



Merger & Acquisition: Well Integrity Due Diligence



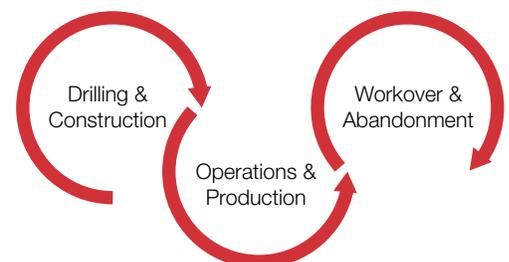
During the course of any oil and gas merger and acquisition (M&A), the Parties will be engaged in a due diligence review. If the transaction involves the entire company, the review can be extensive, comprising financials, corporate cultures, environmental, assets, etc. If the transaction is a sale or divestiture of producing properties only, the due diligence review may be limited to property liens, 3P reserves and production history. If the transaction is complete with an online auction house, there may be extremely limited time to review the properties. One area typically not given adequate attention during these activities is well integrity.

By incorporating well integrity into the M&A due diligence process, a company will develop a deeper understanding of the potential issues, how these may impact future production, and the costs to resolve the issue. With this deeper understanding, the company can take a more proactive stance during the sales process and then after taking possession. It will also decrease the likelihood of an unplanned event and their potential ramifications, such as fines (environmental or regulatory), future permit restrictions, or even revoking the company's right to operate.

Wild Well has extensive experience dealing with well integrity issues. We can review the well stock, identify and diagnose the problems, and resolve the issues. Through the Technical Service approach, our team

will assist clients in evaluating their well integrity issues and develop a forward plan. The specific scope of work will be tailored to meet the client's requirement. The activity sets will vary based on current well integrity deployment level and desired depth of investigation. These may comprise field and office investigations that include the following services:

Well Integrity Life Cycle



Surface Well Diagnostics

A complete visual investigation of each wellhead will be conducted. A detailed schematic and photos will be provided for the well files. If desired, wellhead seals and tree and casing valves can be tested and condition verified. Basic repairs such as valves greased, gauges installed, etc., can be performed. If required, a special services program can be developed to follow-up on more severe issues.

Environmental Assessment

The Wild Well environmental team will provide a detailed assessment of each targeted location and make recommendations to address issues and ensure regulatory compliance.

Engineering Assessments

The well integrity specialist can conduct several activities to determine the overall well condition. Some of these activities may be deferred to post-sale where record access is not limited or restricted. These can include, but are not limited to:

- **Well Barriers:** Review of the existing barrier program and associated schematics to verify dual-barrier compliance and application of barrier envelopes or other conventions.
- **Downhole Well Diagnostics:** Review the client's existing bond logs, corrosion logs, and casing inspection logs, working closely with the client to identify problems and chart a way forward to address issues.
- **Annular Pressure Management:** Review of the current activity and, if required, development of a specific plan for annulus pressure mitigation/management and associated regulatory reporting requirements.
- **Operating Limits:** Review of system in place to determine well operating limits and how these have been adjusted over the life of the well.
- **Abandoned Well Stock:** Review of past well abandonments to investigate compliance and identify any residual liabilities.
- **WIMS Assessment:** Conduct gap analysis of current well integrity system. If required, our well integrity specialists can support development and implementation of a well integrity management system (WIMS).

It is critical that properties purchased through M&A activity be properly assessed and transitioned into the Operator's system so that they can be effectively managed. Each well can present unique challenges that can be compounded by the well construction era, operating environment, and management throughout its life cycle. Identifying these can provide the Operator with critical information to extend the life cycle and implement programs that deal with issues such as poor zonal isolation, corrosion, fatigue, subsidence, etc.

When the M&A activity encompasses a large number of wells or multiple locations, the initial investigation not likely address all wells, but a small sample. It is important that the sample includes not only the oldest wells, but also looks at complexity, known issues, construction era, etc. This will ensure that systemic issues can be flagged and a path forward developed.

This activity will provide clarity on the well integrity status for the producing and shut-in well stock. This will lead to more efficient operations with enhanced safety and reduced operational and environmental risks.

For additional information, please contact:

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