

# Norwegian Athletic Federation

Ullevaal stadion  
Sognsveien 75 J  
0840 Oslo  
NORWAY  
E-mail: [friidrett@friidrett.no](mailto:friidrett@friidrett.no)  
Phone: +47 94 83 33 26



## COURSE MEASUREMENT REPORT

### - REPORT FOR NATIONAL CERTIFIED COURSE -

INFORMATION ABOUT EVENT AND COURSE
<b>Event:</b> Grue Halvmaraton
<b>Technical Organiser:</b> Grue Idrettslag
<b>City/Place:</b> Grue/Kirkenær
<b>Date of Arrangement:</b> 01.05.2026
<b>Date and time for measurement:</b> 28.03.2026 11:00
<b>Measured distance(s):</b> Half marathon
<b>Length of calibration course:</b> 500m
<b>Terrain:</b> Flat <input checked="" type="checkbox"/> Slightly hilly <input type="checkbox"/> Hilly <input type="checkbox"/> Terrain <input type="checkbox"/>
<b>Type of course route:</b> Closed loop <input type="checkbox"/> Back and forth <input type="checkbox"/> A to B <input checked="" type="checkbox"/> Other <input type="checkbox"/>
<b>The course consists of 95%, or more, solid surface:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>Elevation Start - Finish:</b> 4m
<b>Description of start:</b> On Fautvegen, before the entrance to 114/116, 35,5m before the utility pole located by the entrance.
<b>Description of finish:</b> Between Grue Barne- og ungdomsskole and Grue Rådhus, at Rådhusplassen, by the Sportsfield/Basket ball. The fence is the finishline.
<b>Distance, in a straight line, between start &amp; finish:</b> 3km
<b>Start and Finish marked:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>Km-markings:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Measurement direction:</b> Running direction <input type="checkbox"/> Opposite running direction <input checked="" type="checkbox"/>

CONTACT INFORMATION		
	<b>Measured by:</b>	<b>Organizer:</b>
<b>Contact person:</b>	Samuel Hafsaahl	Tom Erik Lukkedal
<b>Phone:</b>	+47 970 46 905	+47 917 83 301
<b>Email:</b>	samuel.hafsaahl@gmail.com	tom-erik@lopskonsult.no

It is hereby confirmed that the course has been measured by a national certified course measurer from Norwegian Athletics. The course is measured in accordance with Norwegian athletics regulations, and the distance(s) has the minimum reported length(s). The survey is valid for 5 years, except if the route is changed.

02.04.2026 Samuel Hafsaahl

Date

Signature by Course measurer

Date

Signature by NFIF



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CALIBRATION COURSE AND PROCEDURE	
Length of measuring tape (steel measuring tape only)	100m
Length of calibration course 1st measurement	500m
Length of calibration course 2nd measurement	500m
Possible 3rd measure (max. 1 cm diff per 100m 1 <sup>st</sup> and 2 <sup>nd</sup> )	
Average of measurements before adjustments	500m
Temperature (road or measuring tape)	20
Adjustment cf. $D-(D*(1+(temp-20)*0,0000115))$	0
Measured calibration distance after adjustment	500m
Distance from start/finish to calibration distance	3km

Calibration course was already measured by previous measurer.

CALIBRATION INFORMATION - (max 8 counts difference of 1000 m between 4 measurements, ie 2 counts of 300m and 3 count of 400m)						
	Pre-measurement:			Post measurement:		
	Date and Time: 28.03.2026 11:00			Date and Time: 28.03.2026 13:00		
	Start	End	Diff.	Start	End	Diff.
1st measure	52562	58363	5801	34774	40577	5803
2nd measure	58363	64165	5802	40577	46380	5803
3rd measure	64165	69967	5802	46380	52184	5804
4th measure	69967	75770	5803	52184	57986,5	5802,5

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	Pre measurement	Post measurement	
<b>Average (1+2+3+4) / 4</b>	5802	5803,125	Today's constant. Either highest or average of before and after measurement
<b>Constant 1 km</b>	11605,6	11607,9	
<b>Addn. +1‰</b>	11,6	11,6	
<b>Measurement constant (rounded)</b>	11617	11619	11618

MEASUREMENT PROCEDURE		
<b>Measurement constant</b>	11618	
<b>Measured Distance</b>	<b>Counter</b>	<b>Description of place</b>
<b>0m</b>	76 528,0	The finishline, by the fence outside the School garden.
<b>21 062,0m</b>	321 226,0	The utility pole by the entrance to Fautvegen 114/116
<b>21 062,0m</b>		<b>Total measured without adjustments</b>
<b>35,5m</b>		<b>Total measured adjustments</b>
<b>21 097,5m</b>		<b>Total measured course</b>

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## CONCLUSION OF MEASUREMENT

### 1. Measurement method

Cycled the shortest route with Cook Jones Counter mounted on the bike

### 2. Measurement procedure

Stop counter - Start counter = number of counts for the course

321226 - 76528 = 244698

Number of counts / measurement constant \* 1000 = number of meters

244698 / 11618 \* 1000 = 21 061,97 meter

### 3. Course adjustment

The course is 35,5m too short when measured to the closest best natural landmark; the utility pole by the entrance to Fautvegen 114/116. The organizer will measure the missing 35,5 meter with a steel measuring tape at the day of the race.

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## CALIBRATION COURSE MAP

500m on the bike path along Solørvegen just after the crossing Solørvegen/Fautvegen, a part of the running course.



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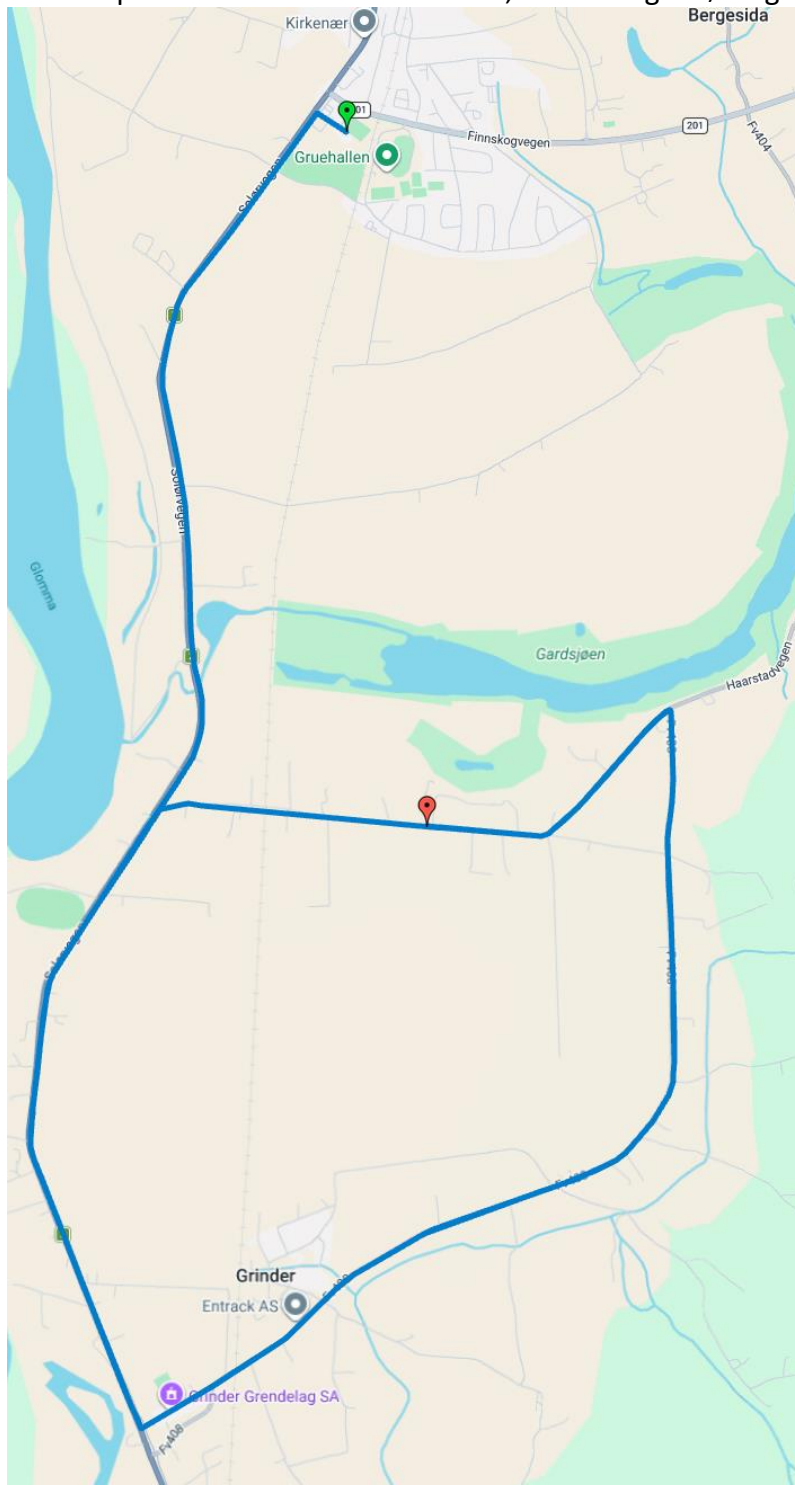
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## COURSE MAP & DESCRIPTION

The "loop" should be run almost twice, then along Solørvegen to the school.



[https://www.google.com/maps/d/edit?mid=1p4cJUcBLv8vYu\\_YgpgQxPDwdCY0r1IY&usp=sharing](https://www.google.com/maps/d/edit?mid=1p4cJUcBLv8vYu_YgpgQxPDwdCY0r1IY&usp=sharing)

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## Start

On Fautvegen, before the entrance to 114/116, 35,5m before the utility pole located by the entrance.



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## Finishline

By the fence outside the school building on Rådhusplassen.



By the basketball court.



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