Numbers: From Massive to Manageable

When you hear about the size of oil and gas fields, you will probably hear how many barrels of oil are in the reserve or how deep the oil is below the surface of the earth. Unless you are involved with the industry or really enjoy obscure units of measurement, these values will probably mean very little to you. This issue can arise with any unit of measurement, such as distance in feet, because the lengths being discussed are so large you just skim over the number without paying it much attention. The best way to comprehend how massive these numbers are is to compare them to objects that we have a better mental grasp on.

It can be difficult to fully understand how big the numbers are that are being used to describe offshore oil and gas fields. For example, let’s examine Stampede - a field off the coast of Louisiana in the Gulf of Mexico. In 2017, Hess said that the platform will operate at a depth of 3,500 feet of water, and that it required an investment of roughly $6 billion. The numbers are large, but they use units we are familiar with. To grasp this number more effectively, 3,500 feet is the same as 3.5 Eiffel Towers or the height of stacking 11.4 University of Texas Towers on top of each other. To the left is a comparison of these famous buildings to how deep the platform will have to reach to go from water surface to sea floor. The $6 billion investment, however, is a massive number even for
multiple oil companies investing together. Instead of investing in this project, they would have had enough money to buy the Houston Texans ($2.5 billion), the Los Angeles Clippers ($2 billion), and the New Orleans Saints ($1.515 billion) all at once, according to values given by Forbes (2016). The following values are even less tangible because they are measured in barrels, which is rarely used in our everyday lives. One barrel is equal to 42 gallons, but this conversion is of little help when we find out that this reservoir holds an estimated 325 million barrels of oil equivalent, and the platform will be able to produce 80 thousand barrels per day according to Hess (2017). A flow rate of 80,000 barrels per day is equivalent to 2,333 gallons per minute, which would fill an Olympic-sized pool in just over 4.5 hours. Even more impressive is that 325 million barrels is enough to fill the Great Pyramid of Giza (which has a volume of 91.23 million cubic feet according to Wikipedia) 20 times over. It is easy to see that all of the numbers that relate to this platform are of enormous proportions, and the only way to really comprehend the magnitude is to relate it to things we are more familiar with.

These numbers can seem too large to understand at first, but after some simple conversions they are much more easily understood when compared to something that we are familiar with. My hope is that next time you are reading an article and come across a large number like this, you don’t do as I have in the past and skim past it. When you take the time to understand just how large these numbers are, you are able to gain a much greater appreciation for how massive of an operation these offshore platforms are and how the industry is technologically advanced.
References

