



Third Coast Training Performance Center

Third Coast Training, Johnny Shelby
5150 Crenshaw Rd, Suite D100, 77505 Pasadena

5150 Crenshaw Rd, Suite D100
77505 Pasadena
United States

TEST TEST

USA

Phone: 7134877708

<https://thirdcoasttraining.com/>
johnny@thirdcoasttraining.com

[3dcoasttraining](#)

[third_coast_training](#)

[Third.Coast.Training](#)

Pasadena 4/10/2020

Performance diagnostics for Test, Test, b. 1/1/1966

On 4/10/2020, a multi-stage test was performed Swimming.

Swim speed (mph)	Distance (m)	Step duration (min)	Heart rate (bpm)	Lactate (mmol/L)	RPE (6 bis 20)
(Rest)	-	-	44	0.50	-
1.72	100.0	2:10 min	99	1.00	7
1.86	100.0	2:00 min	111	1.50	8
2.03	100.0	1:50 min	115	2.30	11
2.24	100.0	1:40 min	126	4.30	15
2.49	100.0	1:30 min	133	8.00	18

The following results are obtained for training and performance diagnostics:

Performance at the so-called individual anaerobic threshold (P(IAT)) **2.0 mph (0.898 m/s)**
 100m-swim time at P(IAT): **1:51 min**
 1,000 m-swim time at P(IAT): **18:33 min**
 1,500m-swim time at P(IAT) : **27:49 min**
 Heart rate at the IAT: **112 bpm**

Maximal oxygen uptake (VO₂max, calculated): **2.81 L/min**
 Rel. maximal oxygen uptake (VO₂max, calculated) : **40.0 ml/min/kg body weight**

Individual calculations for training intensities*:

Type of training	Swim speed (%s) (m/s)	Swim time (per 100 Meters)	Heart rate	
Regenerative training	CZ below 0.72 m/s	slower than 2:19 min	below 98 bpm	■
Extensive basic training	BT1 0.72 - 0.85 m/s	1:57 min - 2:19 min	99 - 107 bpm	■
Intensive basic training	BT2 0.85 - 0.94 m/s	1:46 min - 1:57 min	108 - 116 bpm	■
Development training intensity	DT 0.94 - 1.01 m/s	1:39 min - 1:46 min	117 - 122 bpm	■

*) Recommendations for training heart rates potentially vary with external conditions

Additional information about the body composition:

Body height (ft.) / Body mass (lb.): **6'0.0" / 155.0 lb.**
 Body-Mass-Index (BMI): **21.0**

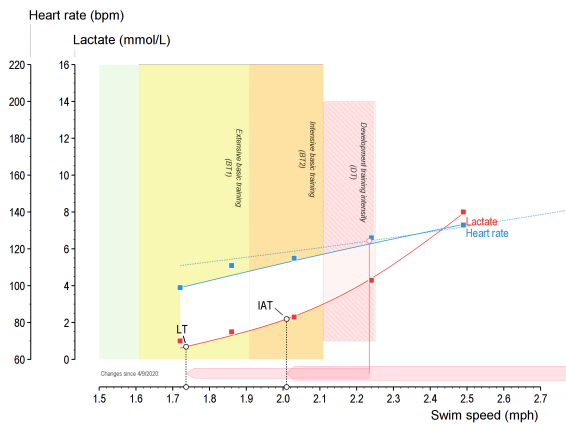
Supplemental data

Performance diagnostics

Third Coast Training
Swimming on 4/10/2020

(Triathlon, Olympic Distance)

Printed 4/10/2020 2:13:46 PM



Swim speed (mph)	Distance (m)	Step duration (min)	Heart rate (bpm)	Lactate (mmol/L)	RPE (6 bis 20)
(Rest)	-	-	44	0.50	-
1.72	100.0	2:10 min	99	1.00	7
1.86	100.0	2:00 min	111	1.50	8
2.03	100.0	1:50 min	115	2.30	11
2.24	100.0	1:40 min	126	4.30	15
2.49	100.0	1:30 min	133	8.00	18

Swimming, unsteady step duration:

Results	4/9/2020	4/10/2020	Difference
Body weight	155.0 lb.	155.0 lb.	+0.0 lb.
Lactate Threshold (LT)	2.23 mph	1.74 mph	-0.50 mph
Lactate at LT (Lactate Threshold)		0.70 mmol/L	
Heart rate at the LT (Lactate Threshold)	124 bpm	100 bpm	-25 bpm
Percentage of P(LT) to P(IAT)	58 %	86 %	+28 %
IAT (Lactate constant: 1.5 mmol/L):	3.83 mph	2.01 mph	-1.82 mph
100m-swim time at P(IAT)	58.4 s	111.3 s	+52.9 s
1,000 m-swim time at P(IAT)	9:44 min	18:33 min	
1,500m-swim time at P(IAT)	14:36 min	27:49 min	
Lactate concentration at P(IAT)		2.20 mmol/L	
Heart rate at the IAT	not provided	113 bpm	
P(IAT) as a percentage of P(max)	53 %	31 %	-22 %
Performance at 2.0 mmol/L lactate		2.0 mph / 0.89 m/s	
Heart rate at 2.0 mmol/L lactate	not provided	111 bpm	
Performance at 3.0 mmol/L lactate		2.1 mph / 0.94 m/s	
Heart rate at 3.0 mmol/L lactate	not provided	117 bpm	
Performance at 4.0 mmol/L lactate		2.2 mph / 0.99 m/s	
Heart rate at 4.0 mmol/L lactate	not provided	121 bpm	
Performance at 5.0 mmol/L lactate		2.3 mph / 1.02 m/s	
Heart rate at 5.0 mmol/L lactate	not provided	125 bpm	
Performance at 6.0 mmol/L lactate		2.4 mph / 1.05 m/s	
Heart rate at 6.0 mmol/L lactate	not provided	128 bpm	

Individual calculations for training intensities*:

Type of training		Swim speed (%s) (m/s)	Swim time (per 100 Meters)	Heart rate
Regenerative training	CZ	below 0.72 m/s	slower than 2:19 min	below 98 bpm
Extensive basic training	BT1	0.72 - 0.85 m/s	1:57 min - 2:19 min	99 - 107 bpm
Intensive basic training	BT2	0.85 - 0.94 m/s	1:46 min - 1:57 min	108 - 116 bpm
Development training intensity	DT	0.94 - 1.01 m/s	1:39 min - 1:46 min	117 - 122 bpm

*) Recommendations for training heart rates potentially vary with external conditions

Lactate-to-performance-curve, Swimming

