

Wellbore History

GENERAL

The 6406/12-3 S, 6406/12-3 A, and 6406/12-3 B wellbores were drilled in concert on the Pil and Bue prospects in the southern end of the Halten Terrace in the Norwegian Sea. The S and B wells were planned to target the Pil and the Bue prospects, respectively. Well 6406/12-3 S found gas over oil in Intra Melke Formation sandstones in the Pil prospect. This result led to the decision within the partnership to drill an appraisal of the discovery. The appraisal well was designated 6406/12-3 B, which confirmed oil in Melke Formation Sandstones in pressure communication with the primary well 6406/12-3 S. The last sidetrack well, 6406/12-3 A, was designed to test the Bue prospect and to evaluate fluid contacts and connectivity with the Pil discovery.

OPERATIONS AND RESULTS

Wildcat well 6406/12-3 A was kicked off from 1259 m in well 6406/12-3 S on 26 April 2014. It was drilled with the semi-submersible installation Transocean Arctic and drilled to 2355 m in the Springar Formation. Once the 13 3/8" casing was cemented on 2 May 2014 the well was suspended while 6406/12-3 B well operations were carried out. After that well bore was plugged and abandoned the 6406/12-3 A sidetrack was resumed on 11 June 2014 and drilled to TD at 4315 m in Late Jurassic (Callovian) sediments belonging to the Melke Formation. No significant problem was encountered in the operations. The well was drilled with XP-07 oil based mud from kick-off to TD.

The 6406/12-3 A well entered the Jurassic reservoir rocks approximately 900 m to the northwest of the 6406/12-3 B Pil reservoir entry point. The well encountered Spekk Formation claystones on either side of a Rogn Formation sandstone reservoir and below this is a Melke Formation heterolithic package. Top Rogn Formation was at 4053 m (3421 m TVD) with top reservoir sands at 4059 m (3426 m TVD). The Rogn reservoir was of good to very good quality and contained an 18 m oil column with an OWC at 4083 m (3444 m TVD). No gas cap was anticipated or present. Data including the oil water contact position and oil type indicates the 6406/12-3 A discovery is separate from 6406/12-3 S discovery.

A total of 93 m of core was cut from 4085 m in the Rogn Formation to 4178 m in the Intra Melke Formation sandstone. The overall core recovery was close to 100%. RCX oil samples were taken at 4072.53m.

The well was permanently abandoned on 16 July 2014 as an oil discovery well.

TESTING

No drill stem test was performed.