

MOTION ANALYSIS

PERSONAL INFORMATION

Name: [Norm Herr](#)

My height: [1.9 m](#)

My Mass: [100 kg](#)

Total Mass of system (+bike, pack, etc) (m): [120 kg](#)

Resting pulse: [60 bpm](#)

ACTIVITY

Description of activity: [Mountain Bike trip from Veterans Park to Sylmar Peak](#)

Origin: [May Canyon Road Entrance at Veterans' park](#)

Destination: [Sylmar Peak, 4004"](#)

Photos of Activity: [Norm on Sylmar Peak](#); [Album of photos](#)

URL: <http://app.strava.com/segments/3114773>

Date: [12/30/12](#)

Latitude / Longitude of origin: [34.327826 \(N\)](#), [-118.419399 \(W\)](#)

Latitude / Longitude of destination: [34.35318 \(N\)](#), [-118.416975 \(W\)](#)

LOCATION / TOPOGRAPHY

Map: <http://app.strava.com/segments/3114773>

Total distance: [11.1 km](#)

Average grade: [6.1%](#)

Greatest uphill grade: [18.2%](#) at a distance of [1.5 km](#)

Greatest downhill grade: [- 12.3%](#) at a distance of [8.7 km](#)

Environment: [chaparral \(south facing slopes\)](#), [Oak woodland \(north facing ridge tops\)](#)

GRAVITATIONAL POTENTIAL ENERGY

Lowest elevation: [539 m](#)

Highest elevation: [1227 m](#)

Elevation difference (h): [688 m](#)

Acceleration due to gravity (g): [9.8 m/s²](#)

Maximum gravitational potential energy of system (mgh): [809 KJ](#)

Total work done if gravity is the only force considered ($W=Fd$; $W=mgh$): [809 KJ](#)

ENERGY

Calories expended (Cal; kcal): [1500 Cal](#); [\(1500 kcal\)](#)

KiloJoules expended (1 cal=4.184 J; 1 Cal=4.184 KJ) : [6276 KJ](#)

Food equivalence at McDonalds (a meal that has the same caloric content). Include "nutrition grade")

[250 Cal - Hot Apple Pie \(C\)](#)

[380 Cal - Medium Fries \(D\)](#)

[550 Cal - Big Mac \(D\)](#)

[150 Cal - Hash Browns \(C\)](#)

[270 Cal - Filet-O-Fish \(D+\)](#)

Recommended daily caloric intake: [3100 Cal](#); [3096 J](#)

POWER

Average power: [276 W](#)

This is similar to the following [household appliance](#): [sunlamp](#) at 279 W

MOTION

Average speed: [6.6 km/h](#)

Vertical ascent per hour(vertical meters per hour: Vm/h): [471 Vm/h](#)

PHYSIOLOGY

Maximum heart rate (220-age): [163 bpm](#)

Target heart rate (60-85% of maximum heart rate): [98-187 bpm](#)

Heart rate during this activity: [130 bpm](#)

Were you within your target heart rate zone for optimal cardiovascular function: [yes](#)

GPX

Download GPX file of ride and generate a report using: [utrack.crempa.net](#)