The thesis document includes the following changes in answer to the external review process.

Dear Jury Members,

I express my gratitude for your valuable comments and suggestions. I found all of them highly important since they resulted in a significant improvement of the thesis quality. I carefully addressed all issues and answered below, point-by-point, with your comments in italic.

**Reviewer Prof. Huang:**

*Figure/table caption should avoid abbreviation, e.g., Figure 1, Table 1.*

Response: Thank you for the comment. All captions for Figures and Table were revised and abbreviations were removed. Please, see the revised thesis.

“prediction” is used extensively in the thesis. I have an impression that this “prediction” is more commonly used in the AI world. In the real world perhaps it would be more nature to use “estimating” or “determination”. For example, in the summary slide 1, perhaps, “predicting rock thermal properties” => “estimating ...”.

Response: Thank you for the comment. I revised the whole text of the thesis and changed “prediction” term to “determination” term.

**Reviewer Prof. Verdoya:**

*Include a geographical grid (or a reference coordinate) in Fig. 29, similarly to Fig. 40.*

Response: Thank you for the comment. I added the coordinate of a well to the caption of Figure 29. Please, see the revised text of the thesis.