# **Andika Perbawa**

Geophysicist
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#### - PROFILE -

High performing geophysicist with overseas job exposure and invaluable almost six years working experience gained in Medco E&P Indonesia and Medco International Venture Limited Libya. Wide ranging experience in exploration and appraisal project. Familiar with comprehensive seismic interpretation, depth conversion, reservoir characterization, quantitative geophysics, seismic data acquisition, seismic data processing, non-seismic method, drilling project and prospect maturation. Demonstrate high performance practical skill in exploration application software and computational programming. Continuous record high achievement, strong technical leadership, good interpersonal communication skill, proven ability to work individually as good as in a team and deliver in timely manner.

### - EDUCATION -

## Institute of Technology Bandung (ITB)

Master of Science: Applied Geophysics

Research: Integration of Simultaneous Seismic Inversion, TOC

Prediction, and Pore Pressure Prediction in Preliminary of Shale Gas

Exploration

### Institute of Technology Bandung (ITB)

Bachelor of Science : Geophysical Engineering

Research: Synthetic Modelling of Time-Lapse Borehole Microgravity

Aug 2005 – June 2009

Aug 2009 – June 2011

GPA: 3.54 of 4.0

GPA: 3.89 of 4.0

# - WORK EXPERIENCE AND PROJECTS -

## Medco Energi, Jakarta, Indonesia

A publicly-listed Indonesia energy company with the focus on exploration and production of oil and gas. Medco has grown more than 35 years since well-known as drilling company become leading private oil and gas company from Indonesia. Currently, Medco has an oil and gas operation in Indonesia, Libya, Tunisia, Oman, Yemen, Papua Nugini and United States.

### Medco E&P Indonesia

Jun 2015 – now

- Exploration Geophysicist
  - Person in charge interpreting 2D seismic data over the Block A for prospect and lead reassessment
  - Provided new maps and new ideas in regional exploration

Jun 2014-May 2015

- Exploration Geophysicist
  - Performed regional 3D seismic interpretation, applied several depth conversion for reduce uncertainty, and delivered update final depth structure map for further exploration strategy
  - Actively involved in three appraisal drilling projects by designing and quality controlling VSP survey. Produced excellent quality VSP data to support seismic interpretation
  - Prospect maturation of A04 oil discovery structure. Generated update final depth structure map for final appraisal report
  - Assisted seismic data reprocessing in more than 1200 Km2 3D seismic volume. Generated new seismic volume which has improvement in static and reverberation elimination, higher frequency and detail seismic stratigraphy
  - Assisted 3D seismic characterization by giving advise and providing supporting data for better interpretation. Generated update acoustic impedance, pseudo volume shale and pseudo porosity distribution map

#### Medco E&P Indonesia

Jun 2010-May 2014

- Exploration Geophysicist
  - Involved in Tarakan basin characterization project to assess existing field and finding new play opportunity. Successfully built project environment with updated data for regional mapping
  - Assisted in Pastel-1 exploration drilling project by designing and quality controlling VSP survey
- Non-seismic Geophysicist
  - Project leader for IVEL resistivity survey in Iliran High for heavy oil identification in South Sumatra block. Successfully identify general structure and location of shallow heavy oil
  - Project leader for IVEL resistivity survey in Lagan Deep-1A well for shallow hazard identification in South Sumatra block. Successfully identify the location and distribution of pocket gas sand which potentially as drilling hazard prior to drilling a well.
  - Assisted and quality controlled passive seismic study for direct hydrocarbon detection in South Sumatra block. Successfully identify the area contains hydrocarbon and not. The result is supporting exploration strategy.
- Exploration Geophysicist
  - Performed 2D seismic data interpretation over Bengara I block and provided new update time and depth structure map.
  - Assisted South Sebuku-2 well drilling project by well siting well log and VSP survey
  - Contributed in Plan of Development proposal of South Sebuku gas field by providing geological finding and geophysical assessment report.
  - Assessed prospects and leads in Bengara I block and updated the resources
  - Performed 3D offshore seismic interpretation in Camar oil field by providing update depth structure map as an input for geological modeling

# Elnusa, Jakarta, Indonesia

The Indonesia national company that possesses combined competencies in oil & gas services: seismic, drilling and oilfield. Elnusa provide oil & gas services sector possessing strategic global alliances established with world-class oil & gas companies, in compliance with global standards in work safety and environment.

Geoscience Intern Aug 2008

• Performed 2D seismic data processing using Pre-Stack Time Migration with Geovecture software. Generated new seismic section with better signal to noise ratio

## - RESEARCH -

Research	Location	Year
Pertamina's gravity software development project	Bandung, West Java	2009
Gravity survey for bed rock identification	Panjang Island, Banten	2009
Land slide identification using seismic refraction, resistivity, and GPR methods	Seling village, Central Java	2008
Resistivity survey for hot spring identification	Kuningan, West Java	2008

# - LABORATORY ASSISTANTSHIP -

Laboratory	Position	Year
Seismic refraction	Assistant	2009
Computing in geophysics	Assistant	2008
Geo-statistic	Assistant	2008

# - COMPUTATIONAL SKILLS -

Geophysics and Geology Petrel, Humpson Russel, Geoframe, OpendTect, Golden Surfer,

software: Grav2D, Grav3D, Mag2D, Promax, Vista 7, Geovecture

Programming: Matlab, Python

Office: Microsoft Office, Open Office
OS: Windows, Linux, Macintosh

# - TRAININGS -

Training/Workshop	Location	Year
Seismic Data Analysis for Interpreter by Oz Yilmaz	Bandung	2013
Petroleum Geology and Petroleum System of Indonesia by Awang Satyana	Manado	2013
Medco Basic Leadership Program by Medco Learning Center	Bogor	2012
3D Seismic Interpretation Techniques by Alistair R. Brown	Bali	2012
Applied Geological Subsurface Mapping by Siamak Agak	Lombok	2012
Petrel: Introduction for G&G by Schlumberger	Jakarta	2011
Shale Gas School by Corelab	Jakarta	2010
Graduate Geoscience Training Acceleration Program by Medco E&P Indonesia	Jakarta and Palembang	2010
Subsurface Mapping Technique by Mustoto Moehadi	Bandung	2008

# - AWARDS AND HONORS -

Awards/Honors	Year
1st Winner Futsal Home Tournament Medco Energi	2010, 2011, 2012
1 <sup>st</sup> Winner National Geophysics Paper Contest	2009
Award for Outstanding Achievement (Dean List) by Mining and Petroleum Engineering Faculty	2007, 2008, 2009
Recipient of ITB Scholarship	2006, 2007, 2008,
	2009
3 <sup>rd</sup> Winner National Petroleum Students Competition	2008

# - WORKSHOPS/COURSES INSTRUCTOR -

<b>University</b> University of Gajah Mada, Yogyakarta	<b>Title</b> Shale gas potential in Indonesia	<b>Date</b> December 2013
Institute of Technology Sepuluh November, Surabaya	Seismic data interpretation	November 2013
University of Diponegoro, Semarang	Seismic data interpretation and introduction to unconventional resources	March 2013

### - PUBLICATIONS -

- Perbawa, A., Mustofa, A., Utama, F., 2014. Evaluating VSP Survey Pastel and Seputi Kiri Wells Case Study. Medco Technology Day. Jakarta
- Perbawa, A., Yudhatama, D., Arham, M.A., 2013. Application of Low Frequency Passive Seismic Method for Hydrocarbon Detection in S Field, South Sumatra Basin. Joint Convention Medan Indonesia Association of Geophysicist (HAGI) Indonesia Association of Geologist (IAGI). Medan.
- Perbawa, A., Kusuma, B., Winardhi, S., 2012. Integration of Seismic Inversion, Pore Pressure Prediction, and TOC Prediction in Preliminary Study of Shale Gas Exploration. 37<sup>th</sup> Indonesia Association of Geophysicist (HAGI) Annual Conference and Exhibition. Palembang
- Perbawa, A., 2011. Enhance Gravity Inversion Result Using Integration of Time-lapse Surface and Borehole Microgravity. Geophysics Journal Indonesia Association of Geophysicist (HAGI). Jakarta
- Perbawa, A., 2010. Enhance Gravity Inversion Result Using Integration of Time-lapse Surface and Borehole Microgravity. International Geosciences Conference and Exposition Society of Exploration Geophysicist Indonesia Association of Geophysicist (HAGI). Bali
- Perbawa, A., Putri, I, H., Kadir, W, G, A., Alawiyah, S., 2009. Synthetic Modeling of 4D Borehole Microgravity for Fluid Movement Monitoring in Complex Structure Models. 34<sup>th</sup> Indonesia Association of Geophysicist (HAGI) Annual Conference and Exhibition. Yogyakarta
- Perbawa, A., Putri, I, H., 2009. Pemodelan Sintetik Gaya Berat Mikro Selang Waktu Lubang Bor Menggunakan BHGM AP2009 Sebagai Studi Kelayakan Untuk Keperluan Monitoring dan Eksplorasi Hidrokarbon. National Geophysics Paper Contest. Bandung
- Juanda A, A., Perbawa, A., Sahara, D, P., Dwiperkasa, D, W., Bekti, R, P, A., 2008. Direct Current Resistivity Method for Shallow Hydrocarbon Exploration. 32<sup>nd</sup> Indonesia Petroleum Association Conference and Exhibition. Jakarta