



BEAUFORT COTTAGE LABORATORIES REFERENCE RANGES

OLDER THOROUGHBRED FOALS (3-6 WEEKS OF AGE)

Clinical Pathology Reference Ranges – Means & Ranges

Test	Abbreviation	Units	Mean	Range
Total erythrocytes	RBC	x10 ¹² /l	10.1	8.8-11.8
Packed cell volume	PCV	l/l	0.34	0.30-0.38
Haemoglobin	Hb	g/dl	12.4	10.6-13.6
Mean cell volume	MCV	fl	34.3	30.6-39.3
Mean cell haemoglobin concentration	McHc	g/dl	36.1	34.4-38.9
Mean cell haemoglobin	McH	pg	12.4	11.1-14.5
Total leucocytes	WBC	x10 ⁹ /l	9.3	6.9-15.2
Segmented neutrophils	Segs	x10 ⁹ /l	5.4	4.1-9.1
	Segs	%	58	42-88
Lymphocytes	Lymphs	x10 ⁹ /l	3.3	0.9-5.9
	Lymphs	%	38	22-54
Monocytes	Monos	x10 ⁹ /l	0.31	0.2-0.6
	Monos	%	3	1-7
Eosinophils	Eos	x10 ⁹ /l	0.1	0.1-0.3
	Eos	%	1	1-3
Platelets	Plts	x10 ⁹ /l	228	133-325
Plasma viscosity	PV	mPa	1.44	1.34-1.56
Total Protein	TSP	g/l	55	42-66
Albumin	Alb	g/l	31	26-37
Globulin	Glob	g/l	24	15-33
Alpha 1 globulin	x1 glob	g/l	1.1	0.9-1.6
Alpha 2 globulin	x2 glob	g/l	6.3	4.1-8.9
Beta 1 globulin	x1 glob	g/l	6.1	4.4-7.3
Beta 2 globulin	x2 glob	g/l	4.0	2.8-5.8
Gamma globulin	x glob	g/l	5.3	4.1-6.8
Plasma fibrinogen	Fib	g/l	3.0	1.5-4.2
Serum amyloid A	SAA	mg/l	1.2	0-5.4
Aspartate amino transferase	AST	iu/l	333	329-337
Creatinine kinase	CK	iu/l	233	204-263
Lactate dehydrogenase	LD	iu/l	920	631-1199
LD isoenzyme 1	LD1	% total LD	12	11-13
LD isoenzyme 2	LD2	% total LD	29	27-33
LD isoenzyme 3	LD3	% total LD	40	38-41
LD isoenzyme 4	LD4	% total LD	16	13-18
LD isoenzyme 5	LD5	% total LD	3	2-4

Test	Abbreviation	Units	Mean	Range
Gamma glutamyl transferase	GGT	iu/l	22	13-30
Glutamate dehydrogenase	GLDH	iu/l	19	8-31
Serum alkaline phosphatase	SAP	iu/l	1840	1195-2513
Intestinal alkaline phosphatase	IAP	iu/l	366	260-471
	IAP	% total SAP	20.3	18.7-22.2
Urea	Urea	mmol/l	3.4	2.8-4.1
Creatinine	Creat	µmol/l	123	97-138
Bromsulphalein half time clearance	BSP	Seconds		
Glucose	Glu	mmol/l	4.2	3.2-6.2
Total bilirubin	TBili	µmol/l	38	22-54
Direct bilirubin	DBili	µmol/l	12	5-18
Bile acids	BACids	µmol/l		0-8.0
Cholesterol	Chol	mmol/l		
Triglycerides	Trigs	mmol/l		
Lipase	Lip	mmol/l		
Amylase	Amyl	iu/l		
Calcium	Ca	mmol/l	3.0	2.9-3.1
Fractional urinary clearance	Ca	%		
Phosphate	PO4	mmol/l	2.4	2.2-2.7
Fractional urinary clearance	PO4	%	0.3	0.02-0.53
Magnesium	Mg	mmol/l	0.8	0.7-1.0
Fractional urinary clearance	Mg	%		
Copper (serum)	Cu	µmol/l		
Copper (plasma)	Cu	µmol/l		
Zinc	Zn	µmol/l		
Sodium	Na	mmol/l	141	135-145
Fractional urinary clearance	Na	%		
Potassium	K	mmol/l	4.8	4.1-5.5
Fractional urinary clearance	K	%		
Chloride	Cl	mmol/l	99	96-102
Fractional urinary clearance	Cl	%		
Cortisol	Cort	nmol/l		
Fasting Insulin	Ins	µiu/ml		
Tri-iodothyronine	T3	nmol/l	12.7	0.5-4.2
Thyroxine	T4	nmol/l	130	60-320
Troponin	cTnl	ng/ml		
Selenium	Se	µmol/l		