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# DAFTAR PUSTAKA

Al-Amri, M., Mahmoud, M., Elkatatny, S., Al-Yousef, H., & Al-Ghamdi, T. (2017). Integrated petrophysical and reservoir characterization workflow to enhance permeability and water saturation prediction. *Journal of African Earth Sciences*, *131*, 105–116. http://dx.doi.org/10.1016/j.jafrearsci.2017.04.014.

Al-Muhaidib, A. M., Sen, M. K., & Toksöz, M. N. (2015). *Integration of Geology, Rock-Physics, Logs, and Pre-stack Seismic for Reservoir Porosity Estimation*. *Report*, Earth Resources Laboratory MIT, Cambridge.

Alyafei, N. (2021). *Fundamentals of Reservoir Rock Properties: Second Edition*. Hamad Bin Khalifa University Press, Qatar.

Aminzadeh, F. (2022). *Reservoir Characterization: Fundamentals and Applications*. John Wiley & Sons, USA.

Archie, G. E. (1941). The Electrical Resistivity Log as an Aid in Determining Some Reservoir Characteristics. *Transactions of AIME*, *146*, 54–62. https://doi.org/10.2118/942054-g.

Arum, L. S., & Rizaldi, A. R. (2022). Rock Physics Modelling and Extended Elastic Impedance Inversion as an Integrated Approach to Identify the Lithology Distribution of Hydrocarbon Reservoir (Tangos Field, Central Sumatera Basin). *The 47th Annual Scientific Meeting of Himpunan Ahli Geofisika Indonesia*, *October*, 1–9.

Asante-Okyere, S., Shen, C., Ziggah, Y. Y., Rulegeya, M. M., & Zhu, X. (2020). Principal component analysis (PCA) based hybrid models for the accurate estimation of reservoir water saturation. *Computers and Geosciences*, *145*, 1–11. https://doi.org/10.1016/j.cageo.2020.104555.

Asquith, G. B., & Gibson, C. R. (1982). *Basic Well Log Analysis For Geologists*. The American Association of Petroleum Geologists, USA.

Asquith, G., & Krygowski, D. (2004). *Basic Well Log Analysis: Second Edition*. The American Association of Petroleum Geologists (AAPG), USA.

Azeem, T., Chun, W. Y., Khalid, P., Qing, L. X., Ehsan, M. I., Munawar, M. J., &

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**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Wei, X. (2017). An integrated petrophysical and rock physics analysis to improve reservoir characterization of Cretaceous sand intervals in Middle Indus Basin, Pakistan. *Journal of Geophysics and Engineering*, *14*(2), 1–14. http://dx.doi.org/10.1088/1742-2140/14/2/212.

Bishop, M. G. (1999). *A Total Petroleum System of the Browse Basin, Australia*. *Report*, U.S. Geological Survey, Australia.

Blevin, J. E., Struckmeyer, H. I., Boreham, C., Cathro, D. L., Sayers, J., & Totterdell, J. M. (1997). *Browse Basin High Resolution Study North West Shelf, Australia*. *Report*, Australian Government, Australia.

Boggs, Sam, Jr. (2009). *Petrology of Sedimentary Rocks* (*Second Edition).* Cambridge University Press, United States of America.

Chai, T., & Draxler, R. R. (2014). Root mean square error (RMSE) or mean absolute error (MAE)? — Arguments against avoiding RMSE in the literature. *Geoscientific Model Development*, *7*(3), 1247–1250. https://doi.org/10.5194/gmd-7-1247-2014.

Correia, P., Astuti, B. S., & Pambudi, S. (2025). Petrophysical Analysis and Hydrocarbon Potential in Low Resistivity Sandstone Reservoirs in Kutai Basin, East Kalimantan. *Syntax Literate: Indonesian Scientific Journal*, *10*(10), 8629–8642. https://jurnal.syntaxliterate.co.id/index.php/syntax-literate/article/download/62099/11965/.

Cosentino, L. (2001). *Integrated Reservoir Studies*. Editions Technip, Paris.

Da Rocha, H. O., Da Costa, J. L., Carrasquilla, A. A. G., & Carrasco, A. M. V. (2019). Petrophysical characterization using well log resistivity and rock surface data. *Journal of Petroleum Science and Engineering*, *183*, 1–17. https://doi.org/10.1016/j.petrol.2019.106372.

Ellis, D. V, & Singer, J. M. (2008). *Well Logging for Earth Scientists, 2nd Edition*. Spinger, Netherlands.

Gassmann, F. (1951). Über die Elastizität poröser Medien. *Vierteljahrsschrift Der Naturforschenden Gesellschaft in Zürich*, *96*, 1–23. https://ngzh.ch/wp-content/uploads/2024/08/96_2.pdf.

Geoscience Australia (2022). *Regional Geology of the Browse Basin*. *Report*,

UNIVERSITAS
GADJAH MADA
**Pemodelan Log Teoritis Berbasis Litologi Untuk Karakterisasi Formasi Di Lapangan Poseidon, Cekungan Browse, Australia**
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**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Geoscience Australia, Australia.

Glover, P. W. J. (2000). *Petrophysics*. University of Aberdeen UK, UK.

Khan, W., Khattak, S. A., Anwar, S., Solangi, S. H., Wang, L., Kontakiotis, G., & Dhas, S. S. J. (2025). Petrophysical characterization and reservoir potential of the Lower Goru sandstone: A case study from the Sinjhoro Gas Field, Pakistan. *Journal of Natural Gas Geoscience*, *10*, 179–197. https://doi.org/10.1016/j.jnggs.2025.05.002.

Kumalasari, I. N., & Dewanto, O. (2016). Reservoir Rock Characterization Using Log-petrophysical, geochemical, and Thermal Method on Well I-1 and I-2 in Regions "Y" Central Sumatra. *Proceedings PIT HAGI 41*, *1*, 1–14.

Lai, J., Su, Y., Xiao, L., Zhao, F., Bai, T., Li, Y., Li, H., Huang, Y., Wang, G., & Qin, Z. (2024). Application of geophysical well logs in solving geologic issues: Past, present and future prospect. *Geoscience Frontiers*, *15*(3), 1–34. https://doi.org/10.1016/j.gsf.2024.101779.

Li, R., Chen, Q., Deng, H., Fu, M., Hu, L., & Xie, X. (2021). Quantitative evaluation of the carbonate reservoir heterogeneity based on production dynamic data: A case study from Cretaceous Mishrif formation in Halfaya oilfield, Iraq. *Journal of Petroleum Science and Engineering*, *206*, 1–12. https://doi.org/10.1016/j.petrol.2021.109007.

Lucia, F. (2007). *Carbonate Reservoir Characterization An Integrated Approach: Second Edition*. Springer Berlin Heidelberg, New York.

Magoon, L. B., & Dow, W. G. (1991). *The Petroleum System-From Source to Trap*. The American Association of Petroleum Geologists, USA.

Mavko, G., Mukerji, T., & Dvorkin, J. (2020). *The Rock Physics Handbook* (Third Edit). Cambridge University Press, UK.

Milsom, J. (2003). *Field Geophysics: Third edition*. John Wiley & Sons Ltd, England.

Munyithya, J. M., Ehirim, C. N., & Dagogo, T. (2019). Rock Physics Models and Seismic Inversion in Reservoir Characterization, "MUN" Onshore Niger Delta Field. *International Journal of Geosciences*, *10*, 981–994. https://doi.org/10.4236/ijg.2019.1011056.

UNIVERSITAS GADJAH MADA
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**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Nabawy, B. S., Abudeif, A. M., Masoud, M. M., & Radwan, A. E. (2022). An integrated workflow for petrophysical characterization, microfacies analysis, and diagenetic attributes of the Lower Jurassic type section in northeastern Africa margin: Implications for subsurface gas prospection. *Marine and Petroleum Geology*, *140*, 1–18. https://doi.org/10.1016/j.marpetgeo.2022.105678.

Niri, M. E. (2015). *Seismic data integration and multi-objective optimization for 3D reservoir characterization and model building*. *Dissertation,* Doctor of Philosophy at The University of Western Australia, Australia.

Okoli, A. E., & Agbasi, O. E. (2021). Inclusive reservoir characterization from rock physics and sequence stratigraphic analyses of Middle Miocene, Niger delta. *Petroleum Research*, *6*(3), 213–223. https://doi.org/10.1016/j.ptlrs.2021.01.001.

Onita, F. B., Ebeh, C. O., & Iriogbe, H. O. (2024). Theoretical advancements in operational petrophysics for enhanced reservoir surveillance. *Engineering Science & Technology Journal*, *5*(8), 2576–2588. https://doi.org/10.51594/estj.v5i8.1445.

Philpotts, A. R., & Ague, J. J. (2022). *Principles of Igneous and Metamorphic Petrology* (Third Edition). Cambridge University Press, UK.

Qin, Y., Zhu, X., Zhu, S., Tan, C., Zhang, S., Zhu, J., Yan, H., & Zhao, F. (2024). Evolution of provenance and sedimentary records in multiphase rift basins: Insights from petrology, detrital zircon geochronology, and seismic reflections of Oligocene Liaozhong Depression, Bohai Bay Basin, China. *Marine and Petroleum Geology*, *163*, 1–20. https://doi.org/10.1016/j.marpetgeo.2024.106789.

Raymer, L. L., Hunt, E. R., & Gardner, J. S. (1980). An Improved Sonic Transit Time-to-Porosity Transform. *SPWLA Twenty-FirstAnnual Logging Symposium*, *July*, 8-11.

Rider, M. (2002). *The Geological Interpretation of Well Logs, 2nd Edition*. Whittles Publishing, Scotland.

Sahari, S., Noh, K. A. M., & Salim, A. M. A. (2019). Synthetic Density Log and

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GADJAH MADA
**Pemodelan Log Teoritis Berbasis Litologi Untuk Karakterisasi Formasi Di Lapangan Poseidon, Cekungan Browse, Australia**
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**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Effective Density Porosity Estimation of Kati Formation, Seri Iskandar, Perak. *Petroleum and Coal Article*, *61*, 177–189. https://www.vurup.sk/wp-content/uploads/2019/01/PC_x_2018_Sahari_162_rev1.pdf.

Sari, T. W., & Sujito. (2019). Lithology Interpretation Based on Well Log Data Analysis in "JS" Field. *Applied Research on Civil Engineering and Environment (ARCEE)*, *01*(01), 31–37. https://media.neliti.com/media/publications/335351-lithology-interpretation-based-on-well-l-36eb9682.pdf.

Schlumberger. (1989). *Log Interpretation Principles/Applications*. Schlumberger Wireline & Testing, Texas.

Schlumberger. (2016). The defining series: Basic well log interpretation. *Oilfield Review*, 1–2. https://www.slb.com/resource-library/oilfield-review/defining-series/defining-log-interpretation.

Selley, R. C., & Sonnenberg, S. A. (2015). *Elements Of Petroleum Geology* (Third Edition). Elsevier, USA.

Stephenson, A. E., & Cadman, S. J. (1994). Browse Basin, Northwest Australia: the evolution, palaeogeography and petroleum potential of a passive continental margin. *Palaeogeography, Palaeoclimatology, Palaeoecology*, *111*, 337–366. https://doi.org/10.1016/0031-0182(94)90071-X.

Waxman, M. H., & Smits, L. J. (1968). Electrical Conductivities in Oil-Bearing Shaly Sands. *SPE Journal*, *8*(2), 107–122. https://doi.org/10.2118/1863-A.

Willmott, C. J., & Matsuura, K. (2005). Advantages of the mean absolute error (MAE) over the root mean square error (RMSE) in assessing average model performance. *Climate Research*, *30*(1), 79–82. https://doi.org/10.3354/cr030079.

Worthington, P. F. (1985). The evolution of shaly-sand concepts in reservoir evaluation. *The Log Analyst*, *26*(1), 23–40. https://kupdf.net/download/worthington-p-f-1985-the-evolution-of-the-shaly-sand-concepts-in-reservoir-evaluation_58da1886dc0d604308c346c7_pdf.

Wu, X., Xu, H., Zhou, H., Wang, L., Jiang, P., & Wu, H. (2024). Improving lithofacies prediction in lacustrine shale by combining deep learning and well

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GADJAH MADA
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**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

log curve morphology in Sanzhao Sag, Songliao Basin, China. *Computers and Geosciences*, *193*(105735), 1–13. https://doi.org/10.1016/j.cageo.2024.105735.

Wyllie, M. R. J., Gregory, A. R., & Gardner, G. H. (1958). An experimental investigation of factors affecting elastic wave velocities in porous media. *Geophysics*, *23*(3), 459–493. https://doi.org/10.1190/1.1438493.

Wyllie, M. R. J., Gregory, A. R., & Gardner, L. W. (1956). Elastic Wave Velocities in Heterogeneous and Porous Media. *Geophysics*, *21*(1), 41–70. https://doi.org/https://doi.org/10.1190/1.1438217.

Yahia, M., Szabó, I., Badawi, M., Radwan, A. A., Kiss, K., Leila, M., & Szabó, N. P. (2025). Integrated petrophysical and seal characterization of the heterogeneous jurassic plover formation for CO2 storage assessment in Northwest Australia. *Scientific Reports*, *15*, 1–26. https://doi.org/10.1038/s41598-025-17135-6.