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Quiz-2: Seismic Data Processing and Interpretation Practical (GPC 519) of Monsoon Semester 2020-21

1 message

Google Forms <forms-receipts-noreply@google.com> Tue, Nov 3, 2020 at 4:04 PM
To: deepak.19mc0025@agp.iitism.ac.in

Thanks for filling out Quiz-2: Seismic Data Processing and Interpretation Practical (GPC 519) of Monsoon Semester 2020-21

Here's what we got from you:

Quiz-2: Seismic Data Processing and Interpretation Practical (GPC 519) of Monsoon Semester 2020-21

All answer should be concise and precise
Answer all Question
No Negative Marks

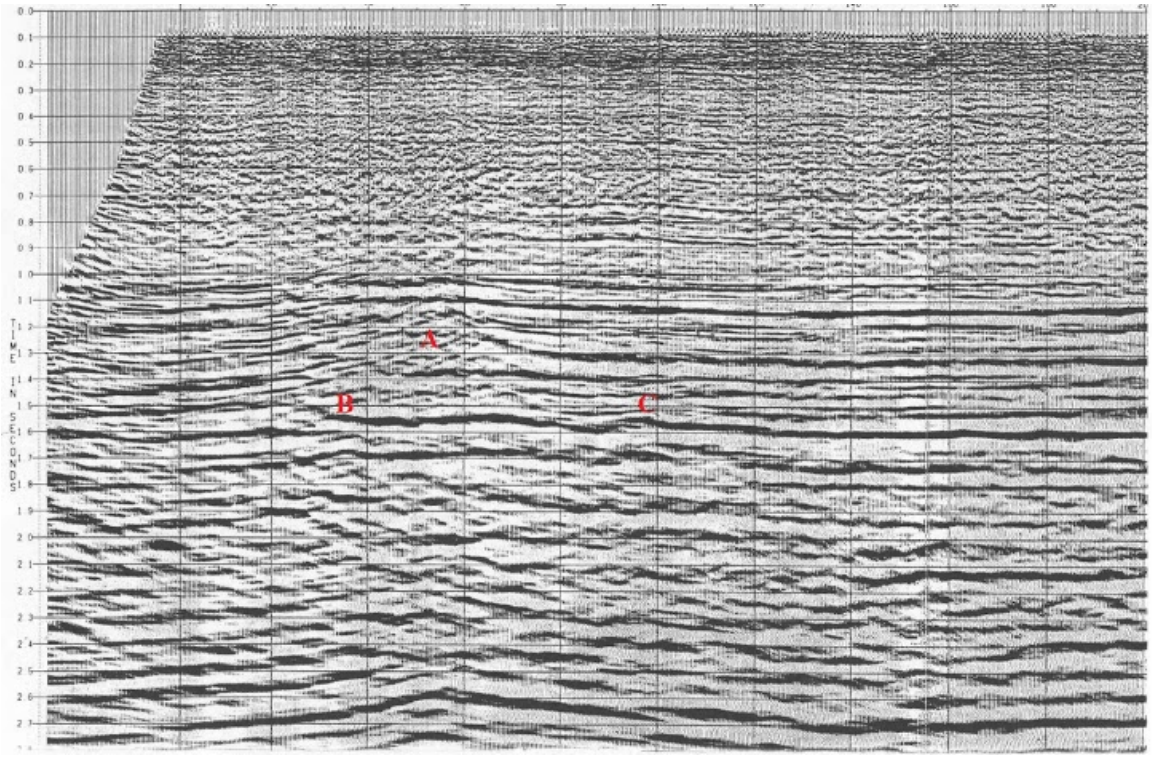
Your email address (**deepak.19mc0025@agp.iitism.ac.in**) was recorded when you submitted this form.

The following values are provided for different lithologies. Find out gas sand from provided lithologies based on the estimation of single Lame's parameter. *

Lithology	Vp (m/s)	Vs (m/s)
A	6260	3240
B	7050	4160
C	6060	4150
D	3453	2302

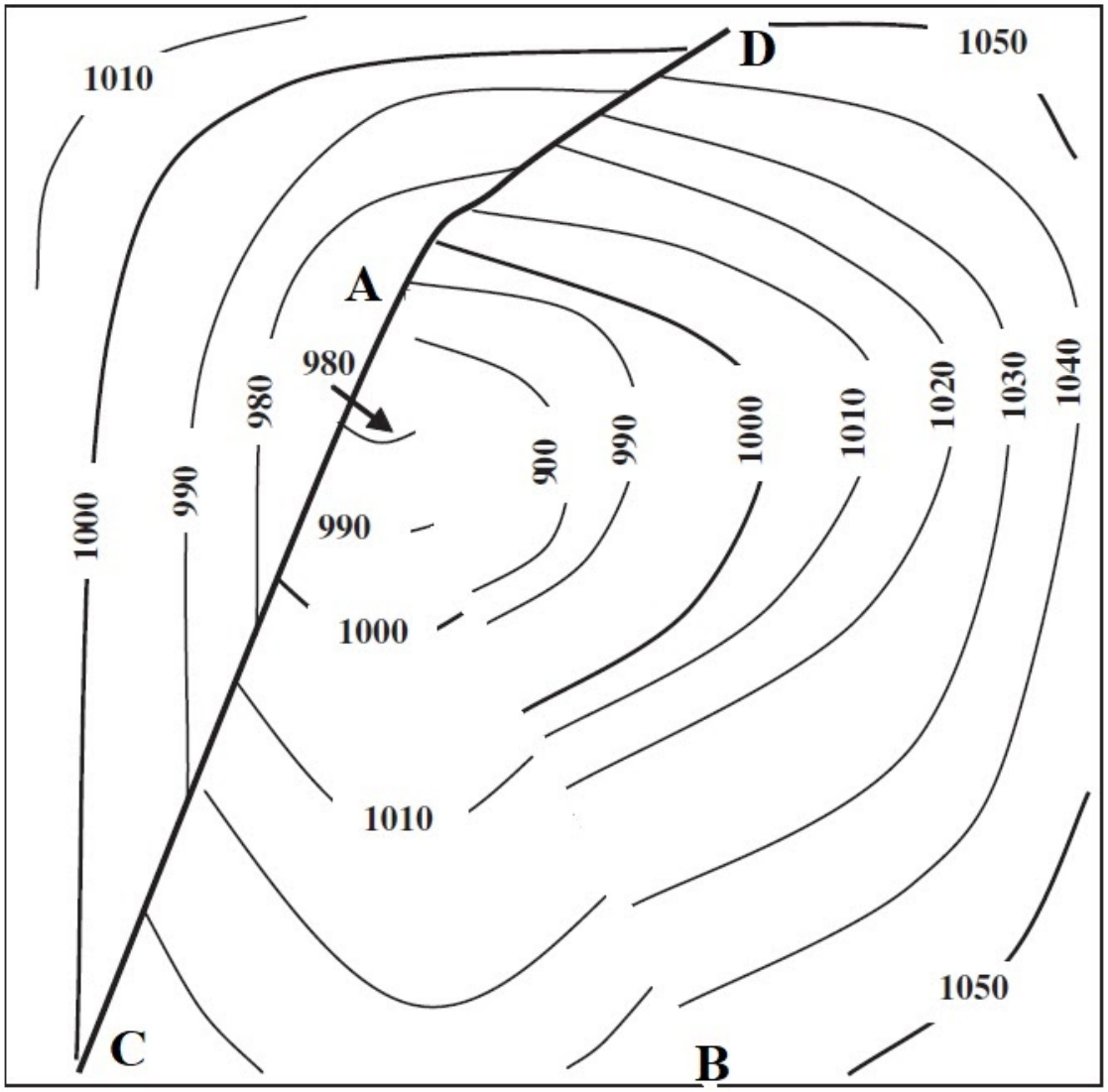
B

Identify the structural signature from the given seismic section. *



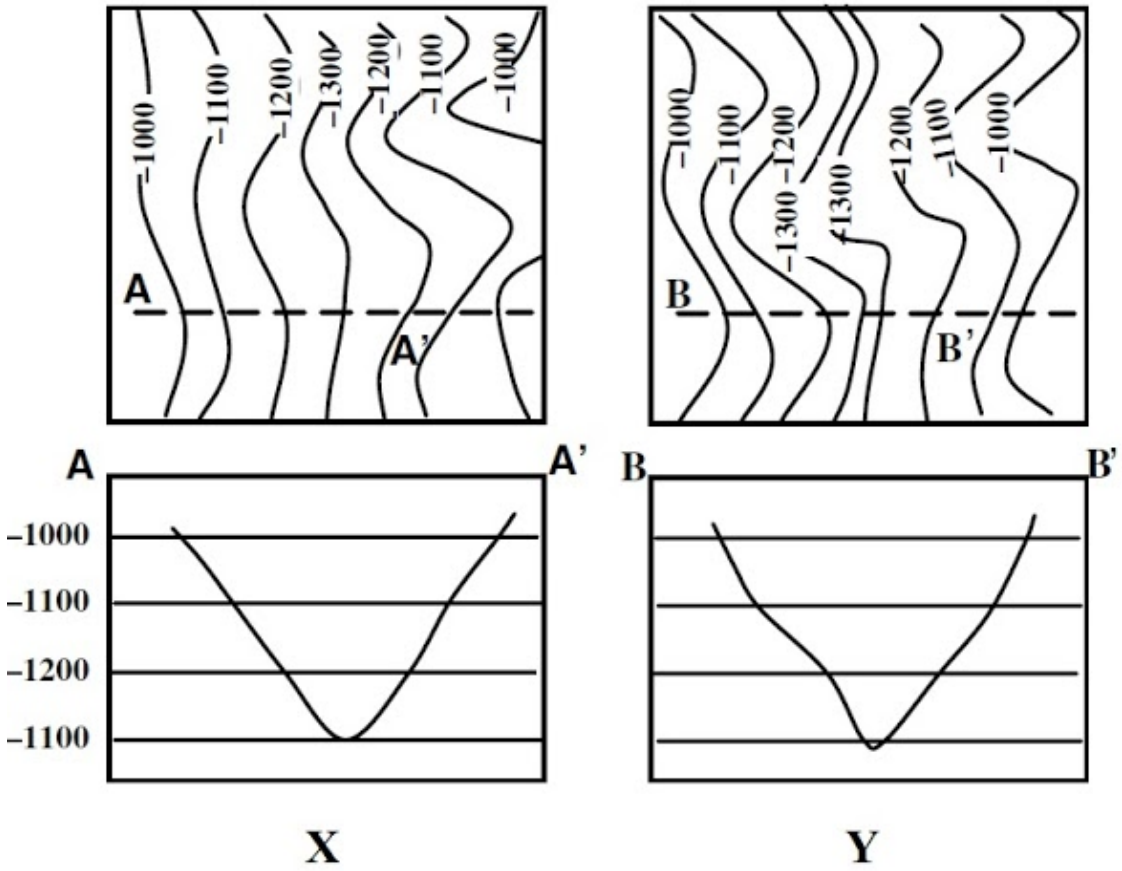
anticline, MAY BE SALT DOME

How this contour map can be corrected and why? *



fault because fualt change in sudden contour

Which one is correct for cross-sectional representation in between X and Y of two contours? *

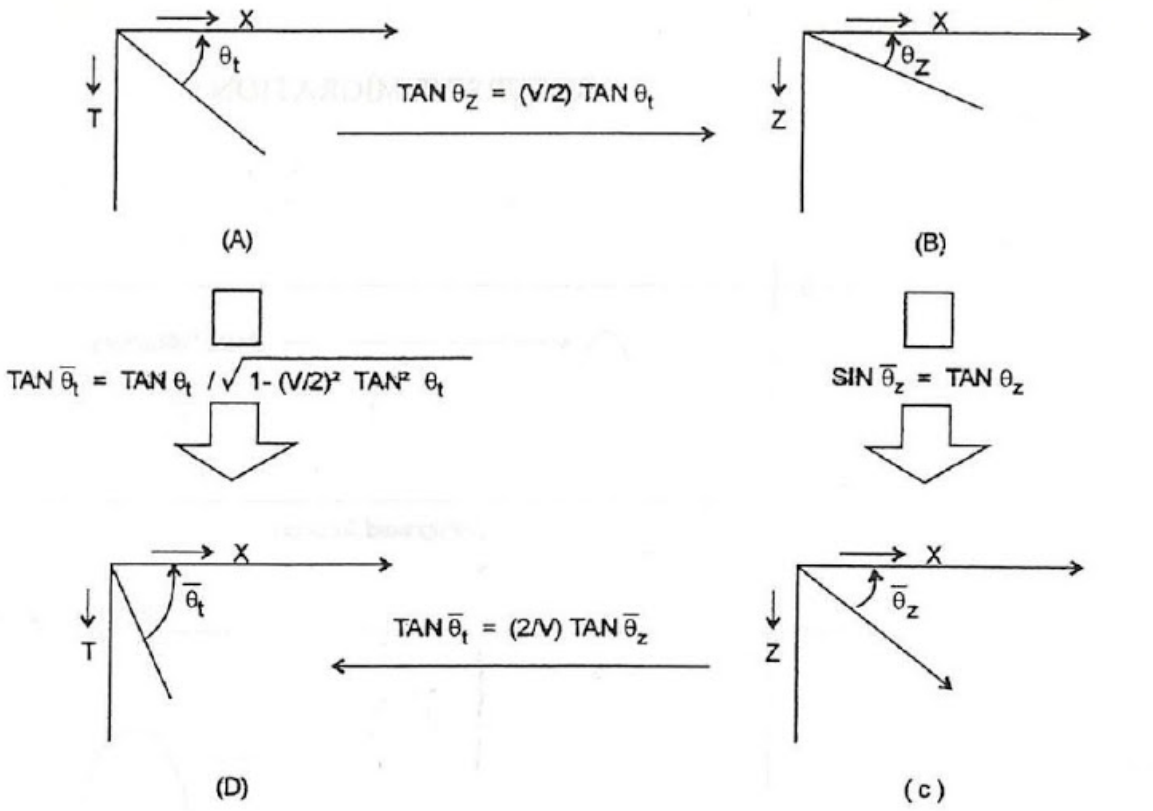


Y

V1: 6500 ft/sec; H1: 650 ft; V2: 8000 ft/sec; H2 : 1000 ft; Δt1 = 100 ms (OWT) and Δt2 = 125 ms (OWT); Find out RMS velocity? In which domain of Migration this velocity will be applicable? Do you expect any kind of distortion in image after using this velocity for migration? *

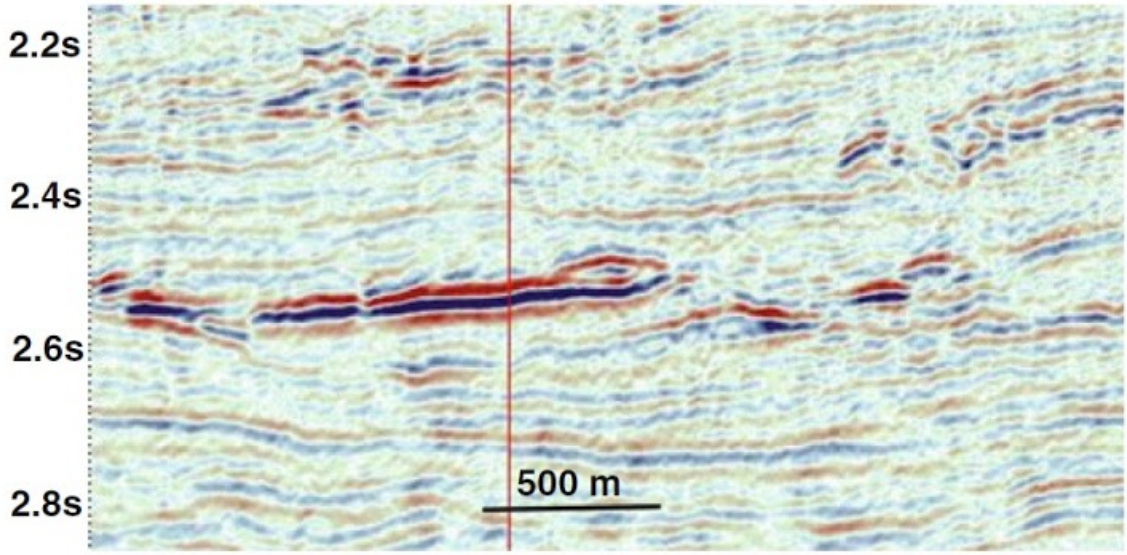
Vrms = 7371.11ft/sec, time domain,

Identify Flow process of Migration based on “A”, “B”, “C” and “D”. Notations are carrying standard meaning of Migration *



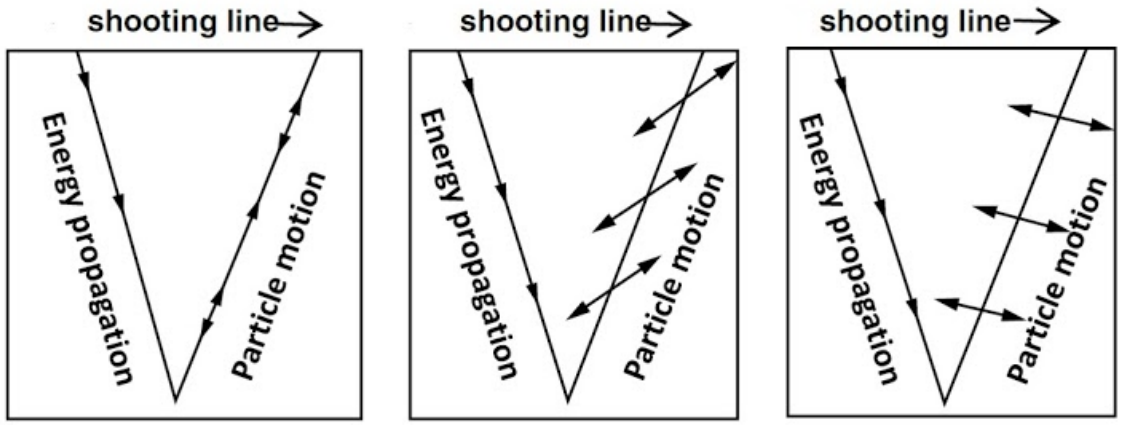
C TO D MIGRATION,

Name/identify the Special Character from the Seismic Image. *



ps section , may be resevior , bright spot

Identify the waves based on particle motion. *



1 - p wave ,3 - s - Horizontal(SH), 2-s vertical(SV)

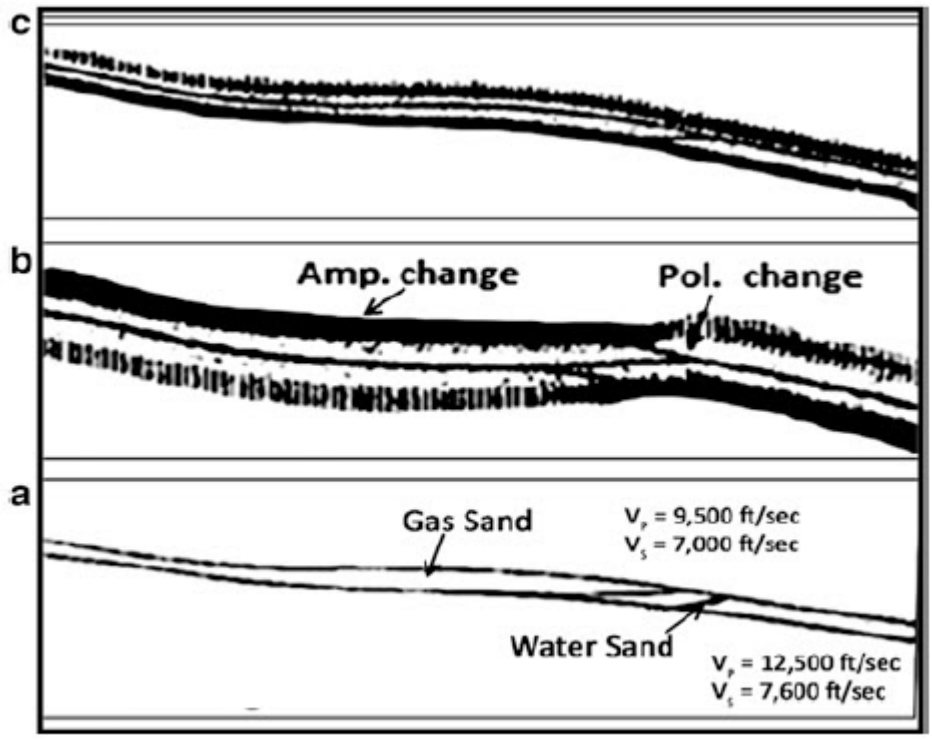
Low-Impedance Gas Sand is, *

- (●) Class 1 AVO
- ( ) Class 2 AVO
- ( ) Class 3 AVO
- ( ) Class 4 AVO

AVO is mostly applicable to siliciclastic sand hydrocarbon reservoirs though more commonly to ones saturated with gas where the effect of amplitude anomaly is more pronounced. *

- [x] True
- [ ] False

Identify Geological model, P-seismic and S-seismic based on “a”, “b” and “c”. *



Bright spot - gas sand