i-STAT® 1 PORTABLE CLINICAL ANALYSER
REFERENCE RANGES AND REPORTABLE RANGES – SI UNITS

WOODLEY EQUIPMENT COMPANY LTD
Laboratory Equipment, Diagnostic and Critical Care Specialists

	CRITICAL CARE ALERT VALUES		RECOMMENDED REFERENCE RANGES*			REPORTABLE RANGE*
PARAMETERS	ALERT LOW	ALERT HIGH	CANINE	FELINE	EQUINE	
Chemistry/Haematology:						
Glucose (mmol/L)	<2.22	>27.75	3.33 - 6.38	3.33 - 7.22	3.44 - 7.44	1.1 - 39
UREA (mmol/L)	N/A	>50	3.57 - 9.28	5.36 - 12.14	3.93 - 9.64	1.0 - 50
Creatinine(µmol/L)	N/A	>619	44 - 155	88.4 - 195	35 - 195	18 - 1768
Sodium (mmol/L)	<120	>170	139 - 150	147 - 162	128 - 142	100 - 180
Potassium (mmol/L)	<2.5	>6.0	3.4 - 4.9	2.9 - 4.2	1.9 - 4.1	2.0 - 9.0
Chloride (mmol/L)	<90	N/A	106 - 127	112 - 129	100 - 111	65 - 140
Lactate (mmol/L)	N/A	>4.00	0.60 - 2.90	0.50 - 2.70	0.30 - 1.50	0.30 - 20.00
TCO2 (mmol/L)	<12	N/A	17 - 25	16 - 25	24 - 32	5 - 50
Ionised Calcium (mmol/L)	<0.75	>2.00	1.12 - 1.40	1.20 - 1.32	1.25 - 1.75	0.25 - 2.50
Anion Gap (mmol/L)	N/A	>35	8 - 25	10 - 27	5 - 15	(-10) - (+99)
Haematocrit (%)	<15	>60	35 - 50	24 - 40	30 - 45	10 - 75
Haemoglobin (g/L)	<50	>200	120 - 170	80 - 130	100 - 150	34 - 255
ACT (sec)	N/A	Canine/Felinie: >190 Equine: >275	90 - 110	100 - 160	120 - 220	50 - 1000
Blood Gases - Arterial:						
pH	<7.100	>7.600	7.350 - 7.450	7.250 - 7.400	7.320 - 7.440	6.500 - 8.200
PCO_2 (mmHg)	N/A	>70.0	34.0 - 40.0	28.0 - 34.0	36.0 - 46.0	5.0 - 130.0
PO_2 (mmHg)	<75	N/A	85 - 100	90 – 110	90 - 100	5 - 800
HCO3 (mmol/L)	<12.0	N/A	20.0 - 24.0	16.0 - 20.0	24.0 - 30.0	1.0 - 85.0
Base Excess (mmol/L)	N/A	N/A	(-5) - (0)	(-5) - (+2)	(-5) - (+5)	(-30) - (+30)
sO_2 (%)	<85	N/A	>90	>90	>90	0 - 100
Blood Gases - Venus:						
pH	<7.100	>7.600	7.350 - 7.450	7.250 - 7.450	7.350 - 7.450	6.500 - 8.200
PCO_2 (mmHg)	N/A	>70.0	35.0 - 38.0	36.0 - 46.0	36.0 - 46.0	5.0 - 130.0
HCO_3 (mmol/L)	<12.0	N/A	15.0 - 23.0	25.0 - 30.0	25.0 - 30.0	1.0 - 85.0

* The above listed reference ranges represent universally accepted ranges of normal, with the exception of potassium and haematocrit. Whole blood potassium measurements are typically lower than serum levels due to potassium release by platlets during the clotting process. The reference range provided is for whole blood potassium. Serum potassium values average approximately 0.5 mmol/L higher. Haematocrit values are slightly lower on the i-STAT® Analyser as compared to reference procedures due to differences in test method. Reportable ranges are the ranges over which the analyser can accurately measure. Patient values below or above the reportable range are displayed as “less than” the lower end of the range or “greater than” the upper range, respectively.