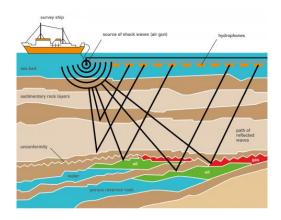


Searching for Underwater Oil Locations



To find oil underwater, researchers conduct seismic surveys to determine "what lies beneath."

To do this, they transmit an energy signal—sometimes via an airgun—which puts a shock wave (or pulse) in motion.

As the shock wave (pulse) travels underwater, it encounters rocks, ledges or other below-water formations. Different types of formations reflect sound differently.

Receiving devices, called hydrophones, record how fast and how loud the sound is reflected from the belowwater formations. This helps experts to decide whether there might be oil under the water's surface.

In this image we see a two-dimensional (2-D) seismic survey at work. It is two-dimensional because the hydrophones are in a straight line.

If the hydrophones were laid-out in a grid, it would be a three-dimensional (3-D) seismic survey.

Click on the image for a full-page view.

Credits:

Two-dimensional seismic survey illustration, online via KrisEnergy, Ltd.

See Alignments to State and Common Core standards for this story online at:

http://www.awesomestories.com/asset/AcademicAlignment/Searching-for-Underwater-Oil-Locations

See Learning Tasks for this story online at:

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