

Human Performance Laboratory Report Form

Name: Eliud Too

Sport: Running

Age: 26

DOB: 12/12/1987

Test Date: 4/27/2014

Body Composition

Height: 1.78 m

Mass: 57.7(kg)

BMI: 18.2(kg.m⁻²) **LBM:** 54.8 (kg)

Sum of Skinfolds: 23 mm

Body Fat: 5%

Incremental Treadmill Test

Velocity miles.h ⁻¹ (km.h ⁻¹)	Blood Lactate (mmol.L ⁻¹)	Heart Rate (beats.min ⁻¹)	VO₂ (mL.kg ⁻¹ .min ⁻¹)
0 (0)	0.6	54	5.2
8 (12.9)	0.8	123	42
9 (14.5)	0.8	137	47.4
10 (16.1)	0.7	147	51.8
11 (17.7)	1.2	157	56.1
12 (19.3)	1.9	167	63.3
13 (20.9)	3.8	176	70.3
14 (22.5)	6.4	183	75.5
12.6 (20.3)	0	#DIV/0!	0
14 (22.5)	0	#DIV/0!	0

Test Results

VO₂peak: 76.1 mL.kg⁻¹.min⁻¹

Velocity @ 2mmol: 12 miles.h⁻¹ (19.3 km.h⁻¹)

HR @ 2mmol: 167 beats.min⁻¹

Velocity @ 2.5mmol: 12.3miles.h⁻¹ (19.8 km.h⁻¹)

HR @ 2.5mmol:170 beats.min⁻¹

Velocity @ 3mmol: 12.6 miles.h⁻¹ (20.3 km.h⁻¹)

HR @ 3mmol: 174 beats.min⁻¹

Velocity @ TLac: 11.8 miles.h⁻¹ (19 km.h⁻¹)

HR@ TLac: 165 beats.min⁻¹

BLa @ TLac: 1.8 mmol.L⁻¹

Percentage VO₂ @ TLac: 82%

Predicted Marathon Time: 2.08 – 2.12

Predicted 10000m Time: 29.30

Training Zones

A1 LSD training (1hr to 90min steady or recovery runs)

Heart Rate: 145 to 155 beats.min⁻¹

Speed: 10 to 11 miles.h⁻¹

A2 Tempo training (30 to 40min with mixed speed efforts or fartlek)

Heart Rate: 155 to 165 beats.min⁻¹

Speed: 11 to 11.5 miles.h⁻¹

A3- Low threshold zone (8 to 15 min repeat intervals)

Heart Rate: 165 to 170 beats.min⁻¹

Speed: 12 to 12.5 miles.h⁻¹

A3+ High threshold zone (4 to 8 min repeat intervals)

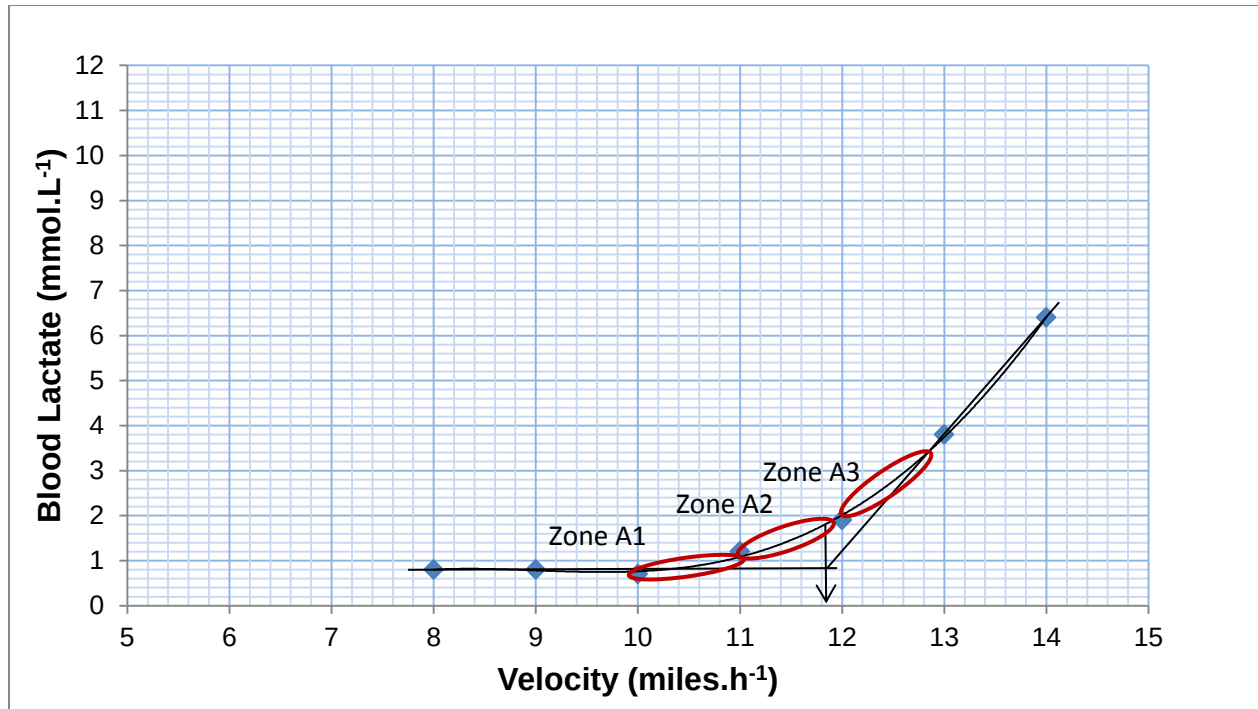
Heart Rate: 170 to 175 beats.min⁻¹

Speed 12.5 to 13 miles.h⁻¹

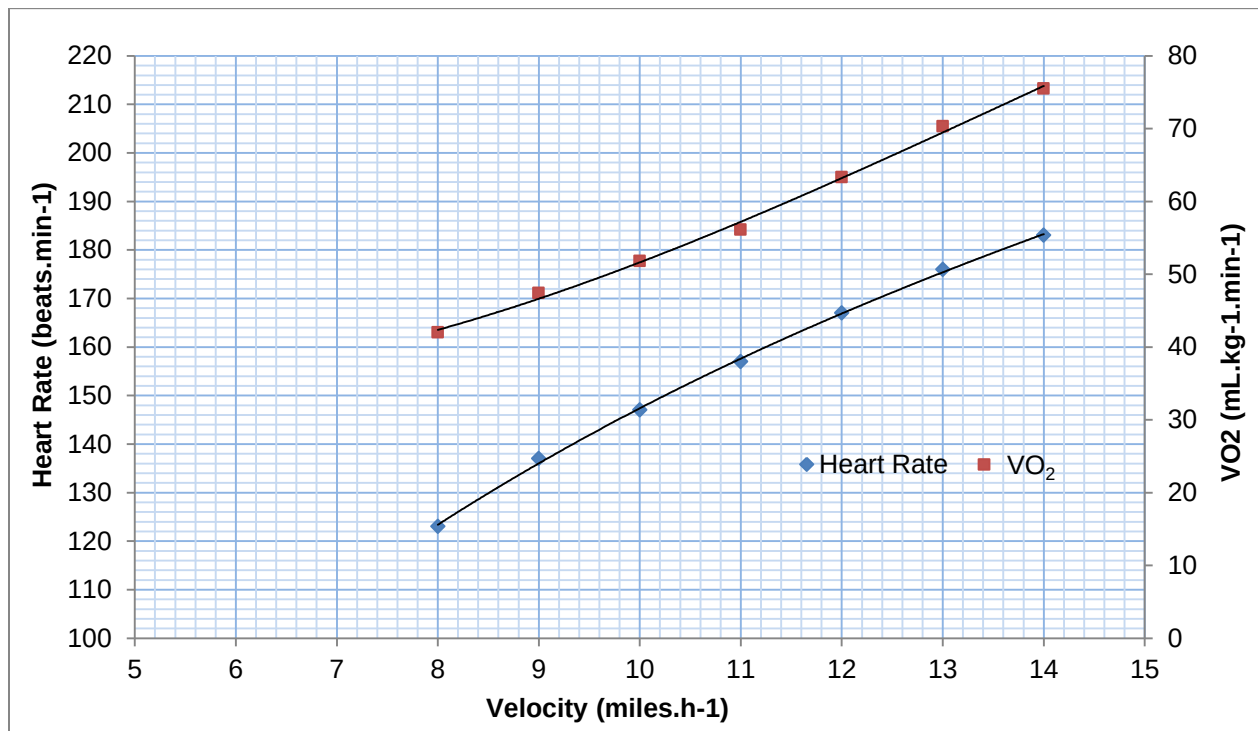
Recommendations

- 1) You should always try to wear a heart rate monitor.
- 2) Maintain current low intensity training volume and gradually increase interval work.
- 3) A3 sessions should progress from 30 mins work up to 50 min work over 2 months.
- 4) Once a week do (8 x 1 mile @ 4.40min pace) and/or (4 x 2mile @ 9 min).
- 5) Focus on consistent 4.45 pace in your hard threshold sessions!

Blood Lactate Response



Heart Rate and VO₂ Response



Pace Chart

Speed (mile.h⁻¹)	Pace (min.mile⁻¹)	Training Zones
6	10.00	
6.5	9.13	
7	8.34	
7.5	8.00	
8	7.30	
8.5	7.03	
9	6.40	
9.5	6.18	
10	6.00	
10.5	5.43	A1(LSD)
11	5.27	A1 (LSD)
11.5	5.13	A2 (Tempo)
12	5.00	A2 (Tempo)
12.5	4.48	A3- (Threshold)
13	4.37	A3+ (Threshold)
13.5	4.27	
14	4.17	