Candee 1H SWD

Richland Co. MT

Completion Overview

Operational Requirements

1) Prior to each major operations, hold pre-job safety/planning meeting (PJSM) with all personnel involved in the operation. Discuss the upcoming operation and safety concerns and solicit feedback from all personnel involved.
2) Keep track of daily acitivites on your Daily Report
3) Inspect any tanks prior to filling
4) Physically caliper, measure, and photograph ALL tools that enter the wellbore

Complete the Well for Injection

1) Contact MBOGC within 24 hours of commencement
2) Set and test workover rig anchors
3) Move in and rig up workover rig, mud pump, mud tank, power swivel, pipe racks, catwalk, and tanks
4) Move in and unload 2-7/8" PH6 workstring onto pipe racks
5) Visually inspect before use.
6) Install a 7-1/16" 5000 psi BOP with 2-7/8" pipe rams/blind rams and a 5000 psi Washington Head.
7) Pick up and go in hole with a used 6" rock bit w/ 2-7/8" work string.
8) Trip in hole to Float Collar.
9) Circulate hole w/10# brine.
10) TOOH. LD first 400'. Stand back rest of string.
11) Rig up Wireline and Run CBL to verify cement across and above the Dakota.
12) RU Coil Tubing to Perforate the Dakota (all perfs = 1 spf, 72 degree phasing). Pump proppant to jet cut perforations in 7" casing. Determine shot depths based off of CBL.
13) Trip in hole with 7" packer on 2-7/8" work string and set packer 4,600' to acidize the perfs.

14) Acidize perfs with:

a. 12,000 gal 15% HCL containing mud cleanout surfactants and 1 ppg rock salt pumped per attached procedure. Ramp treatment pressure up to 10 BPM. Do not exceed tubular burst strength during treatment.

b. Follow acid with 400 bbl fresh water at 10 BPM. Displace fresh water with tbg volume of salt water.

c. Record ISIP, 5 minute, and 10 minute shut-in pressures. Pump test injection zone at 2-10 BPM. Record injection pressures during injectivity test.

15) Release packer and trip out of hole with 2-7/8" work string. Lay down work string and packer.

16) Trip in hole with 7.00" Arrowsel 1-X Nickel coated packer and 4-1/2" tubing. Set packer at 4,600' and displace annulus with 10 ppg brine treated with packer fluid chemical.

17) ND BOP/ NU injection wellhead. Test casing-tubing annulus to 1,000 psi with MBOGC inspector as witness. Install permanent pressure gauge on casing-tubing annulus to monitor pressure.

18) Rig down and move out workover rig.