

Fairborne Energy

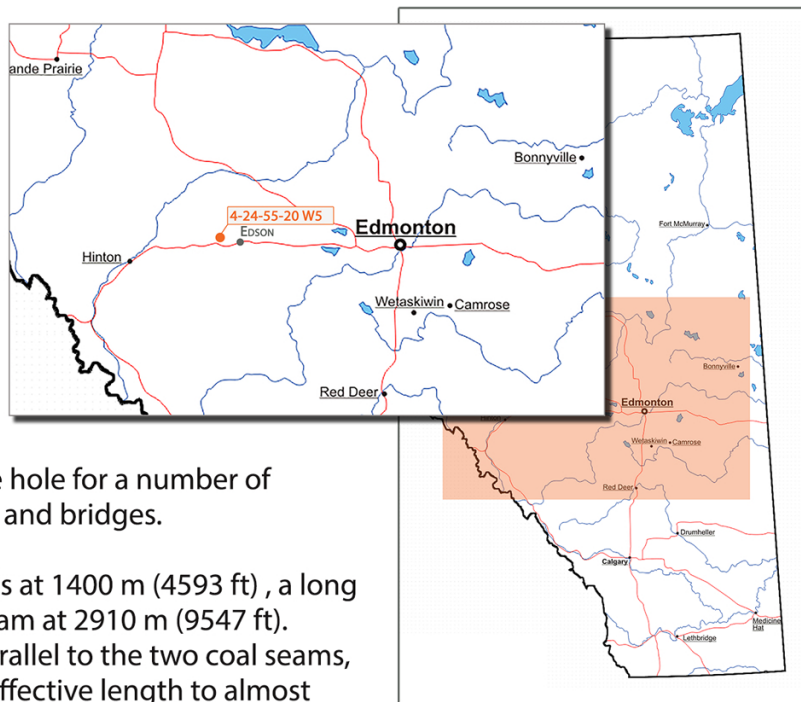
04-24-55-20 W5
Edson, AB
Precision Drilling Rig 427

Longhorn was called out by Fairborne for a challenging run near Edson. With a measured depth of 2970 m (9744 ft) and multiple coal seams to pass through, this application was going to be a test on the Stubby effectiveness at landing casing. By the time Longhorn was on location and rigged in, the rig had been out of the hole for a number of hours, and it was likely that we would encounter swelling and bridges.

On lease, Longhorn was told of potential issues with sands at 1400 m (4593 ft), a long coal seam at 2820 m (9251 ft), and finally another coal seam at 2910 m (9547 ft). Moreover, the angle of the well bore was running near parallel to the two coal seams, approximately 67° and 82° respectively, increasing their effective length to almost double their vertically measured depth. The Stubby passed through the sands at 1400 m without issues. Several hours later, we encountered the first bridge at 2825m in the top coal seam. The well was quite severely bridged, and required approximately 45 minutes of constant reciprocating of the Stubby to clear. The tool was making gains between 1 and 2 feet every 3 foot stroke. After the bridge was cleared, the casing string was continually worked every meter while we continued to run in. At 2917m the second bridge was encountered. The string was reciprocated approximately 10 times, clearing the bridge with steady gains, and eventually landed safely at TD.

The Stubby was drilled out on the following Tuesday. The total drilling operation took about one hour. The 513 PDC bit was rotated by a Mud Motor with a 1.5 degree bend sub at 80 RPM on 4" drill string with 2-4 Kdecs (4500 - 9000 LBS) WOB, and pumps engaged at 10,500 Kpa (1522 psi) pumping approximately 700 l/min (184 GPM). After drilling out the tool, Fairborne was able to drill the final 1000 m (3280 ft) of their well without a bit trip. Once recovered, the bit was graded a 1-2.

This run was an excellent example of the Stubby tool's ability to successfully land a casing string despite well and formation issues that have hampered conventional technology in this area of Alberta in the past.



Run Summary

Client:	Fairborne Energy
Company Man:	Ken Jacobi
Tool:	7" Stubby PDC Drillable
Bit:	7" Bridge Breaker
Target:	7" Intermediate Casing
Hole Size:	222.25 mm / 8 3/4"
TMD:	2970 m/ 9744 ft

Expected Issues	Coal Seams Bridges Shifting Sands
------------------------	---

Total Run Time:	23 Hours
------------------------	----------

Noteworthy

The Stubby was worked through 2 coal seams at 67° and 82° , and a sand zone. It cleared 2 bridges, and landed the casing at TD, as expected.

