



Operations Geology Technical Division

Where's your Wellbore? The Great Wellbore Hunt!

Presenter: Jessica Beal, P. Geo.

Location: Webinar On-Line Presentation

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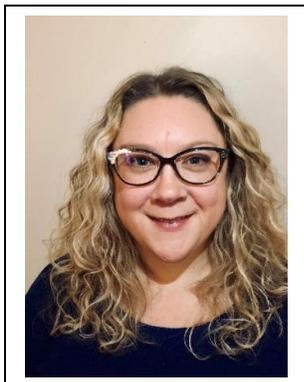
ABSTRACT

Confidence in horizontal wellbore positioning is critical for all aspects of a wellbore's existence – land surveying, geological mapping, reservoir modeling, completions, production, as well as future predictions and optimizations. Yet, wellbore positioning is rarely analyzed, reviewed or evaluated. Often, when, or if, wellbore positioning is questioned, there is varying opinion on the definition of a good well, and if improved accuracy or precision in wellbore positioning really matters. This occurs not only company to company but also internally, from department to department. With increased drilling density, e.g. decreased well spacing, multi-well pads, multi-zone wellbores, etc., there is a need for increased confidence in wellbore positioning.

As a Geoscientist, scale always matters. Depending on the feature or element being mapped, increased confidence in wellbore positioning is likely more impactful on small areas of interest than for regional areas of interest. Confidence in wellbore positioning for dense well spacing is likely more important than for singular wells in wildcat areas. True vertical depth is likely more important when targeting thin formations or zones than when targeting thick formations or zones. Regardless of what is being targeted or where, understanding the potential errors tied to wellbore positioning and how those errors impact the use of a wellbore's position is crucial for understanding wellbore results and for future decision making, changes or plans in an area.

By acknowledging wellbore positional uncertainty from the beginning of the life of a well, the confidence in interpretations, mapping, modeling, understandings, and predictions will change. Fundamentally for the better.

BIOGRAPHY



Jessica Beal has had a curiosity for Wellbore Positioning for a significant portion of her career without even realizing. In her past geological life in Operations, Development, Wellsite, and Reserve and Resource Evaluations, she often found herself questioning why geological results didn't always match expectations, and if the results could be tied to uncertainty in a wellbore's position rather than to the Geology itself. Jessica continued her search for answers and joined roundLAB Inc. in 2020 as a Survey Processor. She is currently the Real-Time Operations Supervisor and Geotechnical Advisor and is passionate about educating the Technical world on the importance of Wellbore Survey Management and Wellbore Positioning.