

Mycotoxin Proficiency Testing

Issue Date: 10/31/2015

Analytes for Sample # 201563 Equine Feed

Disclaimer: Z scores are provided for research and method development purposes only!

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	Horwitz
						D1	D2					
0202	600.12	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl	6.6	5	Y	Y		100%	-1.81	9.65	2.123
0003	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	4.1	8.8	Y	Y		100%	-1.51	9.65	2.123
0227	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	8	6	Y	Y		100%	-1.25	9.65	2.123
0870	600.02	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin HS	7.6	7.6	Y	Y		100%	-0.97	9.65	2.123
0208	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	6.76	8.62	Y	Y		100%	-0.92	9.65	2.123
0027	600.21	Total Aflatoxin (ppb)	LC-PCD FI	7.574	8.967	Y	Y		100%	-0.65	9.65	2.123
0010	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	8.9	8.2	Y	Y		100%	-0.52	9.65	2.123
0958	600.98	Total Aflatoxin (ppb)	Other Rapid Test Kit	8.6	8.5	Y	Y		100%	-0.52	9.65	2.123
0529	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	8.1	9.2	Y	Y		100%	-0.47	9.65	2.123
2050	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	9.8	7.6	Y	Y		100%	-0.45	9.65	2.123
0034	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	9.1	8.5	Y	Y		100%	-0.40	9.65	2.123
2098	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	8.9	9.1	Y	Y		100%	-0.31	9.65	2.123
0964	600.21	Total Aflatoxin (ppb)	LC-PCD FI	8.618	9.574	Y	Y		100%	-0.26	9.65	2.123
0964	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	9.73	10.7	Y	Y		100%	0.27	9.65	2.123
0009	600.21	Total Aflatoxin (ppb)	LC-PCD FI	9.789	11.168	Y	Y		100%	0.39	9.65	2.123
2096	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	10	11.8	Y	Y		100%	0.59	9.65	2.123
0957	600.98	Total Aflatoxin (ppb)	Other Rapid Test Kit	11.4	10.5	Y	Y		100%	0.61	9.65	2.123
0042	600.20	Total Aflatoxin (ppb)	LC	10.5	11.6	Y	Y		100%	0.66	9.65	2.123
0004	600.14	Total Aflatoxin (ppb)	Vicam Aflatest	10	13	Y	Y		100%	0.87	9.65	2.123
0010	600.20	Total Aflatoxin (ppb)	LC	9.5	13.6	Y	Y		100%	0.89	9.65	2.123
0407	600.13	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl SC	12.289	12.154	Y	Y		100%	1.21	9.65	2.123
0035	600.20	Total Aflatoxin (ppb)	LC	14.034	11.822	Y	Y		100%	1.54	9.65	2.123
0010	600.14	Total Aflatoxin (ppb)	Vicam Aflatest	10	17	Y	Y		100%	1.81	9.65	2.123
0035	600.13	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl SC	13.976	13.489	Y	Y		100%	1.92	9.65	2.123
0218	600.24	Total Aflatoxin (ppb)	LC-MS/MS	16.8	15.1	Y	Y		100%	2.97	9.65	2.123
0964	601.21	AB1 (ppb)	LC-PCD FI	7.031	7.79	Y	Y		100%	-1.01	9.525	2.096
0027	601.21	AB1 (ppb)	LC-PCD FI	6.885	8.16	Y	Y		100%	-0.96	9.525	2.096
0959	601.99	AB1 (ppb)	Miscellaneous	7.1	8.6	Y	Y		100%	-0.80	9.525	2.096
2023	601.24	AB1 (ppb)	Vicam Aflatest, LC-FI	8.5	7.6	Y	Y		100%	-0.70	9.525	2.096
0913	601.20	AB1 (ppb)	LC	8.04	8.36	Y	Y		100%	-0.63	9.525	2.096
0009	601.21	AB1 (ppb)	LC-PCD FI	8.34	10.18	Y	Y		100%	-0.13	9.525	2.096
0035	601.20	AB1 (ppb)	LC	10.2	9.288	Y	Y		100%	0.10	9.525	2.096
0918	601.23	AB1 (ppb)	LC-MS/MS	11.8	9.4	Y	Y		100%	0.51	9.525	2.096
0913	601.23	AB1 (ppb)	LC-MS/MS	11.5	11.2	Y	Y		100%	0.87	9.525	2.096
2033	601.23	AB1 (ppb)	LC-MS/MS	11.33	13.53	Y	Y		100%	1.39	9.525	2.096
0218	601.23	AB1 (ppb)	LC-MS/MS	15.5	13.9	Y	Y		100%	2.47	9.525	2.096
0027	602.21	AB2 (ppb)	LC-PCD FI	0.689	0.807	Y	Y		100%	-1.42	1.089	0.24
2033	602.23	AB2 (ppb)	LC-MS/MS	0.84	0.79	Y	Y		100%	-1.14	1.089	0.24

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	Horwitz
						D1	D2					
0913	602.20	AB2 (ppb)	LC	1.04	0.88	Y	Y		100%	-0.54	1.089	0.24
0009	602.21	AB2 (ppb)	LC-PCD FI	0.936	0.985	Y	Y		100%	-0.54	1.089	0.24
0035	602.20	AB2 (ppb)	LC	1.121	1.053	Y	Y		100%	-0.01	1.089	0.24
0964	602.21	AB2 (ppb)	LC-PCD FI	1.046	1.192	Y	Y		100%	0.12	1.089	0.24
0918	602.23	AB2 (ppb)	LC-MS/MS	1.37	1.02	Y	Y		100%	0.44	1.089	0.24
0218	602.23	AB2 (ppb)	LC-MS/MS	1.3	1.2	Y	Y		100%	0.67	1.089	0.24
0913	602.23	AB2 (ppb)	LC-MS/MS	1.4	1.2	Y	Y		100%	0.88	1.089	0.24
2023	602.24	AB2 (ppb)	Vicam Aflatest, LC-FI	1.6	1.7	Y	Y		100%	2.34	1.089	0.24
0035	603.20	AG1* (ppb)	LC	2.535	1.481	Y	Y				ND (0.5)	
0913	603.20	AG1* (ppb)	LC			N	N	1			ND (0.5)	
0964	603.21	AG1* (ppb)	LC-PCD FI	0.542	0.593	Y	Y				ND (0.5)	
0218	603.23	AG1* (ppb)	LC-MS/MS			N	N	1			ND (0.5)	
0913	603.23	AG1* (ppb)	LC-MS/MS			N	N	1			ND (0.5)	
0918	603.23	AG1* (ppb)	LC-MS/MS	0.3	0.7	Y	Y				ND (0.5)	
2033	603.23	AG1* (ppb)	LC-MS/MS			N	N	0.33			ND (0.5)	
2023	603.24	AG1* (ppb)	Vicam Aflatest, LC-FI			N	N	0.6			ND (0.5)	
0035	604.20	AG2* (ppb)	LC			N	N	1			ND (0.5)	
0913	604.20	AG2* (ppb)	LC			N	N	1			ND (0.5)	
0009	604.21	AG2* (ppb)	LC-PCD FI	0.51		Y	N	0.23			ND (0.5)	
0964	604.21	AG2* (ppb)	LC-PCD FI			N	N	0.23			ND (0.5)	
0218	604.23	AG2* (ppb)	LC-MS/MS			N	N	1			ND (0.5)	
0913	604.23	AG2* (ppb)	LC-MS/MS			N	N	1			ND (0.5)	
0918	604.23	AG2* (ppb)	LC-MS/MS			N	N	0.03			ND (0.5)	
2033	604.23	AG2* (ppb)	LC-MS/MS			N	N	0.33			ND (0.5)	
2023	604.24	AG2* (ppb)	Vicam Aflatest, LC-FI			N	N	0.6			ND (0.5)	
0227	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1.6	2.1	Y	Y		100%	-6.83	1,817	265.7
0529	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	2.3	1.5	Y	Y		100%	-6.83	1,817	265.7
0958	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	2.3	2.4	Y	Y		100%	-6.83	1,817	265.7
0870	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	190	170	Y	Y		100%	-6.16	1,817	265.7
2023	610.20	Deoxynivalenol (ppb)	LC	1,054	981	Y	Y		100%	-3.01	1,817	265.7
0913	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,000	1,200	Y	Y		100%	-2.70	1,817	265.7
0009	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	1,530	1,380	Y	Y		100%	-1.36	1,817	265.7
0918	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,410	1,780	Y	Y		100%	-0.84	1,817	265.7
2050	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,900	1,600	Y	Y		100%	-0.25	1,817	265.7
0218	610.25	Deoxynivalenol (ppb)	GC-MS	1,893	1,692	Y	Y		100%	-0.09	1,817	265.7
0208	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,650	2,010	Y	Y		100%	0.05	1,817	265.7
0027	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,900	1,900	Y	Y		100%	0.31	1,817	265.7
0202	610.06	Deoxynivalenol (ppb)	r-Biopharm Ridascreen DON	1,900	1,900	Y	Y		100%	0.31	1,817	265.7
0913	610.20	Deoxynivalenol (ppb)	LC	1,890	2,000	Y	Y		100%	0.48	1,817	265.7
0003	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	2,100	1,900	Y	Y		100%	0.69	1,817	265.7
2096	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,950	2,100	Y	Y		100%	0.78	1,817	265.7
2033	610.23	Deoxynivalenol (ppb)	LC-MS/MS	2,108	1,958	Y	Y		100%	0.81	1,817	265.7
0407	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	2,189	1,904	Y	Y		100%	0.86	1,817	265.7
0964	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	2,050	2,100	Y	Y		100%	0.97	1,817	265.7
0035	610.08	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON SC	1,979	2,230	Y	Y		100%	1.08	1,817	265.7
0033	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	2,000	2,300	Y	Y		100%	1.25	1,817	265.7

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						D1	D2					
2098	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	2,200	2,100	Y	Y		100%	1.25	1,817	265.7
0957	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	2,200	2,100	Y	Y		100%	1.25	1,817	265.7
0959	610.99	Deoxynivalenol (ppb)	Miscellaneous	2,300	2,800	Y	Y		100%	2.76	1,817	265.7
0009	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	1.6	1.6	Y	Y		100%	-6.84	1,821	266.2
0227	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	2	2	Y	Y		100%	-6.83	1,821	266.2
0529	620.02	Total Fumonisin (ppb)	Neogen Veratox Fumonisin 5/10	3.5	2.4	Y	Y		100%	-6.83	1,821	266.2
0870	620.02	Total Fumonisin (ppb)	Neogen Veratox Fumonisin 5/10	291	275	Y	Y		100%	-5.78	1,821	266.2
0004	620.11	Total Fumonisin (ppb)	Vicam Fumonitest	1,800	1,600	Y	Y		100%	-0.45	1,821	266.2
0202	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	1,900	1,600	Y	Y		100%	-0.27	1,821	266.2
0407	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	1,917	1,808	Y	Y		100%	0.16	1,821	266.2
0964	620.21	Total Fumonisin (ppb)	LC-FI OPA der.	2,132	1,676	Y	Y		100%	0.31	1,821	266.2
2023	620.21	Total Fumonisin (ppb)	LC-FI OPA der.	2,064	1,821	Y	Y		100%	0.46	1,821	266.2
0035	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	2,003	1,962	Y	Y		100%	0.61	1,821	266.2
0042	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	2,100	2,200	Y	Y		100%	1.24	1,821	266.2
0033	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	2,500	2,100	Y	Y		100%	1.80	1,821	266.2
2098	620.02	Total Fumonisin (ppb)	Neogen Veratox Fumonisin 5/10	2,310	2,480	Y	Y		100%	2.16	1,821	266.2
0010	620.23	Total Fumonisin (ppb)	LC-MS/MS	2,300	2,600	Y	Y		100%	2.36	1,821	266.2
0964	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	2,930	2,670	Y	Y		100%	3.68	1,821	266.2
0027	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	3,600	2,400	Y	Y		100%	4.43	1,821	266.2
0913	621.23	FB1* (ppb)	LC-MS/MS	1,000	1,200	Y	Y		100%	-2.10	1,600	238.5
0964	621.21	FB1* (ppb)	LC-FI OPA der.	1,364	1,476	Y	Y		100%	-0.75	1,600	238.5
0160	621.23	FB1* (ppb)	LC-MS/MS	1,820	1,440	Y	Y		100%	0.13	1,600	238.5
0913	621.20	FB1* (ppb)	LC	1,850	1,640	Y	Y		100%	0.61	1,600	238.5
2033	621.23	FB1* (ppb)	LC-MS/MS	1,790	1,932	Y	Y		100%	1.09	1,600	238.5
0964	622.21	FB2* (ppb)	LC-FI OPA der.	311.5	322.3	Y	Y		100%	-1.13	400	73.448
0913	622.23	FB2* (ppb)	LC-MS/MS	400	400	Y	Y		100%	0.00	400	73.448
0913	622.20	FB2* (ppb)	LC	430	610	Y	Y		100%	1.63	400	73.448
2033	622.23	FB2* (ppb)	LC-MS/MS	535	592	Y	Y		100%	2.23	400	73.448
0913	623.23	FB3* (ppb)	LC-MS/MS	200	200	Y	Y		100%	0.00	200	40.762
0913	623.20	FB3* (ppb)	LC	360	330	Y	Y		100%	3.56	200	40.762
0529	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	38.5	45	Y	Y		100%	-3.90	202.3	41.162
2098	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	104	112	Y	Y		100%	-2.29	202.3	41.162
0407	630.05	Ochratoxin A (ppb)	r-Biopharm Ridascreen FAST Och A	121.7	120.6	Y	Y		100%	-1.97	202.3	41.162
0964	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	161.8	177.5	Y	Y		100%	-0.79	202.3	41.162
0870	630.06	Ochratoxin A (ppb)	Vicam OchraTest	180	170	Y	Y		100%	-0.66	202.3	41.162
2033	630.23	Ochratoxin A (ppb)	LC-MS/MS	199	214	Y	Y		100%	0.10	202.3	41.162
2023	630.20	Ochratoxin A (ppb)	LC	188	226	Y	Y		100%	0.11	202.3	41.162
0913	630.20	Ochratoxin A (ppb)	LC	227.6	218.1	Y	Y		100%	0.50	202.3	41.162
0964	630.21	Ochratoxin A (ppb)	LC-PCD FI	225.6	224.3	Y	Y		100%	0.55	202.3	41.162
0003	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	240	220	Y	Y		100%	0.67	202.3	41.162
0913	630.23	Ochratoxin A (ppb)	LC-MS/MS	269.7	261.4	Y	Y		100%	1.54	202.3	41.162
0918	630.23	Ochratoxin A (ppb)	LC-MS/MS	251	294	Y	Y		100%	1.71	202.3	41.162
0218	630.23	Ochratoxin A (ppb)	LC-MS/MS	291	278	Y	Y		100%	2.00	202.3	41.162
0227	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	380	210	Y	Y		100%	2.25	202.3	41.162
2033	640.23	T-2 (ppb)	LC-MS/MS	95.8	80.5	Y	Y		100%	-1.84	145.4	31.091
0918	640.23	T-2 (ppb)	LC-MS/MS	102	108	Y	Y		100%	-1.30	145.4	31.091

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						D1	D2					
0407	640.05	T-2 (ppb)	r-Biopharm Ridascreen FAST T-2	146.2	135.9	Y	Y		100%	-0.14	145.4	31.091
0218	640.23	T-2 (ppb)	LC-MS/MS	143	146	Y	Y		100%	-0.03	145.4	31.091
0913	640.23	T-2 (ppb)	LC-MS/MS	147.8	154.4	Y	Y		100%	0.18	145.4	31.091
0913	640.24	T-2 (ppb)	GC-ECD	203.2	183.9	Y	Y		100%	1.55	145.4	31.091
0202	640.05	T-2 (ppb)	r-Biopharm Ridascreen FAST T-2	188.2	200.8	Y	Y		100%	1.58	145.4	31.091
0913	641.23	HT-2* (ppb)	LC-MS/MS	141.5	137	Y	Y		100%	-0.07	141.5	30.381
0913	641.24	HT-2* (ppb)	GC-ECD	243.5	198.6	Y	Y		100%	2.62	141.5	30.381
2098	642.21	T-2 + HT-2* (ppb)	Neogen Veratox T-2 + HT-2	310.5	321.6	Y	Y		100%	0.52	287	55.399
0529	642.21	T-2 + HT-2* (ppb)	Neogen Veratox T-2 + HT-2	356.7	371.1	Y	Y		100%	1.39	287	55.399
0964	642.98	T-2 + HT-2* (ppb)	Other Rapid Test Kit	534	540.3	Y	Y		100%	4.52	287	55.399
0870	642.98	T-2 + HT-2* (ppb)	Other Rapid Test Kit	1,068	1,116	Y	Y		100%	14.53	287	55.399
0003	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	200	236	Y	Y		100%	-2.72	430.9	78.246
0918	650.24	Zearalenone (ppb)	LC-MS/MS	272	328	Y	Y		100%	-1.67	430.9	78.246
0033	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	360	276	Y	Y		100%	-1.44	430.9	78.246
0964	650.22	Zearalenone (ppb)	LC-FI, AOCS	321.9	334.2	Y	Y		100%	-1.31	430.9	78.246
0529	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	312.6	345.4	Y	Y		100%	-1.30	430.9	78.246
0227	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	372	334	Y	Y		100%	-1.00	430.9	78.246
0964	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	352.4	386.3	Y	Y		100%	-0.79	430.9	78.246
2098	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	418.2	389.7	Y	Y		100%	-0.34	430.9	78.246
0202	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	388.8	441.4	Y	Y		100%	-0.20	430.9	78.246
0407	650.07	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON SC	476.9	462.7	Y	Y		100%	0.50	430.9	78.246
2033	650.24	Zearalenone (ppb)	LC-MS/MS	469	480	Y	Y		100%	0.56	430.9	78.246
0870	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	474.4	477.4	Y	Y		100%	0.57	430.9	78.246
0009	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	563.1	427.5	Y	Y		100%	0.82	430.9	78.246
2023	650.20	Zearalenone (ppb)	LC	455	541	Y	Y		100%	0.86	430.9	78.246
0913	650.20	Zearalenone (ppb)	LC	536.5	543.4	Y	Y		100%	1.39	430.9	78.246
0913	650.24	Zearalenone (ppb)	LC-MS/MS	544.7	563.6	Y	Y		100%	1.57	430.9	78.246
0218	650.24	Zearalenone (ppb)	LC-MS/MS	567	575	Y	Y		100%	1.79	430.9	78.246
0035	650.07	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON SC	681.2	698.7	Y	Y		100%	3.31	430.9	78.246

Notes: 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%). If < 6 results used in calculations or only 1 of 2 results detected Z is Grey and Probability of Detection is for the Non-Detect (see documentation). A Red NoZ indicates both results Not Detected with a Probability Of Detecting a single value. Where the Assigned Value is ND then the LOD follows as (LOD) in the Analyte units. An asterix on the Analyte name indicates Reference Lab Value Used as Assigned Value and Z scores are calculated against the reference Lab.