

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 13833
ORDER NO. 16117

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO
CONSIDER THE APPLICATION OF BAYTEX
ENERGY USA LTD. FOR AN ORDER
AUTHORIZING THE DRILLING, COMPLETING
AND PRODUCING OF THE LARSON #3-162-
99H WELL WITH A HORIZONTAL LATERAL
HEEL APPROXIMATELY 347 FEET FROM THE
SOUTH LINE AND 489 FEET FROM THE EAST
LINE OF SECTION 3, T.162N., R.99W., DIVIDE
COUNTY, ND, AS AN EXCEPTION TO THE
PROVISIONS OF NDAC § 43-02-03-18, AND
SUCH OTHER RELIEF AS IS APPROPRIATE.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 16th day of December, 2010.
- (2) The witnesses for Baytex Energy USA Limited (Baytex) provided telephonic testimony in this matter pursuant to North Dakota Administrative Code Section 43-02-03-88.2. Telephonic Communication Affidavits were received on December 21, 2010; therefore, such testimony may be considered evidence.
- (3) Baytex made application to the Commission for an order authorizing the drilling, completing and producing of the Larson #3-162-99H well (File No. 18982) with a horizontal lateral heel approximately 347 feet from the south line and 489 feet from the east line of Section 3, Township 162 North, Range 99 West, Divide County, North Dakota (Section 3), as an exception to the provisions of North Dakota Administrative Code (NDAC) Section 43-02-03-18, and such other relief as is appropriate.
- (4) Order No. 15537 entered in Case No. 13261, the most recent spacing order for the Ambrose-Bakken Pool, established proper spacing for the development of Zone I at one horizontal well per 640 acres, Zone II at up to three horizontal wells per 640 acres, Zone III at one horizontal well per 1280 acres, and Zone IV at up to three horizontal wells per 1280 acres.

(5) The Larson #3-162-99H well, located 265 feet from the south line and 375 feet from the east line of Section 3, was permitted as a horizontal well on a 640-acre spacing unit described as Section 3 in Zone II in the Ambrose-Bakken Pool pursuant to Order No. 14401. Pursuant to Order No. 14401, setback requirements in Zone II were such that the completion interval of a horizontal well must be located no closer than 500 feet to the boundary of the spacing unit. Zone II is now Zone I and setback requirements in Zone I are such that the completion interval of a horizontal well must be located no closer than 500 feet to the boundary of the spacing unit the lateral is most nearly parallel to and 200 feet to the boundary of the spacing unit the lateral is most nearly perpendicular to.

(6) Baytex encountered loss of the build rate when drilling the initial curve in the Larson #3-162-99H well. They attempted to build angle at a more aggressive rate but encountered tool failure which caused them to build angle in the wrong direction. This hole was abandoned at 8548 feet measured depth (MD) and an open hole sidetrack was initiated at 8139 feet MD. The sidetrack was drilled to 8454 feet MD, approximately 403 feet from the south line and 537 feet from the east line of Section 3. Baytex made three wiper trips to eliminate tight spots in the well bore. The 7 inch production casing became stuck in the well while tripping in and Baytex was unable to pull the casing. Baytex decided to cement the casing in place with the casing shoe at 8367 feet MD, approximately 351 feet from the south line and 492 feet from the east line of Section 3, which violates the 500-foot east setback requirement by 8 feet. Baytex testified there is approximately 11 feet of linear well bore from the 7 inch casing setting depth to the 500-foot east setback requirement.

(7) Baytex drilled the Larson #3-162-99H well to a total depth of 14,476 feet MD, approximately 526 feet from the north line and 638 feet from the west line of Section 3 and ran a 4-1/2 inch production liner to bottom. A casing packer is set at 8086 feet MD inside the 7 inch production casing and an oversized swellable isolation packer is set at 8600 feet MD, approximately 512 feet from the south line and 627 feet from the east line of Section 3. The sliding sleeve frack port in the 4-1/2 inch production liner closest to the 7 inch production casing shoe is at 8758 feet MD, approximately 602 feet from the south line and 744 feet from the east line of Section 3.

(8) Baytex testified they would not fracture stimulate the Larson #3-162-99H well between the 7 inch production casing shoe and the oversized swellable isolation packer set at 8600 feet MD, approximately 512 feet from the south line and 627 feet from the east line of Section 3.

(9) The offending lateral from 8367 feet MD to the 500-foot east setback requirement is adequately isolated to protect correlative rights.

(10) Requiring Baytex to perform a cement squeeze or circulate cement behind the production liner in an attempt to isolate the portion of the lateral between the 7 inch production casing shoe and the legal setback requirement could present substantial risk, including losing the well bore, that could result in economic waste and a reduction in reserves recovered from the Ambrose-Bakken Pool.

(11) Allowing the Larson #3-162-99H well to be completed as an exception to the Ambrose-Bakken Pool spacing requirements will prevent waste, prevent the drilling of unnecessary wells, be protective of correlative rights, and produce oil that might otherwise not be produced.

IT IS THEREFORE ORDERED:

(1) Baytex Energy USA Limited, its assigns and successors, is hereby permitted to produce the Larson #3-162-99H well (File No. 18982) from as close as 351 feet from the south line and 492 feet from the east line of Section 3, Township 162 North, Range 99 West, Divide County, North Dakota, as an exception to the spacing requirements set forth in the Ambrose-Bakken Pool.

(2) Baytex shall not stimulate the Larson #3-162-99H well utilizing a frack port or perforation closer than 8600 feet MD, approximately 512 feet from the south line and 627 feet from the east line of Section 3.

(3) Baytex shall submit procedures for prior approval to fracture stimulate the Larson #3-162-99H well on a Sundry Notice (Form 4). Subsequent to the fracture stimulation, a follow-up Sundry Notice (Form 4) shall be submitted verifying the location of the nearest fracture initiation point relative to the south and east lines of Section 3 and to the swellable isolation packer set at 8600 feet MD.

(4) The Larson #3-162-99H well permitted in paragraph (1) above shall not produce more than its fair and equitable share of oil and/or gas from the Ambrose-Bakken Pool.

(5) This order shall remain in full force and effect until further order of the Commission.

Dated this 29th day of April, 2011.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

By the Director, on behalf of the Commission

/s/ Lynn D. Helms, Director