

# Horizontal drilling

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According to Azar and Samuel (p. 237-238) usually, the oil reserves are actually more extensive in their depth, from what they appear from a bird's eye view. Therefore under this technique, such a portion of the well is drilled that intersects a reserve that is parallel to the plane of the dimension that is substantially extensive. Thus through this technique, the substantial area of the reserve is exposed to the wellbore area, as compared to the conventional oil drilling techniques (Figure 1.). As this aspect is achieved more important objectives are easier to be achieved; for instance, the production of water is avoided.

Figure 1: Adopted from Helms (p. 1 Figure 1). It can be clearly observed from the figure above that the horizontal technique A, is exposed to a far larger area of the reserve as compared to the vertically drilled well B.

It is easier to build a larger oil reservoir with a significantly smaller amount of horizontally drilled well, as a larger rock can be drained in contrast to the vertically drilled wells.

cost may be reduced considerably as the total surface that is actually drilled is lesser quite lesser than that of the vertically drilled wells. The production output from the horizontal technique is far greater than that of the vertical oil wells, this is because the area that is exposed to the wellbore area, though underground, is far more than the conventional well drilling techniques. (Technology is Key to Optimally Producing Reserves, p. 1-4)

Better observation of this technique can be seen from the following Figure 2.

Figure 2: Adopted from Hunton Resource Play (2008).

Over the past ten to twenty years, the technology of horizontal drilling other similar techniques have moved significantly into the modern era of the oil industry across the nations. Various developments are budding as the firms <https://assignbuster.com/horizontal-drilling/>

using this technique are increasing. The modern technique of this technology and widespread consideration have emerged due to modern techniques and equipment and economically driven productivity regulations. In almost all of the oil reserves and sites where horizontal drilling is exploited with all of its safety measures and requirements, considerable advantages are gained with incremental profits over the conventional vertically drilled wells.