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DAFTAR PUSTAKA

Amaefule, J.O., Altunbay, M., Tiab, D., Kersey, D.G., dan Keelan, D.K., 1993, *Enhanced Reservoir Description: Using Core and Log Data to Identify Hydraulic (Flow) Units and Predict Permeability in Uncored Intervals/Wells:* SPE Annual Technical Conference and Exhibition, Houston, Texas, 3-6 October, SPE Paper 26436, 16 p

Asquith, G. B., dan Gibson, C. R., 1982, *Basic well log analysis for geologists:* Tulsa, Oklahoma, American Association of Petroleum Geologists.

Barber, A. J., Crow M. J., dan Milsom J. S., 2005, *Sumatra: Geology, Resources and Tectonic Evolution*, Geological Society Memoir No. 31, London: The Geological Society.

Boggs, S., Jr., 2009, *Petrology of sedimentary rocks (2nd ed.):* Cambridge, UK.

Cahyaningati, W.P., Mariyanto, M., Lestari, W., Amelia, R., Yusroni, S.A., dan Sapdawati, S., 2021, *Effect of gamma ray normalization on net pay calculation, a case study of "PE" field, Central Sumatra basin:* Journal of Physics: Conference Series, v. 1876, 012024.

Cuddy, S., 2017, *The difference between net pay and net reservoir, how to pick them and their application to reservoir modelling*: Technical presentation at Aberdeen Formation Evaluation Society (AFES), 27 September 2017, Aberdeen, Scotland, 35 p.

Direktorat Jenderal Minyak dan Gas Bumi, 2024, *Statistik Minyak dan Gas Bumi 2024*: Jakarta, Kementerian Energi dan Sumber Daya Mineral, 106 hlm.

Dwiyono, I.F., dan Winardi, S., 2014, *Kompilasi metode water saturation dalam evaluasi formasi:* Prosiding Seminar Nasional Kebumian Ke-7, Universitas Gadjah Mada, Yogyakarta, hlm. 1–10.

Eubank, R.T., dan Makki, A. C., 1981, *Structural geology of the Central Sumatra backarc basin.* Proceedings Indonesian Petroleum Association, Tenth Annual Convention, p. 153-174.

Fachreza, M., Mastoadji, E., dan Witjaksono, K., 2023, *Petrophysical rock-typing building using Multi Resolution Graph-based Clustering (MRGC) in defining porosity & permeability relationship: Cases in Central Sumatra Basin: In* Proceedings of the Joint Convention Pangkalpinang 2023 (IAGI-IAFMI-HAGI-IATMI-PERHAPI), Pangkalpinang, hlm. 1–10.

Glover, Dr. Paul W.J., 2000, *Petrophysics.* UK: University of Aberdeen.

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Heidrick, T. L., dan Aulia, K., 1993, *A Structural and Tectonic Model of the Coastal Plains Block, Central Sumatra Basin, Indonesia.* Indonesian Petroleum Association, 22nd Annual Convention, IPA 93-1.1-179 Jakarta.

Katz, B.J., dan Dawson, W.C., 1997, *Pematang-Sihapas Petroleum System of Central Sumatra,* in Howes, J.V.C., and Noble, R.A., eds., Proceedings of the International Conference on Petroleum Systems of SE Asia and Australasia: Jakarta, Indonesian Petroleum Association, p. 439–456.

Koesoemadinata, R.P., 1980, *Geologi Minyak dan Gas Bumi, Jilid 2*: Bandung, Institut Teknologi Bandung.

Mertosono, S., dan Nayoan, G. A. S., 1974, *The Tertiary basinal area of central Sumatra.* Proceedings Indonesian Petroleum Association, Third Annual Convention, p. 63-76.

Morad, S., Al-Ramadan, K., Ketzer, J.M., dan De Ros, L.F., 2010, *Diagenesis and heterogeneity of sandstone reservoirs*: Tulsa, Oklahoma, American Association of Petroleum Geologists Bulletin, v. 94, no. 8 (August 2010), pp. 1267–1309.

Nabawy, B.S., Rashed, M.A., Mansour, A.S., dan Afify, W.S.M., 2018, *Petrophysical and microfacies analysis as a tool for reservoir rock typing and modeling: Rudeis Formation, off-shore October Oil Field, Sinai*: *Marine and Petroleum Geology*, v. 97, hlm. 260–276.

Nichols, G., 2009, *Sedimentology and stratigraphy (2nd ed.)*, Wiley-Blackwell.

Ordas, P.R., Abdurrokhim, Sendjaja, Y.A., dan Nainggolan, T.B., 2023, *Analisis Lingkungan Pengendapan dan Sistem Petroleum Berdasarkan Integrasi Data Seismik dan Sumur di Pesisir Cekungan Sumatra Tengah:* Jurnal Ilmu dan Teknologi Kelautan Tropis, v. 15, no. 2, p. 149–165.

Pereira, J.L.L., 2004, *Permeability prediction from well log data using multiple regression analysis:* West Virginia University.

Prasetyo, H., dan Musu, J.T., 2010, *Optimalisasi produksi pada reservoir permeabilitas rendah melalui karakterisasi reservoir: pentingnya studi petrografi dan lingkungan pengendapan*: Proceeding PIT IAGI Lombok 2010 – The 39th IAGI Annual Convention and Exhibition, Lombok, Indonesia, Indonesian Association of Geologists (IAGI).

Pratama, A., Mardiana, U., Mohamad, F., dan Syaripudin, E., 2018, *Penentuan Zona Hidrokarbon Formasi Menggala Lapangan "A" Cekungan Sumatra Tengah berdasarkan Analisis Petrofisika*: Padjadjaran Geoscience Journal, v. 2, no. 3, p. 175–182.

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Putri, S.A.H., Mardiana, U., Mohammad, F., dan Junalia, R., 2023, *Sifat Fisik Batuan Reservoir Batupasir Formasi "Merak" Bagian Atas, Lapangan "Aruna", Cekungan Sumatra Tengah, Berdasarkan Analisis Petrofisika:* Padjadjaran Geoscience Journal, v. 7, no. 2, p. 1267–1284.

Rider, M., 1996, *The Geological Interpretation of Well Logs* (2nd ed.): Malta, Interprint Ltd.

Sari, M., Nugroho, H., Hidajat, W.K., dan Satriawan, O., 2013, *Analisis petrofisika dengan metode deterministik dan probabilistik serta perhitungan volume hidrokarbon dengan metode well basis pada sumur MG-04 di Struktur Musi, Cekungan Sumatera Selatan:* Geological Engineering E-Journal, v. 5, no. 1, p. 196–212

Schlumberger, 1997, *Log Interpretation Charts*, Schlumberger Wireline & Testing, Houston.

Simm, R., dan Bacon, M., 2014, *Seismic amplitude: An interpreter's handbook*: Cambridge, United Kingdom, Cambridge University Press, 271 p.

U.S. Geological Survey, 2019, *Saline water and salinity*: U.S. Geological Survey, Water Science School, https://www.usgs.gov/water-science-school/science/saline-water-and-salinity (diakses pada Mei 2026).

Walker, R. G., dan James, N. P., 1992, *Facies models: Response to sea level change:* St. John's, Newfoundland, Geological Association of Canada.

Williams, H.H., dan Eubank, R.T., 1995, *Hydrocarbon habitat in the rift graben of the Central Sumatra Basin, Indonesia:* Geological Society Special Publication, v. 80, p. 331–371.