

**INTISARI**  
**ANALISIS PETROFISIKA UNTUK KARAKTERISASI RESERVOIR**  
**FORMASI BATURAJA DI LAPANGAN BATARA CEKUNGAN JAWA**  
**BARAT UTARA**

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Cekungan Jawa Barat Utara merupakan salah satu cekungan Tersier di Indonesia yang terbukti memiliki kandungan hidrokarbon. Lokasi penelitian berada di Lapangan Batara, Sub Cekungan Jatibarang, Cekungan Jawa Barat Utara dengan Formasi Baturaja sebagai objek penelitian.

Penelitian yang dilakukan terdiri dari penentuan interval reservoir, perhitungan parameter petrofisika, penentuan geometri dan persebaran reservoir, penyebaran parameter petrofisika. Proses pelaksanaan penelitian menggunakan bantuan perangkat lunak berupa Paradigm yang mencakup Geolog 7 dan Petrel 2015. Daerah penelitian menunjukkan persebaran geometri reservoir mulai dari arah barat daya-timur laut.

Hasil analisis tujuh sumur pengeboran menunjukkan bahwa interval reservoir Formasi Baturaja Lapangan Batara memiliki volume serpih sebesar 15 % hingga 47 %, porositas efektif sebesar 6,69% hingga 14,38 %, saturasi air efektif sebesar 72,51 % hingga 97,7 %, dan permeabilitas sebesar 2,58 md hingga 65,5 md. Dari hasil persebaran parameter petrofisika didapatkan akumulasi hidrokarbon berada pada tinggian jebakan Lapangan Batara zona A.

**Kata Kunci:** Analisis petrofisika, karakterisasi reservoir, Lapangan Batara,  
Formasi Baturaja

## **ABSTRACT**

### ***PETROPHYSICAL ANALYSIS FOR CHARACTERIZATION RESERVOIR BATURAJA FORMATION BATARA FIELD NORTH WEST JAVA BASIN***

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North West Java Basin is one of the tertiary basins in Indonesia which is proven to have hydrocarbon content. This research is located in Batara Field, Jatibarang Sub-Basin, North West Java Basin with Baturaja Formation as the research object.

The research consists of determining reservoir interval, calculating petrophysical parameters, determining geometry and reservoir distribution, deployment of petrophysical parameters. The research is conducted by using software assistances which are Paradigm covering Geolog 7 and Petrel 2015. The research area shows that the spread of reservoir geometry stretches from the southwest to the northeast section.

The result of analysis in seven drilling wells reveals that the reservoir interval of Baturaja Formation in Batara Field has volume of shale 15 % to 47 %, effective porosity 6,69 % to 14,38 %, effective water saturation 72,51 % to 97,7 %, and permeability 2,58 md to 65,5 md. From the deployment of petrophysical parameters, the hydrocarbon accumulation was found at the height of the Batara Field trap that located in A zone.

***Keyword : Petrophysical analysis, reservoir characterization, Batara Field,  
Baturaja Formation***