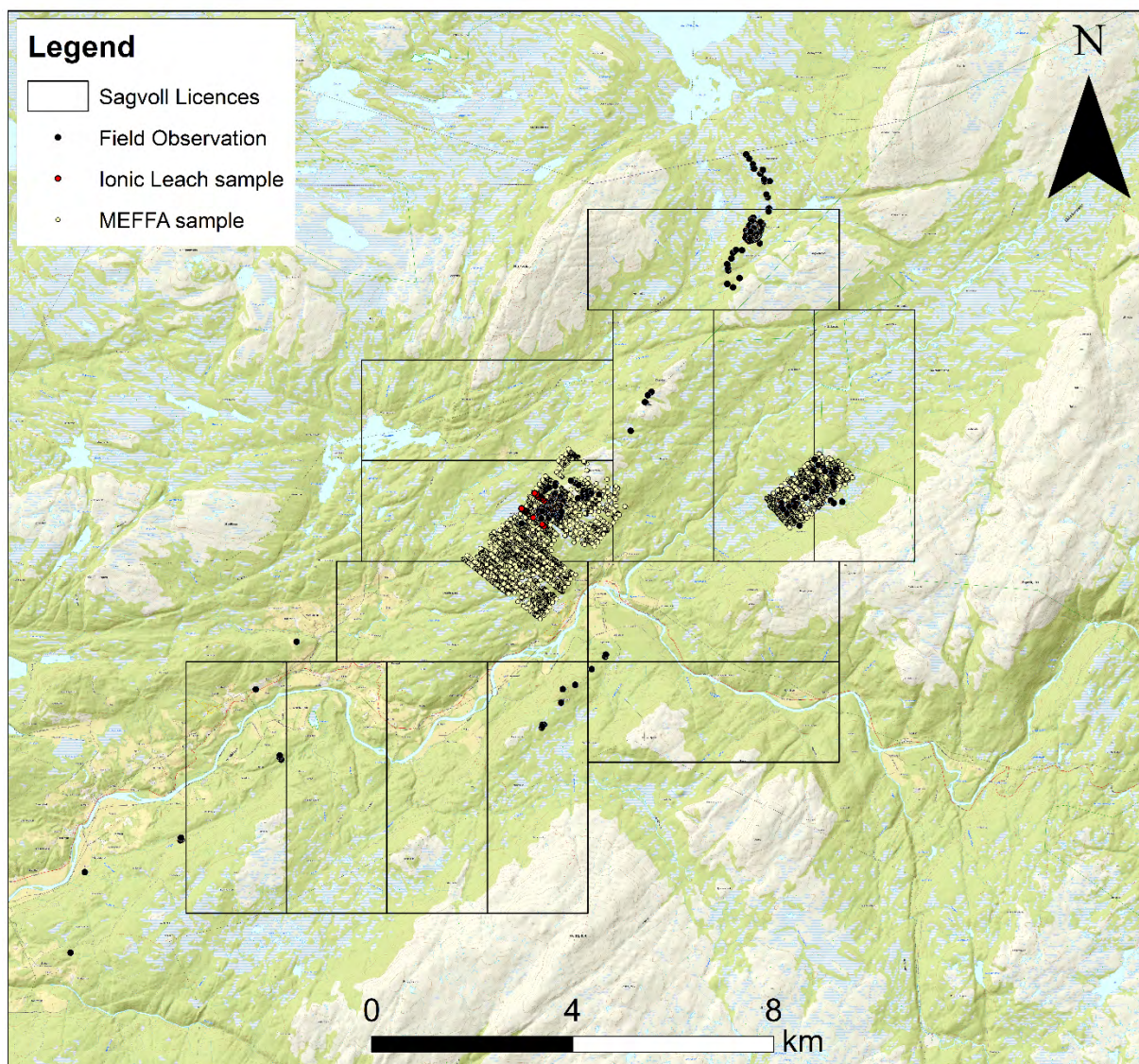


## Data Summary:

**Permit holder:** EMX Norwegian Services AS

**Project Name:** Sagvoll 2-7, 12-18

## Project Overview:





## Performed Work:

### Field observations and rock chip sampling

A total of 324 field observations have been collected, and 74 rock chip samples have been sent to ALS for analysis.

### Soil sampling – MEFFA

A total of 2832 MEFFA (Multi-Element-Fine-Fraction-Analysis) samples were collected in a soil campaign and scanned by a pXRF.

### Soil sampling – IL

20 IL (Ionic Leach) samples including 1 duplicate were collected and sent to ALS for analysis.

### Historic drill core sampling

25 samples of historic drill core (5 different holes) were taken and sent to ALS for analysis.

All samples have been discarded after analysis.

## Method Overview

### *Rock chip Sampling Protocol:*

1. Before sampling, ensure that everybody has taken safety precautions and required PPE is worn.
2. With a hammer (and chisel), fresh chips of rock are extracted from the bedrock or boulder.
3. The sample should be representative for the main rock type observed, including economic mineral and alteration content.
4. In case of dump sampling, good care should be taken to avoid inclusion of any foreign objects like wood, iron pieces, nails, and plastics.
5. At least 200g of material needs to be collected and separate rock chips should not be larger than 10cm across in any dimension.
6. The rock chips must be stored in a calico bag, together with a sample tag with a unique sample ID. This sample ID should match the ID that is written down in the field observation.
7. Location coordinates must be saved on a GPS to be extracted afterwards.
8. After every 10<sup>th</sup> sample a standard (CRM) should be inserted.
9. All samples must be safely stored in a plastic box for transportation out of the field or to the lab.

### *IL Sampling Protocol:*

1. After the survey is planned in GIS. Points need to be exported in GPX and KMZ format to upload on GPS units and field iPads.
2. The material to sample needs to be collected at a constant depth relative to the organic-soil interface. The sample should be taken from the B horizon, see diagram below to help define the sub section of the B horizon. If no B horizon sample 15cm down from the base organics, but avoid the leached (grey to white) A-horizon.
3. Once the hole is dug, the sides of the hole need to be scraped with a plastic shovel to avoid any potential contamination from the steel shovels.
4. 100-200g of material need to be collected with a plastic scoop and stored in an air tide zip lock bag. A second bag is used for additional protection against spilling. Between bag 1 and two a sample tag with a unique sample ID is inserted.



5. While hole is dug the sample-log has to be filled out in the ipad, see below for classifications for each subsection.
6. Hole needs to be back filled.
7. Every 20th sample has to be a field duplicate collected within 1-2m of the first sample site following the same procedures.
8. At the end of each day all collected samples have to be sorted and accounted for to avoid the loss of samples.
9. All samples have to be safely stored in a plastic box for transportation out of the field or to the lab
10. Data from the ipads has to be exported and imported into MXDeposit
11. Dispatch form must be created using MX-deposit. Samples must be dropped off by EMX staff at an ALS facility (Mala or Pitea) for ME-MS23 analysis.

Things to note:

- No suncream or bug spray
- Not on/near roads (15m)
- Remove jewelry from/around hands

#### *Defining the B Horizon*

**Bf** Ferruginous illuviated, which is bright orange in colour

**Bt** Clay rich Bm Brown unmodified

**Bc** Transition from B to C horizon, is more grey in colour

#### *MEFFA Sampling Protocol:*

1. The survey needs to be planned in GIS-software, creating parallel lines with 200 m spacing, filling the area that needs to be sampled.
2. After the survey is planned in GIS, the lines need to be exported in GPX and KMZ format to be uploaded on GPS units.
3. The samples are taken using an auger (photo 1). It is jammed vertically into the ground, twisted at least 360 degrees and pulled up again.
4. Samples are taken along the lines indicated on the GPS. Sample spacing should be roughly 15 meters.
5. The material to sample needs to be collected from the B-horizon. Depending on the soils, the depth of this horizon can differ. The B-horizon can be recognised by its red-orange to brown colouring (photo 2).
6. The soils of the B-horizon are collected in small sample bags with pre-printed sample-IDs. At least 10 grams of sample is needed.
7. When a sample is taken, the location of the sample is marked in the GPS. The location is tagged with the sample-ID of the taken sample.
8. At the end of each day, all collected samples have to be counted and sorted to avoid the loss of samples. In case of a lost sample, the supervisor should be informed (if applicable).
9. Samples should be safely stored in a plastic box for eventual transportation to the office or lab.
10. GPS-data have to be exported into Global Mapper. They should also be saved as .gpx file on Nextcloud in the -KML > GPX > MEFFA DOWNLOADS
11. Samples are then scanned by pXRF which is done internally by EMX.