

# 3<sup>RD</sup> OPEN AND COMPETITIVE SELECTION PROCESS

## Area 1 - Daklan Geothermal Prospect

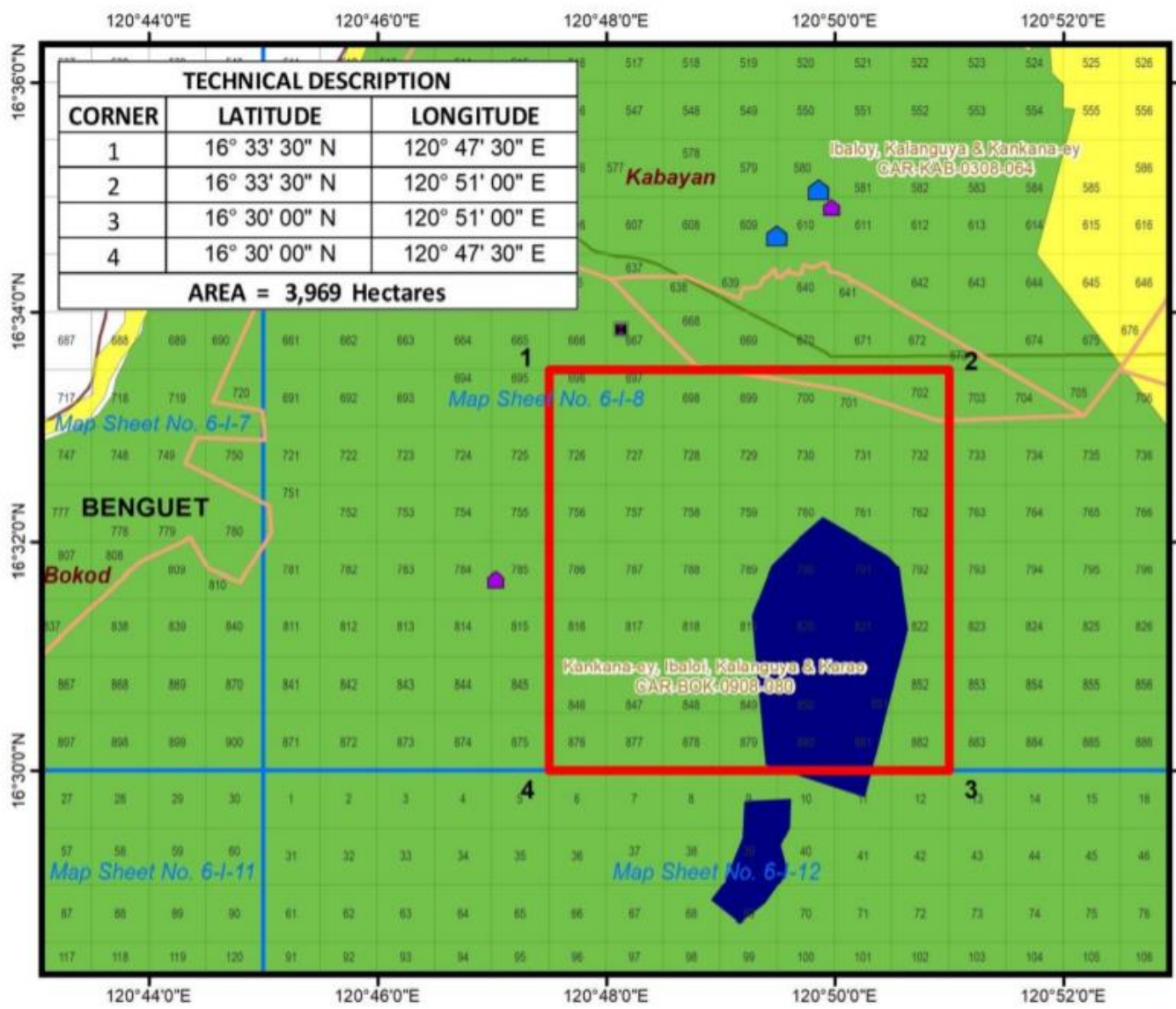
Benguet

Scale : 1:100,000

**Legend :**

- HSC
- HSC Application
- RE Block
- RE Map Sheet
- Municipal Boundary
- Provincial Boundary
- Ancestral Domain
- Protected Area/ NIPAS
- FMB's Tenured Area (CBFMA)
- Pre-Determined Area

DATUM: PRS '92



TECHNICAL DESCRIPTION		
CORNER	LATITUDE	LONGITUDE
1	16° 33' 30" N	120° 47' 30" E
2	16° 33' 30" N	120° 51' 00" E
3	16° 30' 00" N	120° 51' 00" E
4	16° 30' 00" N	120° 47' 30" E

**AREA = 3,969 Hectares**

**Note:**

- All energy resource contract and applied areas herein plotted are based on ITMS issued contract maps and verified applications as of 19 Aug 2020.
- Political boundaries are approximate, not authoritative, and subject to further research/validation.
- The source of information for protected areas, forest tenurial instrument, and Ancestral Domain is the Philippine Geospatial Project website and must be validated with BMB-DENR, FMB-DENR, and NCIP respectively.



**DEPARTMENT OF ENERGY**  
Information Technology and Management Services  
Information Services Division

PREPARED BY: ARME N. RIVERA	APPROVED BY: AAP
VERIFIED BY: RCON	DATE PREPARED: 19 AUG 2020

POLYGON ID: \_\_\_\_\_

DBASE FILENAME: \_\_\_\_\_

MAP NO.: **BM-GML-2020-08-002**

# Daklan Geothermal Field

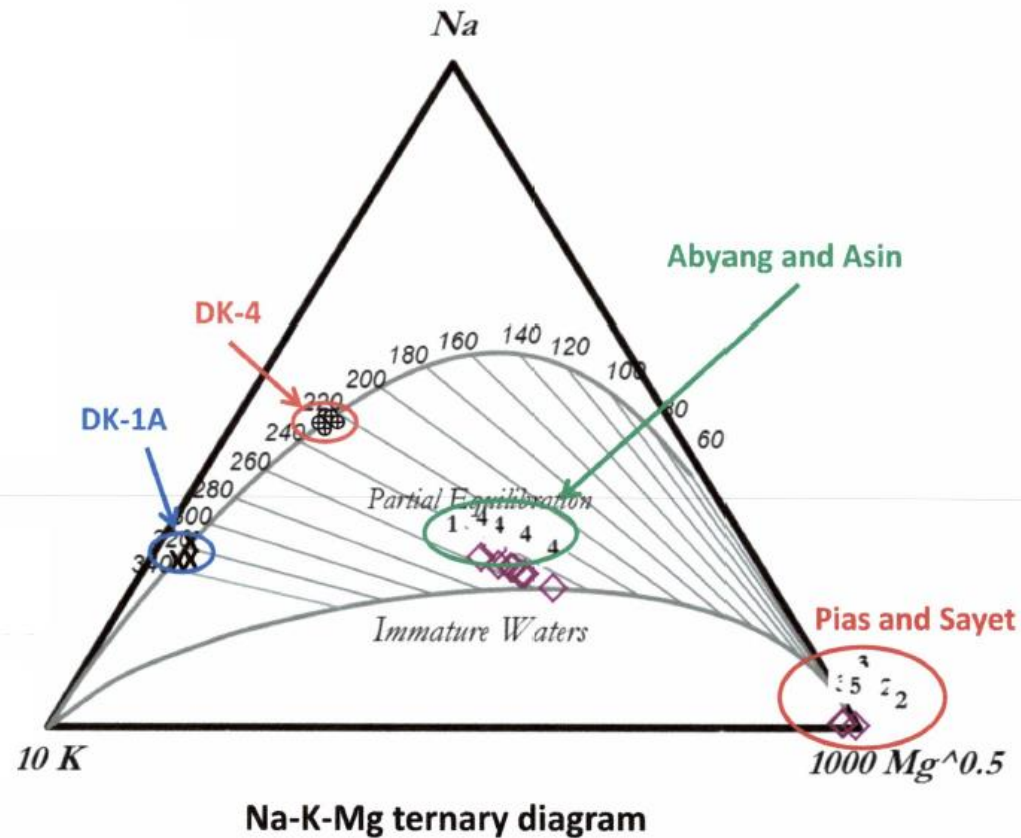
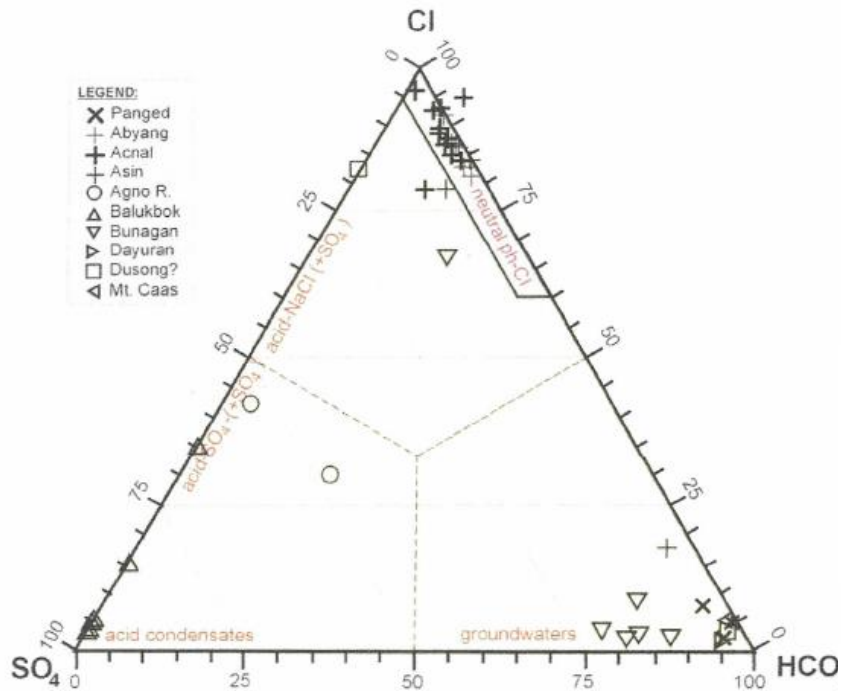
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## *Exploration History*

- Between 1978 and 1981, the then Philippine Bureau of Energy Development (BED) conducted a preliminary assessment of the geothermal potential of Daklan in conjunction with Italian-based company ELC – Electroconsult.
- Studies included : Geochemical sampling and analysis, electrical resistivity, geologic mapping, drilling of seven (7) holes – 300m each, drilling of five (5) holes – 1625 to 2835m.
- Thermal manifestations: solfatara, mudpool, altered and steaming ground, bubbling acidic springs, hot springs, and warm springs.

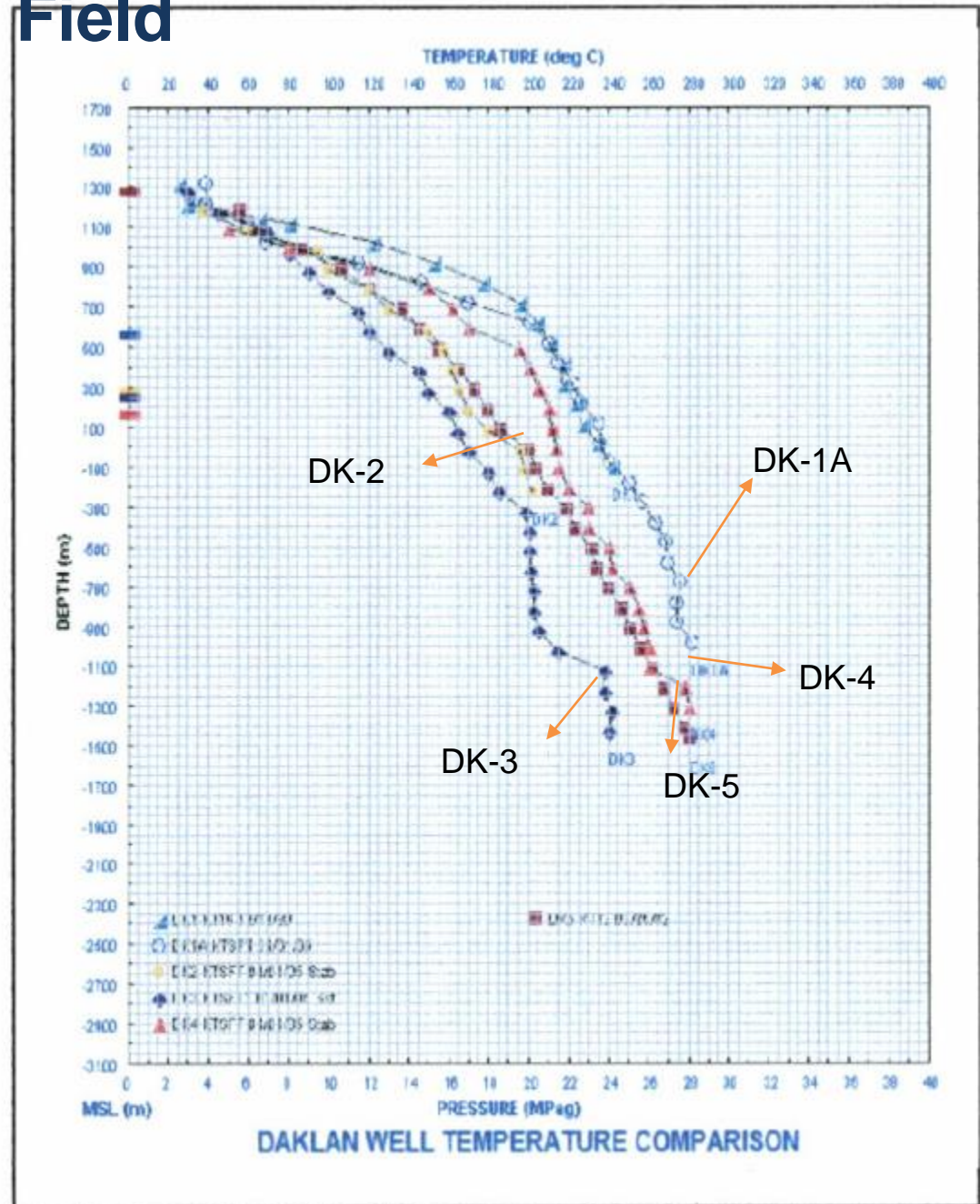


# Daklan Geothermal Field



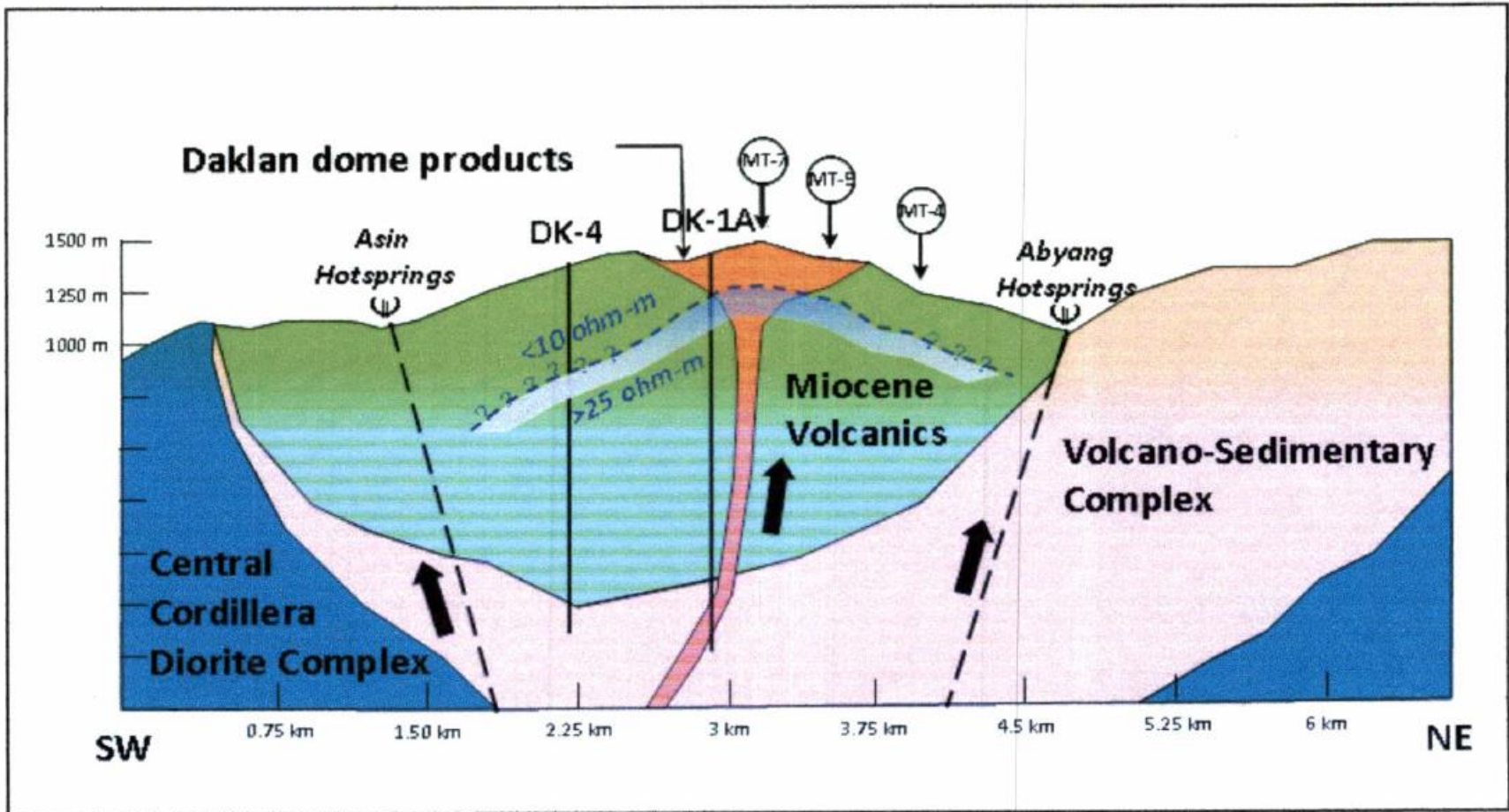
# Daklan Geothermal Field

- **DK-1A**, registered the highest temperature with 293°C followed by **DK-4** with 291 °C.
- **Permeability** was established by five (5) exploratory wells which **intersected permeable zones from lithologic contacts between Late Oligocene – Early Miocene volcaniclastics and Miocene intrusive.**



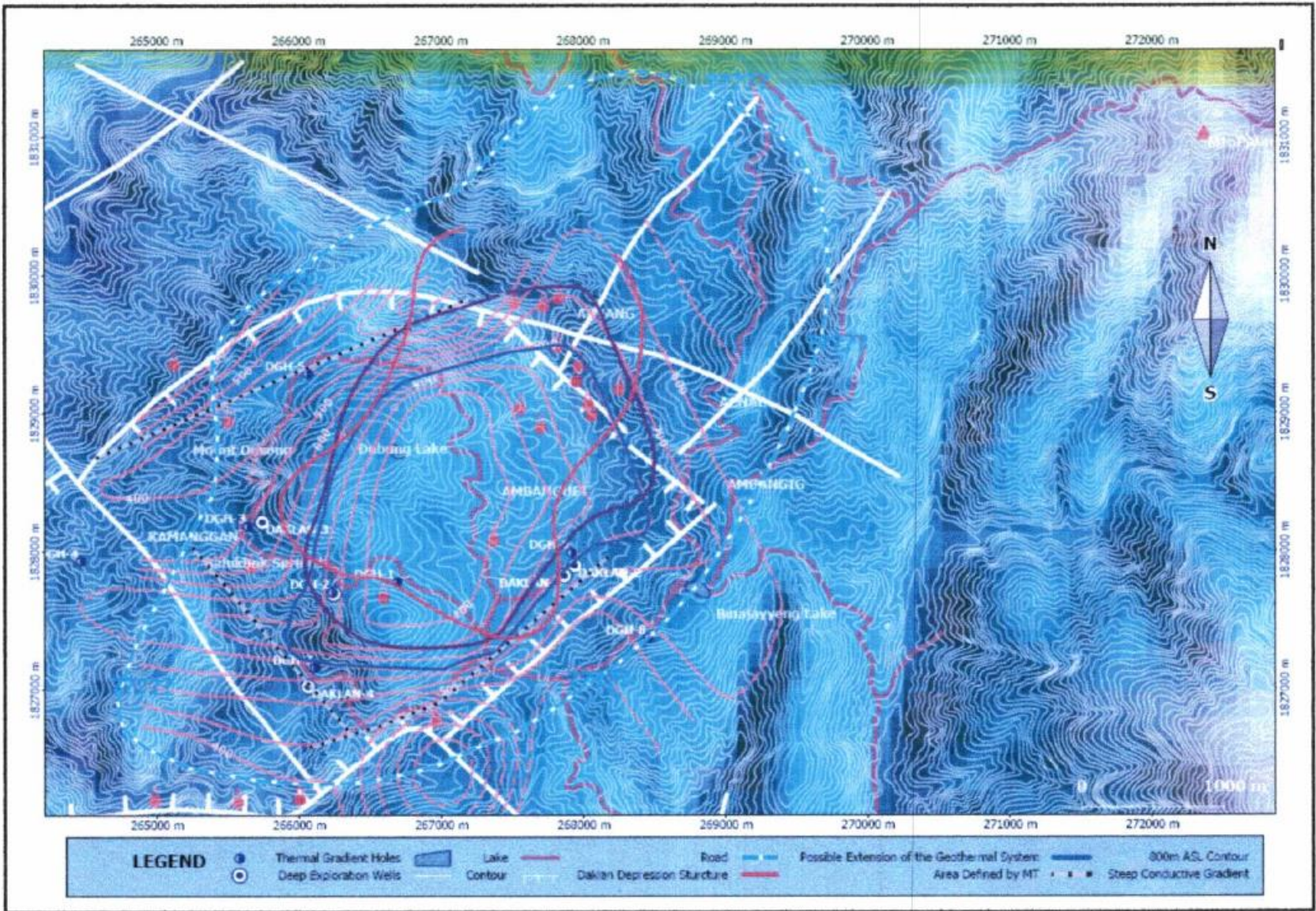
# Daklan Geothermal Field

## Conceptual model



- Estimated with **27MW** geothermal resource potential capacity.





**Figure 25: Provisional resources derived from VES and MT. Red color contours represent MT size (4.7 km<sup>2</sup>), violet color contour VES size (4.4 km<sup>2</sup>) and the blue dashed line - inferred size (16 km<sup>2</sup>) of the anomaly from SE-NE to be further explored.**



# Daklan Geothermal Field

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## *Considerations on Development:*

- Three of the wells were described as having a “total lack of permeability and did not flow. Only wells DK-1A and DK-4 discharged fluid but a sustained flow was not achieved from either of the bores.
- Within NIPAS Area.
- Within Indigenous Cultural Community.

