Accepted Manuscript

Chemical and mineralogical characterization of highly and less reactive coal from northern Natal and Venda-Pafuri coalfields in South Africa

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PII: S1464-343X(17)30404-1

DOI: 10.1016/j.jafrearsci.2017.10.019

Reference: AES 3034

To appear in: *Journal of African Earth Sciences*

Please cite this article as: M.O. Kataka, A.R. Matiane, B.D.O. Odhiambo, Chemical and Mineralogical Characterization of Highly and Less Reactive Coal from Northern Natal and Venda-Pafuri Coalfields in South Africa, *Journal of African Earth Sciences* (2017), doi: 10.1016/j.jafrearsci.2017.10.019

Highlights

- Venda-Pafuri coal has more of vitrinite and total reactivity hence is less reactive
- Vryheid Coal from has more carbon, oxygen and oxygen absorption rate, is reactive
- Vryheid coal, has higher volatile matter which can also makes it more spontaneous
- Non-spontaneous Vryheid coal has high ash content, which inhibits combustion.
- Venda-Pafuri coal has low critical self-heating temperature values hence spontaneous