

**MAPPING OF FAULTS AND FRACTURES FROM LANDSAT AND AERIAL PHOTOGRAPH IN THE  
LAHENDONG GEOTHERMAL FIELD, NORTH SULAWESI, INDONESIA**

Eben Ezer Siahaan<sup>1)</sup>  
Bambang Budiarjo<sup>1)</sup>

<sup>1</sup> Pertamina Geothermal Division  
Kwarnas Pramuka BLD, 6<sup>th</sup> Floor, Jl. Medan Merdeka Timur No. 6 Jakarta 10110

An interpretation of lineaments was based on the aerial photographs, landsat thematic mapper that was processed for the structural geology and later supported by the field ground-truthing. These techniques were applied in order to make the Fault and Altered rock Density Map (FADM) of Lahendong field. The FADM shows the hydrology pattern of Lahendong where an upflow zone is associated with the high density of faults around the crater lake of Linow that flows to the western side. The FADM also provides that the permeable zone is coreable with the existence of production wells.