

DAFTAR PUSTAKA

- Abdassah, D., 2014, *Pedoman Klasifikasi dan Perkiraan Sumberdaya Gas Metana Batubara (GMB)*, Pertamina-Institut Teknologi Bandung.
- AGI, 1976, *Dictionary of Geological Terms*, Anchor Press/Doubleday, Garden City, New York, pp 472.
- Amijaya, D.H., 2004, *Paleoenvironmental, paleoecological and thermal metamorphism implications on the organic petrography and organic geochemistry of Tertiary Tanjung Enim coal, South Sumatra Basin, Indonesia*. Thesis for Doctor Philosophy. Aachen University.
- American Society for Testing and Materials (ASTM) D7569., 2010. *Standard Practice for Determination of Gas Content of Coal – Direct Desorption Method*.
- American Society for Testing and Materials (ASTM) D 3302., 2015, *Standard test method for total moisture in coal*.
- American Society for Testing and Materials (ASTM) D 3173., 2011, *Standard test method for moisture in the analysis sample (% adb)*.
- American Society for Testing and Materials (ASTM) D 3174., 2012, *Standard test method for ash analysis*.
- American Society for Testing and Materials (ASTM) D 3175., 2011, *Standard test method for volatile matter analysis*.
- American Society for Testing and Materials (ASTM) D 4329., 2012, *Standard test method for analysis of sulphur*.

Australian Standard TM (AS) 3980., 1999. *Guide to The Determination of Gas Content of Coal – Direct Desorption Method*, . Published by Standards Australia.

Australian Standard (AS) D 1038., 2008, *Analysis of relative density*. Part 21.1.1

Badan Geologi., 2009, *Peta sebaran lokasi batubara Indonesia*, Kementrian Energi dan Sumber Daya Mineral.

Bertard, C. B., Bruyet, B., dan Gunther, J., 1970. *Determination of desorbable gas concentration of coal (direct method)*. International Journal of Rock Mechanics and Mining Sciences. V. 7. p. 43.

Bohacs, K.M., dan Suter, J., 1997, *Sequence stratigraphic distribution of coaly rocks: fundamental controls and paralic examples*. AAPG Bulletin, v. 81, no. 10, p. 1612 – 1639.

Bustin, R. M., dan Clarkson, C. R, 1998, *Geological control on coalbed methane reservoir capacity and gas content*: International Journal of Coal geology, v. 38, p. 3 – 26.

Butland, C.I., dan Moore, T.A., 2008. *Secondary biogenic coal seam gas reservoirs in New Zealand: A preliminary assessment of gas contents*. International Journal of Coal Geology, 76(1-2): 151-165.

Chalmers, G.R.L., Bustin, R.M., 2007, *On the effects of petrographic composition on coalbed methane sorption*; International Journal of Coal Geology 69, 288–304.

Cai, Y., 2014, *Preliminary Evaluation of Gas Content of the No.2 Coal Seam in the Yanchuannan Area, Southeast Ordos Basin, China*. Journal of Petroleum Science and Engineering 122, 675-689.

- Clarkson, C.R., dan R.M. Bustin, 1997, *Variation in permeability with lithotype and maseral composition of Cretaceous coals of the Canadian Cordillera*: International Journal of Coal Geology, v. 33, p. 135-151.
- Charles, E.B., Todd, A., Dallegge dan Arthur, C.C., 2001, *USGS Coal Desorption Equipment And A Spreadsheet For Analysis Of Lost And Total Gas From Canister Desorption Measurements*, U.S. Department of The Interior, U.S. Geological Survey.
- Craft, B. C. dan Hawkins, H. F., 1991, *Applied Petroleum Reservoir Engineering*, Prentice-Hall Inc., Englewood Cliffs, N.J.
- Crosdale, P.J., Moore, T.A., dan Mares, T.E., 2008, *Influence of moisture content and temperature on methane adsorption isotherm analysis for coals from a low-rank, biogenically-sourced gas reservoir*: International Journal of Coal Geology, v. 76, p. 166-174.
- Cui, X., 2006, *Controls of Coal Fabric on Coalbed Gas Production and Compositional Shift in Both Field Production and Canister Desorption Test*, SPE -89035-PA, U. of British Columbia.
- Dariusz, S., Picardal, F., Turich, C., Schaperdoth, I., Macalady, J., Lipp, J.S., Lin, Y.S., Ertefai, T.F., Schubotz, F., Hinrichs, K.U., Mastalerz, M., dan Schimmelmann, A., 2008, *Methanogenic Microbial Degradation of Organic Matter in Indiana Coal Bed*, Appl. Environ. Microbiol. April 2008 vol. 74 no. 8 2424-2432.
- Edbrooke, S.W., Sykes, R., Pocknall, D.T., 1994. *Geology of the Waikato Coal Measures, Waikato Coal Region, New Zealand, Monograph 6*. Institute of Geological and Nuclear Sciences Limited, Lower Hutt, New Zealand.
- Eddy, G., 1982, *Relationship of Methane Content of Coal Rank and Depth: Theoretical vs. Observed*, SPE/DOE 10800, U.S. Dept. of Energy.

- Eddy, G. E., Rightmire, C. T., Byren, C. W., 1982, *Relationship of methane content of coal rank and depth: theoretical vs observed*; Society of Petroleum Engineers, Dept. of Interior, Proceedings, Unconventional Gas Symposium, Pittsburg, P. A, SPE/DOE 108800, p 117 – 122.
- Ettinger, I., Eremin, I., Zimakov, B., dan Yanovskaya, M., 1966, *Natural factors influencing coal sorption properties, Petrography and sorption properties of coal*; Fuel 45, p 267 – 275.
- Ertekin, T., 2008, *Engineering of Coalbed Methane Reservoirs*, Pennsylvania State University, TX.
- Faiz, M., Saghaf, A., Sherwood, N., Wang, N., 2007. *The influence of petrological properties and burial history on coal seam methane reservoir characterization, Sydney Basin: Australia*. International Journal of Coal Geology 70, 193–208.
- Flores, R.M., Rice, C.A., Stricker, G.D., Warden, A. and Ellis, M.S., 2008. *Methanogenic pathways of coal-bed gas in the Powder River Basin, United States: The geologic factor*. International Journal of Coal Geology, 76(1-2): 52-75.
- Gash, B. W. 1991, *Measurement of rock properties in coal for coalbed methane production*, SPE 22909, 66th Annual Technical Conference and Exhibition of the Society of Petroleum Engineers, Dallas, TX.
- Hall, R., Witts, D., Nichols, G., dan Morley, R., 2012, *A new depositional and provenance model for the Tanjung Formation, Barito Basin, SE Kalimantan, Indonesia*, Journal of Asian Earth Sciences pp. 77-104.
- Heryanto, H., 2010, *Paleogeografi Cekungan Tersier Barito, Kalimantan*. Pusat Studi Geologi, Bandung.
- Hildenbrand, A., Krooss, B.M., Busch, A., Gaschnitz, R., 2006. *Evolution of methane sorption capacity of coal seams as a function of burial history —*

a case study from the Campine Basin, NE Belgium; International Journal of Coal Geology 66, 179–203.

International Standard (ISO) 7404-2., 2009, *Methods for the petrographic analysis of coals – Part 2: Methods of preparing coal samples*.

International Standard (ISO) 7404-3., 1994, *Methods for the petrographic analysis of bituminous coal and antrachite – Part 3: Method of determining maseral group composition*.

International Standard (ISO) 7404-5., 2009, *Methods for the petrographic analysis of coals – Part 5: Method of determining microscopically the reflectance of vitrinite*.

International Standard (ISO) 11760., 2005, *Classification of coals*.

Kim, A. G., 1978, *Experimental studies on the origin and accumulation of coalbed gas* : U.S. Bureau of Mines, Report of Investigation 8317, 18p.

Kissell, F. N., McCulloch, C. M., dan Elder, C. H. 1973. *The Direct Method of Determining Methane Content of Coalbeds for Ventilation Design*. U.S. Bureau of Mines. RI 7767.

Kissell, F. N., 1973; Smith, D. M., dan Williams, F. L, 1981. *A new technique for determining the methane content of coal*.

Koesoemadinata, R.P, 2000. *Tectono-Stratigraphic Frame Work of Tertiary Coal Deposits of Indonesia*. Proceeding Southeast Asian Coal Geology Conference, Bandung, Indonesia, 19-20 June.

Laxminarayana C., Crosdale P.J., 1999. *Role of coal type and rank on methane sorption characteristics of Bowen Basin, Australia coals*. International Journal of Coal Geology 40, 309–325.

- Laxminarayana, C. and Crosdale, P.J., 2002. *Controls on methane sorption capacity of Indian coals*. AAPG Bulletin, 86(2): 201-212.
- Levine, J. R., 1993, *Coalification: The evolution of coal as source rock and reservoir rock for oil and gas*: in Law, B. E. and Rice, D. D., eds.. Hydrocarbons from coal, American Association of Petroleum Geologists Studies in Geology Number 38, Tulsa, Oklahoma, The American Association of Petroleum Geologists, p. 39-78.
- Li, Z.S., Ward, C.R. dan Gurba, L.W., 2007. *Occurrence of non-mineral inorganic elements in low-rank coal maserals as shown by electron microprobe element mapping techniques*. International Journal of Coal Geology, 70(1-3): 137-149.
- Mares, T. E., 2009, *An Investigation of The Relationship Between Coal and Gas Properties in the Huntly Coalfield, New Zealand*. Thesis for Doctor Philosophy. University of Canterbury.
- Mazumder, S. and Sosrowidjojo, I.B., 2010, *The Late Miocene Coalbed Methane System in the South Sumatra Basin of Indonesia*. SPE 133488-PP, Paper presented at the SPE Asia Pacific Oil & Gas Conference and Exhibition, Brisbane, Australia, 18-20 October 2010, 29 p.
- McLennan, J. D., Schafer, P. S., dan Pratt, T. J., 1995. *A Guide to Determining Coalbed Gas Content*, Gas Research Institute Report, GRI-94/0396.
- McCabe, P. J., 1984. *Depositional environments of coal and coal-bearing strata*. In: Rahmani R.A. and Flores, R.M. (eds.). *Sedimentology of coal and coal-bearing sequences*. Special Publication, International Association of Sedimentologists, Blackwell Scientific Publications.
- Moore, T.A, dan Butland, C.I., 2005. *Coal seam gas in New Zealand as a model for Indonesia*. In: S. Prihatmoko, S. Digidowirogo, C. Nas, T. van Leewen

and H. Widjajanto (Editors), IAGI Special Issues 2005: Indonesian Mineral and Coal Discoveries. Indonesian Association of Geologists, Indonesia, pp. 192-200.

Netherwot, R., 2003, *A Geological Overview of Indonesia*, Jakarta, PT. Shlumberger Indonesia.

Newman, N.A., Moore, T.A. and Esterle, J.S., 1997, *Geochemistry and petrography of the Taupiri and Kupakupa coal seams, Waikato Coal Measures (Eocene), New Zealand*. International Journal of Coal Geology, 33(2): 103-133.

Pertamina, 2016, *Pedoman Pengelolaan Keteknikan Reservoir dan Produksi Minyak dan Gas Bumi, Hidrokarbon Non Konvensional, dan Geothermal*. Unpublished.

Pertamina, 2013, *Laporan Studi G&G WK GBM Tanjung II, Cekungan Barito, Kalimantan Selatan*. Unpublished.

Pertamina Hulu Energi (PHE), 2015, *Peta Administratif Lapangan GMB Tanjung II Propinsi Kalimantan Selatan*. Unpublished.

Pertamina Hulu Energi (PHE), 2014, *Laporan Studi Geology, Geophysics, Reservoir and Hydrogeology WK GBM Tanjung II, Cekungan Barito, Kalimantan Selatan*. Unpublished.

Richard, E. C., dan Pashin, J. C, 2004, *Relationship of sorption capacity to coal quality : CO₂ sequestration potential of coalbed methane reservoirs in the Black Warrior Basin*. Geological Survey of Alabama Report, 11p.

Rice, D. D., 1993. *Composition and Origin of Coalbed Gas*. In: Law, B.E., Rice, D.D. (Eds.), Hydrocarbons from coal. American Association of Petroleum Geologists Studies in Geology, 38, 159-184.

- Rice D. D, and Claypool G. E., 1981, *Generation, accumulation, and resources potential of biogenic gas*: American Association of Petroleum Geologists Bulletin, v. 65, no. 1, p. 5-25.
- Rightmire, C.T., Eddy, G. E., and Kirr, J. N., eds., 1984, *Coalbed Methane Resources of the United States*: American Association of Petroleum Geologists Studies in Geology Series Number 17, Tulsa, Oklahoma, The American Association of Petroleum Geologists, 378 p.
- Rogers, R., Ramurthy, K., Rodvelt, G., dan Mullen, M., 2007, *Coalbed Methane Principles and Practices*: Oktibbeha, Starkville MS, USA.
- Satyana, A.H., 1995, *Paleogene Unconformities in The Barito Basin, Southeast Kalimantan: A Concept for The Solution of The "Barito Dilemma" and A Key to The Search for Paleogene Structures*, 24th Annual Convention Proceedings, Indonesian Petroleum Association, Jakarta.
- Sapiie, B., Rifiyanto, A., dan Perdana, L.A., 2014, *Cleats Analysis and GMB Potential of the Barito Basin, South Kalimantan, Indonesia*, AAPG International Conference & Exhibition, Istanbul, Turkey.
- Seidle, J., 2011. *Fundamentals of Coalbed Methane Reservoir Engineering*, PennWell Corporation, 2011.
- Spears, R. W., 2014, *Desorbed Canister Gas Sampling and Gas Isotopic Analysis Procedures and Practices: A Case Study of Two Coalbed Methane Wells from the Lower Saxony Basin, Germany*, SPWLA-2014-V55N1A4, ExxonMobil Production Company.
- Sosrowidjojo, I.B., 2013. *Coal Geochemistry of The Unconventional Muara Enim Coalbed Reservoir, South Sumatera Basin: A Case Study From The Rambutan Field*. Indonesian Mining Journal, 16, no.2, p. 71-81.

- Sosrowidjojo, I.B. and Saghafi, A., 2009. *Development of the first coal seam gas exploration program in Indonesia: Reservoir properties of the Muaraenim Formation, South Sumatra*. International Journal of Coal Geology, 79, p. 145-156.
- Stevens, S.H., dan Hadiyanto, 2004, Indonesia: *Coalbed Methane Indicators and Basin Evaluation*, SPE Asia Pacific Oil and Gas Conference and Exhibition, Perth, Australia.
- Stricker, G.D., Flores, R.M., McGarry, D.E., Stillwell, D.P., Hoppe, D.J., Stillwell, C.R., Ochs, A.L., Ellis, M.S., Osvald, K.S., Taylor, S.L., Thorvaldson, M.C., Trippi, M.H., Grose, S.D., Crockett, F.J., dan Shariff, A.J., 2006. *Gas desorption and adsorption isotherm studies of coals in the Powder River Basin, Wyoming and adjacent basins in Wyoming and North Dakota*. U.S. Geological Survey Open-File Report 2006-1174.
- Tissot, B. P., and Welte, D. H., 1984, *Petroleum Formation and Occurrence*: New York, Springer-Verlag, 699 p.
- Twombly, G., Stepanek, S.H. and Moore, T.A., 2004, *Coalbed methane potential in the Waikato Coalfield of New Zealand: A comparison with developed basins in the United States*, New Zealand Petroleum Conference Proceedings.
- Ulanovskii M. L., 2011, *Origin of methane in coal beds in the initial and intermediate stages of coalification*; Coke and Chemistry, v. 54, no. 1, p. 4-6.
- Ulery, J. P., dan Hyman, D. M., 1991. *The modified direct method of gas content determination: Application and results*. Paper 9163 in Proceedings of the 1991 International Coalbed Methane Symposium. Tuscaloosa: University of Alabama.

Wang, K., 2011, *Adsorption characteristic of lignite in China*. Journal of Earth Science, Vol. 22, No. 3 p. 371-376.

Ward, C. R., 1984, *Coal Geology and Coal Technology*, Blackwell Scientific, Publishers, 345 p.

Warwick, P.D., Breland Jr, F.C. and Hackley, P.C., 2008, *Biogenic origin of coalbed gas in the northern Gulf of Mexico Coastal Plain, U.S.A.* International Journal of Coal Geology, 76(1-2): 119-137.

Yao, Y., Liu, D., dan Qiu, Y., 2013, *Variable gas content, saturation, and accumulation characteristics of Weibei coalbed methane pilot-production field in the southeastern Ordos Basin, China* AAPG Bulletin, August 2013, v. 97, p. 1371-1393.

Yao, Y., Liu, D., Tang, D., Tang, S., dan Huang, W., 2009. *Fractal characterization of adsorption-pores of coals from North China: An investigation on CH₄ adsorption capacity of coals*. International Journal of Coal Geology, 73(1): 27-42.

Yee, D., Seidle, J. P, Hanson, W. B, 1993, *Gas sorption on coal and measurement of gas content*: in Law, B. E, Rice, D. D, (Eds.), *Hydrocarbons from Coal*, AAPG Studies in Geology, Chap. 9, p. 203 – 218.