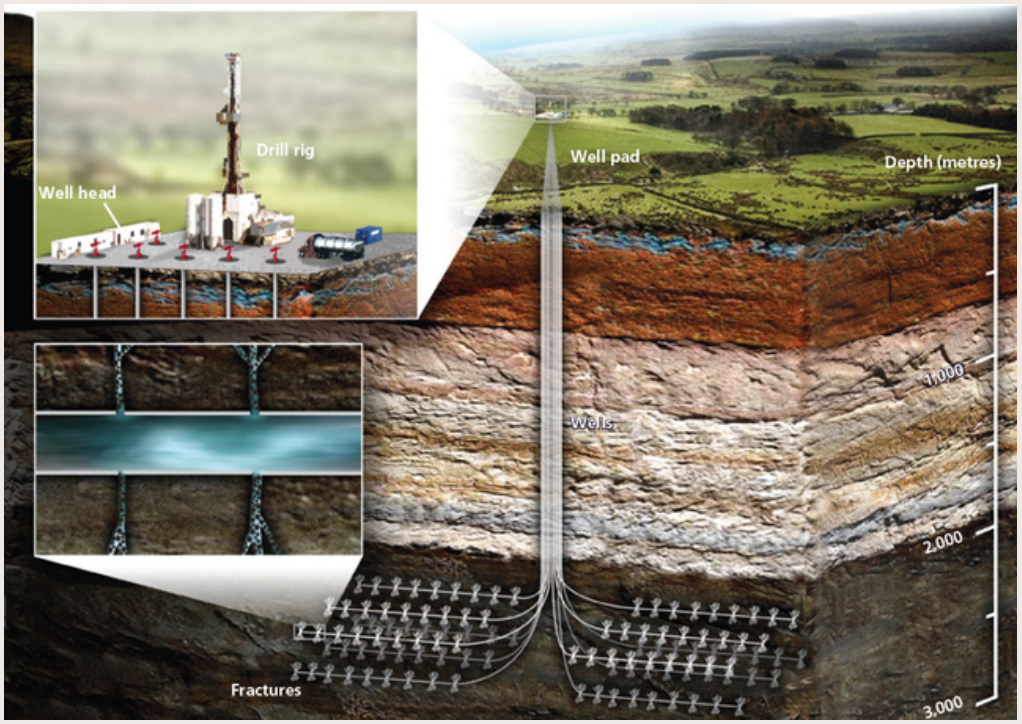


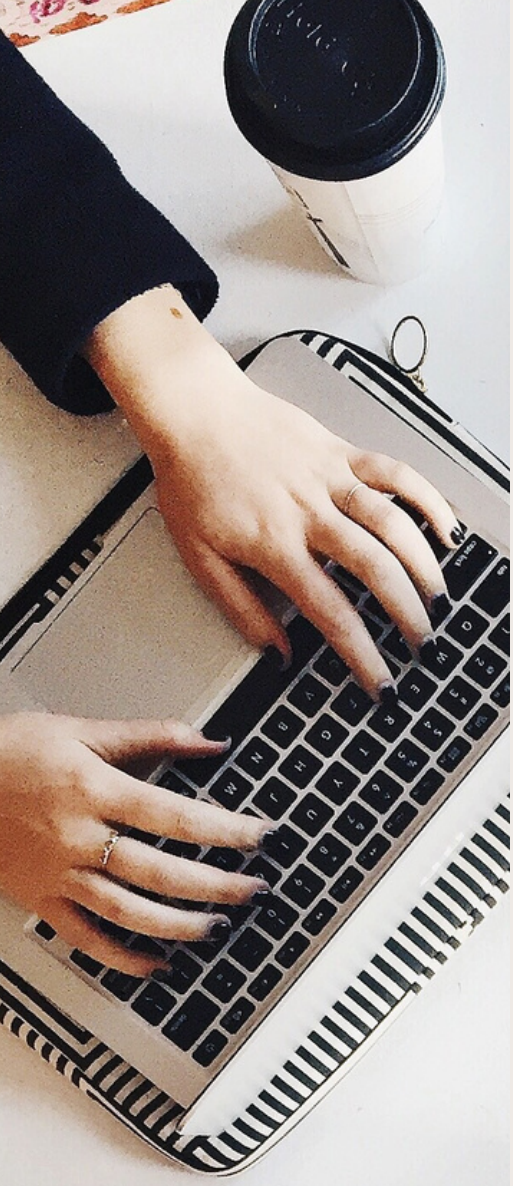
PERFECT COMPLETION SOLUTION FOR LONG LEG HORIZONTAL WELLS

DYRA-VALVES SYSTEM

Where innovation meets operations

PREPARED BY

Anvey Petroleum Engineering



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DYRA-FRAC COMPLETION SYSTEM

Key-Features

1. Provides an effective and efficient method of establishing communication with reservoir.
2. Prevent compaction zone skin damage.
3. Replaces conventional perforation methods. Can be done over balance or do a quick N2 lift after activation and establish production.
4. If frac is required, conduct frac from annulus while CT stays in hole.
5. The innovating upward facing swab cups and a built-in circulation valve ensures the previous sleeves are isolated during subsequent activation.
6. Built-in reverse flapper check valves mean immediate clean up of well using reverse clean out.
7. Torque subs on either ends of the Dyra-Valve ensure room for torqueing the sleeves with production casings.

Specification

Casing Size: 5.1/2"

o Tool Max OD: 4.75"
o Working Pressure : 10000 Psi
o Temp. rating : 200 deg C

Casing Size: 7", 20-26#ppf

o Tool Max OD: 6"
o Working Pressure : 10000 Psi
o Temp. rating : 200 deg C

INTRODUCTION

Anvey's proprietary Dyra-System is a coiled tubing activated completion sleeves. They are cemented in place along with the usual casings. These sleeves are designed for horizontal well completions to produce gas/oil or both.
The dreaded compaction zone damage caused by E-line perforations can be completely avoided. The immense amount of time and cost spent in the conventional plug and perf method is saved and the twice the flow conduit surface area across the sleeves ensure no flow restrictions/ tortuosity is encountered during stimulation/ productions.

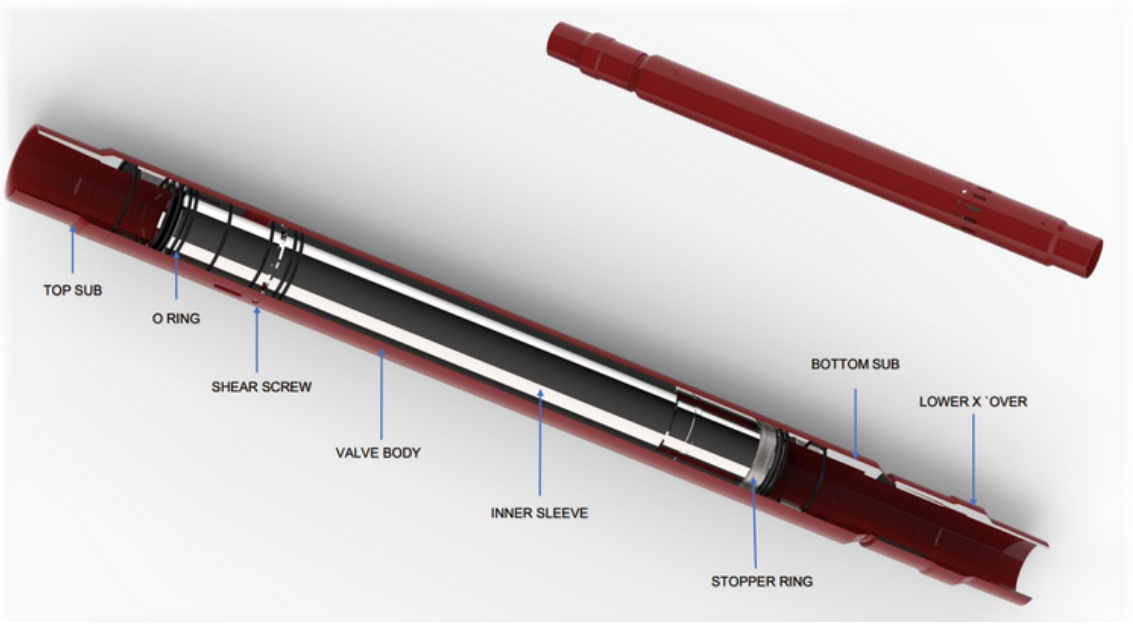
APPLICATIONS

1 Deviated well
2 Vertical well
3.Shallow wells
4. Horizontal Wells

BENEFITS

1. Slim compact design makes dyra-activator suitable for deviated and horizontal wells.
2. An overburden activation of all sleeves can be complemented with an immediate N2 activation to jump-start productions.
3. The completion system perfectly suits CT in hole frac operations. The post frac clean up can be conducted through CT by reverse pumping. A higher linear velocity results in better and faster clean up.
4. Reduction in workover and well completion costs. The built-in abrasive perf assembly can add new holes/ cut holes across existing sleeves which are frozen due to various reasons.

Dyra-Valve


TOP SUB
O RING
SHEAR SCREW
VALVE BODY
INNER SLEEVE
STOPPER RING
BOTTOM SUB
LOWER X `OVER

Dyra-Valve Activator