



Sedimentology & Stratigraphy



One Day Field Trip to Jæren

June 18th. 2019.

Geological history of Jæren and onshore – offshore relationships

Guide: Alexander Lassen (ConocoPhillips)

This will be the first of two Jæren fieldtrips; (1) The tectonic history of Jæren (see details below) and (2) A later field workshop concentrating on deposition of reservoir sandstone on basement exemplified by exposed glaciofluvial sands in the Undheim area.

On this first field trip we will set the general scene by covering some aspects of the Jæren geology – mainly the Caledonian orogenic history of the area and what happened afterwards - as it can be pieced together today. We will also discuss the relationship between the Jæren on-shore geology and the off-shore structures observed in the adjacent southern North Sea basin. The post Caledonian history is not directly present in the Rennesøy area in the shape of e.g. Mesozoic sediments – only relatively recent glacial/fluvial deposits remain. However, the Caledonian cover is dissected by several fracture systems that bear witness to numerous changes in the regional stress field since the end of the Caledonian compression. We will visit the islands of Rennesøy (stop 1) and Fjøløy (stop 2) northwest of Stavanger to look at the structure and mineralogy of the upper part of the Boknfjorden trust sheet or nappe complex as termed by Birkeland, 1981. From Helland on Rennesøy the “strand flat” coastal morphology is particularly evident, and we will briefly discuss mechanisms for its emplacement. On Fjøløy we will look at the geology of the middle to lower part of the Boknfjorden thrust sheet and the fracture sets that may provide us with indications of post Caledonian tectonic events that affected the region. Finally, we will enjoy the “360” view from the top of Fjøløy Fort which provides a nice regional summary view of north Jæren, the islands north and west of Jæren, the Precambrian basement provinces to the East and the uppermost Caledonian trust sheet to the west.



Tidsplan/Time Schedule

- 08:00:Avgang Sandnes Ruten
- 08:15:Ankomst Stavanger Buss Stasjon
- 08:30:Avgang Stavanger Buss Stasjon
- 09:15:Ankomst Helland parkeringsplass, Rennesøy
- 12:00:Avgang Helland parkeringsplass, Rennesøy
- 12:20:Ankomst Fjøløy Fort parkeringsplass*
- 15:30:Avgang Fjøløy Fort parkeringsplass
- 16:15:Ankomst Stavanger Buss Stasjon
- 16:35:Ankomst Sandnes Ruten

•Lunsj spises Når vi kommer frem til Fjøløy

- 08:00:Departure Sandnes Buss Station
- 08:15:Arrival Stavanger Buss Station
- 08:30:Departure Stavanger Buss Station
- 09:15:Arrival Helland parking lot, Rennesøy
- 12:00:Departure Helland parking lot, Rennesøy
- 12:20:Arrival Fjøløy Fort parking lot*
- 15:30:Departure Fjøløy Fort parking lot
- 16:15:Arrival Stavanger Buss Station
- 16:35:Arrival Sandnes Buss Station

•Lunch is planned at Fjøløy Fort

Please note:

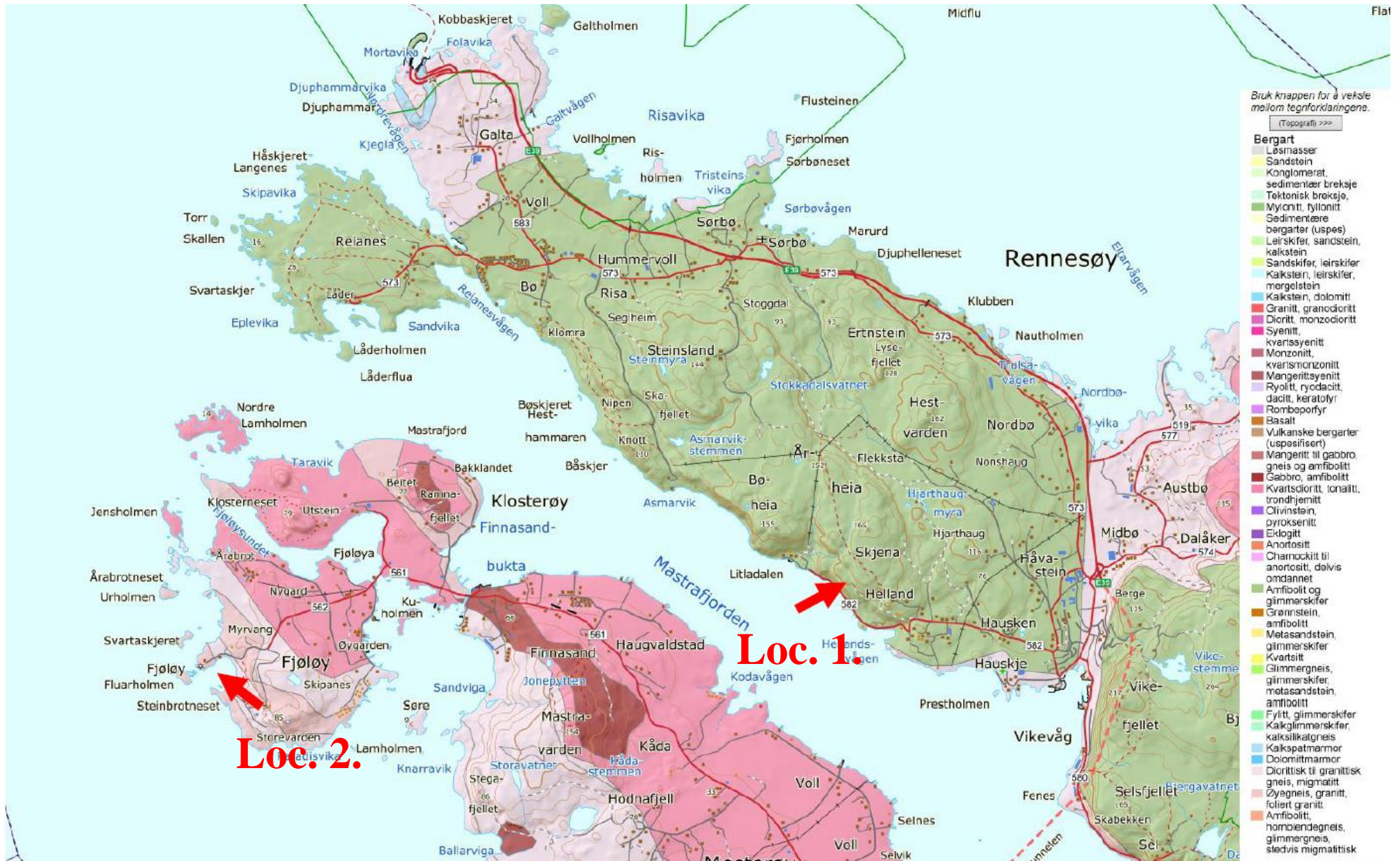
This trip is a day trip and we will walk in light terrain (mainly forest roads and gravel paths but also rock surfaces)

Bring appropriate footwear and clothing – hiking boots/ rain gear etc.

Bring your own food and drink



Locations





 **FORCE**





 **FORCE**



Organizing committee

University of Stavanger

Professor Alejandro Escalona

Associate Professor Wiktor Weibull

Maria Rodriguez

Industry

Alexander Lassen (ConocoPhillips)

Bjørn Kåre Bryn (Spirit)

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