Value creation for rapid response and long term resilience in Exploration 
& Production
For the oil and gas sector, the operational and demand impacts of COVID-19 are further exacerbated by OPEC+ commitments to maintain high levels of output. As a result we believe PE and corporates can benefit from a more aggressive look at ways to manage and identify cost savings in a way that protects cashflow and maintains an eye on long term performance and resilience as markets bounce back.

**Market environment**

The current environment has created uncertainties in demand, as well as supply excess and has rapidly exposed risks to the overall oil & gas value chain that has put certain companies in need of rapid turn-around or restructuring because of several concurring events:

**Demand shocks:** The current environment has adversely impacted oil & gas demand due to global slowdown across end-user segments—e.g. manufacturing, aviation, wider transportation, etc. This has impacted small to mid-size companies more acutely.

**Supply shocks:** Border closings and travel bans are causing significant disruptions, which are exacerbated by OPEC+ commitments to maintain high levels of output, resulting in precipitous drops in crude prices.

**Reduced cash flow:** In this environment operators face depressed crude prices and are delaying capital spending or payments for longer than usual, often because they are unsure of recovery. This causes a chain reaction of delayed payments from one vendor to another, which typically slows down all aspects of business.

**Capex collapse:** Central banks primed the economic pumps by cutting interest rates and adopting other stimulus measures as yet another indication that recession fears are growing – with the specter of prolonged low crude prices, depressed capital spending and D&C activity is almost certain.

**Structured response elements**

- **Active expense management**
  - Assess all expense categories and right-size to projected revenue
  - Actively manage spend going forward

- **Field Performance**
  - Adopt risk / exception based well-visit programs to impact cost and volume
  - Enhance KPIs / incentive programs to drive accountability and improve pumper performance

- **Cash / liquidity forecasting**
  - Improve CCC (DIO, DPO and DSO)
  - Initiate analytics to identify liquidity concerns and improve forecast accuracy
  - Measure and report key cash metrics

- **Working capital and supply chain**
  - Determine key risks (supplier risk, supply chain resilience etc.)
  - Prepare responses (working capital inventory, alternate suppliers, capex etc.)

- **Scenario planning & management**
  - Develop / re-visit well-level profitability to determine negative contribution thresholds
  - Build potential shut-in scenarios taking in to account volume commitments
  - Model actions across production, working capital and cost containment
KPMG’s framework for stabilization and value creation

At the heart of a turn-around is stabilization and value recovery. Our range of capabilities allows us to provide a comprehensive solution.

We believe we could add value across this cycle by bringing...

- Familiarity with, and knowledge of ‘the levers that matter’, having helped address cost and production optimization among numerous operators
- Tools and resources to take a data driven and granular approach to identifying and quantifying actionable opportunities using proven methods
- External perspectives on leading practice procedures to improve field efficiency and effectiveness
- A ‘deal-pace’ approach that works outside-in, with minimal disruption to management at the outset as we look to shine a light on where value may lie
In the current market conditions KPMG’s proven data-driven approach to improving performance for our clients can be quickly deployed to look at the 4 stress areas and identify meaningful value levers for today and the long-term

**Data & analytics driven approach to the “4C’s”**

**Cash**
Analysis to determine the level of liquidity and cash needs, as well as tactical working capital actions (AR, AP, inventory) that will quickly optimize cash flow for the business

**Cost**
Categorization and triage of discretionary expenses for cost control/delay actions
Leverage revenue forecast scenarios to develop organizational cost models to support level of activity (fixed, variable)

**Customer**
Diagnostic to understand how demand patterns will be impacted by customer and end market
Revenue analytics supported by primary research for go-to market and operational changes

**Capital**
Review Capex plan to test for alignment with medium & long term growth scenarios
Identify Capex reduction opportunities to redirect based on revised demand forecast

**KPMG’s framework to assess business impact and drive cash and contain cost**

- **Internal well, financial, operational and organizational transaction level data pulled from multiple systems across the business regardless of data structure**
- **Properitary D&A tools and preconfigured analysis**
- **Dedicated data engineers and scientists**
- **Single source of truth**
- **External basin, field and economic data to augment internal company data**
- **External data from thousands of PI projects**
- **Rapid stress test**
  - **Cash/liquidity**
    - Cash forecasting
    - AR / AP Triaging
  - **Expense alignment**
    - Discretionary expense controls
    - Org rightsizing scenarios
  - **Customer / MVC risk**
    - Off-taker agreement re-forecast
    - Short term shut-ins
  - **Capital allocation**
    - Growth Capex alignment with new demand forecast
    - Flexibility in deploying maintenance Capex and workover program

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Cutting across the 4C’s - our Oil & Gas experience means we can bring in-going perspectives and an ability to prioritize ‘the levers that matter’ for rapid response; while keeping an eye on long term resilience and asset profitability through evaluation and implementation of long-term value creation levers

<table>
<thead>
<tr>
<th>Working Capital</th>
<th>Potential analysis based on past experience</th>
<th>Indicative immediacy of impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>◦ AP / AR triage including supplier payment terms and contract management</td>
<td>FASTER / SHORTER TERM</td>
</tr>
<tr>
<td></td>
<td>◦ Rationalization of inventory levels / review of min-stock to identify spend deferral opportunities while meeting operational needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Recalculating working capital needs to identify release potential</td>
<td></td>
</tr>
<tr>
<td>Third party spend</td>
<td>◦ Identify opportunities for rapid renegotiation of rates through a one-time category cost-down exercise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Undertake contract reviews for midstream, compression assets etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Analyze spend profile for options to consolidate spend among suppliers to increase leverage and reduce higher cost maverick or off-contract spend</td>
<td></td>
</tr>
<tr>
<td>Field OPEX</td>
<td>◦ Maximizing value capture by developing a “fully costed” view of the field to optimize profitability given constraints</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Implementing fit-for-purpose maintenance and equipment strategies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Improving field workforce effectiveness (e.g., utilization, time on tools)</td>
<td></td>
</tr>
<tr>
<td>Operator performance</td>
<td>◦ Adopt risk / exception based well-visit programs to impact cost and volume</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Enhance KPIs / incentive programs to drive accountability, enabling pumpers to do more with less roust-about crews, manage their route like a P&amp;L etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Deploy standard operating procedures and reference guides to manage activity</td>
<td></td>
</tr>
<tr>
<td>Support costs</td>
<td>◦ Right-size support organizations through benchmarking, operational analysis, and zero based budgeting (ZBB) approaches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Challenge central and allocated costs, identify / eliminate shadow activity, review regional and field offices and spans of control</td>
<td></td>
</tr>
<tr>
<td>Volume delivery</td>
<td>◦ Apply data-driven empirical approached such as best demonstrated rate (BDR) to highlight production potential, identify underperforming wells / assets, and facilitate prioritization of intervention activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ Establish systematic process to identify and prioritize de-bottlenecking and interventions to maximize volumes / ROI</td>
<td></td>
</tr>
<tr>
<td>Portfolio management</td>
<td>◦ Consider short term (and long term) shut-in strategies and on-going field evaluation for negative contribution volumes, enabled by integrated portfolio and asset planning systems creating performance transparency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ For PE sponsors, portfolio rationalization, including consolidation of distressed assets in healthy umbrellas and driving mgt. overhead reductions</td>
<td></td>
</tr>
<tr>
<td>Field development</td>
<td>◦ Maximize performance across the D&amp;C cycle, by decomposing key activities into cost, time and quality metrics that are true value drivers to establish the critical KPIs</td>
<td>SLOWER / LONGER TERM</td>
</tr>
<tr>
<td></td>
<td>◦ Utilize benchmarks to help guide focus areas with lean and CI techniques deployed to drive out value</td>
<td></td>
</tr>
</tbody>
</table>
The combination of our data & analytics driven approach and our sector knowledge means our assessment typically takes the form of a 2-stage approach over approximately 3 to 5 weeks with minimal disruption to business as usual.

How our approach works from data aggregation to insight generation

**BREAKDOWN OF OUR APPROACH**

1. **BASELINE DATA COMPILATION**
   - **PROJECT SCOPING AND KICK-OFF**
     - Identify listing of wells/assets to be included in analysis
     - Prepare data requests and identify major gaps in required data and possible solutions
     - Mobilize team and begin data aggregation
   - **BUILD FULLY-COSTED WELL DATABASE**
     - Obtain well level data including, but not limited to:
       - Monthly LOS
       - Daily production
       - Downtime logs
     - Align LOS accounts to the structure utilized in the Reserve Report assumptions
     - Reconcile well data to agreed in scope assets
   - **TAG WELL ATTRIBUTES**
     - Identify individual well attributes to be utilized in hypothesis development
     - Obtain specific well attributes including, but not limited to:
       - Completion date
       - Lift type
       - Pumper route
     - Update well database with individual well attributes

2. **HYPOTHESIS DEVELOPMENT**
   - **REVIEW BASELINES VS. TYPICAL LEVERS**
     - Using the fully-costed well baselines and broader business baselines, undertake a high-level scan of typical value levers using our existing workflows, to include observations on:
       - Production
       - Cost
       - Working Capital
       - Field ops
       - Portfolio / tail mgt. and overall profitability
     - Drilling & completions (data permitting)
   - **CRYSTALIZE HYPOTHESES AND POTENTIAL VALUE RANGES**
     - Using baselines developed and typical value levers – combined with external perspectives – coalescence around potential highest value focus areas
     - For these focus areas – develop high-level quantification; to be expressed as a range of potential value given the outside-in nature of work at this stage
   - **SHARE FINDINGS AND AGREE WHETHER TO PROCEED**
     - Communicate findings from Define phase
     - Agree on relevance and validity of findings / broad value ranges
     - Determine whether to proceed with more detailed analysis and (potentially) down-select focus areas

**Decision point: do we see the value case and are we ready to commit to further investigation of the opportunity**

What we need to get started

<table>
<thead>
<tr>
<th>Request</th>
<th>Description</th>
<th>Typical provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly well level LOS</td>
<td>Detailed database of well level lease operating statements by month for 2017-2019</td>
<td>Accounting</td>
</tr>
<tr>
<td>Daily production volumes and downtime logs</td>
<td>Daily production volumes by well for the period 2017-2019 Downtime logs (if not included in the production information) for wells/fields as available</td>
<td>Accounting or Operations</td>
</tr>
<tr>
<td>Detailed well listing</td>
<td>Complete well listing which can agree to the monthly LOS financials and include well information / attributes</td>
<td>Accounting or Operations</td>
</tr>
<tr>
<td>Lease operator route</td>
<td>Mapping wells to lease operator route and production foreman/supervisor area</td>
<td>Operations</td>
</tr>
<tr>
<td>Monthly internal &amp; allocated financials</td>
<td>Financial statements that can be agreed to the LOS statements and detail of cost allocations from corporate/other groups</td>
<td>Accounting</td>
</tr>
<tr>
<td>Third party spend data</td>
<td>Detailed (e.g. invoice level if possible) data extract/cube providing purchasing spend data by supplier, category, material etc.</td>
<td>Accounting</td>
</tr>
<tr>
<td>Working capital</td>
<td>AP / AR / Inventory data for past 24months ($, terms, count etc.)</td>
<td>Accounting</td>
</tr>
<tr>
<td>Employee listing / census</td>
<td>Listing of employees and contractors (field level and G&amp;A) by department/location, level, role, PT/FT etc.</td>
<td>HR</td>
</tr>
<tr>
<td>G&amp;A / field office / facilities detail</td>
<td>Provide listing of all other G&amp;A costs, field offices/locations, addresses, and primary function</td>
<td>Operations</td>
</tr>
</tbody>
</table>

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Value lever details
**Working Capital**: Unlocking trapped cash and immediate, tactical steps can be applied to release working capital while revising long term practices

**Sample from a recent project**: Early payment and renegotiation of terms

- Analysis of ~1,000 suppliers and ~200k invoices highlighted that over $150m of spend was paid before agreed terms / due date due to a variety of manual interventions
- In addition it was identified that there are 11 active payment terms employed by the business ranging from 0 to 45 days; with ~90% of terms being 30 days or less
- The combination of improved payment accuracy i.e. adherence to existing terms and an increase in select transactional supplier payment terms resulted in a cash/WC impact of $5m to $30m

Wider examples of the types of levers we have investigated with others

Creating value by improving capital efficiency and freeing up the working capital trapped by operational inefficiencies

<table>
<thead>
<tr>
<th>Working Capital and Cash Flow</th>
<th>Representative Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>How much working capital should the business have?</td>
</tr>
<tr>
<td>Procure to Pay</td>
<td>definition of performance baselines through data analysis and benchmarking</td>
</tr>
<tr>
<td>Payment Terms Optimization</td>
<td>How much is excess/shortfall?</td>
</tr>
<tr>
<td>Inventory</td>
<td>fact based understanding through data and analytics, opportunity quantification leveraging proprietary tools</td>
</tr>
<tr>
<td>Forecast to Fulfill</td>
<td>What practices are causing performance gap?</td>
</tr>
<tr>
<td>Collections Effectiveness</td>
<td>evaluation of process maturity and identify gaps and performance drivers</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>What actions will free up the capital and improve cash flows?</td>
</tr>
<tr>
<td>Quote to Cash</td>
<td>identification of key activities and implementation requirements for benefit realization</td>
</tr>
<tr>
<td>Supply Chain Finance</td>
<td>What metrics and targets will facilitate continuous improvement?</td>
</tr>
<tr>
<td>Days Payable Outstanding (DPO) &amp; out flows of cash</td>
<td></td>
</tr>
<tr>
<td>Days Inventory Outstanding (DIO) &amp; materials flow</td>
<td></td>
</tr>
<tr>
<td>Days Sales Outstanding (DSO) &amp; in flows of cash</td>
<td></td>
</tr>
</tbody>
</table>

**Performance Levers**

- Customers
  - Billing processes
  - Credit & terms
  - Collections effectiveness
  - Dispute Management
- Suppliers
  - Supplier traded terms
  - Procurement practices
  - Payment triggers
  - Disbursement timing
- Operations
  - Differentiated segments
  - Process drivers
  - Inventory/Asset management
- Governance
  - Policies & SLAs
  - Metrics & Reporting
  - Organization
  - Communication
- Systems
  - Parameters
  - Functionality
  - Data

Working capital analysis presents the opportunity to determine the level of liquidity and cash needs, as well as tactical working capital actions (AR, AP, inventory) that will quickly optimize cash flow for the business

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Third party spend: Proliferation of suppliers, off-contract spend and variable labor rates present opportunity to increase leverage and reduce spend

Sample from a recent project:
Off-contract spend on critical MRO material and long supplier tail
- 50% to 80% of MRO materials are purchased “off contract”, with the average off-contract price being 3.4x on-contract unit prices
- In addition to higher costs, the level of supplier proliferation and off-contract purchasing drives variability in quality and lead times
- By shifting more materials on-contract alone, in line with company own best practices, annual spend could be reduced by ~$4million
- Additional benefits were identified through a focused effort to rationalize vendors in the bottom 20% of spend to drive cost savings of approximately $2m to $9m

Wider examples of the types of levers we have investigated with others

Vendor proliferation and tail analysis to increase spend leverage
- Third party vendor spend can often exhibit a long supplier tail with consolidation opportunities to funnel and avoid maverick spend in order to generate savings

Contingent labor /contractor rate analysis and harmonization
- Analyzing the costs of the suppliers in categories such as Field Maintenance & Construction Management can identify significant variance in hourly rates indicating there may be an opportunity to reduce overall contingent labor costs by shifting usage to the lowest cost providers

PO compliance process and preferred supplier list usage
- Despite focus on procurement across most entities, newer stand-ups and carve outs from major operators often lack stringent processes resulting in low levels of compliance in some areas
- In our experience, addressing this and targeting increased PO compliance including leveraging / focusing on use of preferred supplier lists (PSL) typically drives savings of 2.5% – 5.0%

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Field OPEX: Across the wells, there is a large spread in opex/boe in some fields, which could suggest re-visiting work practices may drive down costs

Sample from a recent project:
Identifying field OPEX savings across ageing field

— The spread in cost per BOE begins to widen for wells in both Phase II and Phase III indicating there may be opportunities to consider more differentiated approaches to serving older / low rate wells
— Investigation by pumper route, further suggests the extent to which remote and exception based monitoring can be applied (especially in late life wells) should be considered

Wider examples of the types of levers we have investigated with others

<table>
<thead>
<tr>
<th>Focus areas</th>
<th>Process</th>
<th>People</th>
<th>Data</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production &amp; Well Management</td>
<td>— Short interval controls</td>
<td>— Multi skilled operator</td>
<td>— Well targets</td>
<td>— Data collection systems (e.g. v cone, guided radar, wireless POC, automated fluid shots)</td>
</tr>
<tr>
<td></td>
<td>— Route rationalization</td>
<td>— Training and development</td>
<td>— Accuracy of surveillance data</td>
<td>— Use of SCADA</td>
</tr>
<tr>
<td></td>
<td>— Checklists, guides and troubleshooting, site interventions</td>
<td>— Roles &amp; Resp. across functions</td>
<td>— Variance tracking codes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Variance tracking</td>
<td>— Operator empowerment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance &amp; Reliability</td>
<td>— Work order management</td>
<td>— Clarify, document, coach roles</td>
<td>— Work order data requirements</td>
<td>— CMMS usage</td>
</tr>
<tr>
<td></td>
<td>— Planning and scheduling</td>
<td>— Resource leveling</td>
<td>— Equipment history</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Autonomous maintenance</td>
<td>— CMMS training</td>
<td>— Downtime tracking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— PM development</td>
<td></td>
<td>— Failure codes</td>
<td></td>
</tr>
<tr>
<td>Alarms and Controls</td>
<td>— Minimize frequent, repetitive alarms</td>
<td>— Alarm system awareness</td>
<td>— Alarm review and rationalization</td>
<td>— Improve use of SCADA and identify next wave digital (measurement, automated well test controls, etc.)</td>
</tr>
<tr>
<td></td>
<td>— Set point management process</td>
<td>— Response behaviors</td>
<td>— Frequency of data acquisition</td>
<td></td>
</tr>
<tr>
<td>Management &amp; Information Systems</td>
<td>— KPIs, visibility and incentive programs for field operators</td>
<td>— Multi-functional decision making</td>
<td>— Streamlined reports</td>
<td>— Automated report rationalization and updates</td>
</tr>
<tr>
<td></td>
<td>— Continuous improvement program</td>
<td>— Empowerment to drive and enact change i.e. manage own route like P&amp;L</td>
<td>— Management by exception</td>
<td>— Collaboration technology</td>
</tr>
</tbody>
</table>
Operator Performance: Operator / route analysis can show opportunities to improve well profitability e.g. through risk based well visit approaches

Sample from a recent project: Operator performance and risk based well visit protocols
- Well profitability is differentiated between operator / route; additional variation in performance for each operator’s wells
- Operator routes appear defined by geography currently, with each managing 29 wells on average (+/- 5 wells); although each has significant variability in well level profitability suggesting opportunities to stratify wells and explore new routes / exception based monitoring
- If the wells per operator ratio could be increased in line with observed ratios at other fields, (50-60 wells per operator), this could yield up to a ~$2M opportunity

Wider examples of the types of levers we have investigated with others

Route Optimization
- Shifting from a geo model to layering-in performance and exception based models by leveraging analytics, can help identify and reduce waste in operator routes to reduce FTE requirements
- Moreover, beyond cost, this type of approach can help drive focus and improve response towards specific high value wells or areas

Operator Rationalization
- Though dependent on each geo, experience shows that each operator can / should be responsible for 50-60 wells, especially in late life-stage fields
- Evaluation of ‘spans’ – in conjunction with routing and well classification, can create scalable benefits via reduction in management and other expenses

Opportunities may exist to stratify or rank wells based on certain metrics (e.g., profitability, performance, reliability, etc.) and redesign the operator program accordingly

The same stratification may also provide a framework for investment decisions on digital technologies to facilitate exception based care

Each of these potential solution areas can support a more targeted and ‘fit-for-purpose’ program to maintain and enhance well level performance
Support Costs: Benchmarking of support labor (back office and technical functions) highlights potential to right-size functional support

Sample from a recent project: Functional benchmark to identify gaps and opportunity

- Benchmarking across all functions highlighted that a number of technical functions in particular were above benchmark targets as the asset had moved beyond the initial development phase and heavy focus on drilling, new facility construction etc.
- In addition, the overlay of corporate support on to the local business units own support, drove duplication and high costs relative to the true needs of the asset
- Across an in-scope population of ~2k employees/contractors, total savings identified were 12% to 20%

Wider examples of the types of levers we have investigated with others

Sub-function and process level comparisons
- Using sub-function or process level benchmarks can help understand granular differences and where to focus on a tangible level beyond typical top-down measures
- This can also set the stage for zero-basing costs to remove activity

Field office / location consolidation
- Assets that have developed/grown through acquisition may be holding on to multiple office locations with functions delivered across multiple of these, resulting in an opportunity to potentially consolidate real estate and office
- In practice, field offices in remote locations typically cannot be consolidated however corporate and support service locations can be more readily impacted

Spans / layers and grade inflation analysis
- Over time as assets have evolved, spans and reporting structures can become mis-aligned or no longer fit for purpose – either through excessive spans/reduced oversight or very narrow leadership roles
- Grade inflation can often also occur resulting in a potentially right-sized organization, but one which is operates at a higher cost
Volume Delivery: Analysis of daily production data can help highlight volatility that may indicate upside potential from stabilizing production rates

Sample from a recent project: Best Demonstrated Rate (BDR)

- Using Best Demonstrated Rate (BDR), we assessed 655 wells (38% of total production on a BOE basis) across zones 1, 2, 3 for Dec 2018 through Jan 2019:
  - BDR suggested an overall “loss” of 63 KBOE or 11.7%; representing an equivalent revenue value of ~$1.8M
  - Despite the winter period in the data and a limited sample the analysis suggests possible challenges to explore further

Wider examples of the types of levers we have investigated with others

Focus on actual production and downtime / reliability in order to maximize volumes and/or minimize losses through downtime

BDR is a measure of what production “should have been”, assuming the asset was able to maintain stable volumes at best demonstrated levels

In our experience with other clients (independents and IOCs) we have found that an empirical measure / view like this can focus efforts and drive short-interval control decisions

We have found that managing on a “BDR” basis can often result in ~5% to 8% improvements
**Portfolio Management:** Some wells, experiencing negative margin, could be focus areas for cost reduction or short term shut-in based on scenarios

---

**Sample from a recent project:**
Negative margin well analysis

- Across all zones, wells with negative margins should be evaluated for cost rationalization or possible abandonment if target returns cannot be met
- Existing plan: ~2,000 wells noted to be “switched off” yet the contribution margin weighed against the likely stranded costs results in providing little net value
- Proposed alternative: a smaller group of ~480 wells delivered consistent negative contribution margin, representing a ~$4.5M opportunity if fixed costs and overhead could be effectively reduced (i.e. not stranded)

### Wider examples of the types of levers we have investigated with others

**Workover Program**

- Generating additional potential life from each well may be achieved through a workover program to restore / enhance production
- A systematic and disciplined approach to evaluating workover opportunities can drive targeted investments in the highest impact areas

**Fixed Costs / Overhead**

- Benchmarks can help shine a light on potential cost reduction opportunities that may help extend the economic life of each well
- Moreover, experience with other operators, as well as 3rd party data sets can provide perspective on the highest value areas to address

**Shut-in strategy / Portfolio Rationalization**

- For wells where expense reduction is not sufficient to enable return to profitability, a proactive shut-in strategy may be appropriate
- P&A of negative wells may improve long term profitability and allow for investment in high ROI opportunities (though costs to P&A can be high)
- Opportunities may also exist (where reasonable groupings of assets can be ring-fenced) to consider divestment to smaller operators
Field development: Analysis of the “SPUD to Sales” cycle time and lost time / D&C inefficiencies can identify and unlock significant long-term value

Sample from a recent project:
Drilling and Completion analysis for SPUD to first production

— Average cycle time over the period is about 10 months, however this has fallen to about 6 months over the past year
— When controlling for number of wells per pad, cycle appears to remain above indicative industry cycle times (3 months for a single well pad and 6 months for a 4 well pad)
— The positive trend may warrant further investigation of actions taken / ability to sustain the trajectory

Wider examples of the types of levers we have investigated with others

Operational Assessment

Application of Operational Best Practices

Effective Field Level Planning
• Rig move optimization: Created detailed execution level plan for pad rig moves
• 35% reduction in pad moves (72hr/pad, 18hr/well)

Increased Integration with Contractors
• Drilling pipe connection optimization: Worked with contractor to design streamline process making connection
• 50% reduction in connection time (13hr per well)

Streamlined & Standardized Processes
• Rig down process standardization: Developed standard process and rig hand standard work during rig down
• 44% reduction in rig down (18hr per well)

Performance Management
• Rig level performance management and incentive program
• 5% increase in ft/day (18hr per well)

Total Realized Efficiency Savings
• Reduced drilling cycle time by 70 hours
• Reduced drilling cost by $300K per well

Maximizing performance across the D&C cycle, we typically start by decomposing key activities into cost, time and quality metrics that are true value drivers to establish the critical KPIs

External benchmarks can help guide focus areas with lean and CI techniques used to drive out value
Contact us for more information on how KPMG can help accelerate rapid organizational and financial assessments and develop cost containment plans

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