145†	0.0050	0.1844	0.0198	0.0086	55	-3.52	321.99	0
321	Acid Soluble Zinc (0.13%)	0519	0.1200†	0.0200	0.1844	0.0198	0.0086	55	-3.25	321.99	0
321	Acid Soluble Zinc (0.13%)	0533	0.1280†	0.0020	0.1844	0.0198	0.0086	55	-2.84	321.00	0
321	Acid Soluble Zinc (0.13%)	0027	0.1355†	0.0130	0.1844	0.0198	0.0086	55	-2.47	321.99	0
321	Acid Soluble Zinc (0.13%)	0523	0.1530†	0.0080	0.1844	0.0198	0.0086	55	-1.58	321.99	0
321	Acid Soluble Zinc (0.13%)	0234	0.1600†	0.0200	0.1844	0.0198	0.0086	55	-1.23	321.30	0
321	Acid Soluble Zinc (0.13%)	0476	0.1622	0.0181	0.1844	0.0198	0.0086	55	-1.12	321.99	0
321	Acid Soluble Zinc (0.13%)	0230	0.1640	0.0040	0.1844	0.0198	0.0086	55	-1.03	321.30	0
321	Acid Soluble Zinc (0.13%)	0531	0.1650	0.0100	0.1844	0.0198	0.0086	55	-0.98	321.00	0
321	Acid Soluble Zinc (0.13%)	0389	0.1720	0.0000	0.1844	0.0198	0.0086	55	-0.63	321.99	0
321	Acid Soluble Zinc (0.13%)	0539	0.1735	0.0030	0.1844	0.0198	0.0086	55	-0.55	321.00	0
321	Acid Soluble Zinc (0.13%)	0551	0.1750	0.0100	0.1844	0.0198	0.0086	55	-0.47	321.00	0
321	Acid Soluble Zinc (0.13%)	0220	0.1750	0.0100	0.1844	0.0198	0.0086	55	-0.47	321.32	0
321	Acid Soluble Zinc (0.13%)	0486	0.1750	0.0100	0.1844	0.0198	0.0086	55	-0.47	321.33	0
321	Acid Soluble Zinc (0.13%)	0177	0.1777	0.0036	0.1844	0.0198	0.0086	55	-0.34	321.33	0
321	Acid Soluble Zinc (0.13%)	0515	0.1779	0.0027	0.1844	0.0198	0.0086	55	-0.33	321.99	0
321	Acid Soluble Zinc (0.13%)	0040	0.1795	0.0010	0.1844	0.0198	0.0086	55	-0.25	321.00	0
321	Acid Soluble Zinc (0.13%)	0096	0.1797	0.0086	0.1844	0.0198	0.0086	55	-0.24	321.30	0
321	Acid Soluble Zinc (0.13%)	0394	0.1800	0.0020	0.1844	0.0198	0.0086	55	-0.22	321.32	0
321	Acid Soluble Zinc (0.13%)	0117	0.1808	0.0027	0.1844	0.0198	0.0086	55	-0.18	321.33	0
321	Acid Soluble Zinc (0.13%)	0360	0.1820	0.0100	0.1844	0.0198	0.0086	55	-0.12	321.30	0
321	Acid Soluble Zinc (0.13%)	0535	0.1825	0.0050	0.1844	0.0198	0.0086	55	-0.10	321.00	0
321	Acid Soluble Zinc (0.13%)	0029	0.1830	0.0184	0.1844	0.0198	0.0086	55	-0.07	321.00	0
321	Acid Soluble Zinc (0.13%)	0354	0.1850	0.0100	0.1844	0.0198	0.0086	55	0.03	321.30	0
321	Acid Soluble Zinc (0.13%)	0402	0.1850	0.0080	0.1844	0.0198	0.0086	55	0.03	321.30	0
321	Acid Soluble Zinc (0.13%)	0444	0.1850	0.0100	0.1844	0.0198	0.0086	55	0.03	321.30	0
321	Acid Soluble Zinc (0.13%)	0023	0.1850	0.0120	0.1844	0.0198	0.0086	55	0.03	321.33	0
321	Acid Soluble Zinc (0.13%)	0527	0.1850	0.0000	0.1844	0.0198	0.0086	55	0.03	321.33	0
321	Acid Soluble Zinc (0.13%)	0102	0.1870	0.0122	0.1844	0.0198	0.0086	55	0.13	321.30	0
321	Acid Soluble Zinc (0.13%)	0035	0.1885	0.0010	0.1844	0.0198	0.0086	55	0.21	321.30	0
321	Acid Soluble Zinc (0.13%)	0433	0.1900	0.0020	0.1844	0.0198	0.0086	55	0.28	321.30	0
321	Acid Soluble Zinc (0.13%)	0472	0.1900	0.0000	0.1844	0.0198	0.0086	55	0.28	321.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321	Acid Soluble Zinc (0.13%)	0524	0.1900	0.0000	0.1844	0.0198	0.0086	55	0.28	321.99	0
321	Acid Soluble Zinc (0.13%)	0390	0.1935	0.0253	0.1844	0.0198	0.0086	55	0.46	321.30	0
321	Acid Soluble Zinc (0.13%)	0169	0.1940	0.0080	0.1844	0.0198	0.0086	55	0.48	321.00	0
321	Acid Soluble Zinc (0.13%)	0324	0.1945	0.0070	0.1844	0.0198	0.0086	55	0.51	321.30	0
321	Acid Soluble Zinc (0.13%)	0292	0.1950	0.0100	0.1844	0.0198	0.0086	55	0.53	321.30	0
321	Acid Soluble Zinc (0.13%)	0482	0.1950	0.0100	0.1844	0.0198	0.0086	55	0.53	321.30	0
321	Acid Soluble Zinc (0.13%)	0055	0.1950	0.0100	0.1844	0.0198	0.0086	55	0.53	321.33	0
321	Acid Soluble Zinc (0.13%)	0494	0.1956	0.0018	0.1844	0.0198	0.0086	55	0.56	321.33	0
321	Acid Soluble Zinc (0.13%)	0511	0.1970	0.0000	0.1844	0.0198	0.0086	55	0.63	321.30	0
321	Acid Soluble Zinc (0.13%)	0368	0.1993	0.0099	0.1844	0.0198	0.0086	55	0.75	321.99	0
321	Acid Soluble Zinc (0.13%)	0521	0.1995	0.0000	0.1844	0.0198	0.0086	55	0.76	321.32	0
321	Acid Soluble Zinc (0.13%)	0255	0.2000	0.0160	0.1844	0.0198	0.0086	55	0.79	321.30	0
321	Acid Soluble Zinc (0.13%)	0043	0.2000	0.0200	0.1844	0.0198	0.0086	55	0.79	321.32	0
321	Acid Soluble Zinc (0.13%)	0037	0.2010	0.0140	0.1844	0.0198	0.0086	55	0.84	321.33	0
321	Acid Soluble Zinc (0.13%)	0136	0.2050	0.0100	0.1844	0.0198	0.0086	55	1.04	321.33	0
321	Acid Soluble Zinc (0.13%)	0231	0.2100‡	0.0000	0.1844	0.0198	0.0086	55	1.29	321.30	0
321	Acid Soluble Zinc (0.13%)	0483	0.2225‡	0.0010	0.1844	0.0198	0.0086	55	1.92	321.30	0
321	Acid Soluble Zinc (0.13%)	0546	0.2240‡	0.0180	0.1844	0.0198	0.0086	55	1.99	321.33	0
321	Acid Soluble Zinc (0.13%)	0515	0.2256‡	0.0315	0.1844	0.0198	0.0086	55	2.07	321.33	0
321	Acid Soluble Zinc (0.13%)	0307	0.2485‡	0.0090	0.1844	0.0198	0.0086	55	3.23	321.30	0
321	Acid Soluble Zinc (0.13%)	0423	0.3000‡	0.0200	0.1844	0.0198	0.0086	55	5.82	321.32	0
321	Acid Soluble Zinc (0.13%)	0550	0.1600†	0.0600	0.1844	0.0198	0.0086	55	-1.23	321.00	1
325	Water Soluble Zinc (%)	0117	0.0015	0.0003	0.1032	0.1111	0.0530	7	-0.83	325.30	0
325	Water Soluble Zinc (%)	0550	0.0037	0.0018	0.1032	0.1111	0.0530	7	-0.81	325.00	0
325	Water Soluble Zinc (%)	0027	0.0500	0.0020	0.1032	0.1111	0.0530	7	-0.43	325.00	0
325	Water Soluble Zinc (%)	0539	0.1040	0.0120	0.1032	0.1111	0.0530	7	0.01	325.00	0
325	Water Soluble Zinc (%)	0532	0.1085	0.0230	0.1032	0.1111	0.0530	7	0.04	325.00	0
325	Water Soluble Zinc (%)	0541	0.1850	0.0300	0.1032	0.1111	0.0530	7	0.67	325.30	0
325	Water Soluble Zinc (%)	0543	0.4230	0.3020	0.1032	0.1111	0.0530	7	2.60	325.30	0
325	Water Soluble Zinc (%)	0537	0.5430	0.8760	0.1032	0.1111	0.0530	7	3.58	325.00	1

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 and a 4 flag indicates rejected due to 0 value submitted. 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. Your offset values are higher (‡) or lower (†) than the Robust Analyte value ± Investigational Allowance. Analyte 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.