

عنوان مقاله:

Amplitude versus Offset (AVO) Technique for Light Hydrocarbon Exploration: A Case Study

محل انتشار:

مجله بین المللی معدن و مهندسی زمین, دوره 46, شماره 1 (سال: 1391)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Roohollah Parvizi - *Instructor, Islamic Azad University, Qeshm branch*

Gholam Hossain Norouzi - *School of Mining, College of Engineering, University of Tehran*

Fereydoun Sahabi - *School of Mining, College of Engineering, University of Tehran*

خلاصه مقاله:

AVO as a known methodology is used to identify fluid type and reservoir lithology in subsurface exploration. Method discussed in this paper, consists of three stages, including: Direct modeling, Inverse modeling and Cross plot interpretation. By direct modeling we can clarify lithology or fluid dependent attributes. Analysis performed using both P-P and P-Sv attributes. Inverse modeling deals with real data and is fed by the results of direct modeling to identify the light hydrocarbon (gas) zones. The main role of cross plot interpretation is to confirm the inverse modeling results and consequently increasing validity of performed analysis. Using Hodogram – cross plot, makes possible to identify hydrocarbon zone even in small scales. This methodology was applied in Gorgan Plain Southeast Caspian, northern Iran. It was concluded that: fluid factor, SIGN, and Poisson reflectivity are fluid dependent attributes. It was also defined that normal incidence reflectivity and P-wave impedance reflectivity are lithology dependent. Inverted sections of fluid-dependent attributes defined the existence two light hydrocarbon accumulation under the Tertiary-Cretaceous unconformity in the North Gorgan Plain. Two wet and gaseous zones are also confirmed by cross plot

کلمات کلیدی:

Amplitude Versus Offset, Direct Modeling, Inverse Modeling, Hodogram-Cross Plot, Attributes, Light Hydrocarbon, Gorgan Plain

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/488080>

