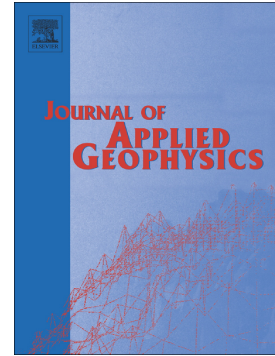


Accepted Manuscript

Facies trend modeling based on geobody-driven binning of seismic impedance

Olena Babak, Kun Liu



PII: S0926-9851(17)30655-9
DOI: [doi:10.1016/j.jappgeo.2018.03.016](https://doi.org/10.1016/j.jappgeo.2018.03.016)
Reference: APPGEO 3474

To appear in:

Received date: 10 July 2017
Revised date: 13 February 2018
Accepted date: 16 March 2018

Please cite this article as: Olena Babak, Kun Liu , Facies trend modeling based on geobody-driven binning of seismic impedance. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Appgeo(2017), doi:[10.1016/j.jappgeo.2018.03.016](https://doi.org/10.1016/j.jappgeo.2018.03.016)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Facies Trend Modeling based on Geobody-Driven Binning of Seismic Impedance

Olena Babak^{1*} & Kun Liu¹

¹Cenovus Energy Inc.

500 Centre St SE, PO Box 766

Calgary, AB T2P 0M5

*Corresponding author; email: obabak@ualberta.ca; Olena.Babak@cenovus.com

Abstract

Trends are deterministic or predictable patterns of the spatial distribution of facies or petrophysical properties. Facies trends relate to climate change, structural deformation, etc. during the time of deposition and provide information on the proportion or frequency of occurrence of a facies for every location within project area. Facies trends must be accounted for in geostatistical reservoir characterization of uncertainty as they have a large effect on petrophysical properties modeling, resource assessment and reservoir performance forecasting. The workflow for reservoir characterization accounting for a trend encompasses two steps: trend modeling (1) and trend integration into geostatistical estimation and simulation (2). This paper addresses the first step – trend modeling. A new approach for building facies trends from a 3D seismic volume is proposed. The methodology is based on the local analysis of acoustic impedance geobodies. All steps

Download English Version:

<https://daneshyari.com/en/article/8915359>

Download Persian Version:

<https://daneshyari.com/article/8915359>

[Daneshyari.com](https://daneshyari.com)