



Svalbard  
Rock Vault



## The Svalbard Rock Vault workshop

at the University Centre in Svalbard (UNIS),

Longyearbyen, Svalbard

24-26 September 2018

### *Taking care of geological data and developing critical infrastructure for geoscientific research and education projects*

The Svalbard Rock Vault initiative – taking care of geoscientific data from Svalbard

What happens when new geological or geophysical data is acquired on the Norwegian Continental Shelf? It is archived with the Norwegian Petroleum Directorate, which maintains a unique database, DISKOS, used by commercial companies and research institutes throughout. Furthermore, all physical samples from exploration drilling are archived and therefore easily retrieved for further studies. Onshore Norway, the Geological Survey of Norway operates the national sample and core storage facility in Løkken. But what about Svalbard? Critical geoscientific data has been collected onshore Svalbard for centuries, including coal exploration, petroleum exploration and research drilling. There is, however, no single place for accessing data and physical samples from these campaigns.

We have thus initiated a project, the Svalbard Rock Vault, which will hold a initial workshop in Longyearbyen from 24<sup>th</sup> to 26<sup>th</sup> of September. The main objective of the workshop is to facilitate long-term collaboration between Svalbard-based, Norway-based, and international researches and institutions with respect to developing a comprehensive geological material archive on Svalbard, the Svalbard Rock Vault, while relying and improving upon existing infrastructure (i.e. SNSK's facility in Endalen). As a secondary objective it is the aim to catalogue relevant data sets and data types from Svalbard held by partner institutions, and identify to what extent these can be shared in a common platform of geoscientific data as a base for future research and educations projects.

Such a collaboration is likely to lead to enhanced scientific use of the present and future geological material, and is likely to proceed through completion of four main themes:

1. Mapping and categorizing existing material (drill cores, wireline data, virtual outcrops)
2. Systemizing material in a database respecting data confidentiality regulations
3. Providing access to geological material for research and education projects

4. Developing a long-term cooperation do develop new infrastructure and/or upgrade and maintain the infrastructure currently present in Endalen.

We envision the proposed steps as critical to achieving an internationally recognized archive of samples from Svalbard on Svalbard, allowing researchers to come to this international place and conduct cutting edge research in spirit as dictated by the Svalbard treaty. Svalbard.

If you want to contribute to this undertaking please get in touch with the workshop organizers below. The agenda is provided below.

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## **Svalbard Rock Vault agenda**

### ***Monday 24 September 2018***

14:00-15:00 Arrival, registration and light refreshments.

### ***Monday 24 September 2018 15:00-18:00***

15:00-15:20 Welcome and introduction to the workshop idea by hosts and co-chairs: Kim Senger, Malte Jochmann  
15:20-15:30 Welcome and introduction to UNIS by director of HSE and Infrastructure at UNIS, Fred Skancke Hansen  
15:30-15:40 Welcome and introduction to SNSK by director of SNSK, Jan Morten Ertsaas  
15:40-16:25 The Svalbard Treaty and its implications for resource management – keynote talk (*TBC*)  
  
16:25-16:40 Break - coffee refill and refreshments  
  
16:40-17:00 Coal exploration: paving the way for groundbreaking research, Malte Jochmann (SNSK)  
17:00-17:20 Drilling the Permian-Triassic boundary: insights from the Deltadalen boreholes, Sverre Planke (CEED)  
17:20-17:40 Drilling for knowledge: the Longyearbyen CO<sub>2</sub> lab project, Kim Senger (UNIS)  
17:40-18:00 Petroleum exploration onshore Svalbard. An industrial perspective, Arvid Nøttvedt (CMR)  
  
19:00-00:00 Workshop dinner in the UNIS canteen

### ***Tuesday 25 September 2018 09:00-16:50***

09:00-09:10 Brief summary of day 1 by workshop organisers  
09:10-09:20 SSF priorities, the Research-in-Svalbard database and international co-operation, Karoline Bælum (Svalbard Science Forum)  
  
09:20-11:00 Presentations by project participants  
09:20-09:40 Exploration activity and geological archive, Peter Brugmans and Ingeborg Solberg (DMF med Bergmesteren på Svalbard)  
09:40-10:00 Geological mapping of the Svalbard archipelago, Synnøve Elvevold (NPI)  
10:00-10:20 Core and sample storage, mainland Norway, Rolf Lynum and Tom Heldal (NGU)  
10:20-10:40 Core and data storage, Norwegian Continental Shelf (NPD; *TBC*)  
10:40-11:00 Geological data archiving and importance for verifiability of scientific results, Hans Arne Nakrem (NHM Oslo)  
  
11:15-14:15 Field excursion to Endalen and Longyearbyen CO<sub>2</sub> lab site – in the Arctic Tapas bus.  
  
14:30-16:10 Presentations by key project participants (cont'd)  
14:30-14:50 Academic perspective on geo-archive on Svalbard, Lisa Watson (UiS)  
14:50-15:20 Legacy of Brian Harland collection, Simon Kelly (CASP/Sedgwick Museum)  
15:20-15:40 German research activity onshore circum-Arctic, Karsten Piepjohn (BGR)  
  
15:40-16:00 Break - coffee refill and refreshments  
  
16:00-16:20 A coal company in change: overview on material and data, Malte Jochmann (SNSK)  
16:20-16:40 Russian activity on Svalbard, Mikhael Milovslavskij (PMGE)  
16:40-17:00 The 1976 Ny Ålesund diamond drilling campaign, the use of the core material, and the story on how they were lost, Peter Midbøe  
  
19:00-00:00 Workshop dinner at Stationen

### ***Wednesday 26 September 2018 08:30-12:00***

08:30-09:00 Wrap up including data types and input from participants, targeting the following topics:  
a. Rock samples – what, where, who and how  
b. Drill core samples – current  
c. Wireline data  
d. Seismic data  
e. Integration possibilities and systems (e.g. Svalbox developed at UNIS)

- f. Data sharing and e-infrastructure.
- g. Data types – what is available and what is relevant

*09:00-10:00* Group workshops, focusing on road map ahead and “statement of intent”

- a. Svalbard Rock Vault: organizational form, financing and who should be in charge
- b. Data types, data access and links to existing archives and databases

*10:00-10:20* Break - coffee refill and refreshments

*10:20-11:20* Panel debate

- a. Address comments from group workshops
- b. Way forward
- c. Statement of intent

*11:20-11:30* Conclusions and way forward by the workshop organisers

*Wednesday 12:00 departure from Svalbard*