

P-ISSN 2301-8097 VOL. 12 NO. 1, MARCH 2023 E-ISSN 2540-9352

Analysis of Liquid Loading and Sandness in Gas Wells A1, A2 And Their Correction with The Plunger Lift Method in Field B

Ali Musnal, Richa Melysa

Page 1-9

Pressure Transient Analysis using Generated Simulation Reservoir Data for Dual Porosity Model of Naturally Fractured Reservoir

> Sri Feni Maulindani, Taufan Marhaendrajana, Doddy Abdassah Page 10-18

Calculation Of Evaporation Loss in Tank Y and Tank Z at SA Field PT X Prabumulih

Sefilra Andalucia

Page 19-27

Maximum Allowable Annular Surface Pressure (MAASP) Standards Calculations Study; a Field
Case Study

Amega Yasutra, Ganesha R Darmawan, Muhammad Rafki Page 28-37

Investigation of experimental study of biomass performance of wood pellets, palm shells, and rice husk in vacuum pressure gasification system

Novandri Tri Setioputro, Muhtar Kosim, Dede Iman Saputra

Page 38-46











pISSN: 2301-8097 eISSN: 2540-9352

Journal of Earth Energy Engineering



Accredited by Directorate General of Strengthening for Research and Development, Ministry of Research, Technology, and Higher Education of Republic Indonesia No: 10/E/KPT/2019

VOL. 12 NO. 1, MARCH 2023

PUBLISHER

Universitas Islam Riau (UIR) Press

EDITOR IN CHIEF

Farizal Hakiki (Taiwan)

ASSOCIATE EDITOR

Muslim Abdurrahman (Indonesia) Ryanda Enggar Anugrah Ardhi (South Korea) Adi Novriansyah (Indonesia) Nguyen Xuan Huy (Vietnam)

EDITORIAL BOARDS

Asep Kurnia Permadi (Indonesia) Agus Astra Pramana (Indonesia)

Taufan Marhaendrajana (Indonesia) Muhammad Taufiq Fathaddin (Indonesia)

Sonny Irawan (Indonesia) Yuichi Sugai (Japan)

Zulkifli Abdul Majid (Malaysia) Goh Thian Lai (Malaysia)

Suranto (Indonesia) Falan Srisuriyachai (Thailand) Medhat (Med) Kamal (USA) Syahrir Ridha (Malaysia)

Madi Abdullah Naser (Libya)

Agus Arsad (Malaysia)

Wisup Bae (South Korea)

Randy Agra Pratama (Canada)

Hussein Hoteit (Kingdom of Saudi Arabia)

Riezqa Andika (Indonesia)

Hyundon Shin (South Korea)

TECHNICAL EDITOR

Fiki Hidayat Tomi Erfando

SCOPE OF JOURNAL

This journal aims to promote excellence in the fields of earth science and energy. The journal welcomes contribution in such areas of current analysis particularly in fossil energy exploration, extraction, and processing. The priority areas include enhanced oil recovery, reservoir engineering, formation

pISSN: 2301-8097 eISSN: 2540-9352

Journal of Earth Energy Engineering



Accredited by Directorate General of Strengthening for Research and Development, Ministry of Research, Technology, and Higher Education of Republic Indonesia No: 10/E/KPT/2019

evaluation, production technique, drilling and drilling fluids, petroleum geology, and petroleum economics. This journal also publishes original works, from fundamental principles to practical applications in the field of energy utilization, energy conservation, and sustainable energy.

This journal accepts articles on any earth and energy-related subjects and any research methodology that meet the standards established for publication in the journal. The primary criterion for publication in Journal of Earth Energy Engineering is the significance of the contribution an article makes to the literature in earth and energy research area, i.e., the significance of the contribution and on the rigor of analysis and presentation of the paper. The acceptance decision is made based upon an independent review process that provides critically constructive and prompt evaluations of submitted manuscripts.

ABOUT THE JOURNAL

Journal of Earth Energy Engineering (pISSN 2301-8097, eISSN 2540-9352) is the leading primary research journal in the fields of earth science and energy with a particular focus on fossil energy exploration, extraction, and processing. Journal of Earth Energy Engineering is published by Universitas Islam Riau (UIR) Press, three times a year, every March, July, and November. From its launch in 2012 to the present day, Journal of Earth Energy Engineering publishes papers on every aspect of fossil energy-based, from the start of the extraction process in drilling and completion technology, reservoir studies, and new method of recovery to the various production technique (see Focus and scope). Our authors and readers reflect a broad interdisciplinary group of scientists who study fossil energy exploration, extraction, and processing.

All research articles published in Journal of Earth Energy Engineering are subject to rigorous double-blind peer review, and editorial decisions are made by a team of expert researchers in the field, supported by an International Editorial Board. Journal of Earth Energy Engineering is indexed in Directory of Open Access Journal (DOAJ), Google Scholar, Science and Technology Index (SINTA S3), Indonesian Publication Index (IPI), and BASE, and has been ACCREDITED by Ministry of Research, Technology, and Higher Education of the Republic of Indonesia, No.10/E/KPT/2019, April 4, 2019 as 3rd Rank, SINTA S3.

EDITORIAL OFFICE OF JOURNAL OF EARTH ENERGY ENGINEERING

"A" Building Faculty of Engineering, Universitas Islam Riau. Jalan Kaharuddin Nasution No. 113 Pekanbaru, Riau 28284, Indonesia Email: jeee@journal.uir.ac.id

Website: https://journal.uir.ac.id/index.php/jeee

pISSN: 2301-8097 eISSN: 2540-9352

Journal of Earth Energy Engineering



Accredited by Directorate General of Strengthening for Research and Development, Ministry of Research, Technology, and Higher Education of Republic Indonesia No: 10/E/KPT/2019

LIST OF CONTENT

Analysis of Liquid Loading and Sandness in Gas Wells A1, A2 And Their Correction with The Plunger Lift Method in Field B Ali Musnal, Richa Melysa	1
Pressure Transient Analysis using Generated Simulation Reservoir Data for Dual	10
Porosity Model of Naturally Fractured Reservoir	
Sri Feni Maulindani, Taufan Marhaendrajana, Doddy Abdassah	
Calculation Of Evaporation Loss in Tank Y and Tank Z at SA Field PT X Prabumulih	19
Sefilra Andalucia	
Maximum Allowable Annular Surface Pressure (MAASP) Standards Calculations	28
Study; a Field Case Study	
Amega Yasutra, Ganesha R Darmawan, Muhammad Rafki	
Investigation of experimental study of biomass performance of wood pellets, palm	38
shells, and rice husk in vacuum pressure gasification system	
Novandri Tri Setioputro, Muhtar Kosim, Dede Iman Saputra	