

**Mycotoxin Proficiency Testing**
**Issue Date: 01/31/2016**
**Analytes for Sample # 201564 Pet Food**
**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					
2096	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	1.8	4.2	Y	Y		100%	-2.33	6.143	1.351
0870	600.02	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin HS	3.4	3.4	Y	Y		100%	-2.03	6.143	1.351
0958	600.98	Total Aflatoxin (ppb)	Other Rapid Test Kit	4.6	5.7	Y	Y		100%	-0.73	6.143	1.351
2098	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	5.1	5.3	Y	Y		100%	-0.70	6.143	1.351
0297	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	5.3	5.3	Y	Y		100%	-0.62	6.143	1.351
0034	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	4.8	5.9	Y	Y		100%	-0.59	6.143	1.351
0033	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	6	5.1	Y	Y		100%	-0.44	6.143	1.351
0208	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	5.43	5.87	Y	Y		100%	-0.36	6.143	1.351
0013	600.22	Total Aflatoxin (ppb)	Vicam Aflatest, LC-FI	6.2	5.4	Y	Y		100%	-0.25	6.143	1.351
0009	600.21	Total Aflatoxin (ppb)	LC-PCD FI	6.416	5.56	Y	Y		100%	-0.11	6.143	1.351
0004	600.14	Total Aflatoxin (ppb)	Vicam Aflatest	6	6	Y	Y		100%	-0.11	6.143	1.351
0042	600.20	Total Aflatoxin (ppb)	LC	6	6	Y	Y		100%	-0.11	6.143	1.351
2050	600.98	Total Aflatoxin (ppb)	Other Rapid Test Kit	6	6	Y	Y		100%	-0.11	6.143	1.351
0027	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	5.3	7.6	Y	Y		100%	0.23	6.143	1.351
0010	600.21	Total Aflatoxin (ppb)	LC-PCD FI	6.1	7.1	Y	Y		100%	0.34	6.143	1.351
0964	600.21	Total Aflatoxin (ppb)	LC-PCD FI	7	7.7	Y	Y		100%	0.89	6.143	1.351
0964	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	7.6	7.4	Y	Y		100%	1.00	6.143	1.351
0003	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	9.2	7.1	Y	Y		100%	1.49	6.143	1.351
0529	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	7.9	8.9	Y	Y		100%	1.67	6.143	1.351
0035	600.13	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl SC	9.2	9.425	Y	Y		100%	2.35	6.143	1.351
0407	600.13	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl SC	14.325	14.376	Y	Y		100%	6.07	6.143	1.351
0035	600.20	Total Aflatoxin (ppb)	LC	25.66	37.849	Y	Y		100%	18.95	6.143	1.351
0202	600.12	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl			N	N	5	80.11%	NoZ	6.143	1.351
0918	601.23	AB1 (ppb)	LC-MS/MS	4	3.8	Y	Y		100%	-1.74	6.308	1.388
0959	601.99	AB1 (ppb)	Miscellaneous	5.3	5.6	Y	Y		100%	-0.62	6.308	1.388
0013	601.24	AB1 (ppb)	Vicam Aflatest, LC-FI	6.2	5.4	Y	Y		100%	-0.37	6.308	1.388
0009	601.21	AB1 (ppb)	LC-PCD FI	6.416	5.56	Y	Y		100%	-0.23	6.308	1.388
0964	601.21	AB1 (ppb)	LC-PCD FI	6	6.4	Y	Y		100%	-0.08	6.308	1.388
2033	601.23	AB1 (ppb)	LC-MS/MS	5.9	6.7	Y	Y		100%	-0.01	6.308	1.388
0913	601.20	AB1 (ppb)	LC	6.37	6.55	Y	Y		100%	0.11	6.308	1.388
2023	601.24	AB1 (ppb)	Vicam Aflatest, LC-FI	6.4	6.8	Y	Y		100%	0.21	6.308	1.388
0035	601.20	AB1 (ppb)	LC	6.625	7.138	Y	Y		100%	0.41	6.308	1.388
0913	601.23	AB1 (ppb)	LC-MS/MS	6.88	7.34	Y	Y		100%	0.58	6.308	1.388
0553	601.23	AB1 (ppb)	LC-MS/MS	8.55	7.26	Y	Y		100%	1.15	6.308	1.388
0918	602.23	AB2 (ppb)	LC-MS/MS	0.39	0.34	Y	Y		100%	-2.48	0.803	0.177
0035	602.20	AB2 (ppb)	LC	0.76	0.8	Y	Y		100%	-0.13	0.803	0.177
2023	602.24	AB2 (ppb)	Vicam Aflatest, LC-FI	0.9	1	Y	Y		100%	0.84	0.803	0.177
0964	602.21	AB2 (ppb)	LC-PCD FI	0.98	1.25	Y	Y		100%	1.77	0.803	0.177

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			N	N	1	13.16%	NoZ	0.803	0.177
0553	602.23	AB2 (ppb)	LC-MS/MS			N	N	1	13.16%	NoZ	0.803	0.177
0913	602.23	AB2 (ppb)	LC-MS/MS			N	N	1	13.16%	NoZ	0.803	0.177
2033	602.23	AB2 (ppb)	LC-MS/MS			N	N	1	13.16%	NoZ	0.803	0.177
0013	602.24	AB2 (ppb)	Vicam Aflatest, LC-FI			N	N	1.6	0.00%	NoZ	0.803	0.177
0035	603.20	AG1* (ppb)	LC	18.275	29.911	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			N	N	3.1			ND (0.5)	
0553	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		0.1	N	Y	0.1			ND (0.5)	
2033	603.23	AG1* (ppb)	LC-MS/MS			N	N	1			ND (0.5)	
0013	603.24	AG1* (ppb)	Vicam Aflatest, LC-FI			N	N	2			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	0.5			ND (0.5)	
0913	604.20	AG2* (ppb)	LC			N	N	1			ND (0.5)	
0964	604.21	AG2* (ppb)	LC-PCD FI			N	N	1.6			ND (0.5)	
0553	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	1			ND (0.5)	
0013	604.24	AG2* (ppb)	Vicam Aflatest, LC-FI			N	N	0.9			ND (0.5)	
2023	604.24	AG2* (ppb)	Vicam Aflatest, LC-FI			N	N	0.6			ND (0.5)	
0870	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	0.1		Y	N	0.1	100.00%	-5.64	506.6	89.776
0529	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	0.4	0.5	Y	Y		100%	-5.64	506.6	89.776
0958	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	0.6	0.6	Y	Y		100%	-5.64	506.6	89.776
0009	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	250	240	Y	Y		100%	-2.91	506.6	89.776
0918	610.23	Deoxynivalenol (ppb)	LC-MS/MS		270	N	Y	240	99.85%	-2.64	506.6	89.776
2033	610.23	Deoxynivalenol (ppb)	LC-MS/MS	310	340	Y	Y		100%	-2.02	506.6	89.776
0913	610.23	Deoxynivalenol (ppb)	LC-MS/MS	386.5	350	Y	Y		100%	-1.54	506.6	89.776
0553	610.23	Deoxynivalenol (ppb)	LC-MS/MS	512.6	324.5	Y	Y		100%	-0.98	506.6	89.776
0027	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	400	600	Y	Y		100%	-0.07	506.6	89.776
2098	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	500	500	Y	Y		100%	-0.07	506.6	89.776
2050	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	500	500	Y	Y		100%	-0.07	506.6	89.776
0208	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	510	520	Y	Y		100%	0.09	506.6	89.776
0913	610.20	Deoxynivalenol (ppb)	LC	540.5	506	Y	Y		100%	0.19	506.6	89.776
0407	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	506.5	546	Y	Y		100%	0.22	506.6	89.776
0035	610.08	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON SC	572	571.5	Y	Y		100%	0.73	506.6	89.776
0033	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	700	500	Y	Y		100%	1.04	506.6	89.776
2096	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	700	500	Y	Y		100%	1.04	506.6	89.776
2023	610.20	Deoxynivalenol (ppb)	LC	587	725	Y	Y		100%	1.66	506.6	89.776
0959	610.99	Deoxynivalenol (ppb)	Miscellaneous	700	700	Y	Y		100%	2.15	506.6	89.776
0003	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	900	800	Y	Y		100%	3.82	506.6	89.776
0297	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,000	1,000	Y	Y		100%	5.50	506.6	89.776
0964	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,900	2,000	Y	Y		100%	16.08	506.6	89.776
0202	610.06	Deoxynivalenol (ppb)	r-Biopharm Ridascreen DON			N	N	500	52.94%	NoZ	506.6	89.776

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						D1	D2					
0529	620.02	Total Fumonisin (ppb)	Neogen Veratox Fumonisin 5/10	2	1.9	Y	Y		100%	-6.69	1,581	236.1
2050	620.98	Total Fumonisin (ppb)	Other Rapid Test Kit	300	300	Y	Y		100%	-5.43	1,581	236.1
0870	620.02	Total Fumonisin (ppb)	Neogen Veratox Fumonisin 5/10	990	840	Y	Y		100%	-2.82	1,581	236.1
0033	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	1,400	1,200	Y	Y		100%	-1.19	1,581	236.1
0042	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	1,400	1,200	Y	Y		100%	-1.19	1,581	236.1
2023	620.21	Total Fumonisin (ppb)	LC-FI OPA der.	1,562	1,452	Y	Y		100%	-0.31	1,581	236.1
0009	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	1,200	2,000	Y	Y		100%	0.08	1,581	236.1
0035	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	1,820	1,722	Y	Y		100%	0.80	1,581	236.1
0407	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	1,750	1,839	Y	Y		100%	0.90	1,581	236.1
0202	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	1,800	1,800	Y	Y		100%	0.93	1,581	236.1
0964	620.21	Total Fumonisin (ppb)	LC-FI OPA der.	1,792	1,816	Y	Y		100%	0.94	1,581	236.1
0964	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	1,900	2,100	Y	Y		100%	1.77	1,581	236.1
0027	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	2,290	2,050	Y	Y		100%	2.49	1,581	236.1
2098	620.02	Total Fumonisin (ppb)	Neogen Veratox Fumonisin 5/10	2,360	2,490	Y	Y		100%	3.58	1,581	236.1
0208	620.20	Total Fumonisin (ppb)	LC			N	N	2000	3.80%	NoZ	1,581	236.1
2033	621.23	FB1 (ppb)	LC-MS/MS	797	786	Y	Y		100%	-1.20	980.6	157.3
0913	621.23	FB1 (ppb)	LC-MS/MS	922	790	Y	Y		100%	-0.79	980.6	157.3
0913	621.20	FB1 (ppb)	LC	739.2	1,036	Y	Y		100%	-0.59	980.6	157.3
0553	621.23	FB1 (ppb)	LC-MS/MS	1,250	954.6	Y	Y		100%	0.77	980.6	157.3
0964	621.21	FB1 (ppb)	LC-FI OPA der.	1,318	1,213	Y	Y		100%	1.81	980.6	157.3
2033	622.23	FB2 (ppb)	LC-MS/MS	266	219	Y	Y		100%	-0.33	259.1	50.792
0913	622.20	FB2 (ppb)	LC	265.6	236.1	Y	Y		100%	-0.16	259.1	50.792
0913	622.23	FB2 (ppb)	LC-MS/MS	269	250	Y	Y		100%	0.01	259.1	50.792
0553	622.23	FB2 (ppb)	LC-MS/MS	317.6	249.7	Y	Y		100%	0.48	259.1	50.792
0964	622.21	FB2 (ppb)	LC-FI OPA der.	475	603	Y	Y		100%	5.51	259.1	50.792
0913	623.20	FB3 (ppb)	LC	100	118.4	Y	Y		100%	-0.71	129.2	28.113
0913	623.23	FB3 (ppb)	LC-MS/MS	145	110	Y	Y		100%	-0.06	129.2	28.113
0553	623.23	FB3 (ppb)	LC-MS/MS	163.3	138.2	Y	Y		100%	0.77	129.2	28.113
0529	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	58.8	54.6	Y	Y		100%	-3.46	194.5	39.809
0407	630.05	Ochratoxin A (ppb)	r-Biopharm Ridascreen FAST Och A	103.6	111.3	Y	Y		100%	-2.19	194.5	39.809
0964	630.21	Ochratoxin A (ppb)	LC-PCD FI	138	128	Y	Y		100%	-1.55	194.5	39.809
0964	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	165	156	Y	Y		100%	-0.85	194.5	39.809
2098	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	148	178	Y	Y		100%	-0.79	194.5	39.809
0918	630.23	Ochratoxin A (ppb)	LC-MS/MS	166	193	Y	Y		100%	-0.38	194.5	39.809
0870	630.06	Ochratoxin A (ppb)	Vicam OchraTest	180	190	Y	Y		100%	-0.24	194.5	39.809
0913	630.20	Ochratoxin A (ppb)	LC	261.4	258.4	Y	Y		100%	1.64	194.5	39.809
2033	630.23	Ochratoxin A (ppb)	LC-MS/MS	270	270	Y	Y		100%	1.90	194.5	39.809
0913	630.23	Ochratoxin A (ppb)	LC-MS/MS	282.5	289.1	Y	Y		100%	2.29	194.5	39.809
0553	630.23	Ochratoxin A (ppb)	LC-MS/MS	345	372	Y	Y		100%	4.12	194.5	39.809
2023	630.20	Ochratoxin A (ppb)	LC	20,600	27,700	Y	Y		100%	601.76	194.5	39.809
2033	640.23	T-2 (ppb)	LC-MS/MS	60	60	Y	Y		100%	-1.99	106.7	23.474
0918	640.23	T-2 (ppb)	LC-MS/MS	59.7	63	Y	Y		100%	-1.93	106.7	23.474
0913	640.23	T-2 (ppb)	LC-MS/MS	105.1	101.6	Y	Y		100%	-0.14	106.7	23.474
0407	640.05	T-2 (ppb)	r-Biopharm Ridascreen FAST T-2	146.7	154.7	Y	Y		100%	1.87	106.7	23.474
0913	640.24	T-2 (ppb)	GC-ECD	137	173.5	Y	Y		100%	2.07	106.7	23.474
0202	640.05	T-2 (ppb)	r-Biopharm Ridascreen FAST T-2	153.8	162.4	Y	Y		100%	2.19	106.7	23.474

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0553	640.23	T-2 (ppb)	LC-MS/MS			N	N	1	100.00%	NoZ	106.7	23.474
0913	641.24	HT-2* (ppb)	GC-ECD	101.2	108.1	Y	Y		100%	-0.10	107	23.54
0913	641.23	HT-2* (ppb)	LC-MS/MS	115	101.6	Y	Y		100%	0.06	107	23.54
0870	642.98	T-2 + HT-2 (ppb)	Other Rapid Test Kit	171.4	149.5	Y	Y		100%	-2.34	291.7	56.169
2098	642.21	T-2 + HT-2 (ppb)	Neogen Veratox T-2 + HT-2	302.4	328.4	Y	Y		100%	0.42	291.7	56.169
0964	642.98	T-2 + HT-2 (ppb)	Other Rapid Test Kit	333	321	Y	Y		100%	0.63	291.7	56.169
0529	642.21	T-2 + HT-2 (ppb)	Neogen Veratox T-2 + HT-2	365.8	362.1	Y	Y		100%	1.29	291.7	56.169
0870	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	437.8	419.8	Y	Y		100%	-3.00	844	138.5
0918	650.24	Zearalenone (ppb)	LC-MS/MS	456	518	Y	Y		100%	-2.58	844	138.5
0009	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	568.2	512.7	Y	Y		100%	-2.19	844	138.5
2033	650.24	Zearalenone (ppb)	LC-MS/MS	510	580	Y	Y		100%	-2.16	844	138.5
0553	650.24	Zearalenone (ppb)	LC-MS/MS	979.3	611.2	Y	Y		100%	-0.35	844	138.5
0529	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	730.2	886.3	Y	Y		100%	-0.26	844	138.5
0964	650.22	Zearalenone (ppb)	LC-FI, AOCS	793	857	Y	Y		100%	-0.14	844	138.5
0202	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	856.4	856.4	Y	Y		100%	0.09	844	138.5
0027	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	682	1,038	Y	Y		100%	0.12	844	138.5
0035	650.07	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON SC	903.3	887.9	Y	Y		100%	0.37	844	138.5
0964	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	865	945	Y	Y		100%	0.44	844	138.5
0407	650.07	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON SC	922.1	924.4	Y	Y		100%	0.57	844	138.5
2098	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	1,040	969	Y	Y		100%	1.16	844	138.5
0913	650.20	Zearalenone (ppb)	LC	964.3	1,048	Y	Y		100%	1.17	844	138.5
0913	650.24	Zearalenone (ppb)	LC-MS/MS	1,065	1,049	Y	Y		100%	1.54	844	138.5
2023	650.20	Zearalenone (ppb)	LC	997	1,153	Y	Y		100%	1.67	844	138.5

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.