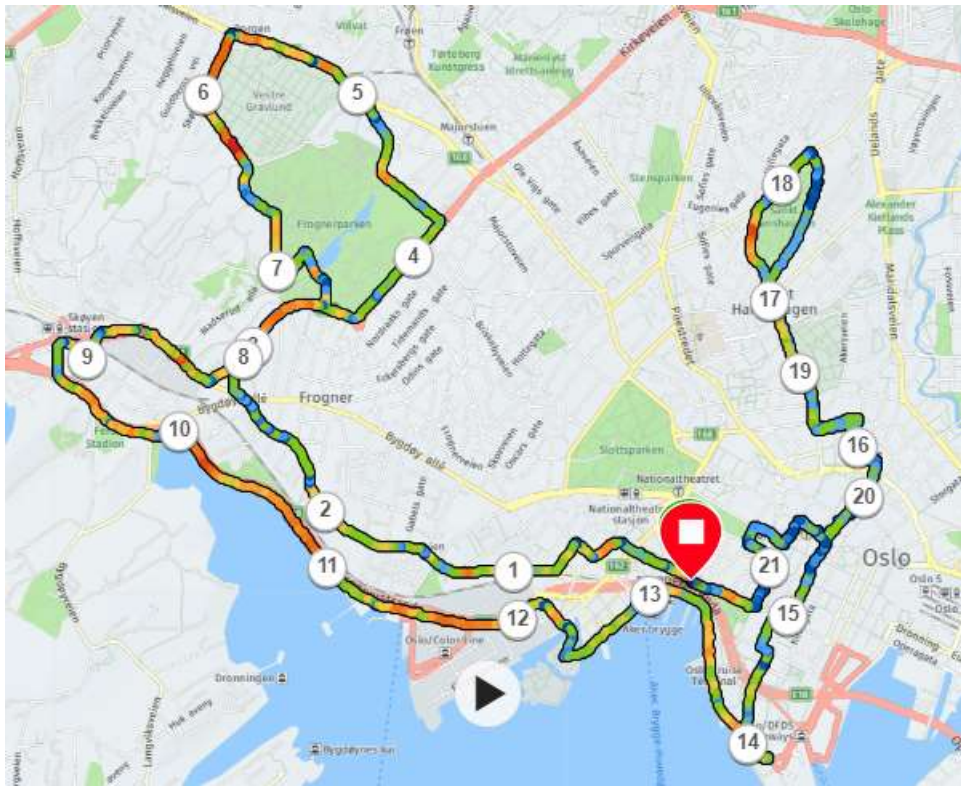


COURSE MEASUREMENT

Oslo Half Marathon and Marathon 2022



SUMMARY SHEET

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*

LOCATION: *Oslo, Norway*

DATE: *17 September 2022*

Promoting Organisation: Sportsklubben Vidar

Name & Address of race director: Tim Bennett

Email: tim.bennett@telia.no

Distance: *The course is not less than 21,097.50/42,195 m*
Measured by *Peer Jensen, Denmark*

Date: *28 August 2022, 7:30-12:00*

Measurement method: *Jones counter mounted on bicycle wheel*

Elevation, if not same, of: START 0 m FINISH 0 m
Distance, in a straight line, between start & finish: *20 m*

Description of the Course

Terrain: *hilly*

Race surface: *tarmac roads except from a few meters gravel in Vigelandsparken*

Course configuration: *point to point*

Start point: *“Rådhuspladsen” outside Oslo Town Hall at middle port*

Finish line: *“Rådhuspladsen” outside Oslo Town Hall 20 m before middle port*

Measurement Details

Section of road available: *The whole road is available for the runners, except from Drammensveien, where only right part may be used until Bygdøy Allé and only left part may be used from Bygdøy Allé to Karenslyst Allé where only right side may be used.*

Line to be taken at turns: *Shortest possible route.*

SIGNED: ... *Peer Jensen* DATE: *2022-09-08*

STEEL TAPING DATA

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*
LOCATION: *Oslo, Norway*
DATE: *17 September 2022*

For measuring a calibration course

Name of calibration course: Akerhusstranda
City/town and State: Oslo, Norway
Date: 27 August 2022
Start time: 19:15
Finish time: 19:30
Pavement temperature: Start 20 °C Finish 20 °C Average 20 °C

Measurements and calculations:

First measurement. 6 x 50.00 m = 300.00 m
Second measurement. 6 x 50.00 m = 300.00 m
Average raw (uncorrected) measurement of course: 300.00 m
No temperature correction.

Final length of calibration course 300.00 m

Calibrations

Pre-measurement

Date/Time 28 August 2022 07:00
Temp. 18 °C

Start	End	Reading
88400	92024	3624
92000	95624	3624
95600	99224	3624
99200	002823	3623

Average 3621.50

Working Constant 12079.17 km
+ 1 ‰ 12.08/km
Pre-measurement constant 12091.25/km

Post-measurement

Date/Time 28 August 2022 12:00
Temp 20 °C

Start	End	Reading
98000	01619	3619
01600	05220	3620
05200	08819	3619
08800	12221	3621

Average 3619.75

Working Constant 12065.83/km
12.07/km
Post-measurement constant 12077.90/km

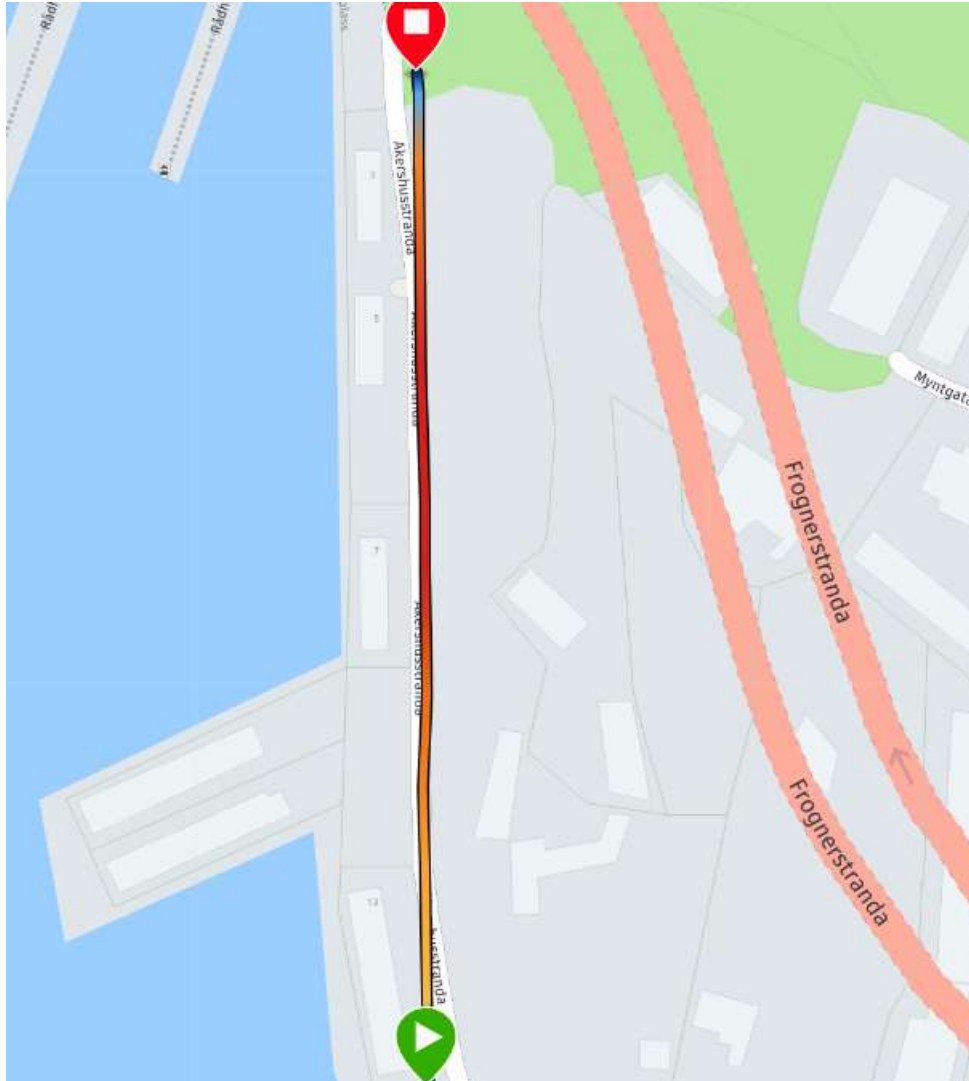
Measurement working constant: **12091/km**
Constant for the Day (highest): **12091/km**

CALIBRATION COURSE MAP

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*

LOCATION: *Oslo, Norway*

DATE: *17 September 2022*



Calibration course 300 metres

North point of calibration course is about 200 m from start and finish area.

MEASUREMENT PROCEDURE

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*
LOCATION: *Oslo, Norway*
DATE: *17 September 2022*

Measurement working constant: **12091**
Measurement constant for the day **12091**

Measurement of the course:

Measurement was done in the running direction – from the start line.
We stopped every kilometre, marked with spray, and described the points

07:30

Counter	Counts	Distance	Fix point
11000	0	0.00 m	Middle port outside Oslo Town Hall.
12091	12091	1,000.00 m	Munkedamsveien at first left tree
35182	12091	2,000.00 m	Port outside Embassy of Egypt
47273	12091	3,000.00 m	Halvdan Svartes Gate, outside Embassy of Spain
59364	12091	4,000.00 m	Kirkeveien, 25 m before sign «Majorstuen»
71455	12091	5,000.00 m	Sørkedalsveien, 10 m after sign «Vigelandsparken»
83546	12091	6,000.00 m	Skøienveien, 25 m before Monolitveien
95637	12091	7,000.00 m	Madserud Allé, at electricity box at no 42
07728	12091	8,000.00 m	Halvdan Svartes Gate, outside Embassy of Turkey
19819	12091	9,000.00 m	Karenslyst Allé, outside shop “Sunkost”
31910	12091	10,000.00 m	Frognerkilen, at sign “Drammen”
44001	12091	11,000.00 m	Frognerkilen, 10 m before harbour sign “4”
56092	12091	12,000.00 m	Frognerkilsen, 40 m before red bicycle sign
68183	12091	13,000.00 m	Fisketorget
80274	12091	14,000.00 m	Akerhusstranda, at “Skur 38”
81300	1026	14,085.00 m	Turning point at zebra crossing after Akershus Castle
We had a breakfast break. Biked 22,000 counts away from the course.			
02274	12091	14,000.00 m	Akerhusstranda, at “Skur 38”
14365	12091	15,000.00 m	Kongensgate 10
26456	12091	16,000.00 m	Grubbegate, at last lamp post
38547	12091	17,000.00 m	Ullevålsveien, at Markus Church
50638	12091	18,000.00 m	Geitemyrveien 37
62729	12091	19,000.00 m	Ullevålsveien, at Wessels Gate
74820	12091	20,000.00 m	Møllergate, at “Skråninga”
86911	12091	21,000.00 m	Akersgate, outside shop “Joker”
88090	1179	21,097.50 m	
91161	3071	21,351.50 m	Wanted finish line, 20 m before start line

CONCLUSION

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*
LOCATION: *Oslo, Norway*
DATE: *17 September 2022*

With the constant for the day 12091 half marathon course is too long (21,351.50-21,097.50) = 254 m.

**We measured 127 m = 1536 counts to short the course at the turning point after 14 km.
New turning point is 10 m after sign “Akershus Slott”, clearly marked with spray.**

**Marathon course is two times half marathon course. That means that the marathon runners will run 20 meters too long, because of the 20 meters between finish line and start line.
The organizers are satisfied with that.**

Kilometre marks 14-21 should be placed 254 meters after descriptions above (in running direction).

Kilometre marks 22-42 should be placed 97.50 meters before kilometre marks 1-21.

MAP of start and finish area

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*

LOCATION: *Oslo, Norway*

DATE: *17 September 2022*



Start line (middle port "Oslo Rådhus")

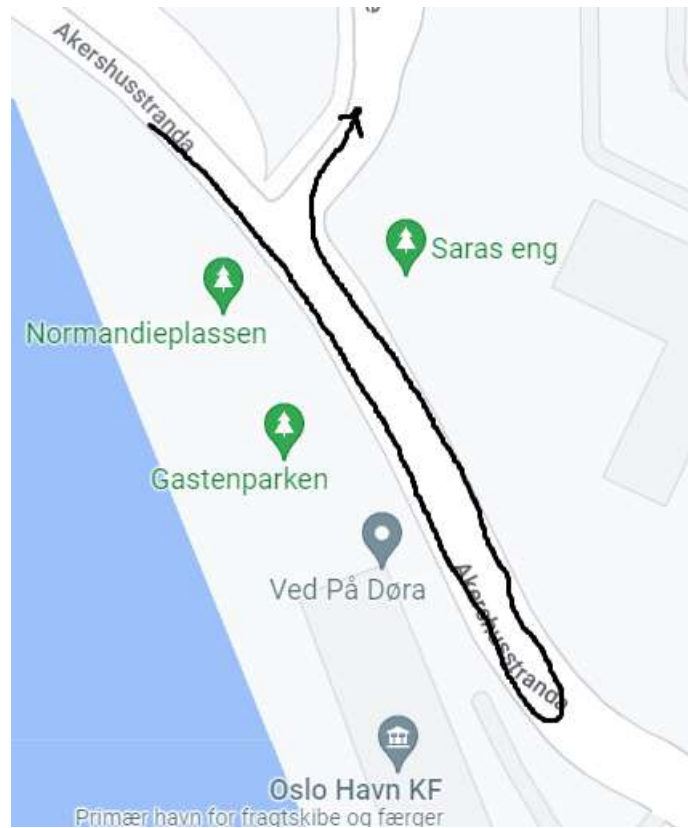
Finish line (20 m before start line)

MAP of turning point after 14 km

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*

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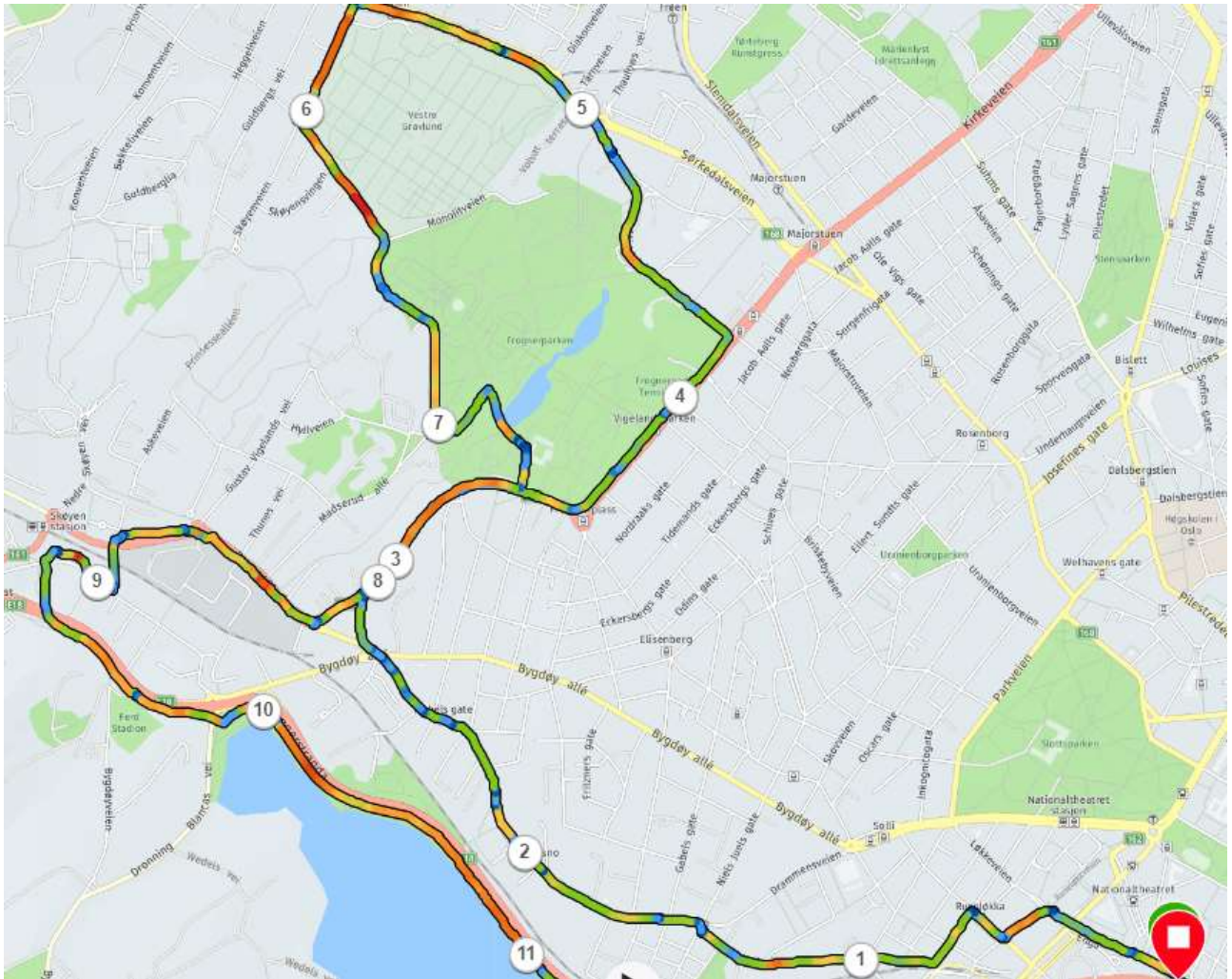
Turning point is 10 m after sign “Akershus Slott” clearly marked with spray

MAP of the course – first part

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*

LOCATION: *Oslo, Norway*

DATE: *17 September 2022*



MAP of the course – second part

EVENT: *Oslo Marathon 2022 – Half Marathon and Marathon course*

LOCATION: *Oslo, Norway*

DATE: *17 September 2022*

