



Client Name: David Ramsey
Facility: Third Coast Training

Date of Assessment: July 15, 2011
Assessment Administrator: Johnny Shelby
Next Assessment: October 15, 2011

exercise metabolic rate

MY RESULTS

ZONES • DATA

Your unique metabolic measurements create a personalized framework for your exercise program. Each zone is defined by heart rate beats per minutes and is created according to your body's current fitness ability. Your zones will change as your fitness progresses.

Two measured points matter most within your zone framework: base, most efficient point of fat utilization, and threshold, most inefficient point of fat utilization. Pushing above and below base and threshold enables you to work harder with less effort.

- step 1:** put on heart rate monitor and start workout
- step 2:** finish program
- step 3:** get reassessed **October 15, 2011**

fuel source: **FAT** • CARBOHYDRATE



Burning fat is your body's most efficient source of fuel.

fat Fat is energy-dense at 9 calories of energy per gram, making it the most efficient source of fuel. Fat is also a long-term fuel reserve that guards against starvation.

- zone 1** promote fat burning capacity, increase oxygen consumption
I can exercise for a long, long time. It's easy to carry on a conversation.
- zone 2** train body to burn fat efficiently and improve endurance
I am working out comfortably. I can talk if I pause every so often.
- zone 3** increase tolerance for anaerobic training, feel the burn
This is more difficult. My muscles burn. I can't finish my sentences.
- zone 4** improve anaerobic threshold, no longer burning calories from fat
I'm uncomfortable. This is hard. I can only speak in single words.
- zone 5** increase VO₂ peak, athlete-level training
It's impossible to speak while I'm doing this.



Client Name: David Ramsey
Facility: Third Coast Training

Date of Assessment: July 15, 2011
Assessment Administrator: Johnny Shelby
Next Assessment: October 15, 2011

exercise metabolic rate

MY RESULTS

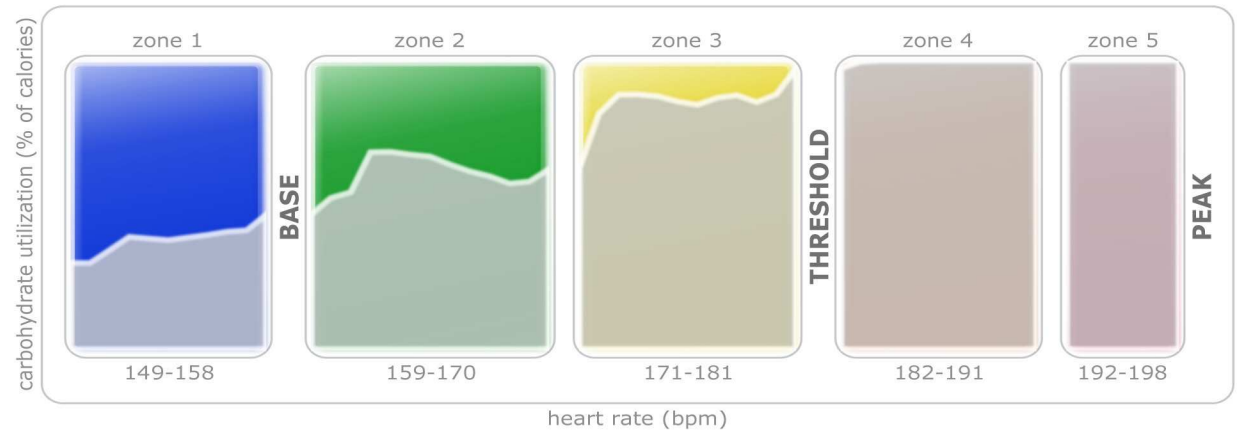
ZONES • DATA

Your unique metabolic measurements create a personalized framework for your exercise program. Each zone is defined by heart rate beats per minutes and is created according to your body's current fitness ability. Your zones will change as your fitness progresses.

Two measured points matter most within your zone framework: base, most efficient point of fat utilization, and threshold, most inefficient point of fat utilization. Pushing above and below base and threshold enables you to work harder with less effort.

- step 1:** put on heart rate monitor and start workout
- step 2:** finish program
- step 3:** get reassessed **October 15, 2011**

fuel source: FAT • **CARBOHYDRATE**



Burning carbs (sugar) is your body's least efficient source of fuel.

carbohydrate Carbohydrates are less energy-dense at 4 calories of energy per gram, broken down into sugars and stored in muscle cells as glycogen. The body can only store so many carbohydrates.

- zone 1** promote fat burning capacity, increase oxygen consumption
I can exercise for a long, long time. It's easy to carry on a conversation.
- zone 2** train body to burn fat efficiently and improve endurance
I am working out comfortably. I can talk if I pause every so often.
- zone 3** increase tolerance for anaerobic training, feel the burn
This is more difficult. My muscles burn. I can't finish my sentences.
- zone 4** improve anaerobic threshold, no longer burning calories from fat
I'm uncomfortable. This is hard. I can only speak in single words.
- zone 5** increase VO₂ peak, athlete-level training
It's impossible to speak while I'm doing this.



Client Name: David Ramsey
Facility: Third Coast Training

Date of Assessment: July 15, 2011
Assessment Administrator: Johnny Shelby
Next Assessment: October 15, 2011

exercise metabolic rate

MY RESULTS

ZONES • DATA

Your metabolic assessment sets the foundation for your personalized exercise program: knowing precisely how your body responds to working out. Your exercise intensity (burning fat and carb calories), oxygen intake and carbon dioxide production is all unique to you. These measurements establish the framework – your heart rate zones – for your personalized fitness plan.

- step 1:** put on heart rate monitor and start workout
- step 2:** finish program
- step 3:** get reassessed **October 15, 2011**

	zone 1	zone 2	zone 3	zone 4	zone 5
heart rate (beats/min.)	149-158	159-170	171-181	182-191	192-198
VO₂ (ml/kg/min.)	33-34	34-37	37-43	43-49	49
calories (min.)	12.8-13.1	13.1-14.6	14.6-17.3	17.3-19.6	19.6
fat utilized (%)	70-60	60-41	41-8	8-0	0
carbs utilized (%)	30-40	40-59	59-92	92-100	100
workload	220 watts	220-250 watts	250-280 watts	280-310 watts	310 watts

heart rate
VO₂

Heart Rate - number of beats per minute (bpm)
 VO₂ – volume (ml/kg/min.) of oxygen consumed by your cells. The higher your VO₂, the more efficient your body is at burning fat.

calories
fat utilized

Calories – energy burned
 Fat % – percentage of total fat calories burned during workout. The more fat you can burn at higher intensities, the easier your workout feels.

carbs utilized

Carbohydrate % – percentage of carbohydrate calories burned during workout. Carbohydrate calories are not a sustainable fuel source while workout out.

workload

Workload – speed/grade or watts



Client Name: David Ramsey **Date of Assessment:** July 15, 2011
Facility: Third Coast Training **Assessment Administrator:** Johnny Shelby
Next Assessment: October 15, 2011

resting metabolic rate

MY GOAL

my current weight:
176 lb.
▲

my goal weight:
169 lb.

WEIGHT CHANGE PER WEEK

move the slider to select your weight lose/gain per week

-0.75
lb./wk

reach my goal: **September 18, 2011**

The Calories Equation calculates how many calories you should be eating every day. Notice you can increase your total amount of calories by working out! But be careful not to eat fewer calories than your RMR amount: doing this might signal your body that it's in trouble and react by getting rid of lean muscle instead of fat.

How much should I be eating?

1786

calories per day

Calories Equation - what happens when I work out?

RMR	+	my lifestyle	-	lose/gain per week	+	workout	=	calories per day
1662		499		375		0		1786
		very light		-0.75 lb./wk		<input checked="" type="checkbox"/> ■ ■ ■ ■ ■ ■		

RMR resting metabolic rate: number of calories your body needs to support your vital organs

my lifestyle very light (spend day sitting) moderate (standing with some physical labor)
 light (spend day standing) heavy (spend day in heavy physical labor)

lose/gain per week weight change per week converted to calories

workout calories burned during your workout

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

28

29


30


31


1


2


3



Zone 2, 100 min


Zone 1, 40 min


Z5:Z1 - 30s:4.5m, 6...


Zone 1, 60 min


Zone 3, 40 min


Zone 1, 220 min

4

5

6

7

8

9

10


Zone 2, 100 min


Zone 1, 20 min


Zone 1, 30 min


Zone 1, 30 min


Zone 1, 20 min

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

28

29

30

31

1

2

3

Zone 2

Zone 1

Z5:Z1 - 30s:4.5m

Zone 1

Zone 3

Zone 1



100 minutes

40 minutes

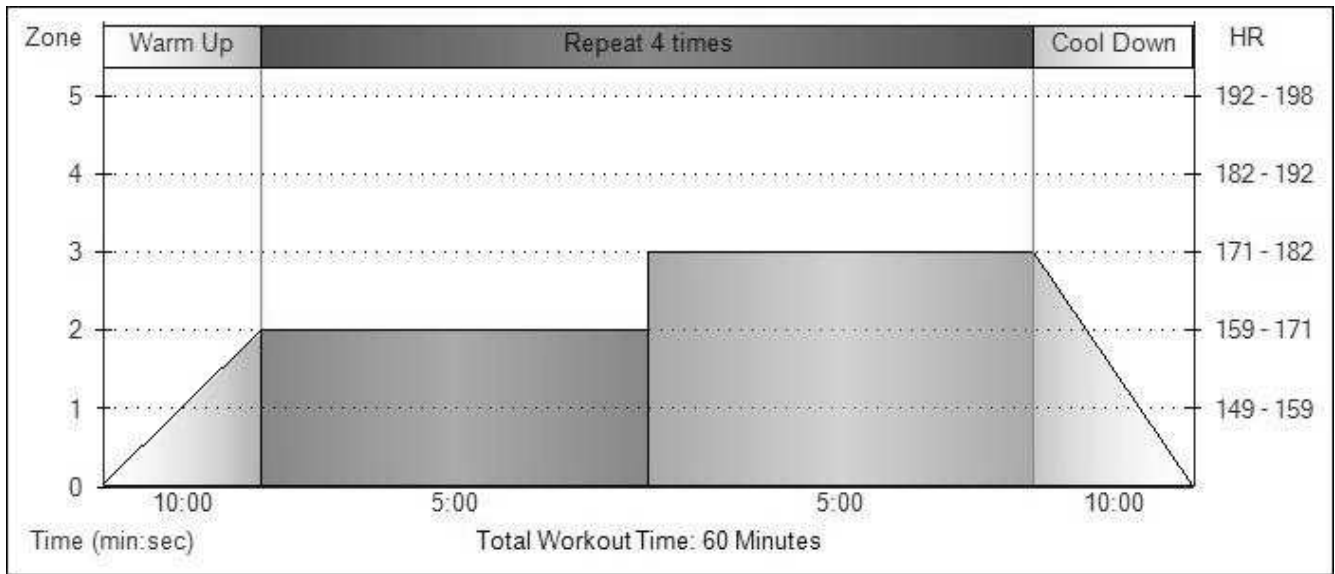
60 minutes

60 minutes

40 minutes

220 minutes

David Ramsey's biking workout for 9/22/2011 - 'LT Interval'



Start Time	HR Zone
0:00	Warmup
10:00	159-171
15:00	171-182
20:00	159-171
25:00	171-182
30:00	159-171
35:00	171-182
40:00	159-171
45:00	171-182
50:00	Cool Down
60:00	Stop

Add a whole new dimension to your training with Garmin Heart Rate monitors and New Leaf. Designed for athletes and fitness enthusiasts at all levels, these totally-integrated devices are easy to use and require no calibration. Multi-sport™ capability lets you easily transition between sports so it can be used for running, biking and more. After taking a New Leaf Active Metabolic Assessment™, your complete metabolic profile, heart rate zones, and up to 200 cardio workouts can be downloaded into a Garmin Fitness monitor to guide you through each workout (see chart below for complete compatibility.) Now you are ready to take your training to the next level!

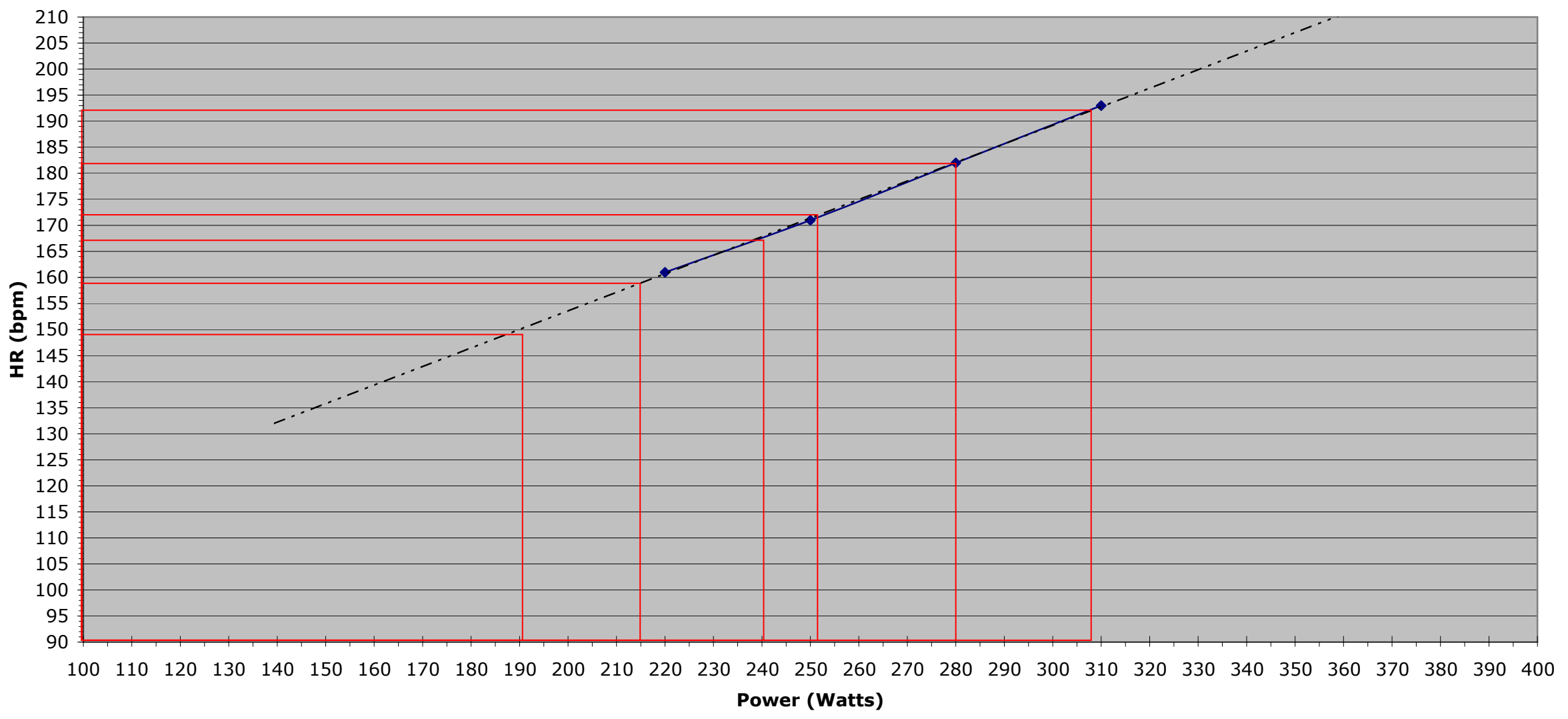
Garmin – New Leaf Compatibility Chart

download profile

	heart rate zones	calorie burn rates	workouts	upload activities
Forerunner® 310XT	✔	✔	✔	✔
Forerunner® 410	✔	✔	✔	✔
Forerunner® 405CX	✔	✔	✔	✔
Forerunner® 405	✔	✔	✔	✔
Forerunner® 305	✔	✔	✔	✔
Forerunner® 205				✔
Forerunner® 110	✔	✔		✔
Forerunner® 50				✔
FR60	✔	✔		✔
Edge® 800			✔	✔
Edge® 705			✔	✔
Edge® 605				✔
Edge® 305			✔	✔
Edge® 205				✔

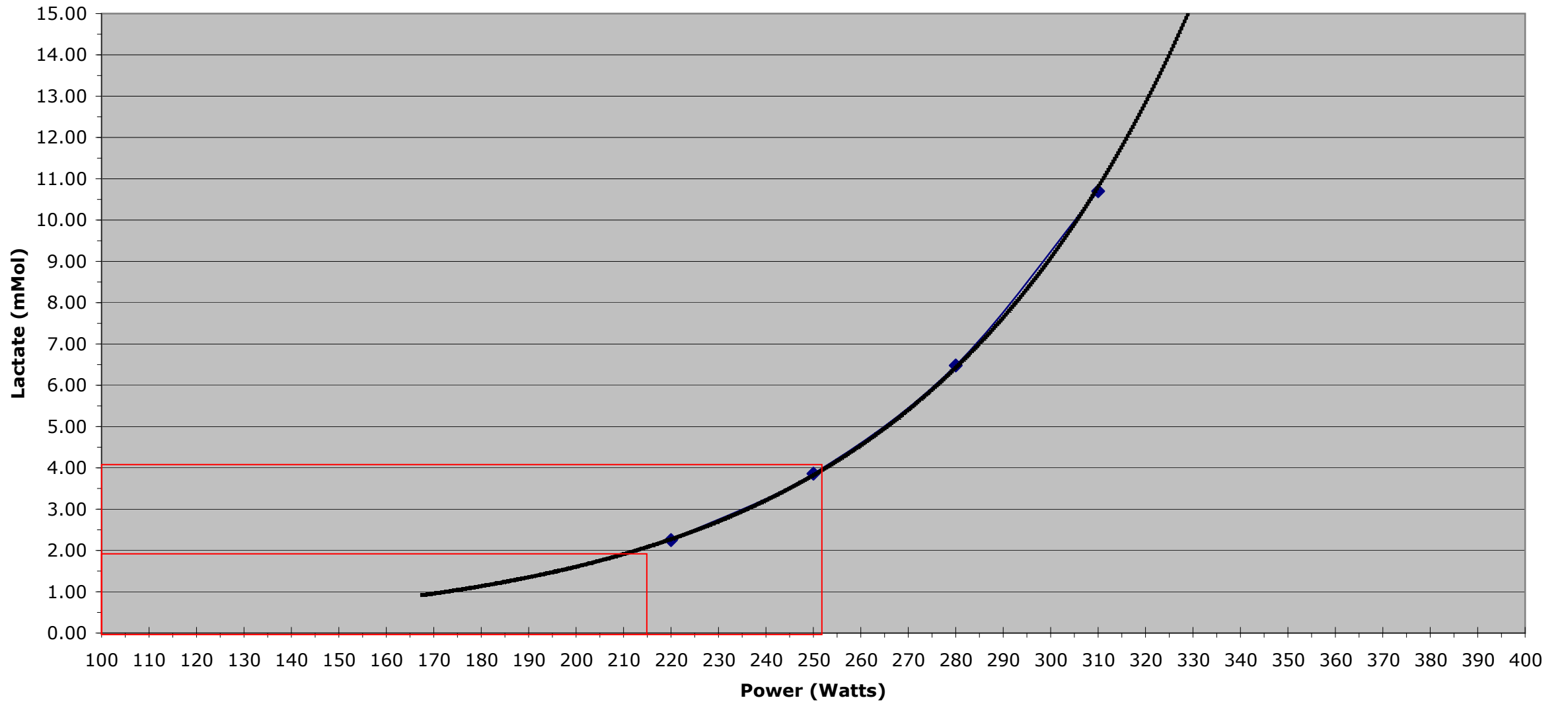
HR vs Lactate

$R^2 = 0.9995$



Lactate vs Power

$R^2 = 0.9997$



Third Coast Training

Cycling VO2 & Lactate Assessment

Name: **David Ramsey**
 Weight (lbs) **177**
 Date: **15 July 2011'**



ASSESSMENT RESULTS

Stage	Power (watts)	Heart Rate	Lactate (mMol)
1	220	161	2.25
2	250	171	3.86
3	280	182	6.48
4	310	193	10.70
5			
6			
7			
8			
9			
10			

SUMMARY

Watts			
V_{L2}	215	STAGE TIME (min)	3
V_{L4}	250	RPM	90
AT (V)	280	AT (W/kg)	3.48
Peak (V)	340	pVO2 Peak	4.23

POWER TRAINING ZONES

WATTS	
Zone 1	190-215
Zone 2	215-240
Zone 3	240-250
Zone 4	250-270
Zone 5	270-310

Power Output Notes:

Last stage completed at 10.70mmol of lactate
 11+ mMol is an indication of good glycogen storage.
 Be sure to focus on the nutrition to always maximize glycogen replenishment
 Great job on ventilation during your assessment.
 Your power at VO2 peak (Cycling standards) falls in the good range.
 Power at VO2 Peak needs improvement to make room for Base and AT to move up. Power at VO2 Peak (340w) is your limiter. Zone 5 Work needed.

Power Output

Test	WATTAGE		
	Actual	Ideal Based on VO2 Peak	
VO2 Peak	340		
Anaerobic Threshold	280	272	289
Aerobic Threshold	215	221	238

Cycling Power Profile

Based on Peak Power (Wingate)

Test	WATTAGE	
	Actual	Ideal
30s Wingate	871	
VO2 Peak		348 392
Anaerobic Threshold		279 333
Aerobic Threshold		226 274

Third Coast Training - pVO2 Peak Cycling Standards

	Male		Female
Poor	<3.0 W/kg	Poor	<2.5 W/kg
Average	3.0 - 4.0 W/kg	Average	2.5 - 3.5 W/kg
Good	4.0 - 5.0 W/kg	Good	3.5 - 4.5 W/kg
Very Good	5.0 - 5.5 W/kg	Very Good	4.5 - 5.0 W/kg
Excellent	5.5+ W/kg	Excellent	5.0+ W/kg