

Table 1: Results and z-Scores for Bovine Milk Test Material

laboratory number	analyte			
	chloramphenicol			
	assigned value 1.39 µg/kg			
result µg/kg	Int. Std used? or % recovery	LoQ µg/kg	z-score	
001	0.8	88	1.5	-1.9
002	< 20	81.5%	20	
003	0.41	90%	0.1	-3.2
004	1.15	Yes	0.20	-0.8
005	1.6	uncorr	0.5	0.7
006	1.3	yes	0.2	-0.3
007	1.49	80	0.037	0.3
008	1.24	Yes	0.3	-0.5
009	1.89	Yes	0.15	1.6
010	1.40	90	0.3	0.0
011	1.22	Yes	0.14 ▲	-0.5
012	1.45	Yes	0.22 ▲	0.2
013	1.55	Yes	0.1 ○	0.5
014	0.84	80	0.3	-1.8
015	1.68	Yes	0.10	1.0
016	1.3	70	0.3	-0.3
017	1.9	Yes	0.3	1.7
018	0.751	No	0.038	-2.1
019	2.18	Yes	0.15	2.6
020	1.19	Yes	0.05	-0.6
021	1.8	Yes	0.15	1.3
022	1.37	100	0.002	-0.1
023	1.9	110	1.0	1.7
024	1.2	Yes	1.0	-0.6
025	1.98	80	0.1	1.9
026	1.61	Yes	0.1	0.7

Int. Std. = internal standard

uncorr = uncorrected

▲ = CC α ○ = CC β

z-scores outside the satisfactory range, i.e. |z| >2, are shown in **bold**

Table 1 (continued): Results and z-Scores for Bovine Milk Test Material

laboratory number	analyte			
	chloramphenicol			
	assigned value 1.39 µg/kg			
result µg/kg	Int. Std used? or % recovery	LoQ µg/kg	z-score	
027	0.94	Yes	0.30	-1.5
028	0.87	80	0.12	-1.7
029	1.5342	Yes	0.3	0.5
030	0.912	89.6	0.05	-1.6
031	1.75	96	0.25	1.2
032	1.3	Yes	1	-0.3
033	1.38	Yes	0.3	0.0
034	0.98	uncorr		-1.3
035	1.50	62.5	0.3	0.4
036	2.11	62.8%	0.3	2.4
037	♣ 0.5804	No	0.006	-2.6
038	1.04	Yes	0.104 ▲	-1.1
039	0.80	78%	0.15	-1.9
040	1.9	Yes	0.1	1.7
041	0.73	63	0.1	-2.2
042	1.60	Yes	0,30	0.7
043	1.44	Yes	0.25	0.2
044	1.2	Yes	0.1	-0.6
045	1.5	Yes	0.1	0.4
046	1.49	75	0.5	0.3
047	1.1	Yes	0.3	-0.9
048	1.2	Yes	0.2	-0.6
049	1.48	No		0.3
050	less than 0.3	63.8	0.3	
051	1.21	Yes	0.04	-0.6
052	1.46	No	0.2	0.2

Int. Std. = internal standard

uncorr = uncorrected

♣ = delivery problems with sample

▲ = CCα

z-scores outside the satisfactory range, i.e. |z| >2, are shown in **bold**

Table 1 (continued): Results and z-Scores for Bovine Milk Test Material

laboratory number	analyte			
	chloramphenicol			
	assigned value 1.39 µg/kg			
result µg/kg	Int. Std used? or % recovery	LoQ µg/kg	z-score	
053	1.91	Yes	0.8	1.7
054	1.25	80	0.2	-0.5
055	3.5	No	0.1	6.9
056	1.18	uncorr		-0.7
057	1.39	77		0.0
058	1.56	Yes	0.21	0.6
059	1.45	90%		0.2
060	2.1	Yes	0.21	2.3
061	not detected	60	0.3	
062	1.42	Yes	0.04	0.1
063	1.46	Yes	0.12	0.2
064	1.60	Yes	0.15	0.7
065	1.8	Yes	0.5	1.3
066	1.51	Yes	0.50	0.4
067	1.2	Yes	0.1	-0.6
068	32.49	70	0.3	101.9
069	<0.8	Yes	0.8	
070	0.44	95	0.15	-3.1
071	0.48	78	0.02	-3.0
072	<10	94	10	
073	0.0025	Yes	0.0005	-4.5
074	1.30	Yes	0.15	-0.3

Int. Std. = internal standard uncorr = uncorrected
z-scores outside the satisfactory range, i.e. $|z| > 2$, are shown in **bold**

Table 2: Assigned Values and Target Standard Deviations

analyte	assigned value, µg/kg				target standard deviation, µg/kg	
	data points, <i>n</i>	robust mean, \hat{X}	robust sd, $\hat{\sigma}$	Uncertainty, <i>u</i>	derived from	σ_p
chloramphenicol	59	1.39	0.40	0.052	Horwitz *	0.305

* see page 7 for appropriate form of the Horwitz equation

Table 3: Number and Percentage of Satisfactory z-Scores

analyte	number of satisfactory scores $ z \leq 2$	total number of scores	satisfactory %
chloramphenicol	57	69	83