

Information of APPLIED RESEARCHES

University of Pembangunan Nasional
“Veteran” Yogyakarta





- Geoheritage of Yogyakarta
- Old Oil Well (Suspended Well) Management
- New Natural Coloring for Batik

Menyingkap “Jogja riwayatmu dulu ... dulu sekali”
dengan mengamati keistimewaan

GEOHERITAGE JOGJA



Oleh:
TIM GeoHeritage
UPN Veteran Yogyakarta



Geoheritage of Yogyakarta and Surrounding Area

Quanti-pu... N... g... n



Objective:

To identify areas of Yogyakarta and surroundings that can be promoted as Geoheritage

Aspects to be considered

→ Education & Research:

Natural laboratory for education and research especially in the subject of earth science

→ Information Source:

Socialization of “geo-heritage” in order to develop public appreciation and awareness on ancient natural prints, siap dan waspada to facing future geo-disasters



A Toba-scale eruption in the Early Miocene: The Semilir eruption, East Java, Indonesia

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EXPLORING JOGJA GEOHERITAGE: THE LIFETIME OF AN ANCIENT VOLCANIC ARC IN JAVA

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Abstract

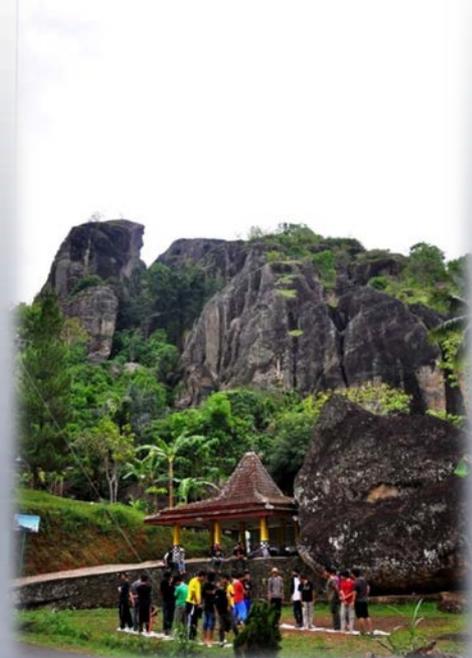
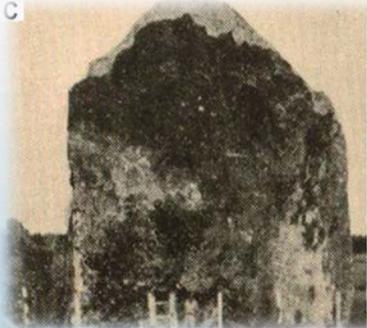
In addition to their art and cultural heritages, Jogja and surrounding areas have also an important and interesting geoheritage. In areas not far from Jogja, within radius around 40 km and only one day's driving, there

Aspects

→ Culture: Earth conservation

→ Tourism: Special interest of tourism

→ Triggering economic developmen → Sustainable developmen



**Monumen
Watuadeg Berbah**





5. Manganese Mining of Kliripan



Geo-sites of Yogyakarta Special Territory

... one day fieldtrip ...

Central Java Area

Yogyakarta

1. Lava Berbah

2. Candi Ijo

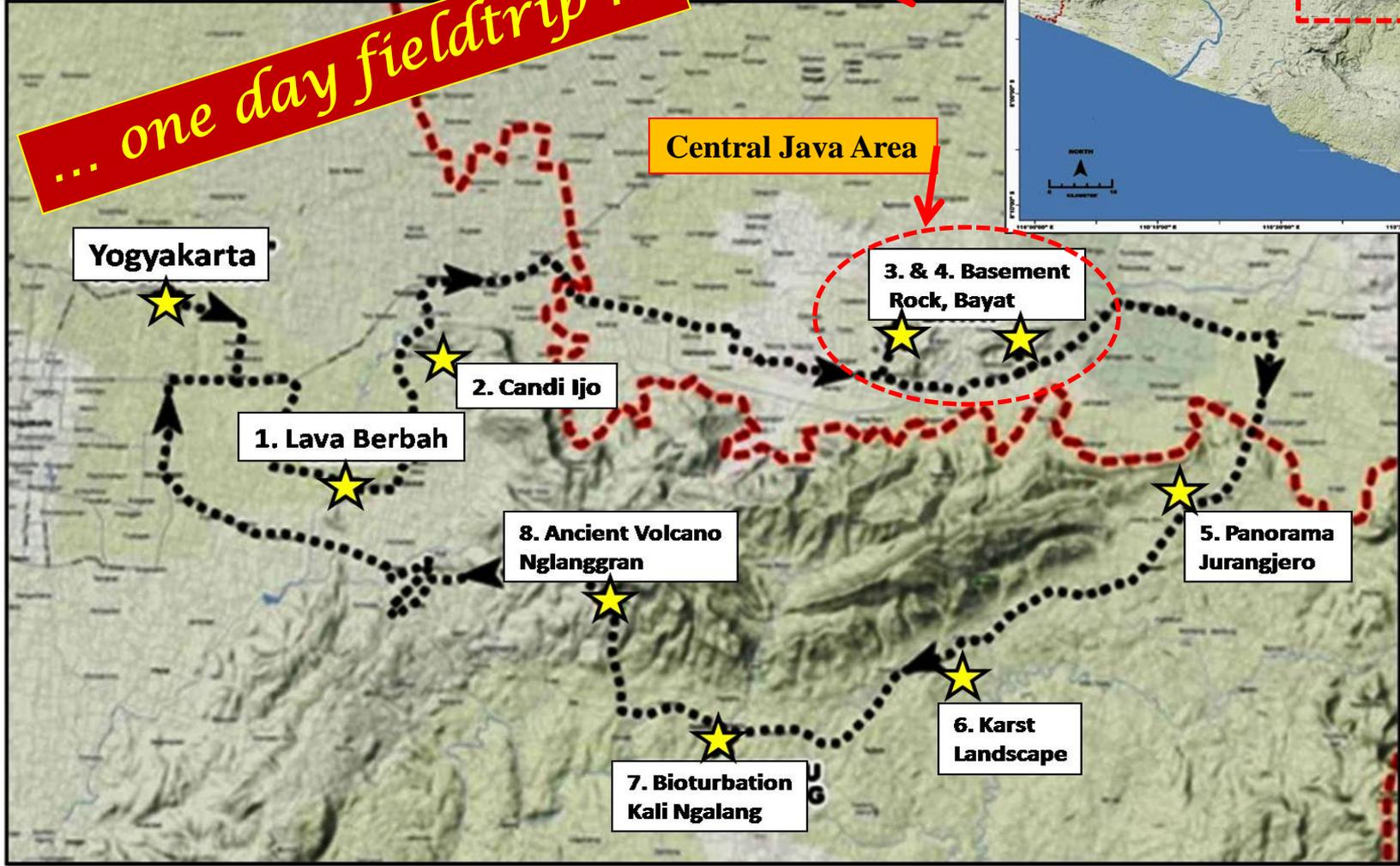
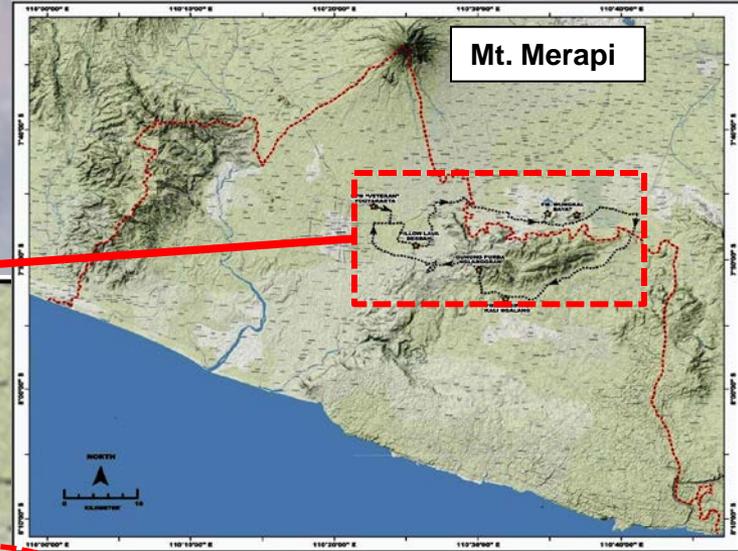
8. Ancient Volcano Nglanggran

7. Bioturbation Kali Ngalang

3. & 4. Basement Rock, Bayat

6. Karst Landscape

5. Panorama Jurangjero





6. Ancient Volcano: Nglanggran





Suspended-(Old)-Oil-Well-Management

- ➡ Since 1 decade ago, the national oil production constantly declines. It caused by:
 1. The existing oil fields have been already “*mature*”
 2. No more significant oil field discoveries
 3. Drilling development activity cannot be realized as that of the planning (due to regulations conflict)

- ➡ There are many suspended (old) wells in Indonesia (developed during Dutch colonization), around 13,000 old wells spreaded from Aceh, Riau, South Sumatera, West Java, Central Java, East Java, east Kalimantan, Moluccas, and Papua. Now about 1020 have been reactivated, the rest are not managed yet.

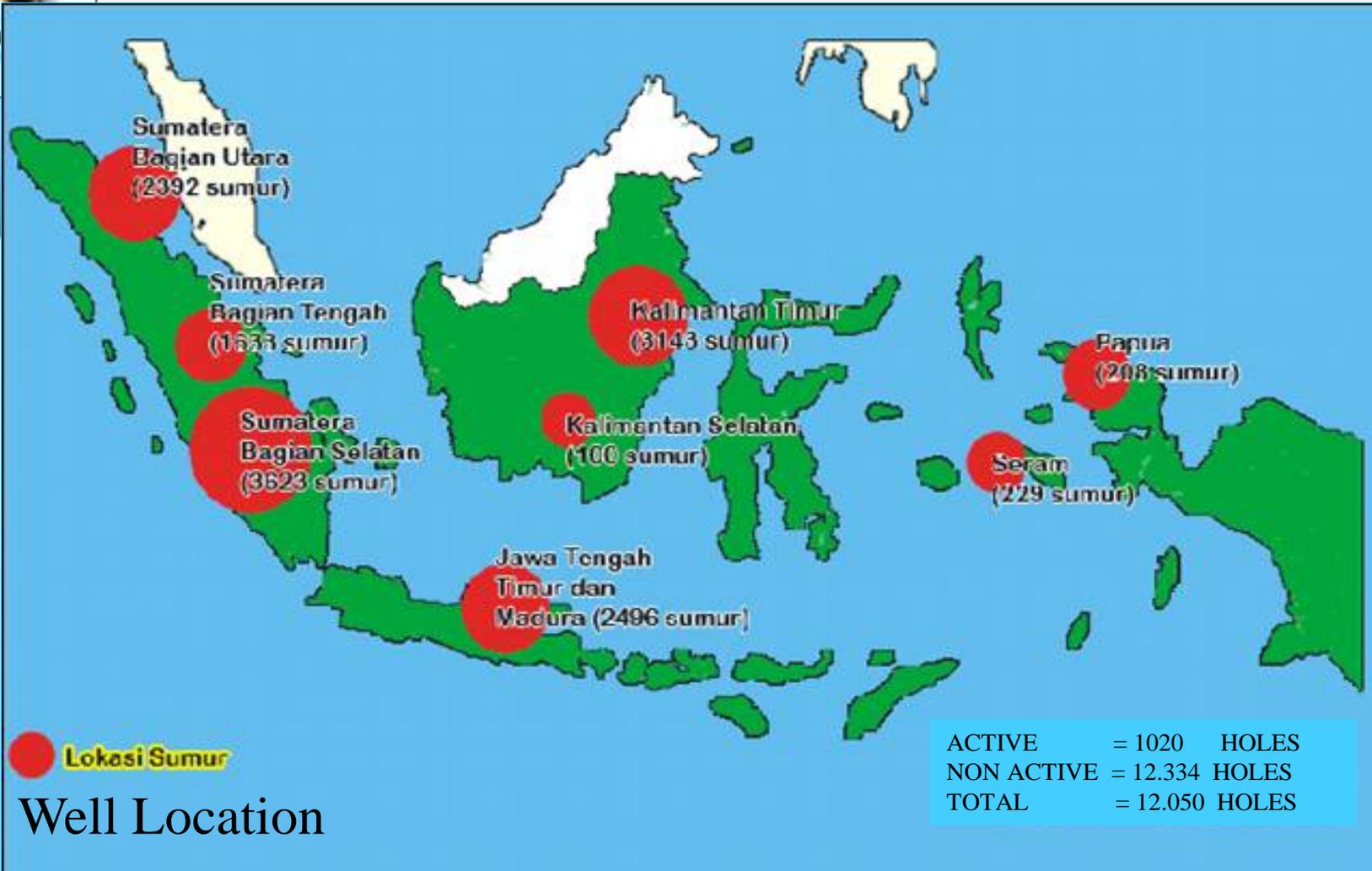
- ➡ The potency of suspended (old) wells that can be reactivated is around 1200. in KTI



OBJECTIVE OF THE RESEARCH

To introduce and apply a simple technology that is nowadays developed by UPN “Veteran” Yogyakarta, in order to contribute the increasing of National oil production

MAP SHOWING THE DISTRIBUTION OF OLD WELLS IN INDONESIA





Evaluation and modification in order to optimize the performance are continuously done.

Now the RIG is used to reactivate the suspended wells in Cepu field, and has been got the operational approval by Ditjen Migas (Oil & Gas Directorate General).





USE OF SIMPLE RIG

KDD-04 WELL, KEDINDING FIELD (2009)



USE OF SIMPLE RIG

KDD-04 WELL, KEDINDING FIELD (2009)



USE OF SIMPLE RIG

NG-06 WELL, NGUDAL FIELD



USE OF SIMPLE RIG

NG-06 WELL, NGUDAL FIELD





REACTIVATION OF SUSPENDED WELL By HAMMER DRILLING (2009)





**THE USE OF ESP (ELECTRIC
SUBMERSIBLE PUMP/175 TO
REACTIVATE SUSPENDED WELL**

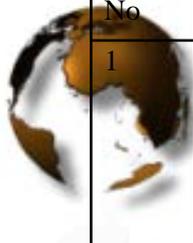


SUBSTITUTION OF CHEMICAL COMPOUND COLORING FOR BATIK BY NATURAL COLORING WITH PLANT OF INDIGOFERA TINKTORIA

(LPPM UPN VETERAN YOGYAKARTA)

OBJECTIVES

- To avoid the environment from negative effect of the use of chemical compound coloring.
- To optimize the function of critical land for sustainable development
- To increase the economic value of local vegetation.
- To increase the prosperity of rural community



No	Name of Plant	Color	
1	Indigofera tinctoria (Javanese: Tarum) producing blue color Kingdom : Plantae Divisi on : Magnoliophyta	Blue 	
	Class : Magnoliopsida Familiy : Fabanceae		
			



Audiensi Bapeda Bantul, LPPM UPN
"VETERAN" YOGYAKARTA



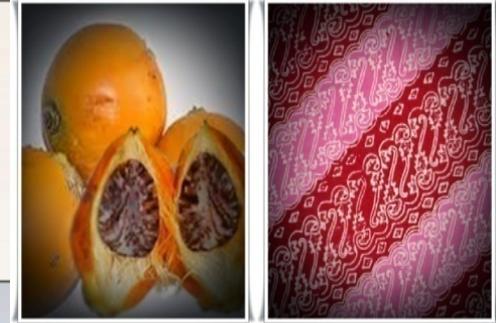
Pinang (*Areca Cathecu*)

Kingdom : Plantae

Division : Magnoliophyta

Class : Liliopsida

Family : Arecaceae



Red

Pinang is a plant that widely spread in various regions of Indonesia. Natural colors produced by it is red. The color obtained from the powder of the pinang seeds. The plant is cultivated by planted. Planting takes a long time, because these plants like palm trees, and therefore these plants can only be used if the plant is already mature enough.





TANK YOU
FOR YOUR ATTENTION