Aerobic Fitness Assessment

Lab Results -Step Test-			
85% predicted HRmax	168bpm	**85% predicted HRmax**	28b/10s
Stage Number		-	
1		-	
2		-	
3		130	
4		140	
5		138	
6		151	
7		159	
8		178	

Post-Test Measurements		
Time (min)	**HR (bpm)**	**BP (mmHg)**
1	154	140/60
3	123	113/66
5	106	98/60

Aerobic Fitness Score	
Lab Result	**Normative Values**
539.9mL/kg/min	**Excellent: 472+** Very Good: 420-471 Good: 378-419 Fair: 350-377 Needs Improvement: <350

Interpretation of Results: According to these fitness test results, this individual is in excellent shape. The purpose of this type of test is to predict the body's maximal oxygen uptake (body's ability to use, deliver, and uptake oxygen) without putting the body under much stress. This is an important factor to a soccer player's fitness as the sport has a large aerobic and anaerobic demand – the more efficient your body is (the higher your VO2max is), the more efficient you will be on the field.

The step test though, tends to over-predict aerobic fitness, especially in already fit participants. Its original purpose was to measure aerobic fitness of cardiac rehabilitation patients so that is what it should be used for. Results of this test can be skewed easily since it only uses heart rate. Heart rate can be affected by hydration, illness, food intake prior to test, and caffeine. It is also restrictive for certain populations (i.e. osteoporotic knee subjects – causes pain; extremely obese subjects – difficulty stepping).

Lab Results -YMCA-					
85% predicted HRmax		168bpm	**85% predicted HRmax**		28b/10s
Time (min)		**Resistance (W)**	**Cadence (rpm)**	**HR (bpm)**	**RPE**
First Workload	1	25	60	80	2
	2	25	60	83	2
	3	25	60	85	2
Second Workload	4	100	60	93	5
	5	100	60	110	6
	6	100	60	115	7
Third Workload	7	50	60	106	7
	8	50	60	100	6
	9	50	60	97	6
Fourth Workload	10	125	60	149	9
	11	125	60	156	11
	12	125	60	160	13

Post-Test Measures		
Time (min)	**HR (bpm)**	**BP (mmHg)**
1	152	155/60
3	145	137/66
5	132	120/64

Interpretation of Results: