Literature survey:

1.

<https://link.springer.com/content/pdf/10.1007/978-3-319-24574-4_28.pdf>

-Total 23 convolutional layers.

Training: stochastic gradient descent implementation of Caffe

warping error, rand-error, pixel error

2.

<https://openaccess.thecvf.com/content_cvpr_2016/papers/He_Deep_Residual_Learning_CVPR_2016_paper.pdf>

3.

<https://openaccess.thecvf.com/content_cvpr_2018/papers/Hu_Squeeze-and-Excitation_Networks_CVPR_2018_paper.pdf>

4.

<https://arxiv.org/pdf/1409.1556.pdf%E3%80%82>

5.

<https://iopscience.iop.org/article/10.1088/1742-6596/1818/1/012006/pdf>

Subsurface salt bodies and layers are a challenging obstacle in the Oil & Gas prospection

Misinterpretation of the salt boundary depth usually leads to higher costs on the production step.

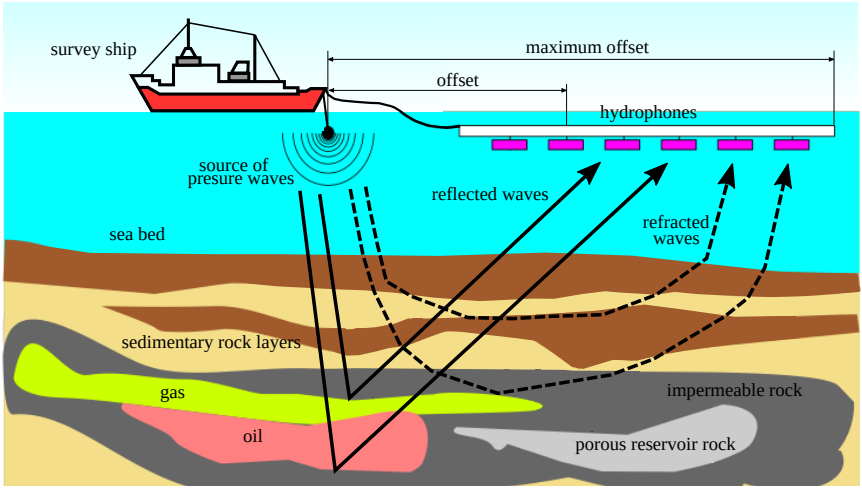
To minimize budget loss during the drilling, much effort is expend in the salt interpretation, that can be done manually by an expert using different geophysical attributes, such as seismic images and gravity maps

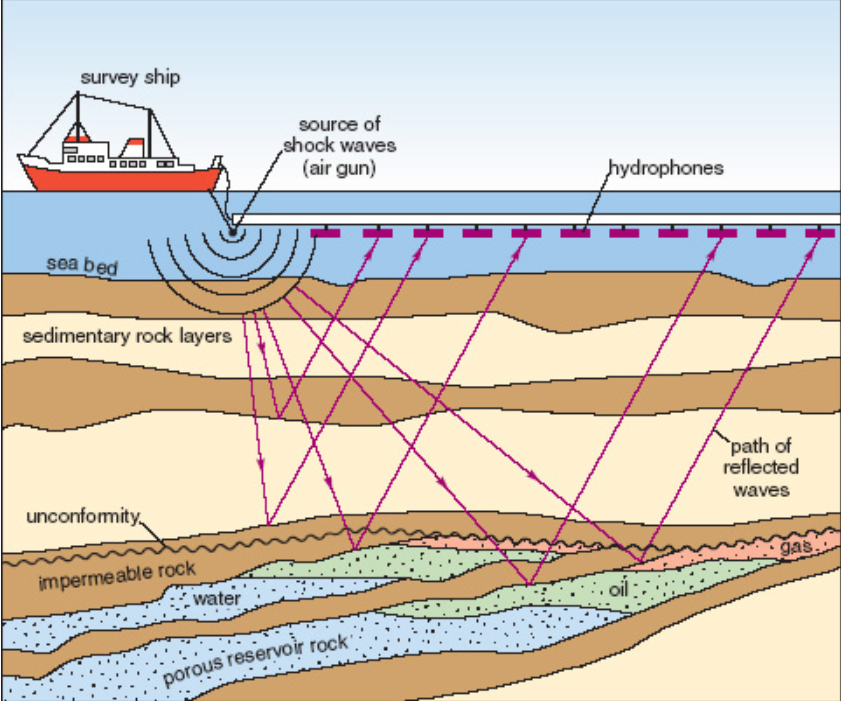
Several areas of Earth that are rich in oil and natural gas also have huge deposits of salt below the surface. Because of this connection, knowing precise locations of large salt deposits is extremely important to companies involved in oil and gas exploration.

This practically means that seismic images contain information about boundaries between rocky deposits, while they expose very little about the rocks themselves [[**2**](https://www.mdpi.com/2220-9964/9/1/24/htm#B2-ijgi-09-00024)]. Seismic images are used in the exploration of hydrocarbon fuel reserves by helping detect potential reservoir rocks and that is why identification of salt deposits plays an important role.

It is based on the emitting of sound waves that reflect on underground structures and are detected on a surface using receiver devices called **geophones** This practically means that seismic images contain information about boundaries between rocky deposits,

. Salt density is usually about 2.14 g/cm3, which is less than most nearby rocks. Salt seismic velocity of around 4.5 km/s is usually bigger than the surrounding rocks. This difference causes a sharp reflection at the salt sediment boundary. <https://www.mdpi.com/2220-9964/9/1/24/htm>

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