

3RD OPEN AND COMPETITIVE SELECTION PROCESS

Area 3 - Mt. Puting Lupa Geothermal Prospect

LAGUNA AND LAGUNA DE BAY



Scale : 1:100,000

Legend :

- RE Block
- RE Map Sheet
- Municipal Boundary
- Provincial Boundary
- SESC
- GRESC/GSC/GREOC
- Pre-Determined Area

DATUM: PRS '92

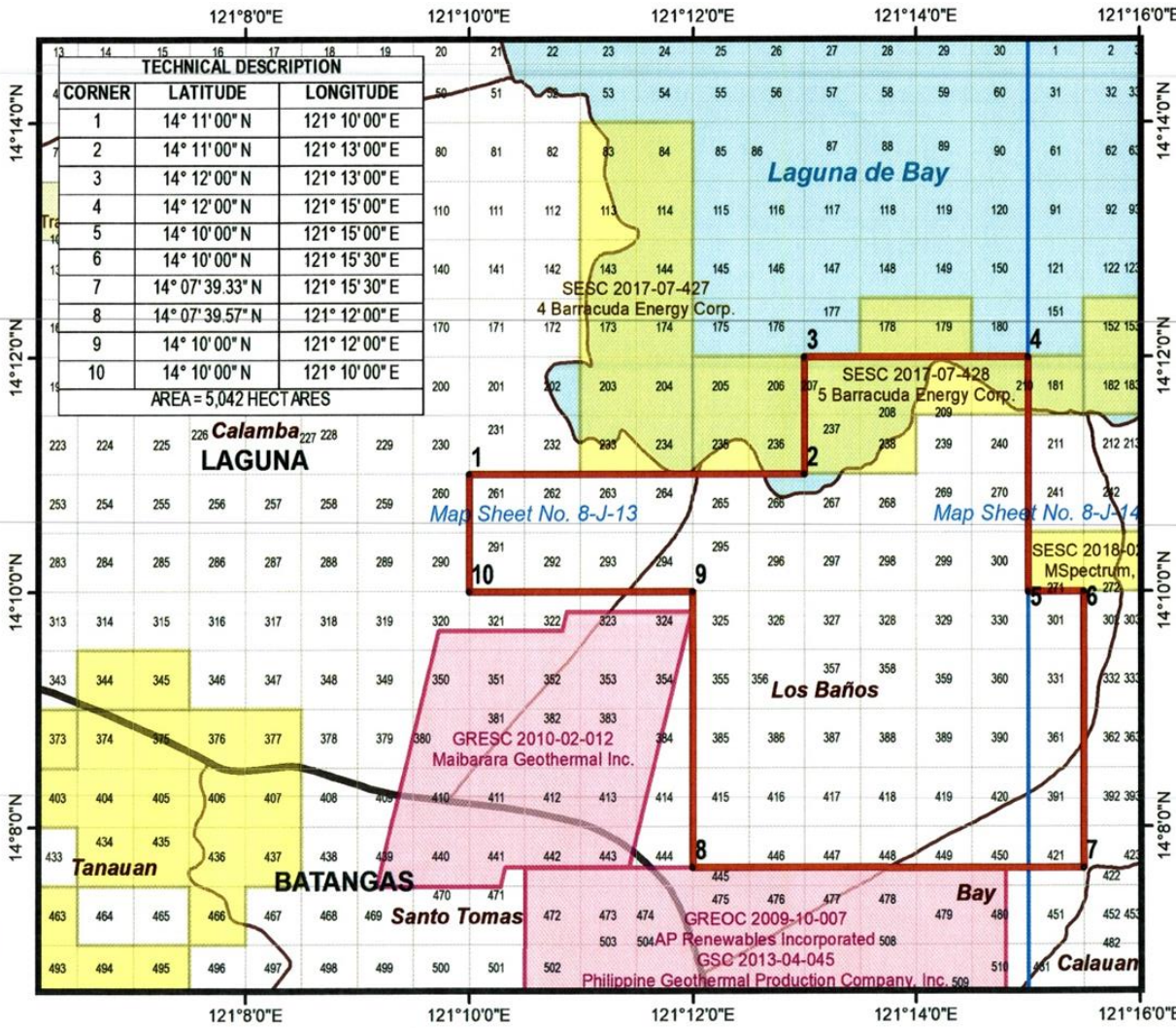
Note:

1. Political boundaries are approximate, not authoritative, and subject to further research/validation.
2. Protected Areas and Forestry Tenurial Instruments must be validated with DENR-PAWB and DENR-FMB, respectively.
3. Ancestral Domain claims must be validated with NCIP.



DEPARTMENT OF ENERGY
Information Technology and Management Services
Information Services Division

PREPARED BY: ARME N. RIVERA	APPROVED BY: RSA
VERIFIED BY: KAP / RCD	DATE PREPARED: 5-10 MAR 2020



POLYGON ID:

DBASE FILENAME:

MAP NO.: BM-GML-2020-03-003



Putting Lupa Geothermal Field

Exploration History

- In 1970s, Commission on Volcanology (Comvol) conducted the earliest study in Putting Lupa as part of the exploration works of the Makiling-Banahaw (Mak-Ban) geothermal area.
- Studies included geologic mapping, geochemical sampling and various geophysical surveys particularly electrical, gravity, and MT surveys.
- In 1972, two deep wells are known to have been drilled by Philippine Geothermal Inc namely PL-1 and MB-1.
- FEDCO conducted geological, geochemical and geophysical survey (CSMT) in 2014

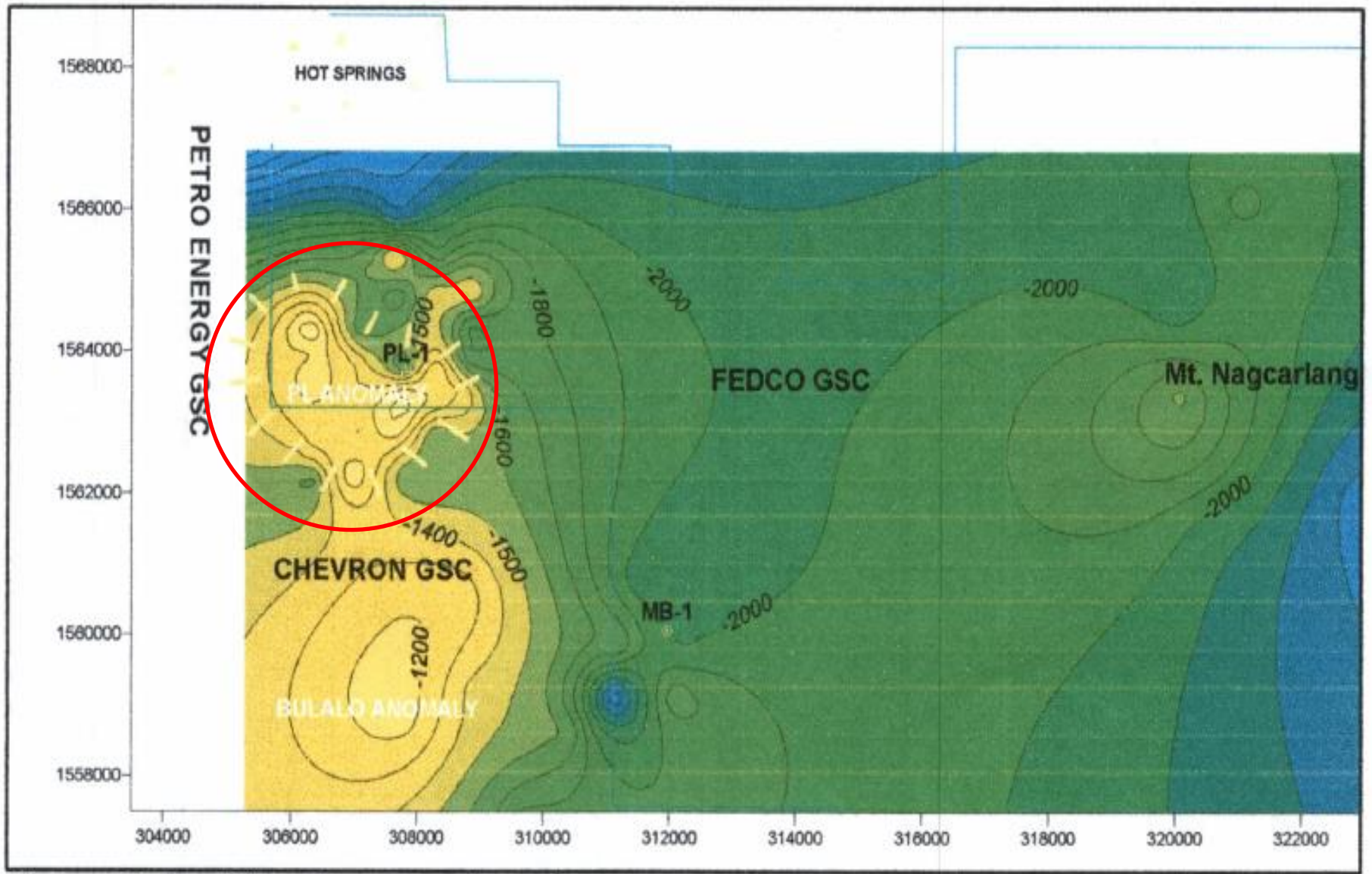


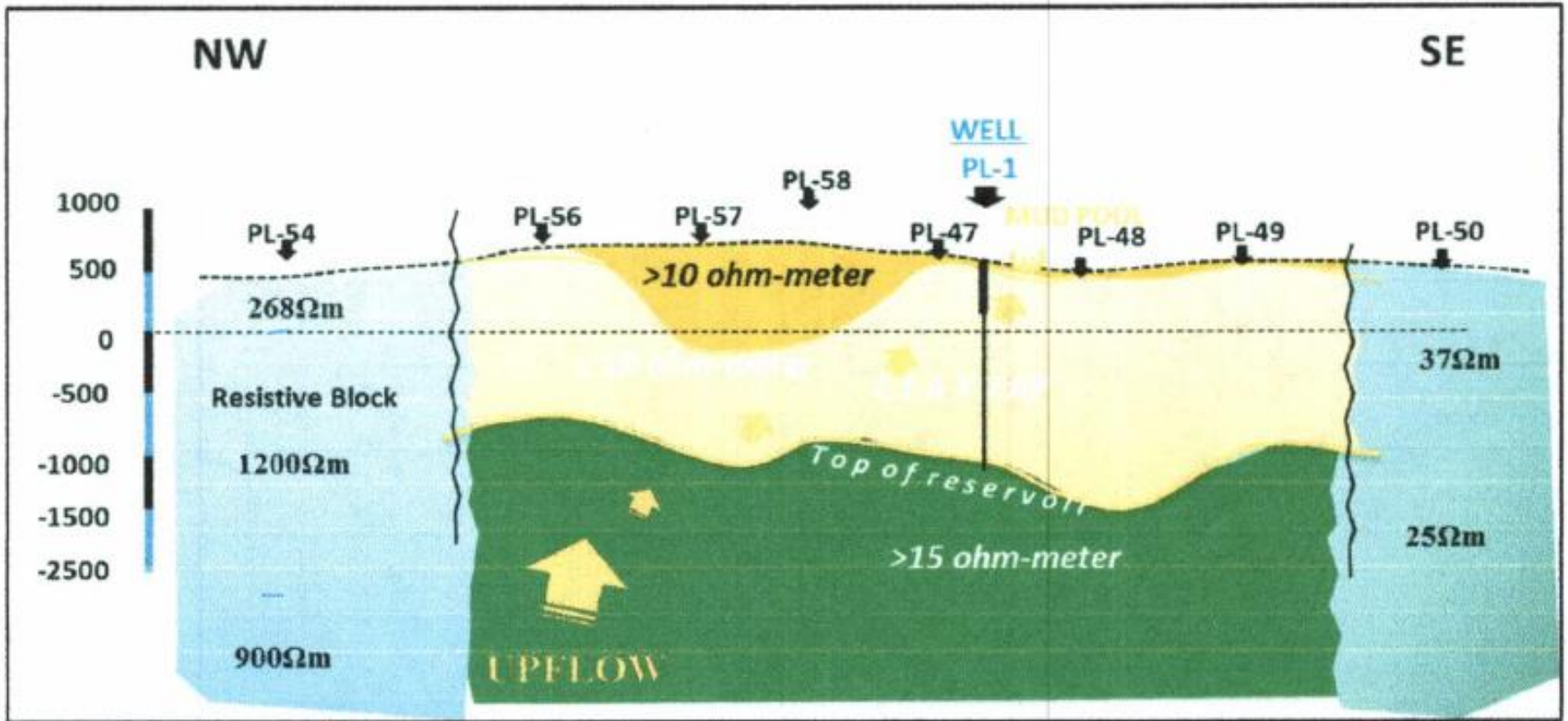
Putting Lupa Geothermal Field

Summary of Resource Assessment

- **Thermal manifestations** – mud pool, hot springs, and warm springs.
- **Intermediate temperature system**, based on the spring geochemistry and deep exploratory wells.
- **Well-bottom temperature** of 230°C (@3049mMD) for MB-1 and 172°C (@1465mMD) for PL-01
- The **minimum inferred resources is about 3.6sqkm** (inner boundary) and the **maximum inferred geothermal resources is about 8sqkm** (outer boundary).







- Estimated with **17MW geothermal resource potential capacity.**



Puting Lupa Geothermal Field

Considerations on Development:

- Overlap with Makiling Forest Reserve

