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Reykjavík 11. maí 2018  
UST201805-013/P.B.S.

### **Application for research permit in Geysir area in Haukadalur**

The Environment Agency of Iceland has received a request from Eva Eibl of the GFZ German Research Centre for Geosciences, dated May 2nd, 2018 regarding a continuation of an experiment from 2017 that was planned by Dr. Thomas Walter at the Geysir area in Haukadalur. The aim of the research is to test which degree the rise of gas slugs leads to deformation and seismicity of the surrounding and how this deformation and seismicity is controlled by the conduit geometry.

#### **Description of the project:**

- Highly sensitive tilt and seismic sensors will be placed at 3 to 5 meters distance to the geyser and record before, during and after eruptions.
- A camera drone will be used to measure how the distribution and activity of geothermal features in the area around the geysers changed in time (with respect to 2017).
- All sensors are made and designed to have no impact on the geyser structure and will not cause any damage.
- The drone will fly at 80 m above the geysers for a duration of 1 hour at 3 am to 5 am in the night.
- Ground installations will be placed at 5-50 m distance and placed on solid plates, which will be removed again after the experiment.
- Number of participants are three people.
- The experiments will be done at night (between midnight and 6 am) so that no tourist is affected during the summer season.
- All scientific results will be accessible for the Environment Agency.

**Impact assessment:**

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

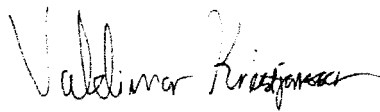
**The permit is subjected to the following conditions:**

- This permission is granted for the period 5-11<sup>th</sup> of June 2018.
- The Environmental Agency of Iceland must be informed before field works begins (email: [ust@ust.is](mailto: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.

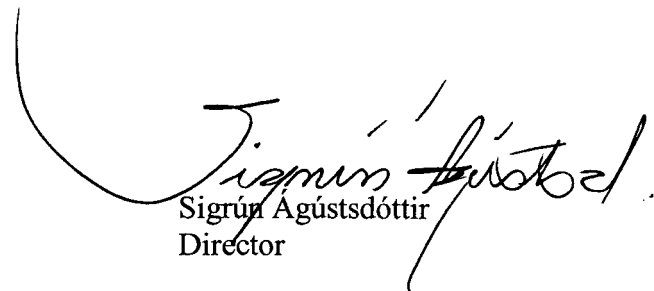
**Separate permit from the National Energy Authority in Iceland is needed**

- 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](http://www.os.is), email: [os@os.is](mailto:os@os.is)).

Sincerely



Valdimar Kristjánsson  
Advisor



Sigrún Agústs dóttir  
Director