Selective placement of treatment in multilayered wells
The CoilFRAC* stimulation through coiled tubing service blends CT and selective fracturing technology. It can effectively isolate zones of interest without the need for costly workover operations. Hydrocarbon recovery is increased while total completion time and costs are greatly reduced.

CT conveyance and selective isolation methods enable the treatment of multiple zones in one trip. Each zone is individually isolated and treated. The zones are then cleaned up simultaneously, resulting in reduced formation exposure to completion fluids.

The service does not require a workover rig or bridge plugs. Wireline perforating runs are completed in one wellsite visit. Saved time and costs make the CoilFRAC service a cost-effective, efficient choice.
Tap historically bypassed pay zones

TURN CHALLENGES INTO OPPORTUNITIES

The CoilFRAC method ensures that individual sands are stimulated rather than forcing the operator to treat multiple zones all at once. Taking into account varying stress contrast and permeabilities, similar porosities but varied productivity, and variations in fracture gradients, the CoilFRAC service offers flexibility in fracture design and placement. With this customizing technology, stimulating multiple zones is quicker and less costly per zone. Previously bypassed pay zones are now more economical candidates, making the entire field more productive.

MINIMIZE NUMBER OF STEPS PER COMPLETION

In multilayered reservoirs, CoilFRAC processes minimize multiple setups for perforating, stimulation, and isolation. The effectiveness of conveyed proppant is maximized, and overall treatment costs are also kept to a minimum.

Streamlined operations and fewer trips to the wellsite save time and money. Total completion time is dramatically reduced, and additional net pay increases total hydrocarbon recovery.

EXTEND FIELD LIFE

The operator of the Hiawatha gas field in Moffat County, Colorado, extended field life by using CoilFRAC proppant fracturing. Fieldwide production has been raised from 11 MMcf/D to more than 22 MMcf/D. Application of CoilFRAC services on 4 wells surpassed production results from 10 wells drilled between 1992 and 1994.

Previously, sands were grouped together over 150- to 200-ft intervals, but effective stimulation was marginal. Using the CoilFRAC service, zones are isolated in intervals of 35 ft. New completions have as many as 14 pay intervals per well. Reentry opportunities have been created by the ability to treat four to six bypassed intervals without damaging existing productive zones. Results demonstrate that the CoilFRAC service provides a sound option in this field.

CoilFRAC Candidate Considerations

<table>
<thead>
<tr>
<th>Casing/liner size</th>
<th>4½ in or 5½ in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottomhole temperature</td>
<td>&lt;250 degF</td>
</tr>
<tr>
<td>Fracture gradient</td>
<td>&gt;0.4 psi/ft</td>
</tr>
<tr>
<td>True vertical depth</td>
<td>0–10,000 ft</td>
</tr>
</tbody>
</table>

APPLICATIONS

- Gas, oil, and coalbed methane reservoir completions, whether in new wells or newly perforated intervals
- Vertical or deviated wells
- Horizontal wells (acid placement only)
- Single- and multilayer-zone reservoirs
- Selective consecutive placement of acid and proppant fracturing using CT
CoilFRAC service permits smaller, efficient treatments targeting individual zones.

ABOUT CONTACT FAMILY

Contact* staged fracturing and completion services maximize reservoir contact by offering the most efficient and effective services for each well. This portfolio of services offers a wide breadth of choices in four fundamental categories. Each choice can be enhanced with real-time measurement options. The Contact intervention category enables multiple stages to be perforated/jetted, fractured, and isolated in one intervention.

www.slb.com/coilfrac

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