

GFZ German Research Centre For Geosciences
Telegrafenberg
14473 Potsdam
Thomas Walter
twalter@gfz-potsdam.de

Reykjavík 19. september 2017
UST201709-021/J.S.J.

Application for research permit in Geysir area in Haukadalur

The Environment Agency of Iceland has received a request from Thomas Walter on behalf of the GFZ German Research Centre for Geosciences, dated September 5th 2017 regarding permit to test to which degree the rise of gas slugs leads to deformation of the surrounding and how this deformation is controlled by the conduit geometry at the Geysir area in Haukadalur. According to the applicant, this would be the third time they visit the Geysir area for research.

Description of the project:

Highly sensitive tilt and deformation sensors will be placed at 3 to 5 meters distance to the geysir and record before, during and after eruptions. In addition, high speed cameras and a novel radar sensor will be used, to measure how the geysers geometry shape is slightly changed during eruptions.

High speed camera and radar sensors will be placed at 20 m distance on regular tripods, which will be removed. Ground installations, tiltmeters and seismometers will be placed at 3-5 m distance and placed on 40x40cm solid plates, which will be removed again after the experiments. All sensors are made and designed to have no impact on the geysir structure and will not cause any damage. Therefore, no disturbance on geological features, soil, flora and fauna will occur.

According to the application, number of participants on location will be three and measurements will take place from 3rd – 10th of October 2017 and again later in the winter of 2017/2018. No disturbance will be on geological features, soil, flora or fauna, no chemicals will be used, no need to go off paths and no sampling will be made.

Impact assessment:

Based on the information in the application the Environment Agency of Iceland does not consider the measurements or the cinemograph likely to have negative impact on the area.

The permit is subjected to the following conditions:

- This permission is granted for the period 3-10th of October and again for one week during the winter of 2017-2018.

- The Environmental Agency of Iceland must be informed before field works begins. (email: ust@ust.is).
- The researchers should carry the signed permit during the research at the Geysir area.
- Every measure should be taken to avoid damage to the sites and unnecessary disturbance while collecting measurements.
- All research equipment should be placed and removed with utmost care and the Geysir area left undisturbed by the process
- All participants in the project must wear high-visibility clothing, labelled with the identity of the researcher/research institute or clearly identify the research site during field work.
- The Environmental Agency of Iceland must be informed of all changes from the description of the project as described in this permit.

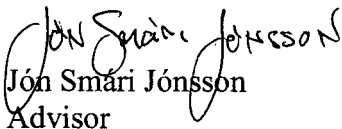
Request

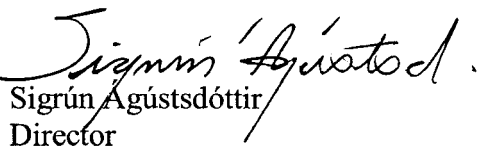
- The Environment Agency of Iceland wishes to be secured, free of charge, a copy of all reports and scientific articles that results from the research project.
- A separate permit from the National Energy Authority in Iceland is needed to conduct research at geothermal sites in Iceland, researchers should also carry a copy of the permit at the research site. (www.os.is, email: os@os.is).

Supervision

The Environment Agency of Iceland charges a fee of ISK 13.200 per hour for supervision of the research. The site will be evaluated before and after the research and the ranger will be available for guidance. An estimate of 2 hours of supervision is needed for this research.

Sincerely


Jón Smári Jónsson
Advisor


Sigrún Agústsðóttir
Director